

# **FIM SUPERBIKE, SUPERSPORT & SUPERSPORT 300 WORLD CHAMPIONSHIPS REGULATIONS**

Technique

SBK

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**THIS BOOK PREVAILS OVER ALL OTHER FIM RULE BOOKS EXCEPT THOSE REFERRED TO AS AN APPENDIX**

SS300

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TBA

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Articles amended as from 1.1.2021 are in bold type





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## **AMENDMENTS TO THE FIM SUPERBIKE & SUPERSPORT WORLD CHAMPIONSHIPS REGULATIONS (HEREINAFTER COLLECTIVELY REFERRED TO “REGULATIONS”).**

The FIM, through the Superbike Commission and the Superbike Permanent Bureau, may at any time amend any or all provisions of the Regulations.

Any subsequent changes that take place after the printed versions are completed will be made electronically, and the on-line versions would then be the prevailing versions.

### The Permanent Bureau consists of:

- One Representative of the Fédération Internationale de Motocyclisme (FIM).
- One Representative of DWO.

which shall meet on a regular basis to discuss and decide on all issues pertinent to the respective interests of the members.

The procedures for the calling of meetings of the Permanent Bureau and for procedures during such meetings (which may be held by telephone or other electronic means) and for the appointment and/or vacancy of representatives and all procedures for their deliberations shall be as mutually agreed by the members from time to time provided always that a decision of the Permanent Bureau shall only be effective with and upon the unanimous vote of the members.

The SBK Commission is competent to study any proposal of changes to the FIM World Championship SBK Regulations.

### The SBK Commission consists of:

- One Representative appointed by the Fédération Internationale de Motocyclisme (FIM).
- One Representative appointed by the manufacturers, through MSMA.
- One Representative appointed by DWO who will be the Chairman of the SBK Commission.

Any resolution voted by the SBK Commission shall require the simple majority and the Chairman will have the casting vote in case of a tie. The resolutions of the SBK Commission shall be effective subject to the approval of the Permanent Bureau. The parties shall procure that the meetings of the SBK Commission take place no later than fourteen (14) days following the request of any Representative for that meeting.



## GENERAL UNDERTAKINGS AND CONDITIONS

Any references to the male gender in this document are made solely for the purpose of simplicity, and refer also to the female gender except when the context requires otherwise.

All riders, team personnel, officials, promoters/organizers and all the persons involved in any capacity whatsoever participating in the FIM Superbike & Supersports World Championships (hereinafter collectively referred to “Championship”) undertake, on behalf of themselves, their employees, and agents, to observe all the provisions of:

1. SPORTING REGULATIONS
2. TECHNICAL REGULATIONS
3. DISCIPLINARY AND ARBITRATION CODE
4. CIRCUIT STANDARDS
5. MEDICAL CODE
6. ANTIDOPING CODE
7. ENVIRONMENTAL CODE
8. CODE OF ETHICS

as supplemented and amended from time to time (hereinafter collectively referred to as the “Regulations”).

All the persons mentioned above may be penalised in accordance with the provisions of the Regulations.

Whilst these Regulations may be translated into other languages, in case of any dispute regarding interpretation the Official English text will prevail.

It is the responsibility of the team to ensure that all persons concerned with its entry observe all the requirements of the Regulations. The responsibility of the rider, or any other person having charge of an entered motorcycle during any part of the Event with respect to observance of the Regulations is joint and several with that of the team.

All persons concerned in any way with an entered motorcycle or present in any capacity whatsoever in the Paddock, Pits, Pit lane or Track, must wear an appropriate pass at all times during the Event.



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## ANTIDOPING CODE

All the persons concerned must at all times observe the FIM Anti-Doping Code and may be penalised accordingly.



## **1. SPORTING REGULATIONS**

### **1.1 INTRODUCTION**

#### **1.1.1**

A series of motorcycle races counting toward the Championship for Riders and Constructors will be organised.

### **1.2 EVENTS**

#### **1.2.1**

The Event shall be deemed to commence at the scheduled time for Technical and Sporting Checks and finish after all the races at the expiry of the deadline for the lodging of a protest and the time at which technical or sporting verifications have been concluded, whichever is the latest.

The race control must remain operative with all equipment in place until the end of the period provided for the lodging of a protest, and all officials and marshals must remain at the circuit available to the Race Direction and FIM Stewards during that period.

#### **1.2.2**

Events must be staged on race circuits that have been approved by the FIM for the Championship.

#### **1.2.3**

Events must not include any other races except for support races approved by DWO and FIM.

#### **1.2.4**

Any activity involving 4 wheels racing vehicular use of the track during the event, including “demonstrations”, displays or the suchlike must receive prior approval from FIM and DWO.

#### **1.2.5**

Organisers will be nominated by DWO and FIM.

### 1.2.6

The Organiser is responsible for providing the facilities and personnel to ensure the smooth and efficient running of the event.

### 1.2.7

DWO shall obtain or shall arrange for the provision by each organiser of an insurance for third party liability for each meeting to cover DWO liability and that of all participants, the manufacturers, riders, sponsors, teams, service companies and officials in case of accidents to third parties during a meeting or during the practices.

The insurance policy shall also cover any possible liability of the FIM and the organiser to third parties. A copy of the policy written in English or French shall be made available to the organiser, DWO and to the FIM Executive Secretariat not later than 20 days prior to the event.

The cover provided for each event shall be US\$ 6 million, with the exception of the USA and Canada, where the cover shall be different.

The validity of the insurance must start at 08:00 hrs on the Tuesday (or Monday in case of Saturday races) before the race and finish at 24:00 hrs on the Monday (or Sunday in the case of Saturday races) after the race.

In case the organiser subscribes his own Third Party Liability Insurance in full conformity with the above specification of the present Art. 1.2.7, the organiser may send the certificate of insurance duly filled in, signed and stamped by an authorised Representative of the Insurance Company, to DWO and to the FIM Executive Secretariat.

This original declaration (form to be provided by DWO) shall be sent to DWO by mail or courier at least 20 days before the event.

### 1.2.8

At least 90 days prior to the Event, the Organisers of the event must submit the following information to the FIM and DWO:

- a) Confirmation of the name and address of the Promoters/Organisers, including telephone & facsimile numbers and e-mail addresses for correspondence.
- b) The date and place of the Event.



- c) A detailed plan of the circuit, its direction, clockwise or anticlockwise, and length.
- d) The location at the circuit of the rider information centre and the official notice board.
- e) The name and address of the company providing the third party liability insurance cover and the number of the policy.
- f) Name and address of FMNR.
- g) The name of the Clerk of the Course (with FIM Clerk of the Course Superlicence).
- h) The name, address and telephone number of the Chief Medical Officer.
- i) The name, address and telephone number of the hospitals designated for the event.

N.B. The Organiser is not required to produce or publish any Supplementary Regulations for the event.

### 1.2.9

At least 60 days before the Event, DWO must publish the above information and post it to all teams with an entry for the Event.

## 1.3 THE PADDOCK

### 1.3.1

The Paddock, pit boxes and all other facilities should be available to teams at least on the Tuesday prior to a Sunday race and remain available to competitors for at least one day and, if possible, two days after the event. Subject to the DWO event schedule as notified in the Teams Handbook.

### 1.3.2

Access must be available for teams arriving to set up between the hours of 08:00 and 20:30. Subject to the DWO event schedule as notified in the Teams Handbook.

### 1.3.3

At all times that the Paddock is occupied there must be 24 hour attendance at the gates providing vehicular access to the circuit and paddock.



### 1.3.4

When the Paddock is occupied there must be an adequate medical and firefighting service available to all riders, teams, manufacturers, sponsors, service companies, officials, FIM, DWO, etc.

At minimum the services must be available from 08.00 - 18.00 hrs on the day prior to the “setting up of teams day”, and on a 24 hour basis for the remainder of the event, ending at midnight on the day.

### 1.3.5

Full security must be supplied to the Paddock area from at least midnight of the Tuesday prior to a Sunday race until midnight of the Monday following the race.

## 1.4 OFFICIALS

All the following Officials must be present and available at the time necessary to ensure smooth and efficient running of the Event:

### 1.4.1 Permanent Officials

All permanent officials shall be appointed for the Championship by the Permanent Bureau.

The following officials will be appointed to perform supervisory and executive roles. Except in cases of illness or Force Majeure the officials will be expected to be present at each event.

#### **Race Director**

Responsible for ensuring proper observance of the Regulations and efficient running of the practice and races. The Race Director is also responsible for all communications between the Event Management Committee and the FIM WSBK Stewards Panel.

The Clerk of the Course shall work in permanent consultation with the Race Director. The Race Director shall have overriding authority in the following matters and the Clerk of the Course may give orders in respect of them only with his express agreement:

- a) The control of practice and the race, adherence to the timetable and, if he deems it necessary, the making of any proposal to the Race Direction to modify the timetable in accordance with the Sporting Regulations.



- b) The stopping of practice or the race in accordance with the Sporting Regulations if he deems it unsafe to continue and ensuring that the correct restart procedure is carried out.
- c) The starting procedure.
- d) The use of medical cars/fast interventions vehicles.

### **Technical Director**

Responsible for ensuring that technical Regulations are correctly enforced and supervising scrutineering and protests of a technical nature. **The Technical Director has the power to disallow the use of any parts based on safety concerns at his/her sole judgement and discretion. The Technical Director is responsible for technical decisions during the course of the event.**

### **Medical Director**

Responsible for liaison with the Chief Medical Officer who is appointed by the FIM to ensure compliance with the Medical Code.

### **FIM Safety Officer**

Responsible for the supervision of all aspects of safety.

### **Starter**

Responsible for the start procedure.

## **1.4.2 Individual Event officials**

All individual Event Officials shall be appointed for each event by the FMNR/Promoter and shall be approved by the FIM.

They are:

### **i) Clerk of the Course**

Responsible for:

- a) Ensuring that the circuit is suitably prepared for and maintained during the Event and that all legal requirements applicable for the running of the event have been complied with.



- b) Ensuring that all officials and services are in place.

The stationing of all track personnel and equipment (i.e. marshals, fire-fighting services, Moto-Taxi, recovery and intervention vehicles, flags, etc.) alongside the Circuit no later than 30 minutes prior to the beginning of all practice sessions and warm-ups.

Once the morning medical inspection is finished, Medical personnel should stand 5 metres behind the Track Marshals or leave. Only sportive personnel should stay on the edge of the track for the “sporting” track inspection.

The Race Director, the FIM Safety Officer, the Clerk of the Course and the Medical Director will make the final inspection of the Circuit to ensure this regulation is complied with, 30 minutes prior to the beginning of the day’s first practice sessions and/or warm up.

During the final inspection lap, the yellow flag must be waved at each flag marshal post together with the display of other flags and equipment requested by the FIM Safety Officer.

- c) Taking decisions to ensure the smooth and efficient running of the event.
- d) Ensuring that the event is run within the Regulations.
- e) Notification of protests to the FIM WSBK Stewards Panel.
- f) Immediate approval and signature with time of provisional results (practices, warm-ups, starting grids and races) and presentation of reports to the Event Management Committee.

**ii) Secretaries**

Responsible for:

- a) During the event effecting communications between the various officials.
- b) Providing secretarial support for the Event Management Committee, the Race Direction and the FIM Stewards.



### **iii) Other Officials**

Marshals, Technical Scrutineers, Security Personnel, Medical personnel etc., as required for the efficient running of the event.

All communications between the individual Event Officials must be made via the relevant Permanent Officials.

#### **1.4.3 The Race Direction**

The Race Direction shall be appointed for the Championship by the Permanent Bureau.

#### **1.4.4 The FIM Stewards**

The FIM Stewards shall be nominated by the FIM and approved by the Permanent Bureau.

### **1.5 EVENT MANAGEMENT**

#### **1.5.1**

The management of the event will be carried out by the Event Management Committee which will comprise the following delegates:

- The Race Director - who will chair the Meetings
- The Technical Director
- The FIM Medical Officer
- The Clerk of the Course
- The Delegate appointed by DORNA
- The FIM Safety Officer

#### **1.5.2**

At any time the duties of the members of the Event Management Committee are:

- a) To ensure the smooth and efficient running of the event.
- b) To make recommendations to the Race Direction concerning any organisational matter that is in contradiction to the Organiser's protocols or the Regulations.



- c) To report to the FIM WSBK Stewards Panel any infringements of the Regulations.

### 1.5.3

The Event Management Committee will meet at any time required during the event, but at least:

- a) Prior to the first practice session.
- b) At the end of each practice day.
- c) At the end of the event.

### 1.5.4

The quorum for a meeting of the Event Management Committee is three persons.

### 1.5.5

All of the members have one vote. Decisions are based on a simple majority. In the case of a tie, then the Race Director will exercise a casting vote.

### 1.5.6

The FIM Stewards may attend the meetings of the Event Management Committee and the Race Director may also invite the participation of Officials or other persons to assist in the meetings. However, FIM Stewards and the invited officials or other persons will have no right of vote.

### 1.5.7

The duties of the Event Management Committee are:

- a) To receive reports from the various Officials concerning scrutineering, practice and races.
- b) To make recommendations to the Promoter to improve the smooth and efficient running of the event.



## **1.6 RACE DIRECTION**

### **1.6.1**

The Race Direction will comprise the following persons:

- The FIM Representative, who will chair the Race Direction meetings
- The Race Director
- The DORNA Representative

These persons can perform other functions during the event.

### **1.6.2**

The quorum for a meeting of the Race Direction is two persons.

### **1.6.3**

Each member has one vote. Decisions are based on a simple majority. In case of a tie, the chairman of the Race Direction has a casting vote.

### **1.6.4**

The Race Direction will meet at any time required during the event.

### **1.6.5**

The duties of the Race Direction are:

- a) To take decision as provided in the Regulations.
- b) To oversee operational matters to ensure the safe, efficient, and timely running of the event according to the FIM World Championship Superbike Regulations.
- c) To make changes in the conduct and/or format of a race and/or a practice session based on safety considerations, provided that such decision is absolutely necessary to resolve a situation not foreseen in the FIM World Championship Superbike Regulations. In such exceptional cases, such decision may prevail over specific provisions of the FIM World Championship Superbike Regulations.



- d) Provided that it is absolutely necessary to resolve a situation not foreseen in the Regulations, the Race Direction may issue pre-race instructions or clarifications and in specific cases even create pre-race regulations (e.g. to take into account the local conditions at a particular circuit). However, such actions may only be taken within the limits set out by the FIM World Championship Superbike Regulations.

## **1.7 THE FIM WSBK STEWARDS PANEL**

### **1.7.1**

There will be a panel comprised of three persons holders of an FIM WSBK Superlicence.

Each FIM Steward may be a permanent appointment, or appointed by rota, and approved by the Permanent Bureau.

### **1.7.2**

The quorum for a meeting of the FIM WSBK Stewards Panel is two persons.

### **1.7.3**

Each member has one vote. Decisions are based on a simple majority. In the case of a tie, the Chairman will exercise a casting vote.

### **1.7.4**

The FIM Stewards have no executive role in the running of the events, except for the imposition of penalties and the adjudication of protests as per Art. 1.7.6.

### **1.7.5**

The FIM WSBK Stewards Panel will meet at any time required during the event.



## 1.7.6

The FIM WSBK Stewards Panel is responsible for:

- a) Taking decisions as provided in the Regulations.
- b) Imposing penalties for any infringements of the Regulations.
- c) Adjudicating on any protest relating to infringements of the Regulations.

## 1.7.7

All decisions of the FIM WSBK Stewards Panel must be communicated in writing to the Race Direction and all affected parties.

## 1.8 THE CALENDAR

### 1.8.1

The provisional calendar of races counting for the Championships will be, in principle, published by no later than 30<sup>th</sup> November of the preceding year.

### 1.8.2

The Superbike Commission reserves the right to propose the inclusion, substitution or cancellation of events in the provisional calendar.

## 1.9 CLASSES

### 1.9.1

Classes will be for the following categories:

Superbike	4 stroke	2, 3 or 4 cylinders
Supersport	4 stroke	2, 3 or 4 cylinders
Supersport 300	4 stroke	1 or 2 cylinders

### 1.9.2

Technical Regulations governing the three classes are provided under chapter 2 of the Regulations.



## **1.10 ELIGIBLE COMPETITORS**

### **1.10.1**

The rider must be in possession of the adequate FIM Licence issued by a FMN. Licences are issued to riders designated by the FIM and DWO and can, in certain circumstances, be for a single event. To receive a licence, the rider must be in possession of a national licence of a FMN at no additional cost to the rider.

The teams must be in possession of the appropriate “FIM Team Licence”.

The constructors must be in possession of the appropriate “FIM Manufacturer Licence”.

#### **1.10.1.1 Minimum age**

Supersport 300	15 years
Supersport	16 years
Superbike	18 years

The limit for the minimum age starts on the date of the rider’s birthday.

#### **1.10.1.2 Maximum age Superbike and Supersport**

The limit for the maximum age finishes at the end of the year in which the rider reaches the age of 50.

#### **1.10.1.3 Maximum age Supersport 300**

The maximum age is 28 years at the 1<sup>st</sup> of January of the corresponding Championship year.

## **1.11 ENTRIES AND WILD CARDS**

### **1.11.1**

Each team, must submit to the Secretariat of DWO by 20 November of the previous season for the FIM Superbike, Supersport, Supersport 300 World Championships an entry for their team which will, except when special dispensation is granted, be valid for all races in the FIM World Championship Superbike or Supersport or Supersport 300. At the same time, the team must indicate the riders designated and the class in which they will participate.

## 1.11.2

Each entry commits the team to designate a rider to compete in all the events of the FIM Superbike or Supersports Championships and of the European Championship in the chosen class. Exceptions can only be made as follows:

- i) A team may withdraw a rider from an event which has already started, due to injury of the rider, irreparable damage to the motorcycle(s) or in case of “Force Majeure”. A withdrawal for medical reasons must be supported by a letter from the Chief Medical Officer of the meeting or the Medical Director.
- ii) A team may withdraw a rider from additional events in the FIM World Championships Superbike or Supersports Championship only for medical reasons or other reasons of “Force Majeure”. Withdrawals for medical reasons must be supported by a letter from a qualified Doctor.

Teams must make every reasonable effort to provide a qualified substitute rider, approved by FIM and DWO, to fulfil their entry obligations within 10 days of the withdrawal. However a substitution or replacement of the entered rider may be made until one hour before the Free Practices 3. In the same time, the Teams must communicate in writing to the Race Direction, the name of the substitute or replacing rider.

A substitute rider may not be a rider currently contracted in the Championship, unless approved by the Race Direction who will pay attention that such substitution was not motivated by reasons other than sportive or medical.

- iii) For reasons not being medical reasons and not being reasons of “Force Majeure”, and subject to the Team obtaining the approval of FIM and DWO (neither of whom shall be obliged to give reasons for any refusal to approve), a Team may replace a rider which that Team has entered in the FIM World Championships Superbike or Supersports with another rider (“replacement rider”) for remaining rounds of the FIM World Championships Superbike or Supersports. Only one replacement of a rider will be permitted per season.



A replacement rider may not be a rider currently contracted in the Championship, unless approved by the Race Direction who will pay attention that such substitution was not motivated by reasons other than sportive or medical.

Exceptional circumstances will be examined by the FIM and DWO.

### 1.11.3

If a team is unable to provide a substitute rider, then the FIM and DWO may decide to allow another team to enter a rider, on an event by event basis, to reach the required number of entries. Art. 1.10 will apply to all replacement and substitute riders.

### 1.11.4

A rider, entered in a round of the Supersport 300 cannot participate in a support race during the same event and on the same track.

### 1.11.5

Each Event host Federation (FMNR) may nominate 2 wild card entries for the Superbike and Supersports in their own event only. Once the wild cards have been nominated by the FMNR, DWO can nominate “one event” riders. These “one event” riders must be holders of an appropriate licence issued by any FMN and wild card entries must be submitted by the FMNR to the FIM, on the official entry form issued by the FIM, at least 45 days (90 days in case of events outside of Europe) before the event. Exceptions may be granted by FIM / DWO.

All entries will be submitted to the approval of the Superbike Commission.

When a wild card licence is confirmed and issued by the FIM, the cost of this licence will not be reimbursed to the rider who withdraws its participation to the race.

Accepted entries will be required to pay to DWO a fee to cover the costs of materials provided for their participation.



### 1.11.6

A compulsory briefing will be held for all the riders who will be participating for the first time in the current Championship, at 18:00 hrs the day before the first practice session is scheduled.

Failure to attend the briefing in full may result in a penalty. A waiver can be granted to a rider by the Race Direction.

### 1.11.7

A rider shall be deemed to have taken part in the event when he enters the race track in at least, one practice session.

### 1.11.8

A rider shall be deemed to have started a race when he participates in, at least, the first lap of the race.

## 1.12 STARTING NUMBERS

### 1.12.1

Each rider accepted for the FIM World Championships Superbike or Supersports will be allocated a specific starting number which will be valid for the whole Championship.

In general, the precedence in the choice of starting number will be based on the result of the rider in the previous year's Championship.

All the numbers must be in the range from 1 to 99.

It is forbidden to have a different number from the starting number, on the bike, helmet or suit (except for specific sponsor reason with the former approval of the Race Direction).

## 1.13 SCHEDULE

### 1.13.1

The Event schedule will be as follows and can only be varied:

- i) Prior to the event by the FIM and DWO;
- ii) During the event by the Race Direction.

From Tuesday to Thursday: arrival and setting up of the teams.

### 2021 EU STANDARD TIME SCHEDULE (Time zone: CET)

#### THURSDAY

TIME		DUR (Hrs, min)	CATEGORY	PROGRAMME
11:00				FIM Track Safety Inspection
13:00	14:00	1:00		DWO TV Track Activities & Safety Car Laps
15:00	17:00	2:00	All Classes	Tyre Stickers Distribution
15:00	17:00	2:00	WorldSSP	Technical/Sporting Checks (Teams without Pit Garages)
15:00	17:00	2:00	WorldSSP300	Technical/Sporting Checks (Teams without Pit Garages)
15:30	17:00	1:30	All Riders	Riders Track Familiarization
16:00	17:30	1:30	WorldSBK	Technical/Sporting Checks
17:00			All 1 <sup>st</sup> Time Riders	Riders Briefing

#### FRIDAY

TIME		DUR (Hrs, min)	CATEGORY	PROGRAMME
07:50	08:00	0:10	Timekeeping	Track System Test
08:20				FIM Medical Inspection
08:30				FIM Track Inspection
08:45	10:00	1:15	WorldSSP	Technical/Sporting Checks
09:45	10:15	0:30	WorldSSP300	Free Practice 1
10:30	11:15	0:45	WorldSBK	Free Practice 1
11:25	12:10	0:45	WorldSSP	Free Practice 1
14:15	14:45	0:30	WorldSSP300	Free Practice 2
15:00	15:45	0:45	WorldSBK	Free Practice 2
16:00	16:45	0:45	WorldSSP	Free Practice 2
17:00	17:30	0:30		Manufacturer Parade Laps


**SATURDAY**

TIME		DUR (Hrs, min)	CATEGORY	PROGRAMME
07:50	08:00	0:10	Timekeeping	Track System Test
08:20				FIM Medical Inspection
08:30				FIM Track Inspection
09:00	09:30	0:30	WorldSBK	Free Practice 3
10:00	10:20	0:20	WorldSSP300	Tissot Superpole
10:35	10:55	0:20	WorldSSP	Tissot Superpole
11:10	11:25	0:15	WorldSBK	Tissot Superpole
12:45			WorldSSP300	RACE 1
14:00			WorldSBK	RACE 1
15:15			WorldSSP	RACE 1
16:45	17:30	0:45		Grid & Pit Walk 1

**SUNDAY**

TIME		DUR (Hrs, min)	CATEGORY	PROGRAMME
07:50	08:00	0:10	Timekeeping	Track System Test
08:20				FIM Medical Inspection
08:30				FIM Track Inspection
09:00	09:15	0:15	WorldSBK	Warm Up
09:25	09:40	0:15	WorldSSP	Warm Up
09:50	10:05	0:15	WorldSSP300	WARM UP
10:10	10:30	0:20		Manufacturer Parade Laps or/and Safety Car Laps
11:00			WorldSBK	TISSOT SUPERPOLE RACE
11:25	12:05	0:40		Pit Walk 2 & Safety Car Laps
12:30			WorldSSP	RACE 2
14:00			WorldSBK	RACE 2
15:15			WorldSSP300	RACE 2

**1.13.2**

The SBK Commission reserves the right to modify the number of races per event for each class.

The schedule may include an allotted time for riders and teams to make familiarisation laps by non-motorised bicycle or by foot. All traffic at this time must be in the circuit direction.

## **1.14 TECHNICAL CONTROL-MEDICAL CONTROL-DOPING CONTROL**

### **1.14.1**

All motorcycles should be checked by the Technical Stewards prior to first participation in practice on safety aspects, according to the published schedule. At the Discretion of the Technical Director, machines may be checked earlier than the schedule if the machines are ready.

Teams may present for Technical Control one (1) motorcycle per rider for the Superbike, Supersport and Supersport 300 which will be specially identified by the Technical Controllers.

Unless a waiver is granted by the Race Direction, teams who do not comply with the schedule for technical or medical controls will not be allowed to take part in the event.

### **1.14.2**

The procedure for Technical Control is described in the Technical Regulations, articles 2.9 thru 2.11. The procedure for Medical Control is described in the Medical Code.

### **1.14.3**

All articles regarding anti-doping procedures are mentioned in the FIM Anti-Doping Code.

## **1.15 PRACTICE**

### **1.15.1 Practice and testing Restrictions**

#### **A) ALL CLASSES:**

1. Practice by riders and teams contracted to compete in the Championship between the end of one season and the end of the subsequent season must be held only in ONE Continental zone designated by the team. Teams must inform DWO their election before their Winter test program starts. Continental Zone definition is (Europe, Asia/Oceania, Africa, the Americas).
2. It is prohibited for riders and teams contracted to compete in the FIM Superbike World Championship to test, practice or race at the same location as a FIM World Superbike World Championship event during the 11 days preceding the day of first practice of this event.



- B) SUPERBIKE and SUPERSPORT classes “Winter testing Ban”: Practice by riders and teams contracted to compete in the FIM Superbike and Supersport World Championship is prohibited from the 21<sup>st</sup> of December until the 4<sup>th</sup> of January (both dates inclusive).
- C) SUPERBIKE CLASS ONLY: “Season testing Ban”: Practice by riders and teams contracted to compete in the SUPERBIKE class of the FIM Superbike World Championship is prohibited at any circuit, **from the end of one season until the completion of the last race of the next season**, with the following exceptions/clarifications:
1. Practice in the same class as their permanent entry class is permitted at any time, up to a maximum of **10** days per rider (3c included). Tests, practices or Races are prohibited at the same location as a FIM World Superbike Championship event during the 11 days preceding the day of first practice of that event. **(The first practice day will usually be a Friday.)**
  2. **Teams must inform DWO of their testing/race plans and schedule during the Season testing Ban in order to analyse the track time at disposal. DWO will inform the Team whether the test will be counted as a full or half day.**

**Any private tests organised prior to an event by a team or manufacturer must be made available to all teams enrolled in the World SBK championship, and at a reasonable cost.**

3. In addition to the testing allocation of **10** days Riders and Teams are permitted to test in in the following conditions:
  - a) Free or qualifying practices at a FIM Superbike World Championship event.
  - b) **Official and Supported Testing Sessions organised by DWO.**
  - c) Participation by riders in any other FIM World Championship or Prize event. (However private tests or “pre-tests” made before this event at a circuit of another FIM World Championship round will be subject to the restriction mentioned at point 1.15.1 C) 1.)



- d) Participation at any National Championship event. However, participating partly or fully to the official sessions and race of the event will be considered as 1 (one) test day only.
  - e) Wild cards and one event riders may test at anytime except at the same location as a FIM World Superbike Championship event during the 11 days preceding the day of first practice of that event.
  - f) **Riders testing privately for the Suzuka 8 hour race are entitled to 2 extra days of testing. This to be carried out at Suzuka race track only.**
- D) Exceptions to this rule may be granted, with the approval of the Race Direction, due to reasons of force majeure, or in **exceptional circumstances.**
- E) Practice for riders in a different discipline than Circuit Racing, is permitted for training purposes.
- F) **The use of road motorcycles for training purposes is permitted at any time, however the rider must not be accompanied by any Team representative and must respect the spirit of the rule in the technical and sporting aspects and is subject to the restriction mentioned at point 1.15.1 C) 1.).**

The specification of the machine must be submitted to Race Direction and the Superbike Technical Director for approval **BEFORE** it is used. Only safety items may be changed including master cylinder, brake pads and closed bellypan.

Exceptions may be granted with the approval of the Race Direction.

#### **1.15.2 Practice Sessions (warm-up inclusive)**

- i) Riders will commence practice from the pit lane when the green light is displayed at the exit of the pit lane.
- ii) The duration of practice will commence from the illumination of the green light. A visible board or count-down will be shown in the pit lane to indicate the minutes of practice remaining.



- iii) The end of practice will be indicated by the waving of two chequered flags, at which time the pit exit will be closed. A rider's time will continue to be recorded until he passes the official chequered flag at the finish line after the allotted time has elapsed. If it is not possible to show the chequered flag because the rider passes the finish line closer to the end of the session, the scheduled time of the end of the session will be considered. After the chequered flags riders may complete the lap to the pit entry.
- iv) If practice is interrupted due to an incident or any other reason, then a red flag will be displayed at the start line and at all marshals posts. All riders must return slowly to the pit lane. When practice is restarted, the time remaining will be that shown on the count-down device in the pit lane and on the monitors of the official timekeepers at the moment the red flags were displayed.

During the whole event, once practice has started, nobody can alter the condition of the racing surface of the circuit. Even track marshals cannot clean the track without prior instructions and/or authorisation of the Race Director and the Safety Officer.

### **1.15.3 Motorcycles**

During the event a rider may only use one motorcycle, as presented for Technical Control, according to the procedures described in articles 2.4.10, 2.5.10 and 2.6.10 of the Technical Regulations.

### **1.15.4 Lap Time**

All laps of the riders will be timed.

A new lap record for a circuit can only be established by a rider during a race.

For both practice and race, the lap time is the subtraction of the time between two consecutive crossings of the plane of the finish line indicated by the line painted on the track.

Official circuit records will be recognised as the following:

- All Time Lap Record - the fastest lap time in history, including all sessions at a race event.
- Best Race Lap - the fastest lap time in history recorded during a race.

### **1.15.5 Qualifying (called Superpole) practices results**

The results will be based on the fastest time recorded by the riders in all qualifying practices.

In the case where all qualifying practices or Superpoles have been cancelled, the results will be based on the fastest time recorded by the riders in all free practices.

In the event of a tie, riders' second and subsequent best times will be taken into account.

### **1.15.6 Qualification for the Race**

To qualify for the race, a rider must achieve a time during the Qualifying session(s) at least equal to 107% of the qualifying time recorded by the fastest rider of his class. Any rider who fails to achieve a qualifying time will be permitted to take part in the race provided that in any of the free practice sessions he has achieved a time at least equal to 107% of the fastest rider in the same session. Such riders will start the race from the back of the grid according to their qualifying time. If such riders fails to achieve a qualifying time, they will start behind all the other riders according to their best free practice time.

If a substitute rider only participates from FP3 onwards and does not achieve a lap time of 107% of the fastest rider in the same session, that rider may participate in warm up, where he must achieve a lap time of at least 107% of the fastest rider in warm up to be allowed to start the race (unless warm up is cancelled in which case the Race Direction may allow such rider to start the race).

## **1.16 GRID POSITIONS**

The pole position, allocated to the fastest rider, will be determined during the homologation of the circuit.

For all classes, the Grid will be arranged in the "in echelon" 3-3-3-3 configuration.

Each line will be offset.

There will be a distance of 9 metres between each row.



### 1.16.1 Grid positions for the Superbike race 1, Superbike Superpole Race, Supersport 600, Supersport 300

Grid positions will be based on the fastest time recorded by the riders in all qualifying practice.

In the case where qualifying practices have been cancelled, the grid positions will be based on the fastest time recorded by the riders in all free practices.

In the event of a tie, riders' second and subsequent best times will be taken into account.

### 1.16.2 Grid positions for the Superbike race 2

Grid positions will be determined as follows:

- The first nine riders in "Superpole Race" will take the first 9 grid positions according to the Superpole race results.
- As from row 4 (grid positions 10 and onwards), according to the qualifying time (for riders other than the ones classified 1 to 9 at Superpole Race).

In the case where Superpole Race has been cancelled, the grid positions will be based as for Art. 1.16.1.

### 1.16.3

The final grid of each class will be published after the warm up has been completed, at the latest one hour before the start of the race.

## 1.17 RACES

Superbike:	minimum 85 km	maximum 110 km
Supersport:	minimum <b>70</b> km	maximum 110 km
Supersport 300:	minimum 40 km	maximum 70 km

Superpole Race 10 Laps

and will be determined by the FIM and DWO after publication of the calendar.

### 1.17.1

The length of a race may only be varied by the Race Direction.



## 1.17.2

If the Timekeeping and Race Control rooms are fed by normal power (electricity) supply, they must also be permanently connected to an U.P.S. (Uninterruptable Power System) and to a generator.

The Clerk of the Course is responsible of the proper operation.

## 1.18 START PROCEDURE

### 1.18.1 Normal Start procedure

1. Only riders who have completed at least one sighting lap will be permitted to start the race from their position published on the final grid. Under no circumstances may they push their motorcycle onto the grid from the pit lane.
2. Approximately 20 Minutes (10 minutes in the case of a restarted or rescheduled race before the Start of the Superbike Race 1 and 2 - Pit lane exit opens for sighting lap.

Approximately 15 Minutes (10 minutes in the case of a restarted or rescheduled race before the Start of the Superpole and Supersport Races - Pit lane exit opens for sighting lap.

Green lights on (and possibly green flags waved) at the pit lane exit. Count-down boards of 5, 4, 3, 2 and 1 minutes are shown at the pit exit.

Riders may complete more than one sighting lap by passing through the pit lane where they may make adjustments or refuel.

Any rider who crashes or encounters problems during the sighting lap(s) is permitted to reach the pit lane safely under the instructions of the officials and make reparations in the pit lane (not in the box). Race Direction is not responsible for ensuring the machine and rider reach the pit lane in time to start. However, all reasonable efforts will be made to assist the team and rider.

His bike will be checked in the pit lane, for safety reasons, by the Technical Director (or his appointed deputy).

3. Approximately 15 Minutes (5 minutes in the case of a restarted or rescheduled race before the Start of the Superbike Race 1 and 2 - Pit lane exit closes.

Approximately 10 Minutes (5 minutes in the case of a restarted or rescheduled race before the Start of the Superpole and Supersport Races - Pit lane exit closes.

Red lights on (and possibly red flags waved) at the pit lane exit.

4. When riders reach the grid after the sighting lap(s) they must stop at the rear of the grid and turn off the engine. The motorcycle will then be pushed at walking pace by a team member to the grid position. The rider may dismount or remain on the motorcycle to the grid position. Riders on the grid may be attended by up to five persons one of whom may hold an umbrella. All attendants on the grid must wear a “Grid Pass”. Having taken up their grid position, riders must take off their helmets, except in the case of a restarted or wet race.
5. Riders who do not go on to the grid may start the warm up lap from the pit lane under the instructions of the marshal positioned at the pit lane exit.

Riders starting the warm up lap from the pit lane must start the race from the back of the grid. If such riders do not respect the “back of the grid position”, they will be penalised by a ride through. In a case of a restarted race with less than 3 laps, the riders will take their original grid position but the ride through penalty will be applied.

Officials will display panels, at the side of the track, indicating the row of the grid, to assist riders in locating their grid position.

6. The Race Director may, at this stage, choose to declare the race as “wet” or “dry” and the starter will indicate this to the riders on the grid and those who may still be in the pit lane by the display of a board. If no board is displayed the race will automatically be “dry”.
7. Riders on the grid may, at this stage, make adjustments to the motorcycle or change tyres to suit the track conditions.

Trolleys, as shown in the SBK Organisation Rules published by DWO, are allowed on the grid.

Two air blowers, as shown in the SBK Organisation Rules published by DWO, are allowed on the grid.

Tyre warmers and suspension pre-heaters may be used on the grid.

Riders may use a generator to power tyre warmers, suspension pre-heaters and air blowers on the grid.

Only one generator per motorcycle may be used. The generator must be of the “hand carried” type.

Starter engines may also be used on the grid.

Generators and starter engines should be located to the rear of the motorcycles.

To ensure ease of mobility when clearing the grid, the size and type of grid equipment such as generators, tool trolleys, etc. is subject to the approval of the Technical Director.

All adjustments must be completed by the display of the 3 minutes board. After this board is displayed, riders who still wish to make adjustments must push their motorcycle to the pit lane. Such riders and their motorcycles must be clear of the grid and in the pit lane before the display of the 1 minute board, where they may continue to make adjustments. Such riders will start the warm up lap from the pit lane and will start the race from the back of the grid.

Working on the machine on the grid after the 3 minutes board is presented may be penalised.

8. Refuelling or changing fuel tank on the grid is forbidden.
9. 5 Minutes before the Start of the Warm Up Lap - Display of 5 Minute Board on the grid.
10. 3 Minutes before the Start of the Warm Up Lap - Display of 3 Minute Board on the grid.

Generators must have been disconnected.

Generators, trolleys and air blowers must be removed from the grid as quickly as possible.



At this point, all persons except maximum two mechanics per motorcycle (3 mechanics in SBK), the person holding the umbrella for the rider, the television crew of the host broadcaster and essential officials must leave the grid.

Riders must put their helmets on.

No person (except essential officials) is allowed to go on the grid at this point.

11. 1 Minute before the Start of the Warm Up Lap - Display of 1 Minute Board on the grid.

Tyre warmers, suspension pre-heaters and stands must have been removed from motorcycles on the grid or in the pit lane. All team personnel must have left the rider/machine and be leaving the grid except when there is a problem with the machine.

Any team, responsible for causing a delay in the start procedure, may be further penalised.

12. 30 Seconds before the Start of the Warm Up Lap - Display of 30 Second Board on the grid.

All riders must be in position on the grid with engines running. No further assistance from mechanics is permitted. Any rider who is unable to start his motorcycle will immediately be removed from the grid, under the control of the grid marshals. The machine will be moved to the pit lane where further attempts can be made to rectify the problem by the mechanics and or rider. Such riders may start the warm up lap from the pit lane and will start the race from the back of the grid.

13. 2 Minutes before the Start of the Race - Green flag waved to start warm up lap.

The minimum pit Intervention time for the Superbike and Supersport 600 classes is active from this moment.

In the interest of safety, should a rider stall his motorcycle, he may be assisted to restart. If, after a reasonable period, the engine does not start, then the rider will be pushed into the pit lane where his mechanics may provide assistance.



The riders will make one lap, at unrestricted speed, followed by a safety car. The safety car will overtake slow riders.

Any rider who arrives at pit lane entry after safety car must enter the pit lane and start the race from there.

As soon as the riders have passed the pit lane exit, the pit lane exit light will be turned green, and any rider waiting in the pit lane will be permitted to join the warm up lap. Thirty seconds later, the light will turn red and a marshal will display a red flag closing the pit lane exit.

On returning to the grid the riders must take up their positions with the front wheel of their motorcycle up to and behind the front line and between the side lines defining the grid position and keep their engines running. The front tyre must not be touching the track surface outside of the painted lines.

If two or more riders must start from the back of the grid, they will take up position in the order in which they qualified for the race.

An official will stand at the front of the grid holding a red flag motionless.

Any rider who crashes or encounters a problem with his motorcycle on the warm up lap may return to the pit lane and make repairs in the pit lane not in the box.

Any rider who stalls his engine on the grid or who has other difficulties must remain on the motorcycle and raise an arm.

Attempting to restart the motorcycle on the grid is not permitted. It is not permitted to delay the start by any other means. Under the supervision or assistance of an official, he will leave the grid to enter into the pit lane where his mechanics may provide assistance.

As each row of the grid is completed, the officials will lower the panels indicating that their row is complete. Panels will not be lowered when a rider in that row has indicated that he has stalled his motorcycle or has other difficulties. When all panels have been lowered and the safety car has taken up its position, an, an official at the rear of the grid will wave a green flag.



The Starter will then instruct the official at the front of the grid, displaying the red flag, to walk to the side of the track.

14. A red light will be displayed for between 2 and 5 seconds.

The red light will go out to start the race.

A safety car will follow behind the motorcycles for the whole of the first lap. The safety car must overtake slow riders.

If the red lights' device is fed by normal power (electricity) supply, it must also be connected to a set of car batteries or to an U.P.S. (Uninterruptable Power System) to provide power to the starting lights' device if the electric line breaks down just at the moment of the start.

Any rider who anticipates the start or who is deliberately not placed in his starting box be penalised by the FIM WSBK Stewards. **The standard penalty is two Long Lap Penalties as described in Article 1.19.2. The two Long Laps must be completed within 6 laps of the rider receiving notification of the penalty. Other penalties may be imposed.**

The motorcycle must be stationary at the time the red lights are turned off. Anticipation of the start is defined by the motorcycle moving forward at the time the red lights are turned off.

In the case of a minor movement and subsequent stop whilst the red lights are on, FIM Stewards panel will be the sole judge of whether an advantage has been gained.

The FIM Stewards panel will decide if a penalty will be imposed for taking advantage by anticipating the start and must communicate the penalty to the rider as soon as possible.

15. If, after the start of the race, a rider stalls his motorcycle, then he may be assisted by being pushed **by an official** along the track until the engine starts.

If, after a reasonable period, the engine does not start, then the rider will be pushed **by an official** into the pit lane where his mechanics may provide assistance.



16. After the riders have passed the exit of the pit lane, the official situated at this exit will display a green light to start any riders still in the pit lane.

Such riders may then start the race up until the point where the lead rider has crossed the finish line to complete the first racing lap.

The Race direction may apply a delay before the display of the green light according to the layout and distance of the pit exit. In that case an official information will be circulated.

17. Should there be a problem that might prejudice safety for the start, of the warm up lap or the race the Starter will invoke one of the following procedures:

#### 17.1 START DELAYED

- A red flag is waved from the Starter's rostrum and the red light stays on.
- The "Start Delayed" board is displayed from the Starter's rostrum and a marshal will wave a yellow flag at each row of the starting grid from the signaling platform.
- Riders must stay in their grid position with helmets on, engines may be switched off.
- The machine(s) which caused the Start Delayed procedure will be removed **by an official** to the pit lane, regardless of what work is needed to restart the machine. If they can be restarted the rider may start the warm up lap from pit lane, and will start the race from the back of the grid.
- After display of the Start Delayed board, a maximum of 2 mechanics per rider is allowed on the grid (3 mechanics in Superbike). Only tyre warmers, stands, and hand-carried tools are allowed, no generators are allowed on the grid.
- Only essential officials are allowed on the grid, no media, guests, umbrella-holders or other team personnel will be permitted, with the exception of camera crew(s) authorised by the Organisers.



- The start procedure will be re-commenced at the 3 minutes board which the Starter will order to be displayed as soon as possible (normally as soon as all riders on the grid are attended by their team).
- Display of 1 Minute Board on the grid: Immediate removal of tyre warmers from machines on the grid. The mechanics will, as quickly as possible, assist the rider to start the machine and then vacate the grid. At this point, all team personnel leave the grid.
- Display of 30 Second Board on the grid: All riders must be in position on the grid with engines running. No further assistance from mechanics is permitted. Any rider who is unable to start his machine must remove it to the pit lane, under the control of the grid marshals, where he may make further attempts to start it. Such riders may start the warm up lap from the pit lane and will start the race from the back of the grid.
- Green flag waved to start warm up lap. In the interest of safety, should a rider stall his machine, he may be assisted by an official to restart. If, after a reasonable period, the engine does not start, then the rider will be pushed by an official into the pit lane where his mechanics may provide assistance.
- The race distance will be reduced by one lap only if the Start Delayed signal is after the warm up lap.
- For a restarted race the race distance may not be reduced.

Any person who, due to his behaviour on the grid is responsible for a “start delayed” may be further penalised.

## 17.2 START DELAYED “RAIN”

- A red flag is waved from the Starter’s rostrum and the red light stays on.
- The “Start Delayed Rain” board is displayed from the Starter’s rostrum and a marshal will wave a yellow flag at each row of the starting grid from the signaling platform.
- Riders must stay in their grid position, engines must be switched off.



- After display of the Start Delayed Rain board, a maximum of 5 mechanics per rider is allowed on the grid. Works on bike are allowed.
- Only essential officials are allowed on the grid, no media, guests, umbrella-holders or other team personnel will be permitted, with the exception of camera crew(s) authorised by the Organisers.
- The start procedure will be re-commenced at the 5 minutes board which the Starter will order to be displayed as soon as possible (normally as soon as all riders on the grid are attended by their team).
- Display of 3 minutes board on the grid: Generators must **have been disconnected**. Generators, trolleys and air blowers must be removed from the grid as quickly as possible.
- Trolleys and air blowers must be removed from the grid as quickly as possible.
- At this point, all persons except maximum two mechanics per motorcycle, the television crew of the host broadcaster and essential officials must leave the grid.
- Riders must put their helmets on.
- Display of 1 Minute Board on the grid: The mechanics will, as quickly as possible, assist the rider to start the machine and then vacate the grid. At this point, all team personnel leave the grid.  
Tyre warmers and stands must have been removed from motorcycles on the grid or in the pit lane.
- Display of 30 Second Board on the grid: All riders must be in position on the grid with engines running. No further assistance from mechanics is permitted. Any rider who is unable to start his machine must remove it to the pit lane, under the control of the grid marshals, where he may make further attempts to start it. Such rider may start the sighting lap from the pit lane and rejoin their grid position.



- Green flag waved to start the sighting lap. In the interest of safety, should a rider stall his machine, he may be assisted to restart. If, after a reasonable period, the engine does not start, then the rider will be pushed into the pit lane where his mechanics may provide assistance.
- Any rider starting the sighting lap from the pitlane/back of the grid may rejoin his grid position.
- After the sighting lap the start procedure will be re-commenced at the 5 minutes board which the Starter will order to be displayed as soon as possible (normally as soon as all riders on the grid are attended by their team).
- The race distance will be reduced by one lap if the Start Delayed Rain signal is after the sighting lap and by two laps if its declared after the warm up lap.
- For a restarted race the race distance will not be reduced.
- Any person who, due to his behaviour on the grid is responsible for a “start delayed” may be further penalized.

### **17.3 START DELAYED “BOX”**

- A red flag is waved from the Starter’s rostrum and the red light stays on.
- The “Start Delayed Box” board is displayed from the Starter’s rostrum and a marshal will wave a yellow flag at each row of the starting grid from the signaling platform.
- Engines must be switched off.
- After display of the Start Delayed Box board, a maximum of 2 mechanics per rider is allowed on the grid to help riders to take the bike into the boxes.
- Race Direction will communicate the new Event schedule on the Official Time keeping monitors.

## 17.4 START DELAYED “QUICK START”

- A red flag is waved from the Starter’s rostrum and the red light stays on.
- The “Start Delayed Quick Start” board is displayed from the Starter’s rostrum and a marshal will wave a yellow flag at each row of the starting grid from the signaling platform.
- Riders must stay in their grid position, engines must be switched off.
- After display of the Start Delayed Quick Start, a maximum of 5 mechanics per rider is allowed on the grid. Works on bike are allowed.
- Only essential officials are allowed on the grid, no media, guests, umbrella-holders or other team personnel will be permitted, with the exception of camera crew(s) authorised by the Organisers.
- The start procedure will be re-commenced at the 5 minutes board which the Starter will order to be displayed as soon as possible (normally as soon as all riders on the grid are attended by their team).
- Display of 3 minutes board on the grid: Generators must **have been disconnected**. Generators, trolleys and air blowers must be removed from the grid as quickly as possible.
- Trolleys and air blowers must be removed from the grid as quickly as possible.
- At this point, all persons except maximum two mechanics per motorcycle, the television crew of the host broadcaster and essential officials must leave the grid.
- Riders must put their helmets on.
- Display of 1 Minute Board on the grid: The mechanics will, as quickly as possible, assist the rider to start the machine and then vacate the grid. At this point, all team personnel leave the grid. Tyre warmers and stands must have been removed from motorcycles on the grid or in the pitlane.



- Display of 30 Second Board on the grid: All riders must be in position on the grid with engines running. No further assistance from mechanics is permitted. Any rider who is unable to start his machine must remove it to the pit lane, under the control of the grid marshals, where he may make further attempts to start it. Such rider may start the sighting lap from the pit lane and rejoin their grid position.
- Green flag waved to start the sighting lap. In the interest of safety, should a rider stall his machine, he may be assisted by an **official** to restart. If, after a reasonable period, the engine does not start, then the rider will be pushed by an **official** into the pit lane where his mechanics may provide assistance.
- Any rider starting the sighting lap from the pitlane/back of the grid may rejoin his grid position.
- After the sighting lap the start procedure will be re-commenced with a quick start procedure From the Grid (one mechanic may go to the grid to indicate the grid position, 30 sec. board, warm up lap).
- The race distance will be reduced by one lap if the Start Delayed quick start signal is after the sighting lap; and by two laps if its declared after the warm up lap.
- For a restarted race the race distance will not be reduced.
- Any person who, due to his behavior on the grid is responsible for a “start delayed” may be further penalized.

## 1.18.2 Quick Start or Restart procedure

When a race is stopped, riders must return to the pit lane, unless otherwise instructed by officials. If there is to be a second part to the race, minor repairs may be carried out. The following procedure will take place:

### 1.18.2.1

Upon arrival in the pit lane, riders may make adjustments to their machine. Refueling is permitted in the pit lane for teams with no garages. (Prior to the start of the race, teams should ensure that all necessary equipment is located in the pit lane service area in a safe position).



### 1.18.2.2

When all riders have entered the pit lane the Race Director will announce the time remaining to the re-opening of the pit lane.

- a) The duration between the red flag and the actual opening of the pit exit will be 10 minutes or more.
- b) The time remaining to the opening of the pit exit will be displayed on timing screens and the 5, 4, 3, 2 and 1 minute(s) count-down boards are shown at the pit exit.

### 1.18.2.3

When the time period has elapsed, the pit lane exit will be opened for SIXTY SECONDS only. Riders will make one lap at unrestricted speed to the starting grid, followed by a Safety Car. Any rider delaying the progress of the sighting lap will be overtaken by the Safety Car. Any rider arriving behind the Safety Car must go into the pit lane. Such riders will have to start the warm up lap from the pit lane and will start the race from the back of the grid.

### 1.18.2.4

Any riders remaining in the pit lane after it has been closed will have to start the warm up lap from the pit exit and start the race from the back of the grid.

### 1.18.2.5

After the closure of the pit lane exit, tyre warmers and suspension pre-heaters must be removed from all machines remaining in the pit lane.

### 1.18.2.6

ONE mechanic only, per rider, may go onto the grid (without tools) to primarily indicate to his rider his position on the grid. In the case of a race impacting new grid positions, the mechanic should avail himself of his riders' new grid position from the classification displayed on the timing screen or from officials who will be positioned at the entry point to the grid with the revised starting grid information.

### 1.18.2.7

All riders will arrive **slowly and safely on the starting position**, with engines running, no adjustments may be made. **When the rider takes his grid position, the mechanic must immediately leave the grid.** Any rider encountering difficulties on the “out lap” from the pit exit must enter the pit lane.

### 1.18.2.8

As soon as the Safety Car arrives on the back of the grid, a 30 seconds board will be shown. These 30 seconds may be reduced at the discretion of the Race Direction when the grid is cleared and it is considered safe.

### 1.18.2.9

After 30 seconds have elapsed a green flag will be shown to start the warm up lap.

### 1.18.2.10

The warm up lap will be completed at unrestricted speed, followed by a Safety Car. When the last rider has passed the pit exit it will be opened for a period of 30 seconds to release any rider waiting. The pit lane exit will remain closed until after the start of the race. Any rider delaying the progress of the warm up lap will be overtaken by the Safety Car.

### 1.18.2.11

Any rider not able to leave the pit exit has a final option of starting the race from the pit exit.

### 1.18.2.12

Upon arrival back at the starting grid the normal start procedure will be followed, with the start signal given in the normal manner.

### 1.18.2.13

Riders who started the warm up lap from the pit lane must start the race from the back of the grid as directed by officials. If two or more riders must start from the back of the grid, they will take up position in the order in which they qualified for the race or, in case of a restarted race, according to the position they qualified in the previous red flagged race.



Any rider arriving in the pit lane entry after the safety car must enter the pit lane and start the race from there.

#### **1.18.2.14**

After the start signal has been given and the last rider has passed the pit exit, the pit exit will be opened. Any riders still in the pit lane may then start the race up until the point when the lead rider has crossed the finish line to complete the first racing lap.

#### **1.18.2.15**

The Quick Start procedure may be invoked by Race Direction as necessary in cases other than an interrupted race (for example a delayed start procedure).

### **1.19 SPECIAL RACE PENALTIES PROCEDURES**

Among various penalties, the FIM WSBK Stewards may apply the following ones:

#### **1.19.1 Ride Through Procedure**

During the race, the rider will be requested to ride through the pit lane, stopping is not permitted. He may then rejoin the race.

The rider must respect the speed limit (Art. 1.21.13) in the pit lane. In case of infraction of this speed limit, **the rider will be penalised by the FIM WSBK Stewards (default penalty is a 2X Long Lap Penalty, however other penalties may be imposed), and repeated infractions during the race will be further penalised.**

In the event of a restarted race, the above regulation will also apply.

In the case of a race interrupted prior to the penalty being complied with or notified to, and if there is a second or subsequent parts, the rider will be required to ride through after the start of the second or subsequent parts of the race.

A yellow board (100 cm horizontal x 80 cm vertical) displaying the rider's number (black colour) will be shown at the finish line and the information will also be displayed on the time keeping monitors.

Failure by the relevant rider to ride through, having been shown the board 5 times, will result in that rider being shown the black flag. In the case where the organisation has been unable to carry out the ride through penalty before the end of the race, the relevant rider will be inflicted with an automatic time penalty.

If the infraction is committed during the last five laps, and the rider will not be able to enter the pit lane for complying his ride through, therefore an automatic time penalty will be applied.

This automatic time penalty cannot be subject of any protest or appeal.

This automatic penalty will be calculated thus: The time to pass through the pit lane from pit entry to pit exit at 60 km/h + 20% rounded down to the nearest second.

### **1.19.2 Long Lap Penalty Procedure**

During a race, a rider may be instructed to complete the Long Lap Penalty procedure. The rider must ride through the pre-defined route, usually painted on an asphalt runoff area.

The penalty will be communicated via dashboard signals (where possible) and a board displayed for the rider at the finish line or other pre-defined area.

If the rider does not comply after the board has been presented 5 times the rider will be penalised with a 2X Long Lap penalty or other penalty as decided by the FIM WSBK Stewards.

In the case of a 2X Long Lap Penalty being given, these 2 long laps must be completed within 6 laps of the penalty notification.

If the rider does not complete this 2X Long Lap Penalty after the board has been presented 6 times, he will be penalised with a pit lane ride through (or other penalty as decided by the FIM WSBK Stewards).

The rider must stay within the lines defining the Long Lap route, infractions may result in the penalty being repeated, or other penalty applied as decided by the FIM WSBK Stewards.

The rider carrying out the Long Lap penalty is responsible for leaving and rejoining the track to follow the designated route, in a safe manner without disturbing or endangering other riders. Infractions will be strongly penalised.

Overtaking is forbidden within the Long Lap route.

The penalty should not be carried out when there are yellow flags covering the penalty area, in this case extra lap(s) will be added to the number of laps allowed to comply if the area is unusable due to yellow flags.

In the case where the organisation has been unable to, or has decided not to carry out the long lap penalty before the end of the race, the relevant rider will be inflicted with an equivalent time penalty, or other penalty applied as decided by the FIM WSBK Stewards.

In the case of a race interrupted prior to a long lap penalty being carried out, the relevant rider will be required to carry out a long lap penalty in the second part if the race is restarted, or other penalty such as an equivalent time penalty, as decided by the FIM WSBK Stewards.

The Long Lap route and equivalent time penalty will be notified to the teams prior to the first practice session.

## **1.20 “WET” AND “DRY” RACES**

All races will be categorised as either wet or dry. A board may be displayed on the grid to indicate the status of the race. If no board is displayed, the race is automatically dry. The purpose of this classification is to indicate to riders the consequence of varying climatic conditions during a race.

### **1.20.1 Supersport 300**

#### **1.20.1.1**

**Dry Races** - A race classified as dry will be interrupted by the Race Director, if he considers that climatic conditions affecting the surface of the track makes it likely that riders will wish to change tyres.



### 1.20.1.2

**Wet Races** - A race classified as wet, usually commenced in varying or wet conditions, will not be interrupted for climatic reasons and riders who wish to change tyres or make adjustment must enter the pits and do so during the actual race.

### 1.20.1.3

In all cases where the first race is stopped for climatic reasons, then the restart will, automatically, be a “wet” race.

### 1.20.2 Superbike and Supersport 600 races

A race will not be interrupted for climatic reasons except for extraordinary events and riders who wish to change tyres or make adjustments must enter the pits and do so during the actual race.

## 1.21 BEHAVIOUR DURING PRACTICE AND RACE

1. Riders must obey the flag signals, the light signals, the officials' instructions and the boards which convey instructions. Any infringement to this rule will be penalised according to the provisions of article 1.23.
2. Riders must ride in a responsible manner which does not cause danger to other competitors or participants, either on the track or in the pit-lane. Any infringement of this rule may be penalized.
3. Riders must use only the track and the pit-lane. However, if a rider accidentally leaves the track then he may re-join it at the place indicated by the officials or at a place which does not provide an advantage to him.

**Any infringement of this rule during the practices or warm up will be penalised by the cancellation of the lap time concerned and during the race, by a penalty decided by the WSBK Stewards Panel.**

**Penalties imposed during a race will be communicated via dashboard signals (where possible) and a board will be displayed for the rider at the finish line during a maximum of 5 laps.**



If the rider did not comply after the board has been presented 5 times, (6 times in case of a 2X Long Lap Penalty) they will be penalised by the FIM WSBK Stewards (penalties may include Long Lap, 2X Long Lap, Ride Through, Black Flag).

A time penalty may be imposed in lieu of a penalty where necessary. Further penalties may also be imposed.

4. Any repairs or adjustments along the race track must be made by the rider working alone with no outside assistance, except that rendered by the marshals. The marshals may assist the rider to the extent of helping him to lift the motorcycle and holding it whilst any repairs or adjustments are made. The rider may be assisted by marshals or others to re-start or to move the machine on track, trackside or in the service road.
5. If the rider intends to retire, then he must park his motorcycle in a safe area as indicated by the marshals. Should a rider crash during any practice or qualifying session and wish to re-join the session, then at the discretion of the track marshals, he may re-join the track and must proceed directly to the pit lane. The rider is responsible of the safety with his machine until he reaches the pit lane. His bike will be checked in the pit lane, for safety reasons, by the Technical Director (or his appointed deputy).
6. If the rider encounters a problem with the motorcycle which will result in his retirement from the practice or the race, then he must not attempt to tour at reduced speed to the pits but must pull off the track and park his motorcycle in a safe place as indicated by the marshals.
7. Riders who are returning slowly to the pits for remedial work should ensure that they travel as far as possible off the racing line.
8. Riders who stop their engines in the pits may be assisted to re-start their motorcycle by the mechanics.
9. Riders are not allowed to transport another person on their motorcycle or to be transported by another rider on his motorcycle (exception: Another rider or by another rider after the chequered flag or red flag).

10. Riders must not ride their motorcycles in the opposite direction of the circuit, either on the track or in the pit lane, unless doing so under the direction of an Official.
11. No signal of any kind may pass between a moving motorcycle and the rider's team, or anyone connected with the motorcycle's team, entrant or rider, except for the signals of the timekeeping transponder, lap trigger, races, legible messages on a pit board, or body movements by the rider or team. On-board TV camera signals are allowed, but only when such signals are for the purposes of and managed by the Championship promoter.
12. Riders in the Superbike class are required to carry "on-board" cameras on their motorcycle.

The cameras and associated equipment must be carried during all practice sessions and the race.

Cameras and other equipment, functioning will be supplied to the designated Teams by, at the latest, 14h00 on the day preceding the first day of practice at an event.

Teams must give reasonable access and assistance to the company designated for the supply of the camera equipment to facilitate the mounting of the equipment.

13. A speed limit of 60 km/h will be enforced in the pit lane at all times during the event. Riders must respect the speed limit from where the sign 60 km/h is placed up to where the sign 60 km/h crossed out is placed.

Any rider found to have exceeded the limit during the practices will be subject to a fine of 200 Euros for the first offence. Repeat offences at the same event will incur a higher fine each time.

Any rider committing 3 offences at a single event may also be subject to further penalties from the FIM WSBK Stewards.

Excessive speed and multiple repeat offences during the season may incur higher fines and may also be subject to further penalties from the FIM WSBK Stewards.



**For exceeding the pit lane speed limit during a race the standard penalty will be a 2X Long Lap Penalty. However the FIM WSBK Stewards may apply further or different penalties (for example for excessively high speed causing danger).**

The Race Direction must communicate the offence to the pit of the rider after having received the information from the Official in charge.

14. Stopping on the track during practices and races is forbidden.
15. During the practice sessions, and warm ups, practice starts are permitted;
  - a) when it is safe to do so, at the pit lane exit before joining the track and
  - b) after passing the checkered flags at the end of practice sessions and warm-ups when it is safe to do so, off the racing line and only in the designated Practice Start Zone and following the procedure, as communicated to teams prior to the first practice session. Practice starts during a red flag situation are strictly prohibited.

Any rider found to have infringed this rule will be subject to an instant fine of 150€. Further penalties may be applied.

16. If any rider wishes to parade a flag or engage in any celebration after the chequered flag, they must ride to the side of the racing surface in a safe location to collect the flag and/or perform any celebrations and then re-join the circuit when it is safe to do so.

Riders must not slow on the start-finish straight after the chequered flag unless they are in a safe position to do so and a sufficient distance from the finish line so as not to endanger or impede other riders.

It is forbidden to stop on the start-finish straight after the chequered flag for any celebrations of any kind.

17. After the chequered flag, riders riding on the track must wear a safety helmet until they stop on the pit lane/parc fermé.
18. It is not permitted to ride racing motorcycles within the circuit other than in the pit lane or on the track.



19. Any rider or team whose motorcycle spill oil on the track causing interruption of practice, warm up or race twice in the same event may be penalised by the FIM Stewards Panel.
20. Any rider whose machine enters the pit box or in the paddock during a race will be considered to have finished the race and CANNOT re-enter the track.
21. Any rider who enters the pit lane twice during the race, to make adjustments (for other reasons than changing tyre), may be forbidden by the Race Direction to re-join the race.
22. The pit lane exit road will be defined by the Safety Officer and marked with painted lines. A dotted white line (interrupted line) will signify the end of the pit lane road, which is the point where the track starts and racing may commence. Riders must stay inside the painted lines defining the pit exit road until passing the dotted white line, during all track sessions (practice and race).

Infractions may be penalised with an instant penalty by the FIM Stewards panel.

23. Penalties for infringement of Engine allocation articles:

- Infringement before the race: the rider will start **the next 2 races (Superbike Race 1 and 2 excepting Superpole race)** from the pit lane exit after the green light is on. Penalties will be applied from the first race of the season till the end of the current season.
- Application for a red flagged race with less than 3 laps completed: rider will start the restarted (**new**) race from pit lane.

24. Should a Superbike Team have a Technical Protest lodged against them after Superbike Race 1 then they have three options;

- i) Immediate Examination time allowing.
- ii) Replacement of Suspected parts, with the replaced parts impounded for examination later.
- iii) Checking of all seals, use the machine 'as is' in Race 2 and for any infractions found then penalties will be applied to BOTH Superbike races.



25. Penalties for infringement of tyre sticker rules during the season:  
First offence: warning,  
Second offences and further offences: €250 fine.

## 1.22 PIT STOPS

Riders may enter the pit lane (but must not cross the line into the pit box) during the race.

Refuelling is strictly prohibited. Any infringement of this rule will be penalised with a disqualification.

For the Superbike and Supersport 600 class only, the following procedure will also apply:

- Riders who wish to change tyres in the pit lane must stop in front of their garage and turn off the engine. The use of power tools (maximum two at the same time, electric or pneumatic) is allowed.
- Stands or lifts must operate manually and cannot be power assisted.
- The use of an auxiliary starter and/or of a booster battery is allowed to restart the motorcycle.
- A marshal will monitor the situation and report any infringement of this rule which **may** be penalised by the **FIM Stewards panel**.
- Intervention time for a pit stop for tyre(s) will be communicated by Race Direction during each event. This intervention time will be monitored by the Official timekeeping company. Any rider whose pit intervention time is below the set time, will be penalised by the Race Direction with a calculated time. This time will be the difference between the intervention set time and the pit stop intervention time, calculated between the pit in and pit out loops, multiplied by 5.
- During the pit stop, adjustments to the motorcycle are allowed.
- A pit stop without a tyre change is not affected by this rule.

## 1.23 FLAGS AND LIGHTS

Marshals and other officials display flags or lights to provide information and/or convey instructions to the riders.

All flags are presented waved.

Light panels may be used in addition to, or instead of, flags and may have slight variations in appearance compared to the flag due to technical constraints. Flags and lights on track are both official signals.

As from 2023 the use of light panels in association with waved flags will be compulsory in all circuits.

### 1.23.1 Flags and Lights Used to Provide Information:

- **Green Flag**

The track is clear.

This flag must be waved at each flag marshal post for the first lap of each practice session and of the warm up, for the sighting lap and for the warm up lap.

This flag must be shown waved at the flag marshal post immediately after the incident that necessitated the use of one or more yellow flags.

This flag must be waved by the starter to signal the start of the warm up lap.

This flag may be waved at pit exit, in conjunction with the official signal of the green light, as an extra signal that pit lane exit is open.

- **Yellow and Red Striped Flag**

The adhesion on this section of the track could be affected by any reason.

This flag must be shown waved at the flag marshal post.

- **White Flag with diagonal red cross  
(stroke width of the cross: between 10 and 13 cm)**

Drops of rain on this section of the track.

This flag must be waved at the flag marshal post.

- **White Flag**

Waved at all the flag marshal posts, this flag indicates that it is raining at some parts of the circuit.

Only the Race Direction can take the decision.



- **Blue Flag**

Waved at the flag marshal post, this flag indicates to a rider that he is about to be overtaken.

During the practice sessions, the rider concerned must keep his line and slow down gradually to allow the faster rider to pass him.

During the race, the rider concerned is about to be lapped. He must allow the rider(s) who are lapping him to pass him at the earliest opportunity. Passing within a group of lapped riders is forbidden under the blue flag.

Waved at a marshal post after the pit lane exit, this flag indicates to a rider exiting pit lane that riders are approaching on track. The rider exiting pit lane must do so safely and without disturbing riders on track.

Any Infringement of this rule may be penalised by the Race Direction.

- **Chequered Black/White Flag**

This (these) flag(s) will be waved at the finish line on track level to indicate the finish of race or practice session.

- **Chequered Black/White Flag and Blue Flag**

The chequered black/white flag(s) will be waved together with the blue flag at the finish line on track level when a rider(s) closely precedes the leader during the final lap before the finish line (see Art. 1.25.1).

- **Green Light**

This light must be switched on at the pit lane exit to signal the start of each practice session and of the warm up, the start of the sighting lap(s) and the start of the warm up lap.

- **Flashing Blue Lights**

Will be switched on at the pit lane exit at all time during practices and races.

### 1.23.2 Flags Which Convey Information and Instructions:

- **Yellow Flag**

Waved at each row of the starting grid, this flag indicates that the start of the race is delayed. Waved at one row (or more) of the starting grid, this flag indicates that a rider on that row is having difficulties.

A single yellow flag waved at the flag marshal post indicates that there is a danger ahead beside the track.

Two yellow flags waved together at the flag marshal post indicate that there is a hazard wholly or partly blocking the track.

The waving of a single or of a double yellow flag does not signify a degree of danger but only the location of the incident.

The riders must slow down and **proceed with caution.**

**During all practices, the lap time of riders passing a yellow flag(s) area will be cancelled.**

**During a race, During a race, overtaking is forbidden up until the point where the green flag is waved.**

An infringement of this rule will result in a penalty.

If immediately after having overtaken, the rider realises that they committed an infraction, **they must let pass the rider(s) they have overtaken.** In this case, no penalty will be imposed.

**Penalties imposed during a race will be communicated via dashboard signals (where possible) and boards will be displayed for the rider on the finish line.**

**If the rider does not comply after the board has been presented 5 times, (6 times in case of a 2X Long Lap Penalty) they will be penalised.**

A time penalty may be imposed in lieu of a penalty where necessary and further penalties may also be imposed.

During the final inspection lap, this flag must be waved at the exact place where the flag marshal will be positioned during the practices, the warm ups and races.



- **Red Flag and Red Lights**

When the race or practice is being interrupted, the red flag will be waved at each flag marshal post and the red lights around the track will be switched on. Riders must return slowly to the pits.

When the pit-lane exit is closed, the light will be switched on and the red flag may be used in conjunction with the official red light signal. Riders are not allowed to exit the pit lane.

Any Infringement of this rule may be penalised by the FIM Stewards Panel. The red flag will be shown motionless on the starting grid at the end of the warm up lap.

The red flag may also be used to close the track.

The red lights will be switched on at the start line for between 2 and 5 seconds to start each race.

- **Black Flag**

This flag is used to convey instructions to one rider only and is waved at each flag marshal post together with the rider's number. The rider must stop at the pits at the end of the current lap.

He cannot restart when this flag results from a penalty.

Any Infringement of this rule may be penalised by the FIM Stewards Panel. This flag can also be presented to a rider for a reason other than a penalty (ie. for checking or changing a transponder), in that case he can restart.

- **Black Flag with orange disk (Ø 40 cm)**

This flag is used to convey instructions to one rider only and is waved at each flag marshal post together with the rider's number. This flag informs the rider that his motorcycle has mechanical problems likely to endanger himself or others, and that he must immediately leave the track.

Any Infringement of this rule may be penalised by the FIM Stewards Panel.

### **1.23.3 Flag Dimension**

The flag dimension should be 80 cm in the vertical and 100 cm in the horizontal.

The flag dimension will be checked the day preceding the day of the first practice session.

### **1.23.4 Flag Colour**

The Pantones for the colours are as follows:

Orange: Pantone 151 C  
Black: Pantone Black C  
Blue: Pantone 298 C  
Red: Pantone 186 C  
Yellow: Pantone Yellow C  
Green: Pantone 348 C

The flags' colours will be checked the day preceding the day of the first practice session.

### **1.23.5 Rider's number board**

Black board (70 cm horizontal x 50 cm vertical) which enables the race number of a rider to be attached with a set of numbers in white, whose stroke width is minimum 4 cm and height minimum 30 cm.

This board must be available at each flag marshal post.

### **1.23.6 Flags Marshals posts**

The location will be fixed during the circuit homologation.

### **1.23.7 Marshals Uniforms**

It is strongly recommended the marshals' uniforms to be in white or orange (Ref. Pantone: 151 C) and the rain coat to be transparent.

## **1.24 MEDICAL CARS**

The medical cars must be equipped with yellow flashing lights. The words “MEDICAL” should be clearly indicated on the back and the sides of the car.

## **1.25 FINISH OF A RACE AND RACE RESULTS**

### **1.25.1**

When the leading rider has completed the designated number of laps for the race, he will be shown a chequered flag by an official standing at the finish line, behind a 1<sup>st</sup> protection line. The chequered flag will continue to be displayed to the subsequent riders.

When the chequered flag is shown to the leading rider, no other rider will be permitted to enter the track from the pit lane.

As soon as the chequered flag is shown to the leading rider, the red light will be switched on at the pit lane exit and a marshal showing a red flag will stand in the pit lane exit.

If a rider(s) closely precedes the leader during the final lap before the finish line, the official will show to the rider(s) and to the leader simultaneously the Chequered flag and the Blue flag. That means that the race is finished for the leader while the rider(s) closely preceding the leader has (have) to complete the final lap and take the Chequered flag.

### **1.25.2**

To be counted as a finisher in the race and be included in the results a rider must:

- a) Complete 75% of the race distance or laps completed, rounded down to the nearest whole number of laps.
- b) Cross the finish line on the race track (not in the pit lane) within five minutes of the race winner. In case the rider is not in contact with the machine, the finish time is determined by the first part of the rider or machine to cross the finish line, whichever arrives last.

### **1.25.3**

The results will be based on the order in which the riders cross the line and the number of laps completed.

#### 1.25.4

In case of a photo-finish between two, or more, riders, the decision shall be taken in favour of the competitor whose front wheel leading edge crosses the plane of the finish line first.

In case the rider is not in contact with the machine, the finish time is determined by the first part of the rider or machine to cross the finish line, whichever arrives last.

In case of ties, the riders concerned will be ranked in the order of the best lap time made during the race.

#### 1.25.5

The riders classified in the first three positions in the race will be escorted by officials, as quickly as possible, to the podium for the awards ceremony. Participation in the podium ceremony by these riders is compulsory.

### 1.26 INTERRUPTION OF A RACE

#### 1.26.1

If the Race Director decides to interrupt a race at any point from the start of the warm up lap onwards, then red flags will be displayed at the finish line and at all marshals' posts and he will switch on the red lights around the circuit. Riders must immediately slow down and return to the pit lane.

The results will be established taking into account **all the time keeping points along the track and only the virtual pit finish line inside the pit lane. Any time keeping point between the finish line and the pit out will not be taken into account.** The order of classification shall be based upon the total number of completed laps and the order of last crossing point for each individual rider prior the showing of the red flag.

For any rider who is inside the pit lane (not in the garage) at the moment the red flag is displayed, the following procedure will be applied:

- If the rider has crossed the virtual finish line inside the pit lane, that time will be used as **finish time**;
- **if the rider has not crossed the virtual finish line inside the pit lane, his last time keeping point along the track will be used;**

- In the particular case where the virtual pit finish line is between the pit garages, for any rider who has or has not crossed the virtual finish line inside the pit lane, his last time keeping point in the track will be used. In case a rider has a problem with his transponder, the FIM WSBK Stewards has the faculty to assign to that rider a position using the last working time keeping point and the TV / CCTV.

To be classified a rider must:

- Complete 75% of the laps of the leader of the race rounded down to the nearest whole number of laps;
- Enter the pit lane using the designated track within 5 minutes after the red flag has been displayed, pushing or riding on their motorcycle.

In exceptional circumstances an exemption may be analysed and considered by the FIM WSBK Stewards panel.

At the time the red flag is displayed, riders who are not actively competing in the race will not be classified.

### 1.26.2

If the results calculated show that less than three laps have been completed by the leader of the race, then the race will be null and void and a new race will be run according to the article 1.27.4. If it is found impossible to re-start the race, then it will be declared cancelled and the race will not count for the Championship.

#### a) For Superbike Superpole race

If the result calculated show that less than three laps have been completed by the leader of the race, then the race will be null and void and a new race will be run according to the article 1.27.4.d.

### 1.26.3

If three laps or more have been completed by the leader of the race, but less than two-thirds of the original race distance, rounded down to the nearest whole number of laps, then the race will be re-started according to article 1.27.4.



If it is found impossible to re-start the race, then the results will be given in accordance with Art. 1.27.7.

a) For Superbike Superpole race

If five laps or more have been completed by the leader of the race, the race is considered valid.

#### 1.26.4

If the results calculated show that two-thirds of the current race distance rounded down to the nearest whole number of laps have been completed by the leader of the race, then the race will be deemed to have been completed and full Championship points will be awarded.

#### 1.26.5

For the purposes of these regulations “active” and “actively competing” are defined as the rider riding on track, or attempting to repair/restart the machine, or to rejoin the track or return to pit lane **with the machine in a condition fit to rejoin the track.**

The FIM WSBK Stewards will be the sole judge of whether a rider is actively competing **including the condition of the machine** and no appeal is possible against the FIM WSBK Stewards’ decision.

### 1.27 RE-STARTING A RACE THAT HAS BEEN INTERRUPTED

#### 1.27.1

If a race has to be re-started, then it will be done as quickly as possible, consistent with track conditions allowing. As soon as the riders have returned to the pits, the Race Director will announce a time and the start procedure type (Normal Start or Quick Start).

#### 1.27.2

The results of the first race must be available to teams before the second part of a race can be started.

#### 1.27.3

The start procedure will be identical to a normal start with sighting laps, warm up lap etc.

## 1.27.4

Conditions for the re-started race will be as follows:

- i) In the case of situation described in 1.26.2 (less than 3 laps completed) above:
  - a) All riders may start, including riders who may not have completed the sighting or warm up lap for the original start.
  - b) Motorcycles may be repaired.  
Refuelling is permitted.
  - c) For Superbike, the number of laps will be 1 lap less than the original race distance.
  - d) For Superbike Superpole Race, The number of the laps will be 2 laps less than the number required to cover the original race distance.  
  
For Supersport, Supersport 300, the number of laps will be two-thirds of the original race distance rounded down to the nearest whole number of laps.
  - e) The grid positions will be as for the original race.
- ii) In the case of situation described in 1.26.3 (3 laps or more and less than two-thirds completed) above:
  - a) Only riders who are classified in the original race may re-start. To be eligible to re-start the rider must enter pit lane, riding or pushing his motorcycle, within 5 minutes after the red flag was displayed in the interrupted race (using the homologated track). If in the previous part of the race a rider is lapped by one or more laps, he will re-start the race from the pit lane exit 10 seconds multiplied the lapped laps after the green light is on.
  - b) Motorcycles may be repaired.  
Refuelling is permitted.



- c) For Superbike Race 1 and 2, the number of laps of the second race will be the number of laps required to complete the original distance of the race.

For Superbike Superpole Race, the number of laps of the second race will be 5 laps.

For Supersport, Supersport 300, the number of laps of the second race will be the number of laps required to complete two-thirds of the original race distance rounded down to the nearest whole number of laps with a minimum of one-third of the original race distance rounded up. The decision is at the discretion of Race Direction respecting schedules.

- d) The grid position will be based on the finishing order of the first race.
- e) The final race classification will be established according to the position and the number of laps of each rider at the time he crossed the finish line at the end of the last part of the race. Provisions of Art. 1.25.4 will apply.

### 1.27.5

Any start position penalties applying to a rider in the first race (e.g. a drop of grid position or starting the race from pit lane), if such penalties were duly applied, will not apply to the restarted race.

In the case of Art.1.26.2 (race interrupted with less than 3 laps completed), the new start will be a completely new race so therefore existing start position penalties will apply.

### 1.27.6

Should a re-started race be interrupted and Race Direction deems it possible to re-start, then the conditions for a further re-start will follow Art. 1.27.4, with the race distance and results defined as follows:

- a) If the re-started race is interrupted when two-thirds of the current race distance (two-thirds must be minimum 5 laps) rounded down to the nearest whole number of laps have been completed by the leader of the race, the race will be deemed to have been completed and full Championship points awarded. The race classification will be according to Art. 1.27.4. ii) e).



- b) If the re-started race is interrupted when less than two-thirds of the current race distance rounded down to the nearest whole number of laps have been completed by the leader of the race, the race would be re-started a further time if possible, for the same number of laps as the first re-start.
- c) **Superpole Race**  
Should a re-started race be interrupted the race is deemed to be cancelled and no Championship points will be awarded. Grid positions for Superbike race 2 will be based on the fastest time recorded by the riders in all qualifying practice. In the case where qualifying practices have been cancelled, the grid position will be based on the fastest time recorded by the riders in all free practices. In the event of a tie, riders' second and subsequent best times will be taken into account.
- d) If that further re-started race (third race) is interrupted when less than 5 laps have been completed, Race Direction will determine if it is practical to re-start the race and will define the number of laps to be completed, with a minimum of 5 laps.
- e) Race Direction may reschedule re-started races in the race programme as necessary.

### 1.27.7

- a) If it has not been possible to re-schedule the race, the race results will then be determined by the last race where at least 5 laps have been completed by the leader of the race and full Championship points will be awarded. To be eligible to championship points, a rider must be classified in the last race.
- b) If the first race is re-started and none of the races (original or subsequent re-starts) have completed 5 or more laps, then the race is deemed to be cancelled and no Championship points will be awarded.



## **1.28 CHECK AREA / PARC FERMÉ**

At the end of the race, or the final part of a race that has been interrupted, all the classified motorcycles will be directed to a compulsory check area (parc fermé) pending inspection by the Technical Stewards or potential protests. It is the responsibility of the teams and riders to ensure that the machine is in the parc fermé. Motorcycles will normally be released from the parc fermé 30 minutes after the finish of the race.

The top three classified finishers in each class will be held at the podium area, the remaining machines will be directed to the Parc Fermé.

## **1.29 CHAMPIONSHIP POINTS AND CLASSIFICATION**

### **1.29.1**

Riders and Constructors will compete for the FIM World Championship Superbike or Supersport or for the FIM Cup.

### **1.29.2**

For riders, the points will be those gained in each race.

### **1.29.3**

For Constructors, only the highest placed motorcycle of a Constructor will gain points, according to the position in the race.

## 1.29.4

For Superbike Race 1 and 2, Supersport 600 Race and Supersport 300 Race Championship points will be awarded on the following scale:

1 <sup>st</sup>	25 points
2 <sup>nd</sup>	20 points
3 <sup>rd</sup>	16 points
4 <sup>th</sup>	13 points
5 <sup>th</sup>	11 points
6 <sup>th</sup>	10 points
7 <sup>th</sup>	9 points
8 <sup>th</sup>	8 points
9 <sup>th</sup>	7 points
10 <sup>th</sup>	6 points
11 <sup>th</sup>	5 points
12 <sup>th</sup>	4 points
13 <sup>th</sup>	3 points
14 <sup>th</sup>	2 points
15 <sup>th</sup>	1 point

Championship points for Superbike Superpole Race will be awarded on the following scale:

1 <sup>st</sup>	12 points
2 <sup>nd</sup>	9 points
3 <sup>rd</sup>	7 points
4 <sup>th</sup>	6 points
5 <sup>th</sup>	5 points
6 <sup>th</sup>	4 points
7 <sup>th</sup>	3 points
8 <sup>th</sup>	2 points
9 <sup>th</sup>	1 points



### **1.29.5**

All races will count for the FIM World Championship Superbike or Supersport classification.

### **1.29.6**

In the event of a tie in the number of points, the final positions will be decided on the basis of the number of best results in the races (number of first places, number of second places etc.). In the event that there is still a tie then, the date in the Championships at which the highest place was achieved will be taken into account with precedence going to the latest result. For WorldSBK, the Tissot Superpole Race results will not be taken into account for discriminating the tie.

### **1.29.7**

In the case where a rider participates on different motorcycles, it is the make of the motorcycle with which he obtained the most points that will appear next to his name in the final classification, without, however, modifying the calculation for the Constructors' classification.

### **1.29.8**

The World Champions in each category and winner of the FIM Cup are obliged to attend an official FIM ceremony.

## **1.30 INSTRUCTIONS AND COMMUNICATIONS TO COMPETITORS**

### **1.30.1**

Instructions may be given by the Race Director and/or Clerk of the Course to Teams and/or Riders by means of special circulars in accordance with the Regulations. Circulars must be posted on the official notice and / or delivered by electronic means such as email and/or placed in the special team mailbox which will be provided at each event. Posting on the official notice board, or via electronic means and/or placing in the team mailbox will be deemed as proof of delivery.



### 1.30.2

All classifications and results of practice and the race, as well as all decisions issued by the officials, must be posted on the official notice board. Posting on the official notice board will be deemed as proof of delivery and official publication.

### 1.30.3

Any communication from the Race Direction, the Permanent Officials or the Clerk of the Course to a team or rider must be communicated in writing or by Time keeping monitors. Similarly, any communication from a team or rider to the Race Direction, the Permanent Officials or the Clerk of the Course must also be made in writing.

### 1.30.4

For safety reasons, it is not permitted to start the engine of racing motorcycles inside the pit box at any time. Engines must be started in the pit lane.

### 1.30.5

For safety reasons it is not permitted to have the motorcycle engine running during any wheel change.

## 1.31 EXTRA DEPOSITS IN CASE OF MOTORCYCLE CONTROL FOLLOWING A PROTEST

The deposit in case of dismantling and reassembling a motorcycle to measure the cylinder capacity, following a protest, is 150 € (material included)

The deposit in case of partial or complete dismantling of an engine or gearbox is 300 €.

If the party who makes the protest is the losing party, the deposit shall be paid to the winning party.

If the party who makes the protest is the winning party, the deposit shall be reimbursed.

### **1.32 EXTRA DEPOSIT FOR FUEL CONTROLS FOLLOWING A PROTEST**

All requests for fuel control following a protest or an appeal must be accompanied by a deposit of 600 € paid to the FIM.

After the last control:

- the winning party will have its deposit reimbursed.
- the losing party will have to pay the costs of all the controls carried out after deduction of deposits which it has already paid.

### **1.33 NON-PARTICIPATION IN AN EVENT**

Any rider who enters an event must inform the organiser if, subsequently, he decides not to participate in the event. A rider who has submitted an entry form and fails to participate will be reported by the Event Management Committee to the FIM, who will impose the following penalties:

- First offence: fine of 150 €.
- Subsequent offences in the same season: suspension from the next event counting towards the Championship.

Upon receipt of the Event Management Committee report, the Executive Secretariat will send a letter to the rider's FMN asking the reasons for the non-participation; a reply must be sent within 15 days at the latest and a decision will be taken regarding the penalty.

A suspension could also be pronounced against a rider who takes part in another event on the same day.

## 2. TECHNICAL REGULATIONS

Amendments to the technical regulations may be made by the Superbike Commission at any time.

During practices: If a motorcycle is found not to be in conformity with the technical regulations during or after the practices, its rider will be given a penalty for the event such as a ride-through, a drop of any number of grid positions for the next race, suspension and/or withdrawal of Championship or Cup points.

After a Race: If a motorcycle is found not to be in conformity with the technical regulations after a race, its rider will be given a penalty such as a time penalty, or disqualification.

### 2.1 INTRODUCTION

#### 2.1.1

Motorcycles for the Road Racing Superbike & Supersport World Championships must be motorcycles with a valid road homologation in one of the following areas: USA, EU or Japan.

These motorcycles must be available for sale to the public in the shops and the dealerships representing the manufacturer in at least one of the above areas before the third event of the current Championship to be allowed to be used in the remaining Championship events.

### 2.2 CLASSES

#### 2.2.1

The production based racing classes will be designated by engine capacity and level of technical freedom.

## 2.3 GENERAL ITEMS

### 2.3.1 Materials

The use of titanium in the construction of the frame, the front forks, the handlebars, the swing arms, the swing arm spindles and the wheel spindles is forbidden. For wheel spindles, the use of light alloys is also forbidden. The use of titanium alloy nuts and bolts is allowed in certain classes.

### 2.3.2 Handlebars and Control Levers

Exposed handlebar ends must be plugged with a solid material or rubber covered.

The minimum angle of rotation of the steering on each side of the centre line or mid position must be of 15° for all motorcycles.

Whatever the position of the handlebars, the front wheel, tyre and the mudguard must maintain a minimum gap of 10 mm.

Solid stops, (other than steering dampers) must be fitted to ensure a minimum clearance of 30 mm between the handlebar with levers and the tank, frame or other bodywork when on full lock to prevent trapping the rider's fingers (see diagrams A, B, C ).

Repair by welding of light alloy handlebars is prohibited.

Composite handlebars are not allowed in any class.

All handlebar levers (clutch, brake, etc.) must be ball ended (diameter of this ball to be at least 16 mm). This ball can also be flattened, but in any case the edges must be rounded (minimum thickness of this flattened part 14 mm). These ends must be permanently fixed and form an integral part of the lever.

Each control lever (hand and foot levers) must be mounted on an independent pivot.

The brake lever, if pivoted on the footrest axis, must work under all circumstances, such as the footrest being bent or deformed.

Modified rider controls will be considered for the mobility challenged subject to a report by the Medical Director, the SBK Technical Directors decision is final.

Clutch lever may have a guard fitted equivalent to a brake lever guard.

### 2.3.3 Compulsory Safety Items

- a) All drain plugs must be lock wired (safety wired). External oil filter(s), screws and bolts that enter an oil cavity must be safety wired (i.e. on crankcases). The oil filter may optionally have a secondary retention mechanism.
- b) Where breather or overflow pipes are fitted they must discharge via existing outlets. The original closed system must be retained; no direct atmospheric emission is permitted.
- c) Motorcycles must be equipped with a red light on the instrument panel that will illuminate in the event of oil pressure drop.
- d) Any championship safety devices fitted according to their specific mounting instructions (e.g. 2-way RF system).

### 2.3.4 Wheel and rims (See Table 1)

- 1) Any modification to the rim or spokes of an integral wheel (cast, moulded, riveted) as supplied by the manufacturer or of a traditional detachable rim other than for spokes, valve or security bolts is prohibited, except for tyre retention screws sometimes used to prevent tyre movement relative to the rim. If the rim is modified for these purposes bolts, screws etc. must be fitted.
- 2) The distance between the rim walls is measured inside the flange walls in accordance with ETRTO.

### 2.3.5 Tyres

Tyres may be replaced from those fitted to the homologated motorcycle.

Only tyres distributed by the Official Supplier at the event are authorised.

The tread pattern must be made exclusively by the manufacturer when producing the tyre.

As a safe minimum, the depth of the tyre tread over the whole pattern at pre-race control must be at least 2.5 mm.

Tyres which at the preliminary examination have a tread depth of less than 1.5 mm are considered as non-treaded tyres and the restrictions applying to slick tyres will then apply to them.

The surface of a slick tyre must contain three or more hollows at 120° intervals or less, indicating the limit of wear on the centre and muster areas of the tyre. The rider shall not enter the track if at least 2 of these indicator hollows are worn on different parts of the periphery.

### **2.3.6 Use of tyre warmers**

The use of tyre warmers and suspension pre-heaters is allowed.

### **2.3.7 Use of tyres**

The competitors shall only use tyres distributed by the Official Supplier during the event.

For each event, all tyres must be made of the same quality and shall be strictly identical.

All tyres to be used must be easily identifiable with a colour marking or a numerical system, to be applied by the Official Supplier at the time of manufacturing.

The Official Supplier shall provide the SBK Technical Director with a written description of the markings and the general characteristics of the different types of tyres.

The SBK Technical Director may ask the Official Supplier to deliver tyre samples to him the day prior to the start of the official practice. Any modification of the tread pattern by the Official Supplier is not permitted after the start of the practices.

During free practices, qualifying practices, Superpole for Superbike, warm up session and races, front and rear tyres may be required to be marked with tyre stickers (see Art. 2.4.7/ 2.5.7/ 2.6.7).

The SBK Technical Director may, at his discretion, require the exchange of one (1) or more competitors' tyres for a tyre sample under his control. The tyres exchanged remain under his control and he can exchange them for the ones of another competitor.

No tyres marked for one event may be used during another event.

### 2.3.8 Ballast

The use of ballast is allowed to stay over the minimum weight limit. The use of ballast must be declared to the SBK Technical Director at the preliminary checks.

The ballast must be made of solid metallic piece/s, firmly and securely connected, either through an adapter or directly to the main frame or engine, with a minimum of 2 steel bolts (min. 8 mm diameter, 8.8 grade or over). Other equivalent technical solutions must be submitted to the SBK Technical Director for his approval.

Fuel in the fuel tank can be used as ballast. Nevertheless, the verified weight may never fall below the required minimum weight.

### 2.3.9 Engine Sealing

- a) The total number of engines that a rider may use during the entire championship is limited the “allocated number”. When a permanent rider changes teams during the championship their engine limit should not change, but in extra-ordinary circumstances will be reviewed by the Race Direction.
- b) The total number of engines that a team may use during the entire Championship is limited to the “allocated number” per permanent entry. When a permanent rider is replaced or substituted during the Championship, the total engine allocation for the teams’ entry will not change. Should a new team enter the championship part way through the season the number of engines allowed will be proportional (pro-rata) to the season remaining.
- c) Wild card riders (and one event riders) will be allowed to use two (2) sealed engines during the event in which they take part. Should the same rider choose to enter a second meeting as a wildcard, in the Superbike class one (1) extra engine will be added, for the Supersport (World and European) and Supersport 300 no extra engines will be allowed. For any further entries/events the rider and/or team will be considered a permanent entry (see 2.3.9.b).
- d) Should the number of race meetings change during the season then the Superbike Commission will convene to consider updating the number of allocated engines.

- e) A team or rider that uses more than the allocated number of engines during the Championship will receive a penalty (according to Art. 1.21.23).
- f) The SBK Technical Director or his appointed staff must be notified of all engine changes and therefore know at all times which engine is in current use.
- g) The number of engines that may be used during each event is only limited by the remaining allocation.
- h) Each engine will be sealed by the SBK Technical Director or by his appointed staff before it can be used during any event. It is the team's responsibility to ensure that this happens in a timely manner before the engine is required for use. If any engine is used without having been sealed then penalties will be applied.
- i) An engine is considered in use or active from the moment it crosses the finish line at the end of its first (out) lap, until that point it may be unsealed with no penalty, only one "out" lap is allowed, any further incomplete laps will register the engine as 'active'.
- j) Engines can only be sealed when not installed in the chassis.
- k) Seals will bear a serial number, which will be recorded.
- l) A broken or damaged seal will be considered as if the engine has been used and will be counted as part of the rider's allocation for the season.
- m) A team must request sealing of an engine/engines before its/their use.
- n) A previously sealed engine may be resealed following repair or refreshment; this will be considered a new engine and count towards the total number of engines allowed.
- o) Any attempt made to remove the seal will damage it irreparably. All seals including the seals on an engine that has completed its life cycle or is in need of repair can only be broken by the SBK Technical Director or his appointed staff. At the time of the breaking of the seals the SBK Technical Director may ask for this engine to be disassembled to check for compliance with the technical rules for the relevant class.

- p) The crankcases will be sealed in such a way not to allow the disassembly for repair, replacement or adjustment of the crankshaft, connecting rods and/or associated bearings, pistons, piston pins or piston rings.
- q) The cylinder, cylinder head(s) and head cover/cam cover will be sealed to prevent repairs, replacement or adjustment on the cylinder head, valve, valve seats or any other repairs or service work on the valve train.
- r) The cassette gearbox door and/or crankcases will be sealed to control the gearbox use.
- s) The right and left hand engine side covers will not be sealed as to allow repair or adjustment to the ACG, clutch system, water pump or other accessory systems located behind these covers.
- t) If an engine is found not to be in compliance with the regulations, any penalties imposed will apply retrospectively to each race this engine was used in.
- u) Engine usage information will be published only at the end of the fourth round of the Superbike Championship (for all classes).
- v) Schedule for sealing (and unsealing):
  - i) Thursday from 10:00 until 18:00
  - ii) Friday from 9:00 until 18:00
  - iii) Saturday from 9:00 until 18:00
  - iv) 10 minutes before first warm up till 16:00

### **2.3.10 Engine Inspection**

- a) When any engine is unsealed and stripped for inspection following a protest or at the discretion of the SBK Technical Director and found to be fully compliant with the rule(s) which is (are) the subject of the protest(s), then the team will be given one additional seal allocation to reseal the rebuilt engine OR to seal a new engine.
- b) The SBK Technical Director, Race Direction or the Permanent Officials (FIM Stewards) reserve the right to suspend any technical engine protest if it is felt to be a violation of the above rule. That engine will then be stripped at “end of life”.

- c) When an engine has reached an agreed “end of life” then the SBK Technical Director may at his discretion choose to have that engine stripped to check for compliance.
- d) If any engine is found to have been opened or its seals removed or if any engine is not presented when requested (for any reason) or if any (sealed) engine is inspected by the technical director or his appointed staff and found to be in breach of the technical rules then the rider will be disqualified from ALL races in which this engine was used. The points earned will be removed in the riders championship and if applicable the manufacturers championship.
- e) At the SBK Technical Directors discretion an engine may be unsealed under the supervision of the SBK Technical Director or his appointed staff for a visual inspection only on grounds of safety. If the engine is discovered to have or be failing the engine will be removed from the active engines. If found safe the engine will be resealed immediately by the attending official.

### 2.3.11 Timekeeping instruments

All motorcycles must have a correctly positioned timekeeping transponder. The transponder must be approved by the official Timekeeper and fixed to the motorcycle in the longitudinal centre of the motorcycle (typically close the swing-arm pivot), on either the left or right side, as low as possible and avoiding being shielded by carbon bodywork.

Correct attachment of the transponder bracket consists of a minimum of tie-wraps, but preferably by screws or rivets. Any transponder retaining clip must also be secured by a tie-wrap. Velcro or adhesive alone will not be accepted. The transponder must be working at all times during practices and races, also when the engine is switched off.

### 2.3.12 Wildcard technical specification

Wildcards in the Superbike Class only will be allowed to enter using machines with components not featuring on the **Eligible Parts for Competition - List 2021** components or concession parts lists. The parts must be declared at the time of entry to the SBK Technical Director and must be or have been generally available parts. They must of a lower or equal performance level than those allowed in the rules. No “factory” parts will be considered and the SBK Technical Directors decision on eligibility will be final. After a competitor has competed in two events as a wildcard they will then have to comply with all permanent technical regulations.

Wildcards in the Supersport 300 Class can apply to the SBK Technical Director to enter using machines with 2017/18 specification Electronic Systems. Application **MUST** be made at least 1 month before the event. [sbk.technical.director@fim.ch](mailto:sbk.technical.director@fim.ch)

### 2.3.13 Homologated Parts

Homologated parts are the OEM parts supplied fitted to the machine during manufacture and as delivered. Unless stated otherwise these parts may not be remade, refinished, treated, coated or modified in any way.

Parts from different homologations may not be used on machines from another homologation including when sharing the model name but excepting when the part is superseded for production reasons and also accepted by the FIM.

See Appendix: “Homologation Rules” for details.

### 2.3.14 Wings and Aerodynamic Aids

Wings and other aerodynamic aids will only be considered legal if originally fitted to the homologated road specification machine in all of Europe, Japan and North America. For race use the wings must follow the dimensions, profiles and positions of the homologated shapes exactly (+-1 mm).

For copies of the OEM parts the leading edges (including end plates) must have a minimum circumference of 4 mm and must have a rounded end (8mm radius) or be enclosed/integrated into the fairing.

The OEM parts may be used “as is” with the exception that the wing root and 10 mm from the end face maybe be modified to allow mounting to the (race) fairing. This may not be in the form of an extension and the size of the wing will be measured with reference to the face of the wing root.

The wing must be fitted in the same “relative” position (accepting the tolerance allowed for the fairing) and the angle of attack must be within +/-4° of the original angle of attack relative to the chassis.

For active or dynamic aerodynamic parts **ONLY** the standard homologated mechanism may be used. The range of movement must be the same as that used by the homologated road machine in normal use - not the mechanical maximum.

The SBK Technical Directors decision will be final.

### 2.3.15 Reference team

The reference team is the Superbike team nominated by the motorcycle manufacturer and notified through the manufacturers MSMA representative (This team can be competing outside of WorldSBK). See electronics 2.4.9.1. See Chassis 2.4.10.1.b.

### 2.3.16 Concession parts

The motorcycle manufacturer may nominate themselves, their subsidiary or one company as the supplier of the engine concession parts. The nominated party will be known as the concession part supplier.

All concession parts must be **declared eligible** by SBK Technical Director and the CTI before they are allowed to be used.

For the updates of concession parts please see 2.4.3.4.

Concession parts remain legal for use until the end of the season following the season in which they were last updated/replaced.

Concession Parts			
Part	Price Limit	Lead time	Notes
Valve springs single	€ 60.00	10 weeks	3 sets by January 10 <sup>th</sup> if ordered then 10 weeks.
Valve springs double	€ 75.00	10 weeks	3 sets by January 10 <sup>th</sup> if ordered then 10 weeks.
Collet and Retainer	€ 45.00	10 weeks	3 sets by January 10 <sup>th</sup> if ordered then 10 weeks.
Camshaft (WSBK & WSS600)	€ 1,000.00	10 weeks	3 sets by January 10 <sup>th</sup> if ordered then 10 weeks.
Camshaft Sprocket	€ 100.00	10 weeks	3 sets by January 10 <sup>th</sup> if ordered then 10 weeks.
Shim bucket	€ 45.00	10 weeks	3 sets by January 10 <sup>th</sup> if ordered then 10 weeks.
Cam chain	TBC	10 weeks	3 sets by January 10 <sup>th</sup> if ordered then 10 weeks.
<b>ACG Assembly</b>	<b>€ 500.00</b>	10 weeks	3 sets by January 10 <sup>th</sup> if ordered then 10 weeks.

### 2.3.17 Eligible parts

All eligible parts must be declared eligible by SBK Technical Director and the CTI before they are allowed to be used.

Eligible Parts			
Part	Price Limit	Lead time	Notes
SBK Swingarm	€ 10,000.00	10 wks	At least 1 must be available per rider in WSBK within 2 races of its first use.
SBK Triple Clamps	€ 2,000.00	10 wks	At least 1 must be available per rider in WSBK within 2 races of its first use.
SBK Linkage	€ 1,500.00	4 wks	At least 1 must be available per rider in WSBK within 2 races of its first use.
SBK Front Forks	€ 10,000.00	6 wks	
SBK RCU (Shock)	€ 6,500.00	6 wks	
WSS/SSTK Fork Kit	€ 2,200.00	6 wks	
WSS/SSTK RCU	€ 2,000.00	6 wks	
WSS300 Fork Kit	€ 700.00	6 wks	
WSS300 RCU	€ 2,850.00	6 wks	
SBK Brake	Various		Caliper €2,200, Master Cylinder €1,300, Disc €850, Quick Break €1,800
Sump 2019	€ 2,000.00	10 wks	3 sets by January 10 <sup>th</sup> if ordered then 10 weeks.
Superbike Kit System	€ 8,000.00	8 wks	Only reference team may develop these parts

### 2.3.18 Option parts

- a) The following option parts must be supplied to the following championships upon request:
  - i) World Superbike Championship.
- b) Their use is not compulsory - teams may “optionally” elect to use them.
- c) The parts must have the same specification as the reference teams parts.
- d) See the **Eligible Parts for Competition - List 2021** for more details.

All option parts must be **declared eligible** by SBK Technical Director and the CTI before they are allowed to be used.

Option Parts			
Part	Price Limit	Lead time	Notes
Cylinder Head (SBK, WSS600)	€ 3,000.00	10 weeks	3 sets by January 10 <sup>th</sup> if ordered then 10 weeks. Machined as the reference teams parts.
Chassis (SBK)	€ 2,000.00	10 weeks	3 sets by January 10 <sup>th</sup> if ordered then 10 weeks. Modified as the reference teams parts.

### 2.3.19 Order details

The concession parts, **eligible** parts and option parts must be supplied to the following championships upon request:

- i) World Superbike Championship

The parts must be available within 10 weeks of a confirmed order and deposit (or as detailed). Order and deposit details must be documented by the manufacturer and will be published in the **Eligible Parts for Competition - List 2021**.

Manufacturers must make 3 cylinder heads available per rider by January 10<sup>th</sup>. Further heads must be supplied at a rate of 6/month. There will be at least one order opportunity per season per evolution.

### 2.3.20 Parts Eligibility Process

The parts manufacturer is responsible for the **eligibility** of their parts and their submission to the SBK Technical Director and the CTI to be declared eligible. The team using them should ensure that they have been declared eligible and are in the **Eligible Parts for Competition - List 2021**.

The **eligible** parts supplier can be the manufacturer of the machine e.g. in the case of a factory team using factory supplied parts the **eligible** parts supplier is the manufacturer.

The parts must be documented with drawings, dimensions, pricing, contact details for ordering and photos to enable precise identification of the parts. ALL parts must be permanently marked with a part number, version number (when updated or a new part number) and a unique serial number (when required). Information should be submitted to the SBK Technical Director and the CTI to [sptech@fim.ch](mailto:sptech@fim.ch).

The **Eligible Parts for Competition - List 2021** will be published on [www.fim-live.com](http://www.fim-live.com).

**Eligible Parts for Competition - List 2021** applies to the World Superbike series and does not infer or imply eligibility for any other usage.



## 2.3.21 Declarations

The following declarations must be made:

Declarations								
Part	Info	Class	Require Part numbers	Require Serial Number	For	By	When	
Reference Team	Team to be considered the "Reference Team"	SBK	na	na	Each Manufacturer	Manufacturer via MSMA representative	Before season start	
Gearbox	Ratios/tooth Count	SBK, WSS	na	na	Each Rider	Team	Before season start	
Concession Part Details	Dimensions/Specs/Serial number ranges/Supplier	SBK	Y	Y	Each Part	Manufacturer	Every concession part and when updated	
Engine Specification	List of concession parts used for engine Evolution	SBK	Y	Y	Each Evolution	Manufacturer	Every concession update	
Eligible part	Dimensions/Specs/Serial number ranges	SBK	Y	Y	Every version of the part	Eligible Part Supplier (can be factory/mfr)	Every time a new part is developed	
Option Part	Dimensions/Specs/Serial number ranges/Supplier	SBK	Y	N		Eligible Part Supplier (can be factory/mfr)	Before season start	
Bike Specification	Combination of <b>eligible</b> components being used	SBK	Y	na	Every Rider	Team	Before season start and again if Swingarm/Clamps are changed	
Extra Sensors	Declaration of which two extra sensors are chosen	SBK			Every Rider	Team	Thursday of event when updated	



## 2.4 SUPERBIKE TECHNICAL SPECIFICATIONS

The following rules are intended to give freedom to modify or replace some part in the interest of safety, research and development and improved competition between various motorcycle concepts.

### **EVERYTHING THAT IS NOT AUTHORISED AND PRESCRIBED IN THIS RULE IS STRICTLY FORBIDDEN**

If a change to a part or system is not specifically allowed in any of the following Articles, then it is forbidden.

Superbike motorcycles require an FIM homologation (see Appendix FIM Homologation procedure for Superstock, Supersport and Superbike motorcycles). All machines must be normally aspirated. All motorcycles must comply in every respect with all the requirements for road racing as specified in these Technical Regulations, unless they are already equipped as such on the homologated model.

Once a motorcycle has obtained the homologation, it may be used for racing in the corresponding class for a maximum period **stated** in Homologation Art. 1.4.4. Or until such time that the homologated motorcycle is disqualified by new rules or changes in the technical specifications of the corresponding class.

The appearance from the front, rear and the profile of Superbike motorcycles must (except when otherwise stated) conform in principle to the homologated shape (as originally produced by the manufacturer). The appearance of the exhaust system is excluded from this rule.

### 2.4.1 Motorcycle specifications

All part and systems not specifically mentioned in the following Articles must remain as originally produced by the manufacturer for the homologated motorcycle.

### 2.4.2 Engine configurations and displacement capacities

The following engine configurations comprise the Superbike class.

Over 750cc up to 1000cc	4 stroke	3- and 4-cylinder
Over 850cc up to 1200cc	4 stroke	2-cylinder

The displacement capacity bore and stroke must remain at the homologated size.



### 2.4.2.1 Balancing various motorcycle concepts

- a) In order to equalise the performance of different brands of machine rev limits will be individually applied to each brand.
- b) Each season will begin with the same rev limits as the previous season finished.
- c) The rev limit will be adjusted according to Art. 2.4.3.2.
- d) Updated machines with the same basic engine design will continue with the manufacturers previous rev limit. Any new machines entering with a redesigned engine will have their rev limit set by calculation.
- e) The initial rev limit will be the dynamometer measured rev limit of 3<sup>rd</sup> & 4<sup>th</sup> gear averaged, plus 3% or 1100 rpm above the dyno measured max horsepower rpm of a production machine, whichever is lower.
- f) The limiter in all gears will be analysed to check for anomalies.
- g) The dyno test will take place during the homologation inspection. (See part 4.0 Homologation, 1.4.b)
- h) The Superbike Commission can at any time modify the handicap system to ensure fair competition.

### 2.4.2.2 Balancing Calculation

1. The FIM/DWO algorithm will be used to balance the performance of the machines relative to one another.
2. The algorithm may include but not be limited to the following signals:
  - a) Lap time relative to all other competitors
  - b) Speed traps
  - c) Number of riders per brand
  - d) Anticipated individual rider performance
    - i) Per track
    - ii) Considering preceding rounds
  - e) Race results
  - f) Laps led

- g) Overall race time
  - h) Change in balance following any rpm limiter changes
  - i) Bias towards recent results reflecting current performance
  - j) Any concession part updates being applied
3. The rev limit may be updated (according to Art. 2.4.3.2) at the end of every 3<sup>rd</sup> event provided at least 3 events remain in the season.
  4. The rev limit may also be updated at the end of the season.
  5. FIM/DWO reserves the right to update the rpm balance at their discretion in the case of an imbalance.
  6. “Wet” races (as declared by the Race Director) are not taken in account for the calculation.

#### 2.4.2.3 Rev limit

The manufacturer specific rev limit will be adjusted in increments of 250 rpm (up or down).

The rev limit will be controlled by the manufacturers software and will be monitored by the FIM/DWO rev-logger (see Art. 2.4.9.1). Over rev because of downshift will be ignored. ECU Hard limiter must be set to the WSBK specified rev limit.

WSBK Initial rev-limit	
Brand	Proposed
Aprilia	14700
BMW	14950
BMW 2019	14900
Ducati V2	12400
Ducati V4	16100
Honda	15050
<b>Honda 2020</b>	<b>15600</b>
Kawasaki 2018	14100
Kawasaki 2019	14600
MV Agusta	14950
Suzuki	14900
Yamaha	14700
<b>Yamaha 2020</b>	<b>14950</b>

### 2.4.3 Concessions

- a) Concession points are awarded according to the final results of all dry races. Any rider can earn the concession points.
- b) At the start of each season manufacturers will begin with 0 concession points.
- c) The points will be awarded **during Superbike Races 1 and 2 (excluding Superpole Race)** as follows:
  - i) 1<sup>st</sup> place = 3 concession points
  - ii) 2<sup>nd</sup> place = 2 concession points
  - iii) 3<sup>rd</sup> place = 1 concession point
- d) No updates can be made to the concession parts during the first three races (excepting point h).
- e) At the end of the first three rounds:
  - i) Any manufacturer whom achieves 9 or more points less than the manufacturer with the most concession points may choose at their discretion to make one update to their concession parts during the season. The parts must be introduced simultaneously.
- f) Any manufacturer whom achieves 36 or more points less than the manufacturer with the most concession points at the end of season may update the concession part for the following season.
- g) Concession points are not cumulative. The manufacturer may only have one concession available. A concession point earned after from round 4 may be used for an intra-season update.
- h) FIM/DORNA reserve the right to allow, at their discretion, one further concession parts update during the season for new manufacturers entering the series or for new homologations of bikes with a new design of engine.
- i) The manufacturer must notify the SBK Technical Director of the full combination/specification of parts to be used. This notification must be made before the start of the season and again if a concession part update is earned.



- j) If a newly homologated machine maintains the same engine design as its predecessor and the manufacturer has not earned a between season concession update then the new machine must begin with the same engine specification as the last season with the **eligible** concession part. The SBK Technical Directors decision is final.
- k) Machines considered as new will have their part **declared eligible** by December 31<sup>st</sup> to allow part to be supplied to supported teams for the first race. A minimum of 3 sets of part must be supplied to teams before January 10<sup>th</sup>.

#### 2.4.4 Minimum weight

All machines: 168 kg

- a) At any time during the event, the weight of the whole motorcycle (including the tank and its contents) must not be less than the minimum weight.
- b) There is no tolerance on the minimum weight of the motorcycle.
- c) During the final technical inspection at the end of each race, the selected motorcycles will be weighed in the condition they finished the race, and the established weight limit must be met in this condition. Nothing may be added to the motorcycle. This includes all fluids.
- d) During the practice and qualifying sessions, riders may be asked to submit their motorcycle to a weight control. In all cases, the rider must comply with this request.
- e) The use of ballast is allowed to stay over the minimum weight limit and may be required due to the handicap system. The use of ballast and weight handicap must be declared to the SBK Technical Director at the preliminary checks.
- f) The minimum weight includes all Championship contracted devices whether fitted or not, such as Transponder and on-board TV system.



## 2.4.5 Numbers and number plates

The background colours and figures (numbers) for Superbike are white background with black numbers.

The size for all the front numbers is:

Minimum height:	140 mm
Minimum width:	80 mm
Minimum stroke:	25 mm
Minimum space between numbers:	10 mm

The sizes for all the side numbers are:

Minimum height:	120 mm
Minimum width:	70 mm
Minimum stroke:	20 mm
Minimum space between numbers:	10 mm

The allocated number (& plate) for the rider must be affixed on the motorcycle as follows:

- The design of the numbers **MUST** be submitted to the SBK Technical Director before the final pre-season test for approval ([sbk.technical.director@fim.ch](mailto:sbk.technical.director@fim.ch)).
- Only single or double digit numbers will be allowed.
- Only if the design is approved and the front numbers are taller than 180 mm and wider than 95 mm then side numbers will not be required.
- Once on the front, either in the centre of the fairing or slightly off to one side; the number must be centred on the white background with no advertising within 25 mm in all directions.
- Once on each side on the lower rear portion of the lower fairing. The number must be centred on the white background. Any change to this must be pre-approved a minimum of 2 weeks before the first race by the SBK Technical Director.

- f) All digits must be of standard form.
- g) Any outlines must be of a contrasting colour and the maximum width of the outline is 3 mm. The background colour must be clearly visible around all edges of the number (including outline). Reflective or mirror type numbers are not permitted.
- h) Numbers cannot overlap.
- i) No machine may enter the circuit if it does not meet the above regulations. If the rider does enter the circuit then no lap times will be recorded and Race Direction will at their discretion black flag the rider.

In case of a dispute concerning the legibility of numbers, the decision of the FIM SBK Technical Director will be final.

#### 2.4.6 Fuel

See article 2.8 for full Fuel regulations.

#### 2.4.7 Tyres

- a) The maximum number of tyres, of any type, available to each rider during the event will be 24 (11 front tyres - 13 rear tyres).
- b) A maximum of 15 tyres can be mounted per rider at any time.
- c) The maximum number of each type or option of tyre is according to the “allocation list” at each event. This is event specific and supplied to teams by the official tyre supplier. It is the same for every rider in the class. Tyre types may not be exchanged between riders. The official tyre supplier will ensure that each rider’s allocation limits are adhered to.
- d) With the consultancy of the SBK Technical Director and the official tyre supplier only Race Direction may alter the “allocation list” during an event.



- e) Every tyre used during the event must be marked with an adhesive sticker with a number allocated by the SBK Technical Director. The sticker will be a different colour front and rear.
- f) For all Superbike races only (including the Superpole race), wet and intermediate tyres will not need to be marked with a tyre sticker. They will not be considered in the total number of tyres available for use; however normal allocation limits still apply.
- g) The tyre stickers will be delivered to the teams in a sealed envelope, on the day before the first practice after which the teams will be responsible for their use.
- h) The stickers must be applied to the left sidewall of the tyre.
- i) The use of motorcycles without the official stickers will be immediately reported to the Race Direction whom will take appropriate action.
- j) Qualifying tyres can only be used during Superpole.
- k) Any modification or treatment (cutting, grooving) is forbidden.

At the beginning of the event, the Official Supplier may be requested by the SBK Technical Director to deliver to him four (4) samples of each type of tyre to be used at the event.

- l) The allocation of individual tyres will be made on a random basis, with no involvement of any representative from the tyre supplier, teams or riders. Those tyres will be individually identified and may not be exchanged between riders, including between team mates, and may not be exchanged by the tyre supplier after the allocation, except with the permission of the Race Direction.
- m) In exceptional cases, should the sticker be damaged or applied in the wrong way, up to 2 extra stickers may be provided at the sole discretion of the SBK Technical Director. However, the damaged sticker must be returned to the SBK Technical Director and/or the tyre it was applied to, must be absolutely intact.

## Tyre Limitations for slick tyres:

- n) Minimum tyre pressure:

Minimum Tyre Pressure	
Period	Pressure
At all times	1.60 bar
No tolerance	

- o) At the 3 minute board the pressure will be checked on the grid for a minimum of three riders using the Pirelli approved tyre gauge. At the same time the TPMS data will be recorded for information only. If the tyre is below the minimum limit according to the Pirelli approved gauge then the machine will be removed from the grid to the pit lane to have the pressure corrected and the rider will start the warm up lap from the pit lane (and the race from the back of the grid).
- p) During the race the TPMS data will be logged by the Rev-Logger for post race analysis. The 2 way communication systems will be used to check the data (at lower rate) during the race. There will be no penalties applied as a result of this data.
- q) Riders may be stopped in the pitlane at any time by the SBK Technical Director or his appointed staff to check the tyre pressure.
- r) Limits for wet and intermediate tyres will be published separately.

### 2.4.8 Engine

The allocated number of engines is calculated as follows:  
 (Race events in Season)/2, rounded UP.

See also Art. 2.3.9 for Sealing and Usage Details.

The following engine specifications and components may not be altered from the homologated motorcycle except as noted:

- The homologated engine design model cannot be changed.
- Homologated materials and castings for the crankcase, cylinder, cylinder head and gear-box housing must be used.
- The method of cam drive must remain as homologated.



- d) The method of valve retention must remain as the homologated model. No pneumatic valve retention devices are allowed unless fitted to the homologated model.
- e) The sequence in which the cylinders are ignited (i.e. 1-2-4-3), must remain as originally designed on the homologated model. Simultaneous firing of 2 cylinders is also forbidden if not adopted on the homologated motorcycle. Up to 5 degrees firing difference in 2 cylinders is regarded as “simultaneous” firing.
- f) The concession part supplier must provide engine build sheets detailing the engine build clearances/tolerances, details and methods. This must be made as a declaration to the SBK Technical Director for each specification/version of the engine.

Engines must be used with the combination of concession part as detailed in the “Engine Specification” declaration - not as a combination of specification. Each engine specification remains legal till the end of the season following its introduction.

#### 2.4.8.1 Fuel injection system

- a) The original homologated fuel injection system must be used without any modification.
- b) The fuel injectors must be stock and unaltered from the original specification and manufacture.
- c) Air funnels may be altered or replaced. The critical dimensions of the air funnels used by the nominated reference team must be supplied to the teams purchasing the **eligible** concession part by the nominated concession part supplier.
- d) Primary throttle valves cannot be changed or modified.
- e) Variable intake tract devices cannot be added if they are not present on the homologated motorcycle and they must remain identical and operate in the same way as the homologated system. All the part of the variable intake tract device must remain exactly as homologated (excepting the air funnels). Variable intake tract devices may be replaced with fixed air funnels.



- f) Air and air/fuel mixture must go to the combustion chamber exclusively through the throttle bodies.
- g) If the variable intake tract actuation mechanism mount or fuel injector mount is an integrated part of the air funnel then those part alone may be redesigned maintaining the exact geometry of the original part.
- h) If the mechanism link arm interferes with the air funnels then the link may be redesigned for clearance maintaining the exact linkage geometry of the original part.

#### 2.4.8.2 Cylinder Head

The cylinder head must be the originally fitted and homologated part with the following modifications allowed:

- a) The cylinder head must begin as a finished production part using homologated materials and castings. Material may only be added by epoxy or removed by machining. No machining or modification is allowed in the cam box/valve mechanism area.
- b) The induction and exhaust system including the number of valves and or ports (intake and exhaust) must be as homologated.
- c) Porting and polishing of the cylinder head normally associated with individual tuning such as gas flowing of the cylinder head, including the combustion chamber is allowed. Epoxy may be used to shape the ports.

The ported/machined cylinder head as used by the reference team must be available as an “option part” from the concession part supplier. The price limit of the ported finished cylinder heads is the retail price of the cylinder head PLUS €3000 per 4 cy. cylinder head, €1800 per 2 cy. head (1/2 v4 engine), €1200 per 1 cy head (1/2 v2 engine). See Art. 2.3.18, Art. 2.3.19 and Art. 2.3.20..

- d) The throttle body intake insulators may be modified.
- e) The compression ratio is free.
- f) The combustion chamber may be modified.

- g) Valves must remain as homologated.
- h) Valve seats can be modified or replaced for repair. The material must remain as homologated.
- i) Valve guides must remain as homologated. Modifications in the port area are allowed by machining.
- j) Valves must remain in the homologated location and at the same angle as the homologated valves.
- k) Rocker arms (if any) must remain as homologated.
- l) The exhaust air bleed system must be blocked and the external fittings on the cam cover(s) may be replaced by plates.
- m) The homologated cylinder head/cam cover may be replaced by a cosmetic replica of higher specific weight material (i.e. replace magnesium part with aluminium).

The following part must be made available by the concession part supplier and follow the concession rule (Art. 2.3.16) (for order details see Art. 2.3.17).

- n) Valve springs must be the originally homologated or the **eligible** concession valve spring. Their material must remain as homologated. An additional spring may be added or the spring may be removed.

The price limit is €60 for each individual spring when using one spring per valve and €75 per pair of springs when utilising 2 springs per valve.

- o) Only the originally homologated or the **eligible** concession valve spring (or collet) retainers, collets, spring seats may be used.

The price limit is €45 per spring (or collet) retainer and collet set (for one valve, individual part price total).

- p) Only the originally homologated or the **eligible** concession shim buckets/tappets may be used. The standard part may have their surface finish altered. The concession part must be the same height, diameter, material type and shim to top surface dimension as the homologated part. The weight must be equal to or greater than the homologated part. The price limit is €45 per shim bucket.

### 2.4.8.3 Camshaft

- a) Camshafts may be altered or replaced from those fitted to the homologated motorcycle (see also Art. 2.4.8).
- b) Only the original homologated or the **eligible** concession camshafts may be used.
- c) Offsetting the camshaft is not allowed. The camshaft must remain in the homologated location.
- d) The camshafts must be available from the concession part supplier and follow the concession rule (Art. 2.3.16). The price limit is €1000 per camshaft in an inline 4 engine and €650 per camshaft in a V4 or V2 engine. The concession camshafts must include the part listed in Art. 2.4.8.4.

### 2.4.8.4 Cam sprockets or cam gears

- a) Camshaft sprockets, pulleys or gears may be altered or replaced to allow degreeing of the camshafts (see also Art. 2.4.8 and Art. 2.4.8.3). The camshaft sprockets must be available from the concession part supplier and follow the concession rule (Art. 2.3.16). The price limit is €100 per sprocket.
- b) The cam chain or cam belt tensioning device(s) can be modified or changed.
- c) Only the originally homologated or **eligible** concession cam chain may be used (price limit tbc).

### 2.4.8.5 Cylinders

- a) Must be the originally fitted and homologated part with no modification allowed except as noted below.
- b) The cylinder base gasket(s) may be changed.
- c) The top face of the cylinder may be ground to adjust deck height.

### 2.4.8.6 Pistons

Must be the originally fitted and homologated part with no modification allowed.

#### 2.4.8.7 Piston rings

Must be the originally fitted and homologated part with no modification allowed.

#### 2.4.8.8 Piston pins and clips

Must be the originally fitted and homologated part with no modification allowed.

#### 2.4.8.9 Connecting rods

- a) Connecting rod may be altered or replaced from those fitted to the homologated motorcycle. The weight must be the same or greater than the original homologated part. The weight of the connecting rod assembly is the homologated weight (of the weight of the middle weight rod) with a tolerance of  $\pm 3\%$ .
- b) The material must be the same type as the homologated item (i.e. steel, titanium, alloy) or steel.
- c) If the original connecting rod is fitted with a little end insert then the replacement connecting rods may also have an insert of the same material as fitted in the original homologated connecting rod.
- d) If the original homologated connecting rod is not fitted with a little end insert then the replacement connecting rods may be fitted with an insert of any material.
- e) If the original homologated connecting rod is not fitted with a little end insert then the replacement connecting rods may be fitted with an insert of the same material as the connecting rod or steel.
- f) The centre to centre (little end to big end) length of the rod must be the same as the original homologated item.
- g) Connecting rod bolts are free but must be of the same weight or heavier, and of the same material as the original bolt or of higher specific weight material.

#### **From 2019 for any newly homologated machines:**

- h) The connecting rod must be the originally fitted and homologated part with no modification allowed.



- i) Connecting rod big end bolts may be changed but must be of the same weight or heavier, same material or of higher specific weight material.
- j) The weight of the connecting rod assembly is the homologated weight (normally the weight of the middle weight rod) with a tolerance of +/-3%.

#### **2.4.8.10 Crankshaft**

Only the following modifications are allowed to the homologated crankshaft:

- a) Bearing surfaces may be polished.
- b) Surface treatments may be applied to the crankshaft.
- c) Balancing is allowed but only by the same method as the homologated crankshaft. For example heavy metal, i.e.: Mallory metal inserts, are not permitted unless they are originally specified in the homologated crankshaft.
- d) The addition or reduction in weight of the crankshaft in order to reach a racing balance can be no greater than 3% of the homologated weight excluding the tolerance as shown in the homologation documents of the crankshaft.
- e) The balancing must be performed by the original method i.e. drilling or machining and in the same position (i.e. edge of flywheels).
- f) Polishing of the crankshaft is not allowed.
- g) Balance shaft must remain as homologated. No modifications are allowed.

#### **2.4.8.11 Crankcase / Gearbox housing**

- a) Crankcases must be the originally fitted and homologated part with only the following modifications allowed. If the crankcases have an integral cylinder then the top face of the cylinder may be ground to adjust deck height. Oil Spray nozzles may be modified. No other modifications are allowed (including painting, polishing and lightening).

- b) It is not allowed to add a pump used to create a vacuum in the crankcase. If a vacuum pump is installed on the homologated motorcycle then it may be used only as homologated.

Only the original or **the eligible** sump Oil-pan (sump) and oil pick up can be used. The price limit is €2000 for one complete set of the required part Note that the gasket is free and may form part of the mechanism for controlling oil flow in the sump area. Art. 2.3.18 and Art. 2.3.19 apply.

- c) One thread may be altered or created to allow for oil pressure/temperature measurement. The sensor must be positioned so it cannot sustain impact in the case of a crash.
- d) See Art. 2.4.10.1.g.
- e) Oil breather cover must remain as homologated but the internal breather/damper plate can be modified or replaced.

#### 2.4.8.11.1 Lateral covers and protection

- a) Lateral (side) covers may be altered, modified or replaced (excluding pump covers). If altered or modified, the cover must have at least the same resistance to impact as the original one. If replaced, the cover must be made in material of same or higher specific weight and the total weight of the cover must not be less than the original one.
- b) Titanium bolts may be used to fasten lateral covers.
- c) All lateral covers/engine cases containing oil and which could be in contact with the ground during a crash, must be protected by a second cover made from metal such as aluminium alloy, stainless steel, steel or titanium, composite covers are not permitted.
- d) The secondary cover must cover a minimum of 1/3 of the original cover. It must have no sharp edges to damage the track surface.
- e) Plates or crash bars from aluminium or steel also are permitted in addition to these covers. All of these devices must be designed to be resistant against sudden shocks, abrasions and crash damage.

- f) Covers from the **Eligible Parts for Competition - List 2021** will be permitted without regard of the material or dimensions.
- g) These covers must be fixed properly and securely with a minimum of three (3) case cover screws that also mount the original covers/engine cases to the crankcases.
- h) Oil containing engine covers cannot be secured with aluminium bolts.
- i) The SBK Technical Director has the right to refuse any cover not satisfying this safety purpose.

#### 2.4.8.12 Transmission / Gearbox

- a) Only one (1) set of gearbox ratios will be allowed for the whole season. The ratios can be freely chosen.
- b) The ratios chosen by the team for the season (individually and separately for each and every entry) must be declared before the start of the first event (includes wildcard and one-event entries).
- c) Only the homologated primary gear ratio may be used (see Art. 2.4.8.13).
- d) The layout of the transmission shafts must be the same as on the homologated motorcycle.
- e) The gear design and material is free.
- f) The selector drum and complete gear index mechanism are free.
- g) The selector forks may be changed. However the forks must engage with the same gears and function in the same way as on the homologated motorcycle (**i.e. no dog boxes if not fitted as standard**).
- h) Countershaft sprocket, rear wheel sprocket, chain pitch and size may be changed.
- i) The sprocket cover may be modified or eliminated.
- j) It will not be allowed to change the gearboxes at the track - a broken Gearbox will equal a broken engine.
- k) **An external neutral selection mechanism may be fitted.**

- l) **Seamless shift gearboxes are not allowed. Should the homologated base model be originally fitted with a seamless shift gearbox then the complete homologated gearbox assembly may be used with no modifications allowed excepting surface finish.**

#### **2.4.8.13 Clutch**

- a) Aftermarket or modified clutches are permitted (including plates/springs etc).
- b) Back torque limiter is permitted.
- c) No power source (i.e. hydraulic or electric) can be used for clutch operation, if not installed in the homologated model for road use. Human power is excluded from the ban.
- d) Clutch system (wet or dry type), type (multiplate) and method of operation (cable/hydraulic) must remain as homologated.
- e) Clutch basket may be changed. If the clutch basket has the primary gear integrated then the primary gear must retain the original number of teeth and tooth form.

#### **2.4.8.14 Oil pumps and oil lines**

- a) The originally fitted and homologated oil pump must be used. The oil pressure relief spring is free.
- b) Oil lines may be modified or replaced. Oil lines containing positive pressure, if replaced, must be of braided reinforced construction with swaged or threaded connectors.

#### **2.4.8.15 Cooling System**

- a) The only liquid engine coolants permitted is water.
- b) The water pump must remain as homologated.
- c) The original radiator or oil cooler may be altered or replaced from those fitted to the homologated motorcycle.
- d) Additional radiators or oil coolers may be added.
- e) The original oil/water heat exchanger may be modified, replaced or removed.

- f) The cooling system hoses and catch tanks may be changed.
- g) Radiator fan and wiring may be changed, modified or removed.
- h) The oil cooler must not be mounted on or above the rear mudguard.
- i) The appearance from the front, rear and profile of the motorcycle must in principle conform to the homologated shape after the addition of additional radiators or oil coolers.

#### **2.4.8.16 Airbox**

- a) The airbox must be the originally fitted and homologated part with the following modifications allowed:
- b) If the homologated airbox is used to mount top type fuel injectors, then the airbox and the attached systems must remain as homologated.
- c) If the homologated airbox is used to mount variable intake tract devices, then the airbox and the attached systems must remain as homologated and function in the same way (excepting the air funnels - see Art. 2.4.8.1).
- d) If used, variable intake tract devices must function in the same way as on the homologated system (see Art. 2.4.8.1).
- e) Air filters, internal flap type valve, sensors and vacuum fittings may be removed, modified or replaced with aftermarket part. Should any modification be required for the fitment of these parts it will be at the discretion of the SBK Technical Director.
- f) Any holes in the airbox to the outside atmosphere resulting from the removal of components must be completely sealed from incoming air.
- g) The airbox drains must be sealed.
- h) Ram air tubes or ducts running from the fairing to the airbox may be modified, replaced or removed. If tubes/ducts are utilized, they must be attached to the original, unmodified airbox inlets.
- i) All motorcycles must have a closed breather system. All the oil breather lines must be connected, may pass through an oil catch tank and exclusively discharge in the airbox.

- j) If the top of the airbox is formed by the bottom of the tank then that part of the tank will be considered as the airbox and must conform to its homologated shape excepting 2 mm variance in corner radii and must be the same volume. A dry break/quick release connector may be fitted. See Art. 2.4.8.17.
- k) Additional heat shielding is allowed to be applied to lower face/side of the airbox (i.e. foil tape).

#### **2.4.8.17 Fuel supply**

- a) Fuel pump and fuel pressure regulator must be the originally fitted and homologated part with no modification allowed.
- b) The fuel pressure must be as homologated. The pressure tolerance at the technical control is +0.5 bar in respect to the maximum pressure of the homologated motorcycle. All motorcycles must have a special device on the fuel line in accordance with FIM specifications for fuel pressure checks, or teams must provide a temporary adaptor to allow checks.
- c) Fuel lines from the fuel tank up to the injectors (fuel hoses, delivery pipe assembly, joints, clamps, fuel canister) may be replaced and must be located in such a way that they are protected from crash damage.
- d) Quick connectors or dry break connectors may be used.
- e) Fuel vent lines may be replaced.
- f) Fuel filters may be added.

#### **2.4.8.18 Exhaust system**

- a) Exhaust pipes, catalytic converters and silencers may be altered or replaced from those fitted to the homologated motorcycle. Catalytic converters may be removed.
- b) The number of the final exhaust silencer(s) must remain as homologated. The silencer(s) must be on the same side(s) as on the homologated model.



- c) For safety reasons, the exposed edge(s) of the exhaust pipe(s) outlet(s) must be rounded to avoid any sharp edges.
- d) Wrapping of exhaust systems is not allowed except in the area of the rider's foot or an area in contact with the fairing for protection from heat.
- e) The noise limit for Superbikes will be 115 dB/A (with a 3 dB/A tolerance after the race only).
- f) The critical dimensions of the exhaust system used by the nominated reference team must be supplied to the teams purchasing the **eligible** concession part by the nominated concession part supplier.

#### 2.4.9 Electronic Control System

The engine control system (including ECU) must be the DWO/FIM eligible "Superbike Kit System" See Art. 2.4.9.1 from the Eligible Parts for Competition - List 2021.

- a) No other external ignition/injection controllers, traction control modules or other active expansion modules or calculation units may be fitted.
- b) Central unit (ECU) may be relocated.
- c) Telemetry is not allowed (remote signals to or from the bike), **except by compulsory championship devices.**
- d) No remote or wireless connection to the bike for any data exchange or setting is allowed whilst the engine is running or the bike is moving.
- e) Spark plugs, spark plug caps and HT leads (if applicable) are free.
- f) Battery type is free. The maximum capacity for a lithium type battery is 100 Wh.
- g) The Wiring Harness is free.
- h) Each team must provide a download connection lead to the SBK Technical Director.

- i) The FIM/DWO specified rev-logger must be fitted as detailed (separately) at all times. The rev-logger will be connected directly to the crankshaft sensor, power supply and to a CAN bus directly from the ECU. For the rev-logger a second, independent, crankshaft sensor may be considered by application by the manufacturer to the SBK Technical Director. The method of fitment must be published and the sensor made available to the customer teams. This extra sensor will be considered as an allowed sensor.
- j) **The DWO mandated 2 way RF system must be fitted as detailed (separately) at all times.**
- k) The FIM/DWO rev logger must be physically connected to the same CAN bus as the ECU, TPMS system, Mylaps Transponder, 2 way RF system and any FIM/DWO mandated devices. All devices must transmit messages as detailed in the Superbike CAN bus specification.

**2.4.9.1 The DWO/FIM eligible “Superbike Kit System” must meet the following:**

- a) The system must be a complete package including all electrical/electronic part not supplied on the homologated motorcycle required for full operation of all strategies - excepting the wiring harness.
- b) Only the machine manufacturer or one **manufacturer** approved partner can submit a single system for **eligibility**.
- c) The total price of the complete system including ECU, dashboard/display, all additional sensors essential for full operation of all strategies, IMU, software, enable codes, datalogging, analysis software, ECU “tuning” or “setting” software, datalogger, download/connection cable, example harness design, manual for use, (not a complete list), is €8000 Euro (excluding taxes). Data Logging only sensors are excluded from the price cap.
- d) There must be at least 50 Superbike Kit Systems (**current system**) available worldwide per season, if ordered, through authorised distributors or dealers. The Superbike Kit System must be marked and considered as for race use only.
- e) Lead time less than 8 weeks.



- f) The ECU must be from the FIM/DWO **eligible** Superbike ECU List.
- g) The following sensors may be used:
1. Throttle position (multiple)
  2. Map sensor, Map Sync (pressure sensor on the intake port used to synchronize the engine during the start)
  3. Airbox Pressure
  4. Engine pick-ups (Cam, crank) (Crank trigger may be replaced)
  5. Lambda
  6. Exhaust Valve / Motor position / feedback
  7. Twist grip position
  8. Front speed
  9. Rear Speed
  10. Gearbox output shaft speed
  11. Gear position
  12. Gear shift load cell
  13. Front brake pressure
  14. Rear brake pressure
  15. Oil pressure
  16. Air pressure
  17. Water temperature
  18. Air temperature
  19. IMU (various signals)
  20. Transponder / Lap time signal
  21. Knock Sensor
  22. Fuel pressure
  23. Oil temperature
  24. Fork position
  25. Shock position
  26. Tilt / Tip-Over Switch
  27. GPS Unit
  28. Rear tyre temperature (External) (Multiple)
  29. Rear TPMS Monitor (Temperature and Pressure) (Compulsory)\*
  30. Front TPMS Monitor (Temperature and Pressure)
  31. **Front brake disc and caliper temperature (multiple, various types)**
  32. **Front brake lever position**

\* Must be from the **Eligible Parts for Competition - List 2021**.

- h) Sensors on the above list that are originally fitted to the standard machine may be replaced with alternative sensors, however they must be included in the Superbike Kit System and inside the total price (Art. 2.4.9.1.c).
- i) 2 further additional sensor channels (that are not included in the above list) may be added to the machine. These sensors must be declared to the SBK Technical Director, they may be changed only between meetings and if changed a new declaration must be made.
- j) Redundant/doubled sensors are allowed but must be included in the Superbike Kit System if they are required for safe operation.
- k) Analogue/Logic to CAN sensors are allowed.
- l) The sensors originally fitted to the homologated machine and used as homologated, will not be included in the price limit.
- m) When the following sensors are damaged through crashes they may be replaced by part of the same function but do not have to be the same specific part from the Superbike Kit System:
  - i) Fork and Shock Potentiometers
  - ii) Brake pressure sensors
  - iii) Gear shift sensor (but must remain the same type included with the kit - i.e. Load cell, switch etc.)
- n) Before the final pre-season test, before the mid-season test(s) or at the season midpoint and within three hours of the last race of the season any firmware / software updates being used by the reference teams must be made available to all same manufacturer customer WSBK teams (more frequent updates are allowed).
- o) The manufacturer must provide current strategies but may remove the ability to change or see these settings, base mapping must be provided.
- p) Only firmware and software from the FIM/DWO **eligible** software and firmware list may be used.
- q) Reference Teams may use any development firmware and software which will be made available to teams according to the update schedule.



- r) Any essential hardware updates required must be made available to customer teams from the same race as the reference team and available free of charge to update those Superbike Kit Systems purchased in the current season.
- s) The dashboard must display compulsory flags and messages contact [sbk.technical.director@fim.ch](mailto:sbk.technical.director@fim.ch) for more information.
- t) **From 2022: All shift lights must be only “White”.**
- u) Transponder and X2 Link Unit are NOT included in the “Superbike Kit System”.
- v) The selection of logged channels is free.
- w) Coils and coil drivers are free and must be included in the Superbike Kit System if altered.
- x) No other external ignition/injection controllers, traction control modules or other active expansion modules or calculation units may be fitted unless included in the Superbike System.
- y) The reference team must use the current seasons “Superbike Kit System”. No backdated part may be used.
- z) Superbike kit systems remain **eligible** for 3 seasons (first season inclusive).

Manufacturer nominated Superbike Kit System suppliers: please also see “Superbike Kit System **Eligibility** Requirements” documentation.

#### 2.4.9.2 Generator, alternator, electric starter

- a) The stator/coil must be the originally fitted and homologated part with no modification allowed.
- b) Only the originally homologated or **ACG assembly from the Eligible Parts for Competition - List 2021** may be used.
- c) The **ACG assembly** must be available from the concession part supplier and follow the concession rule (Art. 2.3.16). The price limit is **€500**.
- d) The ACG must generate sufficiently to maintain battery charge.
- e) The use of a “booster” battery is permitted except during parc fermé.

- f) The electric starter must operate normally and always attempt to start the engine during the event.
- g) During parc-fermé the starter must crank the engine at a suitable speed for starting for a minimum of 2 seconds without the use a boost battery. No boost battery may be connected to the machine after the end of the session. **If the above is satisfied and the machine does not start for the noise test - then the boost battery may be used.**
- h) The starter motor gear system must be the originally fitted and homologated part Surface and hardening treatments are allowed.
- i) Motorcycles should self-start on the starting grid in neutral. Push-starting on the starting grid is not allowed, however start line Officials may push start the motorcycle if necessary (in gear).

#### 2.4.10 Main frame and spare motorcycle

- a) During the entire duration of the event, each rider may only use one (1) complete motorcycle, as presented for Technical Control, with the frame clearly identified with a seal. In case the frame needs to be replaced, the rider or the team must request the use of a spare frame to the FIM SBK Technical Director.
- b) One (1) Spare complete motorcycle is allowed per rider.
- c) A team may opt to have one (1) spare machine shared by two or more riders. The fitted engine must be sealed but not allocated to a rider in this case.

#### EXPLANATION OF THE PROCEDURES:

- Only one (1) complete motorcycle may be presented for the preliminary technical checks and it will be the only motorcycle allowed on the track and in the pit box during the practices, qualifying, Superpole and races.
- The frame of this motorcycle will be officially sealed with by the SBK Technical Director or by his appointed staff. The seal will bear a serial number, which will be recorded. Any attempt made to remove the seal will damage it irreparably.

- At any time during the event the technical stewards, under the direction of the SBK Technical Director, may check the seal and verify that it conforms to the motorcycle and rider it was assigned to. For cross reference, every frame must have a unique number punched on it, on the steering-head.
- If the primary or active motorcycle is damaged in a crash or in any other incident and is declared unrepairable or inoperable (safely and in the available time) by the Technical Director or his appointed staff then the seal on the damaged motorcycle will be destroyed by the technical staff and the chassis of this motorcycle must not be used for the remainder of the event. The new serial number will be recorded by the SBK Superbike Technical Director. The spare machine may then be presented for scrutineering before the next session.
- The spare bike will not be allowed in the front of the pit box until the rider or the team has received authorization from the SBK Technical Director.
- The replacement motorcycle may be used on the track only after the end of the practice and qualifying sessions or race in which the damage occurred. The damaged motorcycle must be removed from the front of the pit box as soon as possible and put in storage at the back of the pit box out of view of pit lane.
- Once a rider exits the pitlane for any session including the race the spare machine can no longer be used.
- Any actions contrary to these procedures will result in a penalty as described in the Sporting Regulations.
- The damaged frame may be impounded by the SBK Technical Director for later examination.

#### **2.4.10.1 Frame body and sub-frames**

- a) The main frame must be the originally manufactured, fitted and homologated part. The main frame is considered to be any component that structurally connects the steering head pivot to the swingarm pivot and the SBK Technical Directors decision is final. Only the following modifications allowed (and must be documented by the reference team or manufacturer).



- b) The main frame may be altered by the addition of gussets, tubes or plates. The additions may be welded or bonded and their material is free. No gussets or tubes may be removed, other allowed modifications are detailed within the following section of these rules.
- c) Holes may be drilled on the frame only to fix approved components (i.e. fairing brackets, steering damper mount).
- d) The homologated position (of engine, steering stem or pivots) is considered as the position in which the production motorcycle is supplied. (Fore and aft is considered along the bottom plane of the original bearing seat).
- e) Suspension linkage mounting points on the frame must remain as homologated.
- f) If the original chassis includes adjustable inserts for the engine mounting position then:
  - i) The inserts are free BUT the chassis cannot be modified further (except as mentioned in b).
  - ii) There is no limit to the range of adjustment.
- g) If the original chassis has fixed engine mounts then the engine must be mounted in the homologated position.

#### **Steering Stem Position:**

- h) if the homologated machine has adjustable/exchangeable bearing inserts/bushes for the steering stem position then:
  - i) The inserts/bushes can be used to adjust the fore and aft position of each bearing.
  - ii) No part of these bushings may protrude axially more than 3 mm from the original steering head pipe location nor may the bearing be inset.

- iii) A slot and clamp may be machined/added to allow easier bushing exchange. Other positive retention mechanism may be allowed at the discretion of the SBK Technical Director.
- iv) The chassis cannot be modified further except as mentioned in point b.
- i) If the original chassis has a fixed steering stem position then the steering stem axis/position may be adjusted by moving the steering head bearings.
  - i) The fore and aft position of each bearing can be a maximum +/-6 mm in respect to the original bearing location (excluding tolerances).
  - ii) The original bearing seats may be modified (ovaled) or increased in diameter to insert special bushings.
  - iii) No part of these special bushings may protrude axially more than 3 mm from the original steering head pipe location nor may the bearing be inset.
  - iv) The steering head pipe can be reinforced in the area of the bearing seats.
  - v) Welding and machining is allowed for the purpose of making these modifications.

#### **Swingarm Pivot Position:**

- j) If the original chassis includes adjustable inserts for the swinging arm pivot axis then:
  - i) Inserts/bushings are free
  - ii) The chassis cannot be modified further (except as mentioned in b).
  - iii) There is no limit to the range of adjustment.
- k) If the original chassis has a fixed swingarm mounting pivot axis:
  - i) The swing arm pivot axis may be moved a maximum of 5 mm radially (excluding tolerances) measured from the homologated axis.



- ii) Modifications may be made to the frame at the swing arm pivot area to allow this. Welding and machining is allowed for the purpose of making this modification, regardless of the technology used and the dimensions of the component or section of the frame (i.e.: cast, fabricated, etc.).
- iii) The method of adjustment is free - e.g. bushings, inserts, offset axles. For machines fitted with exchangeable inserts as standard then the homologated position is considered as the position in which the production motorcycle is supplied.
- iv) Should this pivot/axles pass through the crankcases then the relevant crankcase mounting hole may be machined larger, no welding or other modifications will be permitted. Crankcases may be machined for swingarm clearance only.
- l) The original lock stops may be removed from the frame body by grinding or machining. However another form of lockstop must be fitted.
- m) The chassis modified to the same specification as that used by the reference team must be made available as an “option part” by the concession part supplier (see Art. 2.3.18, Art. 2.3.19 and Art. 2.3.20). The price limit of the finished chassis is the retail price of the chassis (excluding inserts/bushes) plus €2000 (excluding taxes).
- n) All motorcycles must display a vehicle identification number punched on the frame body (a proper “legal VIN” or a unique designation by the team to which the SBK Technical Director may choose to append). No detachable plates are permitted.
- o) No polishing or surface refinishing is allowed but the paint scheme is not restricted.
- p) Fairing brackets may be altered or replaced.
- q) Front and rear sub frame may be changed altered or removed.
- r) Crash protectors may be fitted to the frame using existing points (max. length: 50 mm), or pressed into the ends of the wheel axles (max. length: 30 mm).



## 2.4.10.2 Suspension - General

- a) Participants in the Superbike class must only use units from the **Eligible Parts for Competition - List 2021**. The price limits are:
  - i) **Fork:** For the complete fork kit, including all parts such as but not limited to cartridge, springs (1 set), adjusters, fork caps, blanking inserts, seals, bushes but excepting oil and fitting the price limit is €10000 excluding tax.
  - ii) **Shock Absorber/RCU:** For the complete shock absorber/RCU including but not limited to spring (1 of), pre-load adjuster and length/ride height adjuster the price limit is €6500 excluding tax.
- b) The **eligible** products from the manufacturers must be available to all participants at least one month before the first round of the World Superbike season, and remain available all season. The products must be available within 6 weeks of a confirmed order.
- c) Setting part and tuning part must be provided by the suspension manufacturers to all customers/teams/participants using the manufacturer's products. These parts can be used by all participants during the season. These parts shall be available for immediate delivery to all teams/customers.
- d) Teams may not modify any part of the forks or shock absorber, all setting part must be supplied by the Suspension manufacturer and available to all teams/riders.
- e) The suspension manufacturers are allowed to offer service contracts when the team is using the **eligible** suspension products. The suspension manufacturers cannot demand a service contract for a customer or participant in order to obtain a suspension product.
- f) Electronic suspension cannot be used.
- g) **Suspension lowering and locking devices (sometimes known as holeshot devices) are not allowed.**

### 2.4.10.3 Front Suspension

- a) The front fork in whole or part may be changed but must be the same type homologated (leading link, telescopic, etc.).
- b) The upper and lower fork clamps (triple clamp, fork bridges) and stem may be changed or modified. The part used by the manufacturer nominated reference team must be made available according to Art. 2.3.17, Art. 2.3.19 and Art. 2.3.20 with a price limit of €2000.
- c) A steering damper may be added or replaced with an “after-market” damper.
- d) The steering damper cannot act as a steering lock limiting device.

### 2.4.10.4 Swinging arm (Rear Fork)

- a) Only **eligible** swingarms may be used. However the type single or double sided must remain as homologated.
- b) The price limit for **eligibility** is €10,000 for the bare swingarm. The limit for all the remaining part to complete the assembly including but not limited to bearings/spacers/inserts/chain-adjusters/chain sliders/hugger/chain-guard/sharkfin is €2000. Any supplier must submit their part for **eligibility**. The part must be available to any team who wishes to purchase them following Art. 2.3.17, Art. 2.3.19 and Art. 2.3.20. Only one update/evolution may be approved per season per rider.
- c) The use of carbon fibre or Kevlar® materials is not allowed if not homologated on the original motorcycle.
- d) A solid protective cover (shark fin) shall be fixed to the swingarm, and must always cover the opening between the lower chain run, swingarm and the rear wheel sprocket, irrespective of the position of the rear wheel.
- e) Rear wheel stand brackets may be added to the rear fork by welding or by bolts.
- f) Brackets must have rounded edges (with a large radius). Fastening screws must be recessed.
- g) Swingarm spindle (pivot) may be modified or replaced.

#### 2.4.10.5 Rear suspension unit

- a) Rear suspension unit may be changed but a similar system must be used (i.e. dual or mono).
- b) Only **eligible** rear suspension linkages may be used. The price limit for **eligibility** is €1500 and must be the complete assembly including rocker/link arms/push pull rods/all bearings/seals/spacers. Any supplier may submit their part for **eligibility**. Updates/evolution is free but the linkages must be made available within 2 races of its first use and according to Art. 2.3.17, Art. 2.3.19 and Art. 2.3.20.
- c) The original fixing points on the frame (if any) must be used to mount the shock absorber, linkage and rod assembly fulcrum (pivot points).
- d) Removable top shock mounts may be replaced. If replaced they must retain their homologated geometry.

#### 2.4.10.6 Wheels

- a) Wheels may be replaced (see Art. 2.3.4) and associated part may be altered or replaced from those fitted to the homologated motorcycle.
- b) Aftermarket wheels must be made from aluminium alloys.
- c) The use of the following alloy materials for the wheels is not allowed: Beryllium ( $\geq 5\%$ ), Scandium ( $\geq 2\%$ ), Lithium ( $\geq 1\%$ ).
- d) Each specific racing wheel model must be certified according to JASO (Japanese Automotive Standards Organization) T 203-85 where W (maximum design load) of Art. 11.1.3 is 195 kg for front wheel and 195 kg for rear wheel,  $K = 1.5$  for front and rear wheels. Static radius of tyre: front 0.301 m, rear 0.331 m.
- e) Wheel manufacturers must provide copy of the certificate for their wheel(s) as proof of compliance to the SBK Technical Director when requested.
- f) The homologated road bike wheel and sprocket carrier assembly may be used with no modification, irrespective of material. They must meet Art. 2.4.10.6.d/e. Bearings and spacers may be changed.



- g) On motorcycles equipped with a double sided swing arm (rear fork), the rear sprocket must remain on the rear wheel when the wheel is removed.
- h) Bearings, seals, and axles may be altered or replaced from those fitted to the homologated motorcycle. The use of titanium and light alloys is forbidden for wheel spindles (axles).
- i) Wheel balance weights may be discarded, changed or added to.
- j) Aluminium or steel inflation valves are compulsory.

Angled valves are compulsory.

Wheel rim diameter size (front and rear)	17 inches
Front wheel rim width:	3.50 inches
Rear wheel rim width:	6.00 inches

#### 2.4.10.7 Brakes

- a) Participants in the Superbike season must only use front brake part (Calipers, master cylinders, brake discs, brake pads and dry break systems) from the **Eligible Parts for Competition - List 2021**. The price limits are:
  - i) **Caliper:** Including all parts such but not limited to body, pistons, radiators, anti-drag system, anti knockback (mechanical) and boost systems but excepting dry break/quick connect systems, hoses and pads the price limit is €2200 excluding tax. No optional parts will be allowed to be fitted to the calipers.
  - ii) **Master Cylinder:** For a complete master cylinder the price limit is €1300 excluding tax.
  - iii) **Brake Disc:** For a complete brake disc assembly (each) the price limit is €850 excluding tax.
  - iv) **Quick Connect system:** For a complete per set of quick connectors and quick bleed valves for both calipers that includes male, female, bleeding and caps the price limit is €1800 excluding tax.



- b) The **eligible** products from the manufacturers must be available to all participants at least one month before the first round of the World Superbike season, and remain available all season. The products must be available within 4 weeks of a confirmed order.
- c) No part can be added to the **Eligible Parts for Competition - List 2021** during the current season. Performance related updates are not allowed. Any product changes due to manufacturing or material supply issues must be approved in advance.
- d) Front brake master cylinder may be altered or replaced from those fitted to the homologated motorcycle.
- e) Front brake calipers may be altered or replaced from those fitted to the homologated motorcycle.
- f) Rear brake master cylinder may be altered or replaced from those fitted to the homologated motorcycle.
- g) Rear brake calipers may be altered or replaced from those fitted to the homologated motorcycle.
- h) Brake pads or shoes may be altered or replaced from those fitted to the homologated motorcycle.
- i) Brake hoses and brake couplings may be altered or replaced from those fitted to the homologated motorcycle. The split of the front brake lines for both front brake calipers must be made above the lower fork bridge (lower triple clamp). **Brake line hose fittings (including banjo bolts) can only be Steel or Titanium.**
- j) Hydraulic anti-knockback systems may be fitted to the brake lines/ caliper.
- k) Brake discs may be altered or replaced from those fitted to the homologated motorcycle. Only Steel (max. carbon content 2.1 wgt.%) is allowed for brake discs. Alloys containing beryllium are not allowed to be used for brake calipers.
- l) ABS systems cannot be used.

- m) Motorcycles must be equipped with brake lever protection, intended to protect the handlebar brake lever from being accidentally activated in case of collision with another motorcycle. Composite guards are not permitted. Guards from the **Eligible Parts for Competition - List 2021** will be permitted without regard to the material. The SBK Technical Director has the right to refuse any guard not satisfying this safety purpose.
- n) Front brake system cooling ducts are allowed.

#### **2.4.10.8 Handlebars and hand controls**

- a) Handlebars, hand controls (Subject to Art. 2.4.8.1) and cables may be altered or replaced from those fitted to the homologated motorcycle.
- b) Cable operated throttles (grip assembly) must be equipped with both an opening and a closing cable including when actuating a remote drive by wire grip/demand sensor.
- c) Motorcycles must be equipped with a functional ignition kill switch or button mounted on the right hand handlebar (within reach of the hand while on the hand grips) that is capable of stopping a running engine. The button or switch must be RED.

#### **2.4.10.9 Foot rest and foot controls**

- a) Foot rests, hangers/brackets and hardware may be replaced and relocated but the hangers/brackets must be mounted to their original frame mounting points.
- b) Foot controls; gear shift must remain operated manually by foot.
- c) Foot rests may be rigidly mounted or a folding type which must incorporate a device to return them to the normal position.
- d) The end of the foot rest must have at least an 8mm solid spherical radius. (See diagram A & C).
- e) Non folding footrests must have an end (plug) which is permanently fixed, made of aluminium, plastic, Teflon® or equivalent type of material (min. radius of 8 mm). The plug surface must be designed to reach the widest possible area of the footrest. The SBK Technical Director has the right to refuse any plug not satisfying this safety purpose.

## 2.4.10.10 Fuel tank

- a) The fuel tank must conform in principle to the homologated appearance and location of the original tank; however its actual shape can be slightly changed to suit the rider's preference and increased fuel volume. The tank may also be modified below the upper frame line and under the seat.

The tank may be replaced by a fuel cell and a structural cover.

- b) The material of construction of the fuel tank may be altered from the one of the tank fitted to the homologated motorcycle.
- c) All fuel tanks must be filled with fire retardant material (i.e. fuel cell foam, Explosafe), or be fitted with a fuel cell bladder.
- d) Fuel tanks made of composite materials (carbon fibre, aramid fibre, glass fibre, etc.) must have passed the FIM Standards for fuel tanks or be lined with a fuel cell bladder.
- e) Tanks made of composite material must bear the label certifying conformity with FIM Fuel Tank Test Standards. Fuel tanks without a fuel cell bladder must bear a label certifying conformity with FIM Fuel Tank Test Standards.
- f) Such labels must include the fuel tank manufacturer's name, date of tank manufacture, and name of testing laboratory.
- g) Each manufacturer is requested to inform the FIM/CCR Secretariat of its fuel tank model(s) which have passed the FIM test standards, together with a copy of the fuel tank label. Full details of the FIM Fuel Tank Test Standards and Procedures are available from the FIM (See "Fuel Tank Test Standards" below).

All fuel bladders must conform to the FIA Standard FT3.5-1999, specifically for the chapters 2 (Fuel bladder lifetime), 3 (General requirements), 4 (Fittings and connections), 5 (Sampling and pre-treatment), 6 (Testing) and 7 (Performance requirements).

This includes also that, as stated in 3, all fuel bladders should be supplied with a suitable fuel resistant polyurethane foam baffling, conforming to Mil Spec MIL-B-83054, SAE-AIR-4170 or equivalent. This foam shall fill a minimum of 80% of the volume of the fuel bladder. Where rapid refuelling is expected, an anti-static foam conforming to Mil-Spec MIL-F-87260 (USAF) should be employed.



- h) The fuel tank must be fixed to the frame from the front and the rear with a crash-proof assembly system. Bayonet style couplings cannot be used, nor may the tank be fixed to any part of the streamlining (fairing) or any plastic part. The SBK Technical Director has the right to refuse a motorcycle if he is of the opinion that the fuel tank fixation is not safe.
- i) The original tank may be modified to achieve the maximum capacity of 24 litres, provided the original profile is as homologated.
- j) A cross over line between each side of the tank is allowed (maximum inside diameter 10 mm).
- k) Fuel tanks with tank breather pipes must be fitted with non-return valves which discharge into a catch tank with a minimum volume of 250 cc made of a suitable material.
- l) Fuel tank filler caps may be altered or replaced from those fitted to the homologated motorcycle, and when closed, must be leak proof. Additionally, they must be secured to prevent accidental opening at any time.
- m) The same size fuel tank used in practice must be used during the entire event.

### **Fuel tank homologation**

- a) Any fuel tanks, made of non-ferrous materials (with the exception of aluminium) must be tested according to the test procedure prescribed by the FIM.
- b) Each manufacturer is responsible for testing its own fuel tank model(s) and will certify that the fuel tank exceeds the FIM test standard, if it has passed the FIM test procedure for fuel tanks.
- c) Each manufacturer must affix a quality and test label on each fuel tank type that is produced for competition use. This quality and test label will be the recognition of a fuel tank model which has passed the FIM test procedure.
- d) All fuel tanks that are made to the same design, dimensions, number of fibre layers, grade of fibre, percentage of resin, etc., must be identified with the same quality and test label.

- e) The quality and test label will include the following information on each label affixed to each fuel tank: name of the fuel tank manufacturer, date of fabrication, code or part number, name of testing laboratory, fuel capacity.
- f) Each manufacturer is requested to inform the FIM/CCR Secretariat of its fuel tank model(s) which have passed the FIM test procedure, with a copy of the quality and test label, according to point 5.
- g) Only fuel tanks that have passed the FIM test procedure will be accepted.

#### 2.4.10.11 Fairing / Bodywork

- a) The fairing, mudguards and body work must conform in principle to the homologated shape as originally produced by the manufacturer. Headlights must be included even when considered external.
- b) The fairing has a tolerance of +/-15 mm from the original homologated road fairing, respecting the design and features of the homologated fairing, with the exception of the oil containing portion of the lower fairing, seat area and the area supporting the screen.
- c) The front upper fairing section (cowling) above the area of the front wheel cavity (front view) may have its frontal area increased in width by up to 30 mm per side (60 mm overall). It must still conform to the style of the original machine (scaled +/-15 mm planar) incorporating all included design features, however it may not exceed the homologated maximum width of the fairing side panels (excluding wings).

The decision of the SBK Technical Director will be final.

- d) The windscreen may be replaced.
- e) The ram-air intake must maintain the originally homologated shape and dimensions.
- f) The original air ducts running between the fairing to the airbox may be altered or replaced from those fitted to the homologated motorcycle. Particle grilles or “wire-meshes” originally installed in the openings for the air ducts may be removed.



- g) The lower fairing has to be constructed to hold, in case of an engine breakdown, at least half of the total oil and engine coolant capacity used in the engine (min. 5 litres). The lower edge of openings in the fairing must be positioned at least 70 mm above the bottom of the fairing.
- h) There cannot be exit air vents in the front half of the lower fairing below a line 40 mm below the centreline of the wheel axles of the machine. The SBK Technical Director may give permission for the lower fairing to have additional vents added if vents have been filled to meet these and the oil containment requirements.

Any added vents will not allow the exit of air in the front half of the fairing lower if they are behind a water or oil radiator.

- i) Exceptions may be made to Art. 2.4.10.11.g with the sole agreement of the SBK Technical Director if a manufacturer produced and FIM approved close fitting, oil containing engine shroud is fitted in addition to the bellypan. In this case OEM shaped air vents will be allowed in the front lower half of the fairing.
- j) Any vents in the fairing lower must have their inner surface finish in-line with their outer surface or overlap to reduce the risk of liquid spraying from the machine.
- k) The lower fairing must incorporate one hole of 25 mm in the bottom of the front lower area. This hole must remain closed in dry conditions and must be opened only in wet race conditions, as declared by the Race Director.
- l) A feature may be built into the shape of the bellypan on its rear lower section. It may not extend around the tyre. The maximum dimensions when viewed from below (normally z-minus axis) are 120 mm front to rear and 200 mm in width. The feature may project 30 mm from the bottom of the original bellypan shape. The feature must have rounded edges and must not create a “plough” action (for safety and to stop issues in the gravel traps). The only aerodynamic effect must be to redirect the airflow laterally around the rear tyre. No downforce may be created. If there is any doubt about the aerodynamic effects then a CFD run of the whole machine (with rider) must be submitted to the Superbike Technical Director with and without the feature indicating the resultant forces. The Superbike Technical Director’s decision on suitability is final.



- m) **Bellypan must have minimum of 100 mm ground clearance at 1G static ride height.**
- n) Minimal changes are allowed in the fairing to permit the use of an elevator (stand) for wheel changes and to add plastic protective cones to the frame or the engine.
- o) Holes may be drilled or cut in the fairing or bodywork to allow additional increased intake air to the oil cooler. Holes bigger than 10mm must be covered with a particle grill or fine wire mesh. Grill/mesh must be painted to match the surrounding material.
- p) Original openings for cooling in the lateral fairing/bodywork sections may be partially closed only to accommodate sponsors' logos/lettering. Such modification shall be made using wire mesh or perforated plate. The material is free but the distance between all opening centres, circle centres and their diameters must be constant. Holes or perforations must have an open area ratio > 60%.
- q) If the upper fairing has a rear edge/section that returns to the frame, reducing airflow between the fairing and frame (or sealing the fairing to the frame) then slots/notches may be removed from that area only. No material can be removed from the lateral (side) surfaces of the fairing. A maximum of 50% of the rear face may be removed.
- r) A Gurney flap (lip/deflector) may be fitted at the edge of the lateral air vents or the rear edge of the fairing to increase vent effectiveness. The gurney flap may project a maximum of 4 mm from the lateral surface of the fairing and must have a rounded end. It should be formed from the same material and be a moulded part of the fairing. The SBK Technical Directors decision on suitability is final.
- s) Holes may be drilled in the front mudguard to allow additional cooling. Holes bigger than 10 mm must be covered with metal gauze or fine mesh. Mesh must be painted to match the surrounding material.
- t) A rear **hugger type** mudguard may be added or removed, it may not project vertically down below the level of the rear bottom of the belly pan at 1G static ride height. It may not extend rearward past a line drawn vertically through the rear axle.

- u) Material of construction of the front mudguard, rear mudguard and fairing is free.
- v) The exact appearance, shape, size and location of the front headlights of the homologated motorcycle must be respected, and should be obtained by applying a plastic or metallic film on the front of the motorcycle.

#### **2.4.10.12      Seat**

- a) Seat may be altered or replaced from those fitted to the homologated motorcycle. The appearance from front, rear and profile must conform in principle to the homologated shape.
- b) The top portion of the rear body work around the seat may be modified to a solo seat.
- c) Holes may be drilled in the seat or rear cowl to allow additional cooling. Holes which are bigger than 10 mm must be covered with metal gauze or fine mesh. Mesh must be painted to match the surrounding material.
- d) Material of construction of the seat is free.
- e) All exposed edges must be rounded.

#### **2.4.10.13      Rear Safety Light**

All motorcycles must have a functioning red light mounted at the rear of the machine. This light must be switched on any time the motorcycle is on the track or being ridden in the pitlane and the session is declared WET. All lights must comply with the following:

- a) Lighting direction must be parallel to the machine centre line (motorcycle running direction), and be clearly visible from the rear at least 15 degrees to both left and right sides of the machine centre line.
- b) The rear light must be mounted near the end of the seat/rear bodywork and approximately on the machine centre line, in a position approved by the SBK Technical Director. In case of dispute over the mounting position or visibility, the decision of the SBK Technical Director will be final.



- c) Power output/luminosity equivalent to approximately: 10 - 15 (incandescent), 0.6 - 1.8 W (LED).
- d) The output must be continuous - no flashing safety light whilst on track, flashing is allowed in the pit lane when pit limiter is active.
- e) Safety light power supply may be separated from the motorcycle.
- f) The SBK Technical Director has the right to refuse any light system not satisfying this safety purpose.

**2.4.11 The following items MAY BE altered or replaced from those fitted to the homologated motorcycle.**

- a) Any type of lubrication, brake or suspension fluid may be used.
- b) Gaskets and gasket material.
- c) Bearings (ball, roller, taper, plain, etc.) of any type or brand may be used.
- d) Fasteners (nuts, bolts, screws, etc.), but internal engine bolts must remain of standard homologated materials or materials of higher specific weight.
- e) Thread repair using inserts of different material such as helicoils and timeserts.
- f) External surface finishes and decals.

**2.4.12 The following items MAY BE removed**

- a) Instrument and instrument bracket and associated cables.
- b) Tachometer.
- c) Speedometer and associated wheel spacers.
- d) Chain guard.



### 2.4.13 The Following Items **MUST BE** Removed

- a) Headlamp, rear lamp and turn signal indicators (when not incorporated in the fairing). Openings must be covered by suitable materials.
- b) Rear-view mirrors.
- c) Horn.
- d) License plate bracket.
- e) Tool box.
- f) Helmet hooks and luggage carrier hooks
- g) Passenger foot rests.
- h) Passenger grab rails.
- i) Safety bars, centre and side stand brackets welded to the main frame may be removed.
- j) Catalytic convertors



## 2.5 SUPERSPORT 600 TECHNICAL SPECIFICATIONS

The following rules are intended to give freedom to modify or replace some parts in the interest of safety, research and development and improved competition between various motorcycle concepts.

### **EVERYTHING THAT IS NOT AUTHORISED AND PRESCRIBED IN THIS RULE IS STRICTLY FORBIDDEN**

**If a change to a part or system is not specifically allowed in any of the following articles, then it is forbidden.**

Supersport motorcycles require an FIM homologation (see Appendix FIM Homologation procedure for Superstock, Supersport and Superbike motorcycles). All machines must be normally aspirated. All motorcycles must comply in every respect with all the requirements for road racing as specified in these Technical Regulations, unless they are already equipped as such on the homologated model.

Once a motorcycle has obtained the homologation, it may be used for racing in the corresponding class for a maximum period **stated** in Homologation Art. 1.4.4, or until such time that the homologated motorcycle is disqualified by new rules or changes in the technical specifications of the corresponding class.

The appearance from the front, rear and the profile of Supersport motorcycles must (except when otherwise stated) conform in principle to the homologated shape (as originally produced by the manufacturer). The appearance of the exhaust system is excluded from this rule.

### 2.5.1 Motorcycle specifications

All parts and systems not specifically mentioned in the following articles must remain as originally produced by the manufacturer for the homologated motorcycle.

### 2.5.2 Engine configurations and displacement capacities

The following engine configurations comprise the Supersport class.

Over 400cc up to 600cc	4 stroke	4 cylinders
Over 500cc up to 675cc	4 stroke	3 cylinders
Over 600cc up to 750cc	4 stroke	2 cylinders

The displacement capacity bore and stroke must remain at the homologated size. Modifying the bore and stroke to reach class limits is not allowed.

### 2.5.3 Balancing various motorcycle concepts

In order to equalize the performance of motorcycles used in the Supersport World Championship, A system of performance enhancements or restrictions (such as but not limited to concession parts, minimum weight, air restrictor or Rev Limit) may be developed or applied according to their respective racing performances.) The decision to apply a balancing system to a motorcycle will be taken by the Superbike Commission at any time deemed necessary to ensure fair competition.

Concessions parts will be **declared eligible** and will be documented in the **Eligible Parts for Competition - List 2021**.

The **eligible** concession parts supersede all the following regulations.

The concession parts are decided by mutual agreement of SBK Commission and the manufacturers.

**Balancing level will be continued between seasons.**

#### 2.5.3.1 Rev Limit

RPM Limit		
Brand	Type	Limit
Honda CBR600RR	4cy 600cc	16,400 rpm
Kawasaki ZX-6R	4cy 600cc	16,400 rpm
MV Agusta F3	3cy 675cc	<b>15,800 rpm</b>
Suzuki GSX-R600	4cy 600cc	16,400 rpm
Triumph 675R	3cy 675cc	15,500 rpm
Yamaha YZF-R6	4cy 600cc	16,400 rpm

#### 2.5.4 Minimum weight

Weight Limit		
Brand	Type	Limit
Honda CBR600RR	4cy 600cc	160 kg
Kawasaki ZX-6R	4cy 600cc	161 kg
MV Agusta F3	3cy 675cc	160 kg
Suzuki GSX-R600	4cy 600cc	161 kg
Triumph 675R	3cy 675cc	161 kg
Yamaha YZF-R6	4cy 600cc	<b>164 kg</b>



- a) At any time during the event, the weight of the whole motorcycle (including the tank and its contents) must not be less than the minimum weight.
- b) There is no tolerance on the minimum weight of the motorcycle.
- c) During the final technical inspection at the end of the race, the selected motorcycles will be weighed in the condition they finished the race, and the established weight limit must be met in this condition. Nothing may be added to the motorcycle. This includes all fluids.
- d) During the practice and qualifying sessions, riders may be asked to submit their motorcycle to a weight control. In all cases the rider must comply with this request.
- e) The use of ballast is allowed to stay over the minimum weight limit and may be required due to the handicap system. The use of ballast and weight handicap must be declared to the SBK Technical Director at the preliminary checks.

### 2.5.5 Numbers and number plates

The background colours and figures (numbers) for Supersport are a white background with blue numbers:

The sizes for all the front numbers are:	Minimum height:	140 mm
	Minimum width:	80 mm
	Minimum stroke:	25 mm
	Minimum space between numbers	10 mm

The sizes for all the side numbers are:	Minimum height:	120 mm
	Minimum width:	70 mm
	Minimum stroke:	20 mm
	Minimum space between numbers	10 mm

The allocated number (& plate) for the rider must be affixed on the motorcycle as follows:

- a) The numbers must use the design/font and precise colours prescribed by DWO in for the season Industry Ultra Italic. **The reigning World Champion if using the number one plate is excepted from this but the design must be approved by the Superbike Technical Director in advance.**



- b) Only single or double digit numbers will be allowed.
- c) Once on the front, either in the centre of the fairing or slightly off to one side. The number must be centered on the white background with no advertising within 25 mm in all directions.
- d) Once on each side on the lower rear portion of the lower fairing. The number must be centred on the white background. Any change to this position must be pre-approved a minimum of 2 weeks before the first race by the SBK Technical Director.
- e) A single outline is permitted and the Any outlines must be of a contrasting colour and the maximum width of the outline is 3 mm. The background colour must be clearly visible around all edges of the number (including outline). Reflective or mirror type numbers are not permitted.
- f) Numbers cannot overlap.
- g) No machine may enter the circuit if it does not meet the above regulations. If the rider does enter the circuit then no lap times will be recorded and Race Direction will at their discretion black flag the rider.

In case of a dispute concerning the legibility of numbers, the decision of the FIM SBK Technical Director will be final.

### 2.5.6 Fuel

See article 2.8 for full Fuel regulations.

### 2.5.7 Tyres

- a) For single race events:

For 2021 the maximum number of tyres, of any type, available to each rider during the event will be 15 (7 front tyres- 8 rear tyres).  
For 2022 the maximum number of tyres, of any type, available to each rider during the event will be 13 (6 front tyres- 7 rear tyres).

For double race events:

For 2021 the maximum number of tyres, of any type, available to each rider during the event will be 17 (8 front tyres- 9 rear tyres).  
For 2022 the maximum number of tyres, of any type, available to each rider during the event will be 15 (7 front tyres- 8 rear tyres).



- b) A maximum of **9** tyres per rider can be mounted per rider at any time.
- c) The maximum number of each type or option of tyre is according to the “allocation list” at each event. This is event specific and supplied to teams by the official tyre supplier. It is the same for every rider in the class. Tyre types may not be exchanged between riders. The official tyre supplier will ensure that each riders allocation limits are adhered to.
- d) With the consultancy of the SBK Technical Director and the official tyre supplier only Race Direction may alter the “allocation list” during an event.
- e) Every tyre used during the event must be marked with an adhesive sticker with a number allocated by the SBK Technical Director. The sticker will be a different colour front and rear.
- f) For **both** the Supersport race only, Wet and Intermediate tyres will not need to be marked with a tyre sticker. They will not be considered in the total number of tyres available for use, however normal allocation limits still apply.
- g) The tyre stickers will be collected by the teams in a sealed envelope, on the day before the first practice after which the teams will be responsible for their use.
- h) The stickers must be applied to the left sidewall of the tyre. Officials will check that all the motorcycles in the pit lane are fitted with tyres carrying the sticker.
- i) The use of motorcycles without the official stickers will be immediately reported to the Race Direction whom will take appropriate action.
- j) One (1) size for the front and two (2) sizes for the rear are allowed. Each tyre, front and rear, must be available with the same size for all riders. The manufacturers may only submit one front and rear pattern (or slick tyre) for approval (for both wet and for dry tyres).
- k) All tyres to be used must be easily identifiable with a colour marking or a numerical system to be applied by the Official Supplier at the time of manufacture.

- l) At the discretion of the rider, intermediate or wet weather tyre (if allocated) may be used. Wet-weather tyres must be a fully moulded tyre. The use of hand cut tyres is not allowed. Wet-weather tyres must be marked “Not for Highway Use” or “NHS”.
- m) Any modification or treatment (cutting, grooving) is forbidden.
- n) At the beginning of the event, the Official Supplier may be requested by the SBK Technical Director to deliver to him four (4) samples of each type of tyre to be used at the event.
- o) The allocation of individual tyres will be made on a random basis, with no involvement of any representative from the tyre supplier, teams or riders. Those tyres will be individually identified and may not be exchanged between riders, including between team mates, and may not be exchanged by the tyre supplier after the allocation, except with the permission of the Race Direction.
- p) In exceptional cases, should the sticker be damaged or applied in the wrong way, up to 2 extra stickers may be provided at the sole discretion of the SBK Technical Director. However, the damaged sticker must be returned to the SBK Technical Director and/or the tyre it was applied to, must be absolutely intact.

### Tyre Limitations for dry weather tyres:

- q) Minimum tyre pressure:

Minimum Tyre Pressure	
Period	Pressure
At all times	1.60 bar
No tolerance	

- r) At the 3 minute board the pressure will be checked on the grid for a minimum of three riders using the Pirelli approved tyre gauge. If the tyre is below the minimum limit according to the Pirelli approved gauge then the machine will be removed from the grid to the pitlane to have the pressure corrected and the rider will start the warm up lap from the pitlane (and the race from the back of the grid).
- s) Riders may be stopped in the pitlane at any time by the SBK Technical Director or his appointed staff to check the tyre pressure.
- t) Limits for wet and intermediate tyres will be published separately.

## 2.5.8 Engine

The allocated number of engines is 5 for the World Championship.

The allocated number of engines is 3 for the European Championship.

See Art. 2.3.9 for Sealing and Usage Details

The following engine specifications and components may not be altered from the homologated motorcycle except as noted:

### 2.5.8.1 Fuel injection system

- a) The original homologated fuel injection system must be used without any modification.
- b) The fuel injectors must be stock and unaltered from the original specification and manufacture.
- c) Air funnels (including their fixing points) may be altered or replaced.
- d) Butterflies cannot be changed or modified.
- e) Variable intake tract devices cannot be added if they are not present on the homologated motorcycle and they must remain identical and operate in the same way as the homologated system (excepting the air funnels). Variable intake tract devices may be replaced with fixed air funnels.
- f) Vacuum slides may be fixed in the open position.
- g) Secondary throttle valves and shafts may be removed or fixed in the open position and the
- h) Electronically controlled throttle valves, known as “ride-by-wire”, may be only used if the homologated model is equipped with the same system. Software may be modified but all the safety systems and procedures designed by the original manufacturer must be maintained.

### 2.5.8.2 Cylinder head

Cylinder head must be the originally fitted and homologated part. The following modifications are allowed:

- a) Porting and polishing of the cylinder head normally associated with individual tuning such as gas flowing of the cylinder head, including the combustion chamber is allowed. Welding is not allowed. No machining or modification is allowed in the cam box/valve mechanism area.

- b) The throttle body intake insulators may be modified.
- c) Modifications of the inlet and exhaust ports by taking off or adding material (welding is forbidden) epoxy may be used to shape the ports.
- d) Surface grinding of the cylinder head surface on the head gasket side.
- e) Original homologated valves guides may be cut or modified, but only on the intake or exhaust port side.
- f) Polishing of the combustion chamber.
- g) Original valve seats must be used, but modifications are allowed to the shape.
- h) Compression ratio is free, but the combustion chamber may be modified only by taking material off.
- i) It is forbidden to add any material to the cylinder head unless as described above.
- j) Rocker arms (if any) must remain as homologated.
- k) The valves must remain as homologated.
- l) Valve springs may be changed but the number must remain as homologated.
- m) Valve spring retainers may be replaced or modified, but their weight must be the same as, or higher than, the original ones.
- n) The shim buckets/tappets must remain as homologated.
- o) The exhaust air bleed system must be blocked and the external fittings on the cam cover(s) may be replaced by plates.

### 2.5.8.3 Camshaft

Only the originally homologated or the championship **eligible** concession camshafts from the **Eligible Parts for Competition - List 2021** may be used.

- a) The method of drive must remain as homologated.
- b) The duration is free but the maximum lift must remain as homologated.

- c) The camshafts must be available from the concession parts supplier (art 2.3.16, 2.3.19 and 2.3.20). The price limit is €1000 per camshaft in an inline 3 or 4 cylinder engine and €650 per camshaft in a V engine. The concession camshafts must include the parts listed in 2.5.8.4 if required for use.

#### **2.5.8.4 Cam sprockets or cam gears**

- a) Cam sprockets or cam gears may be modified or replaced to allow the degreeing of camshafts.
- b) The cam-chain/cam-belt tensioning device(s) can be changed or modified.

#### **2.5.8.5 Cylinders**

- a) Cylinders must be the originally fitted and homologated parts with only the following modification allowed.
  - i) Cylinder head gasket surface may be machined to allow the adjustment of compression ratio or resurfacing to repair a warped cylinder surface deck.
- b) The surface finish of the cylinder bore must remain as homologated.

#### **2.5.8.6 Pistons**

- a) Pistons must be the originally fitted and homologated parts with no modification allowed.
- b) Polishing and lightening is not allowed.

#### **2.5.8.7 Piston rings**

- a) Piston rings must be the originally fitted and homologated parts with no modification allowed.
- b) All piston rings must be fitted.

#### **2.5.8.8 Piston pins and clips**

Piston pins and clips must be the originally fitted and homologated parts with no modification allowed.

### **2.5.8.9 Connecting rods**

Connecting rod assembly must be the originally fitted and homologated parts with no modification allowed.

### **2.5.8.10 Crankshaft**

- a) Crankshaft must be the originally fitted and homologated parts with no modification allowed.
- b) Polishing and lightening is not allowed.
- c) Modifications of the flywheels are not allowed.

### **2.5.8.11 Crankcase / Gearbox housing**

- a) Crankcases must be the originally fitted and homologated parts with no modification allowed.
- b) It is not allowed to add a pump used to create a vacuum in the crankcase. If a vacuum pump is installed on the homologated motorcycle then it may be used only as homologated.
- c) One thread may be altered or created to allow for oil pressure/temperature measurement. The sensor must be positioned so it cannot sustain impact in the case of a crash.

#### **2.5.8.11.1 Lateral covers and protection**

- a) Lateral (side) covers may be altered, modified or replaced. If altered or modified, the cover must have at least the same resistance to impact as the original one. If replaced, the cover must be made in material of same or higher specific weight and the total weight of the cover must not be less than the original one.
- b) Titanium bolts may be used to fasten lateral covers.
- c) All lateral covers/engine cases containing oil and which could be in contact with the ground during a crash, must be protected by a second cover made from metal, such as aluminium alloy, stainless steel or steel or titanium, composite covers are not permitted.
- d) The secondary cover must cover a minimum of 1/3 of the original cover. It must have no sharp edges to damage the track surface.

- e) Plates or crash bars from aluminium or steel also are permitted in addition to these covers. All these devices must be designed to be resistant against sudden shocks, abrasions and crash damage.
- f) Covers from the **Eligible Parts for Competition - List 2021** will be permitted without regard of the material or dimensions.
- g) These covers must be fixed properly and securely with a minimum of three (3) with case cover screws that also mount the original covers/ engine cases to the crankcases.
- h) Oil containing engine covers cannot be secured with aluminium bolts.
- i) The SBK Technical Director has the right to refuse any cover not satisfying this safety purpose.

#### 2.5.8.12 Transmission / Gearbox

- a) Must be the originally fitted and homologated parts (including but not limited to shafts, selector mechanism, gears and primary gears) with the following exceptions:
  - b) 1<sup>st</sup> gear shaft and counter gear may be changed.
  - c) Undercutting and re-shimming are allowed.
  - d) The positive neutral selector mechanism may be removed.
  - e) Shift star/indexer, spring, roller and detent may be replaced or modified but must function as originally designed.
  - f) Polishing, surface treatment, and heat treatment of all gearbox components is allowed.
  - g) It will not be allowed to change the gearboxes at the track - a broken Gearbox will equal a broken engine.
  - h) Countershaft sprocket, rear wheel sprocket, chain pitch and size may be changed.
  - i) The front sprocket cover may be modified or eliminated.
  - j) Chain guard as long as it is not incorporated in the rear fender may be removed.

### 2.5.8.13 Clutch

- a) Clutch system (wet or dry type) and the method of operation (by cable or hydraulic) must remain as homologated.
- b) Friction and drive discs may be changed.
- c) Clutch springs may be changed.
- d) The clutch basket (outer) must be the originally fitted and homologated part but may be reinforced.
- e) The original clutch inner assembly may be modified or replaced by an aftermarket clutch, also including back torque limiting capabilities (slipper type).
- f) No power source (i.e. hydraulic or electric) can be used for gear selection, if not installed in the homologated model for road use. Human power is excluded from the ban.

### 2.5.8.14 Oil pumps, water pumps and oil lines

- a) Modifications are allowed but oil pump housing, mounting points and oil feed points must remain as original.
- b) Oil lines may be modified or replaced. Oil lines containing positive pressure, if replaced, must be of braided reinforced construction with swaged or threaded connectors.

### 2.5.8.15 Cooling System

- a) The only liquid engine coolants permitted will be water.
- b) The water pump must remain as homologated.
- c) The radiator may be changed with an aftermarket radiator or an additional radiator added that fits in the standard location and does not require any modifications to the main frame or to the fairings' outer appearance.
- d) Modifications to the homologated oil-cooler are allowed only they do not require any modifications to the main frame or to the fairings' outer appearance. A heat exchanger (oil/water) may be replaced with an oil-cooler.



- e) The cooling system hoses and catch tanks may be changed.
- f) Radiator fan and wiring may be changed, modified or removed.
- g) The oil cooler must not be mounted on or above the rear mudguard.

#### **2.5.8.16 Airbox**

- a) The airbox must be the originally fitted and homologated part with no modification allowed.
- b) The air filter element may be removed or replaced.
- c) The airbox drains must be sealed.
- d) All motorcycles must have a closed breather system. All oil breather lines must be connected, may pass through an oil catch tank and must exclusively discharge in the airbox. **Only the original breather vents may be used.**
- e) No heat protection may be attached to the airbox.

#### **2.5.8.17 Fuel supply**

- a) Fuel pump and fuel pressure regulator must be the originally fitted and homologated parts with no modification allowed.
- b) The fuel pressure must be as homologated.
- c) Fuel lines from the fuel tank up to the injectors (fuel hoses, delivery pipe assembly, joints, clamps, fuel canister) may be replaced and must be located in such a way that they are protected from crash damage.
- d) Quick connectors or dry break connectors may be used.
- e) Fuel vent lines may be replaced.
- f) Fuel filters may be added.

#### **2.5.8.18 Exhaust system**

- a) Exhaust pipes, silencers and exhaust mounts may be altered or replaced from those fitted on the homologated motorcycle. Catalytic converters must be removed.
- b) The number of final exhaust silencer(s) must remain as homologated. The silencer(s) must be on the same side(s) as on the homologated model.



- c) For safety reasons, the exposed edge(s) of the exhaust pipe(s) outlet(s) must be rounded to avoid any sharp edges.
- d) Wrapping of exhaust systems is not allowed except in the area of the rider's foot or an area in contact with the fairing for protection from heat.
- e) The noise limit for Supersport will be 107 dB/A (with a 3 dB/A tolerance after the race only).

#### 2.5.9.1 Electrics and electronics

- a) The ECU must be the Supersport 600 control ECU - the Mectronik MKE7 (part number WSS600\_A). The sole official supplier of the ECU is Solo Engineering. [www.soloengineering.com](http://www.soloengineering.com), [sales@solengineering.com](mailto:sales@solengineering.com).
- b) The firmware and manufacturer (engine) map must be declared **eligible** by championship and from the **Eligible Parts for Competition - List 2021**.
- c) **The ECU must have the "FIM Settings" section up to date at all times - it is the team's responsibility to ensure that this is done.**
- d) External quickshift modules/sensors may be fitted but may only provide a signal to the **Control Supersport ECU**.
- e) No other external modules may be fitted except:
  - a) Part of a quickshifter where the module may only provide a signal to the **control ECU**.
  - b) Championship mandated devices (e.g. 2 way RF system).
  - c) Datalogger.
- f) A CAN connection must be made available for Championships devices. One must be located in the rear of the seat unit of the bike. It must be connected to the ECU CAN bus and the TPMS system (if fitted) must be connected to the same bus. 12v power should be available switched by the main switch (not switched by the ignition switch).
- g) The ECU may be freely located but must be fitted securely, in a damped mounting without vibration.
- h) During an event the SBK Technical Director has the right to ask a team to substitute their ECU. The change has to be done before Sunday warm up.

- i) The following sensors must be connected directly to the ECU only.
  - a) Throttle position (multiple allowed)
  - b) Map sensor, Map Sync (pressure sensor on the intake port used to synchronize the engine during the start)
  - c) Airbox Pressure
  - d) Engine pick-ups (Cam, crank)
  - e) Twist grip position
  - f) Front Speed
  - g) Rear Speed
  - h) Gearbox output shaft speed (if on OEM machine)
  - i) Gear position
  - j) Air pressure
  - k) Water temperature
  - l) Air temperature
  - m) Tip-Over Switch (No lean angle) For 2020 all ECU's will feature crash detection (by IMU).
  - n) Gear shift load cell/switch (Non-OEM parts must be from **the Eligible Parts for Competition - List 2021**) (Shift controlled by ECU only)
  - o) Lambda - Bosch LSU4.9 only (one sensor only).
  - p) Fork position
  - q) Shock position
  - r) Front brake pressure
  - s) Rear brake pressure
  - t) Fuel pressure (not temperature)
  - u) Oil pressure
  - v) Oil temperature
  - w) Switches (Left and right)
  - x) Rear TPMS Monitor (Temperature and Pressure)
  - y) Front TPMS Monitor (Temperature and Pressure)
- j) Only the following may be connected directly to the logging system.
  - a) GPS Unit (Lap timing and track position)
  - b) Transponder/Lap time signal
  - c) Rear tyre temperature (Infra-Red) (External) (Maximum 3)

- k) The data logger must be from the **Eligible Parts for Competition - List 2021 (Data Logger list)**. The characteristics of **eligible** data logging systems must be the following:
- a) Maximum retail price of the unit (hardware + software, excluding sensors and wiring harness) cannot exceed €3.000 Euro (VAT excluded) unit. The “unit” may consist of multiple parts, input module, recording module etc.
  - b) The Data Logger unit must be available for sale to the public.
  - c) The data logger may **ONLY** be connected to the CAN bus and to those sensors listed in section 2.5.9.1.j.
- l) Telemetry is not allowed.
- m) No remote or wireless connection to the bike for any data exchange or setting is allowed whilst the engine is running or the bike is moving.
- n) The dashboard is free, it may also contain the datalogger. There must remain a working Tachometer display.
- o) Plug caps **and coils** must remain as homologated.
- p) Electric cables, harness, connectors, battery and switches are free but the harness must comply with the wiring schematic that is available from [www.soloengineering.com](http://www.soloengineering.com).
- q) Spark plugs and wires may be replaced.

#### 2.5.9.2 Generator, alternator, electric starter

- a) The generator (ACG) must be the originally fitted and homologated part with no modification allowed.
- b) The stator must be fitted in its original position and without offsetting.
- c) The electric starter must operate normally and always be able to start the engine during the event.
- d) During parc fermé the starter must crank the engine at a suitable speed for starting for a minimum of 2 seconds without the use a boost battery. No boost battery may be connected to the machine after the end of the session.

## 2.5.10 Main frame and pre-assembled spare frame

During the entire duration of the event, each rider can only use one (1) complete motorcycle, as presented for Technical Control, with the frame clearly identified with a seal. In case the frame needs to be replaced, the rider or the team must make a request to the SBK Technical Director to use the spare frame.

The pre-assembled spare frame must be presented to the SBK Technical Director to receive the permission to rebuild the motorcycle. The pre-assembly of the frame shall be strictly limited to:

- Main frame
- Bearings (steering pipe, swing-arm, etc)
- Swing-arm
- Rear suspension linkage and shock absorber
- Upper and lower triple clamps
- Wiring harness

The spare frame will not be allowed in the pit box before the rider or the team has received authorisation from the SBK Technical Director.

The rebuilt motorcycle must be inspected before its use by the technical stewards for safety checks and a new seal will be placed on the motorcycle frame.

**No complete spare machine may be at the track. If found penalties will be applied. For the remainder of the event the machine will be impounded and no part of that machine may be used for spare parts.**

### EXPLANATION OF THE PROCEDURES

Only one (1) complete motorcycle may be presented for the preliminary technical checks and it will be the only motorcycle allowed on the track and in the pit box during the practices, qualifying, warm up and race.

The frame of this motorcycle will be officially sealed by the SBK Technical Director or by his appointed staff. The seal will bear a serial number, which will be recorded. Any attempt made to remove the seal will damage it irreparably.

At any time during the event the technical stewards, under the direction of the SBK Technical Director, may check the seal and verify that it conforms to the motorcycle and rider it was assigned to. For cross reference, every frame must have a unique number punched on it, preferably on the steering-head.

If the motorcycle is damaged in a crash or in any other incident, it is allowed to use the pre-assembled spare frame to rebuild the motorcycle.

The spare frame may be pre-assembled with the following items: main frame assembly, swing-arm, rear suspension linkage, shock-absorber, steering head bearings, upper and lower triple clamps and wiring harness.

When a team decides that a crashed or damaged motorcycle requires a change of frame, it must inform the SBK Technical Director. Only once authorized may the pre-assembled spare frame be brought into the pit box.

Parts may be transferred from the damaged motorcycle for the assembly of the replacement motorcycle.

Once the assembly of the replacement motorcycle is completed, the machine must undergo technical and safety checks and it will be officially sealed. The seal on the damaged motorcycle will be destroyed by the technical staff and the chassis of this motorcycle must not be used for the remainder of the event. The new serial number will be recorded by the SBK Technical Director.

The replacement motorcycle may be used on the track only after the end of the practice and qualifying sessions or race in which the damage occurred. The damaged motorcycle must be removed from the pit box as soon as possible and put in storage outside the pit box.

After the pre-assembled spare part frame has been used, should it become necessary to replace the frame again because of a further crash or damage, the assembly work must be done using a bare frame with no components attached. The FIM SBK before work can start.

Any actions contrary to these procedures will result in a penalty as described in the Sporting Regulations.

#### **2.5.10.1 Frame body and sub-frames**

- a) The frame must be the originally fitted and homologated part with no modification allowed.

- b) Holes may be drilled on the frame only to fix approved components (i.e. fairing brackets, steering damper mount, sensors).
- c) The sides of the frame-body may be covered by a protective part made of a composite material. These protectors must fit the form of the frame.
- d) Crash protectors may be fitted to the frame using existing points (max. length: 50 mm), or pressed into the ends of the wheel axles (max. length: 30 mm). Without exception, the wheel axles cannot be modified.
- e) Nothing else may be added or removed from the frame body.
- f) All motorcycles must display a vehicle identification number punched on the frame body.
- g) Engine mounting brackets or plates must remain as originally produced by the manufacturer for the homologated motorcycle.
- h) Front sub frame/fairing mount may be changed or altered.
- i) Rear sub frame may be changed or altered, but the type of material must remain as homologated, or material of a higher specific weight.
- j) Additional seat brackets may be added, non-stressed protruding brackets may be removed if they do not affect the safety of the construction or assembly. Bolt-on accessories to the rear sub-frame may be removed.
- k) The paint scheme is not restricted but polishing the frame body or sub-frame is not allowed.

#### 2.5.10.2 Suspension - General

- a) Participants in the Supersport class must only use **units from the Eligible Parts for Competition - List 2021**. The price limits are:
  - i) Fork: For the fork kit, including all parts such as but not limited to cartridge, springs (1 set), adjusters, fork caps, blanking inserts, seals, bushes but excepting oil and fitting the price limit is €2200 excluding tax.
  - ii) Shock Absorber/RCU: For the complete shock absorber/RCU including but not limited to spring (1 of), pre-load adjuster and length/ride height adjuster the price limit is €2000 excluding tax.



- b) The **eligible** products from the suspension manufacturers must be available to all participants at least one month before the first round of the World Superbike season, and remain available all season. The products must be available within 6 weeks of a confirmed order.
- c) Setting parts and tuning parts must be provided by the suspension manufacturers to all customers/teams/participants using the manufacturer's products. These parts can be used by all participants during the season. These parts shall be available for immediate delivery to all teams/customers.
- d) Teams may not modify any part of the forks or shock absorber; all setting parts must be supplied by the Suspension manufacturer and available to all teams/riders.
- e) The suspension manufacturers are allowed to offer service contracts when the team is using the **eligible** suspension products. The suspension manufacturers cannot demand a service contract for a customer or participant in order to obtain a suspension product.
  - i) No aftermarket or prototype electronically-controlled suspensions may be used. Electronically-controlled suspension may only be used if already present on the production model of the homologated motorcycle.
  - ii) The electronically-controlled valves must remain as homologated. The shims, spacers and fork/shock springs not connected with these valves can be changed.
  - iii) The ECU for the electronic suspension must remain as homologated and cannot receive any motorcycle track position or sector information; the suspension cannot be adjusted relative to track position.
  - iv) The electronic interface between the rider and the suspension must remain as on the homologated motorcycle. It is allowed to remove or disable this rider interface.
  - v) The original suspension system must work safely in the event of an electronic failure.
  - vi) Electro-magnetic fluid systems which change the viscosity of the suspension fluid(s) during operation are not permitted.

- f) Electronic controlled steering damper cannot be used if not installed in the homologated model for road use. However, it must be completely standard (any mechanical or electronic part must remain as homologated).

### 2.5.10.3 Front forks

- a) Forks must be the originally fitted and homologated parts with the following modifications allowed:
- b) Original internal parts of the homologated forks may be modified or changed.
- c) **Only** aftermarket damper kits or valves from the **Eligible Parts for Competition - List 2021** may be installed (2.5.10.2.a).
- d) Fork springs may be modified or replaced.
- e) Fork caps may be modified or replaced to allow external adjustment.
- f) Dust seals may be modified, changed or removed if the fork is totally oil-sealed.
- g) The original surface finish of the fork tubes (stanchions, fork pipes) may be changed. Additional surface treatments are allowed.
- h) The front fender mounts integrated in the fork lower may be modified or removed and replaced.
- i) The axle bore in the fork lower cannot be modified. The front axle nut/sleeve may be added or modified and/or made captive.
- j) The upper and lower fork clamps (triple clamp, fork bridges) must remain as originally produced by the manufacturer on the homologated motorcycle.
- k) A steering damper may be added or replaced with an aftermarket damper.
- l) The steering damper cannot act as a steering lock limiting device.

#### 2.5.10.4 Rear fork (swing-arm)

- a) The rear fork must be the originally fitted and homologated part with no modification allowed.
- b) Rear fork pivot bolt must be the originally fitted and homologated part with no modification allowed.
- c) Rear axle chain adjuster may be modified or changed. The wheel axle nut may be replaced and/or made captive.
- d) Rear axle chain adjuster slot may be enlarged to allow the brake caliper mounting to become captive.
- e) A solid protective cover (shark fin) shall be fixed to the swing-arm, and must always cover the opening between the lower chain run, swingarm and the rear wheel sprocket, irrespective of the position of the rear wheel.
- f) Rear wheel stand brackets may be added to the rear fork by welding or by bolts. Brackets must have rounded edges (with a large radius). Fastening screws must be recessed. An anchorage system or point(s) to keep the original rear brake caliper in place may be added to the rear swing-arm.
- g) Wheel support rails/guides may be added to permit quick wheel changes.
- h) The sides of the swing-arm may be protected by a thin vinyl cover only, no composite or structural covers are allowed.

#### 2.5.10.5 Rear suspension unit

- a) Rear suspension unit (shock absorber) may be **replaced with a unit from the Eligible Parts for Competition - List 2021** (see 2.5.10.2.b).
- b) The original attachment points to the frame and rear fork (or linkage) must be as homologated.
- c) All the rear suspension linkage parts must be the originally fitted and homologated parts with no modification allowed.
- d) Removable top shock mounts must remain as homologated. A nut may be made captive on the top shock mount and shim spacers may be fitted behind it.

### 2.5.10.6 Wheels

- a) Wheels must be the originally fitted and homologated parts with no modification allowed.
- b) The wheels may be overpainted but the original finish cannot be removed.
- c) A non-slip coating/treatment may be applied to the bead area of the rim.
- d) If the original design included a cushion drive for the rear wheel, it must be the originally fitted and homologated parts with no modification allowed.
- e) Wheel axles may be modified or replaced but must be of the same material as the originally homologated part. The shank section of the axle must remain the same diameter as the originally homologated axle but the threaded area may be reduced in diameter.
- f) Wheel spacers can be modified or replaced.
- g) Bearing spacers are free.
- h) Wheel balance weights may be discarded, changed or added to.  
Aluminium or steel inflation valves are compulsory.  
Angled valves are compulsory.

### 2.5.10.7 Brakes

- a) Front and rear brake discs may be replaced with aftermarket brake discs that must fit the original calliper and mounting. However, the outside diameter, offset, wheel mounting and the ventilation system must remain the same as on the homologated motorcycle. Internally ventilated discs are not allowed if not present on the homologated motorcycle.
- b) Only Steel (max. carbon content 2.1 wt%) is allowed for replacement brake discs.
- c) Front brake callipers as well as all the mounting points and mounting hardware (mount, carrier, hanger) must be the originally fitted and homologated parts with no modification allowed. (see Art. 2.5.10.3).



- d) Rear brake callipers must be the originally fitted and homologated parts with no modification allowed. The mounting points must remain as homologated but the mounting hardware (mount, carrier, hanger) may have the axle bore sleeved to capture the brake calliper assembly to the swingarm to permit quick wheel changes.
- e) In order to reduce the transfer of heat to the hydraulic fluid it is permitted to add metallic-shims to the callipers, between the pads and the callipers, and/or to replace light alloy pistons with steel pistons made by the same manufacturer of the calliper.
- f) The front brake master cylinder must be the originally fitted and homologated parts with no modification allowed, excluding the hand lever.
- g) The rear brake master cylinder must be the originally fitted and homologated parts with no modification allowed.
- h) Front and rear hydraulic brake lines may be changed. The brake fluid reservoir may be replaced and/or repositioned. Quick connectors may be used. The split of the front brake lines for both front brake callipers must be made above the lower edge of the fork bridge (lower triple clamp). **Brake line hose fittings (including banjo bolts) can only be Steel or Titanium.**
- i) Front and rear brake pads may be changed. Brake pad locking pins may be modified for quick change type.
- j) Additional air ducts are not allowed.
- k) The ABS System must be removed.
- l) Motorcycles must be equipped with brake lever protection, intended to protect the handlebar brake lever from being accidentally activated in case of collision with another motorcycle. Composite guards are not permitted. **Guards from the Eligible Parts for Competition - List 2021** will be permitted without regard to the material. The SBK Technical Director has the right to refuse any guard not satisfying this safety purpose.

### 2.5.10.8 Handlebars and hand controls

- a) Handlebars may be replaced (except for the brake master cylinder).
- b) Handlebars and hand controls may be relocated.
- c) Throttle controls must be self-closing when not held by the hand.
- d) Throttle assembly and associated cables may be modified or replaced but the connection to the throttle body and to the throttle controls must remain as on the homologated motorcycle.
- e) Cable operated throttles (grip assembly) must be equipped with both an opening and a closing cable including when actuating a remote drive by wire grip/demand sensor.
- f) Clutch and brake lever may be replaced with an after-market model. An adjuster to the brake lever is allowed.
- g) Switches may be changed but the electric starter switch and engine stop switch must be located on the handlebars.
- h) Motorcycles must be equipped with a functional ignition kill switch or button mounted on the right hand handlebar (within reach of the hand while on the hand grips) that is capable of stopping a running engine. The button or switch must be red.

### 2.5.10.9 Foot rest and foot controls

- a) Foot rests, hangers/brackets and hardware may be replaced and relocated but the hangers/brackets must be mounted to their original frame mounting points.
- b) Foot controls; gear shift and rear brake must remain operated manually by foot.
- c) Foot rests may be rigidly mounted or a folding type which must incorporate a device to return them to the normal position.
- d) The end of the foot rest must have at least an 8 mm solid spherical radius. (see diagram A & C).
- e) Non folding footrests must have an end (plug) which is permanently fixed, made of aluminium, plastic, Teflon® or an equivalent type material (minimum radius 8 mm). The plug surface must be designed to reach the widest possible area. The SBK Technical Director has the right to refuse any plug not satisfying this safety purpose.

### 2.5.10.10 Fuel tank

- a) Fuel tank must be the originally fitted and homologated parts with no modification allowed.
- b) All fuel tanks must be completely filled with fire retardant material (open-celled mesh, i.e. “Explosafe®”).
- c) Fuel tanks with tank breather pipes must be fitted with non-return valves that discharge into a catch tank with a minimum volume of 250 cc made of a suitable material.
- d) Fuel caps may be changed. Fuel caps when closed, must be leak proof. Additionally, they must be securely locked to prevent accidental opening at any time.
- e) A rider spacer/pad may be fitted to the rear of the tank with non-permanent adhesive. It may be constructed of foam padding or composite material.
- f) The tank may not have a cover fitted over it unless the homologated machine also features a full cover.
- g) The sides of the fuel tank may be protected with a cover made of a composite material. These covers must fit the shape of the fuel tank.
- h) Fuel tank may have heat reflective sheet attached to its bottom surface.

### 2.5.10.11 Fairing / Bodywork

- a) Fairing, mudguards and body work must conform in principle to the homologated shape as originally produced by the manufacturer. The use of carbon fibre or Kevlar® materials is not allowed in fairing, fuel tank cover, seat, seat base and associated bodywork construction. Specific reinforcements in Kevlar® or carbon are allowed locally around holes and stressed areas. Headlights must be included even when considered external.
- b) For all bodywork paint and decal design is free.
- c) The fairing has a tolerance of +/-10 mm from the original homologated road fairing, respecting the design and features of the homologated fairing and any articles below. The overall width of the frontal area may be +10 mm maximum. The decision of the SBK Technical Director is final.

- d) Wind screen may be replaced.
- e) Fairing brackets may be altered or replaced.
- f) The ram-air intake must maintain the originally homologated shape and dimensions.
- g) Original air ducts running between the fairing to the airbox may be altered or replaced from those fitted to the homologated motorcycle. Particle grilles or “wire-meshes” originally installed in the openings for the air ducts may be removed.
- h) The lower fairing has to be constructed to hold, in case of an engine breakdown, at least half of the total oil and engine coolant capacity used in the engine (min. 5 litres). The lower edge of openings in the fairing must be positioned at least 50 mm above the bottom of the fairing.
- i) The lower fairing must incorporate one hole of 25 mm in the bottom of the front lower area. This hole must remain closed in dry conditions and must be opened only in wet race conditions, as declared by the Race Director.
- j) Minimal changes are allowed in the fairing to allow clearance for protective engine covers.
- k) Holes may be drilled or cut in the fairing or bodywork to allow additional increased intake air to the oil cooler. Holes bigger than 10 mm must be covered with a particle grill or fine wire mesh. Grill/mesh must be painted to match the surrounding material.
- l) Original openings for cooling in the lateral fairing/bodywork sections may be partially closed only to accommodate sponsors’ logos/lettering. Such modification shall be made using wire mesh or perforated plate. The material is free but the distance between all opening centres, circle centres and their diameters must be constant. Holes or perforations must have an open area ratio > 60%.
- m) Motorcycles may be equipped with a radiator shroud to improve the air stream towards the radiator but the appearance of the front, the rear and the profile of the motorcycle must not be changed.

- n) Front mudguard must conform in principle to the homologated shape originally produced by the manufacturer. Front mudguards may be replaced and the use of carbon fibre or Kevlar® composites are allowed.
- o) Front mudguard may be spaced upward for increased tyre clearance.
- p) Rear **hugger type** mudguards fixed on the swing-arm may be replaced with a cosmetic duplicates of the original part. The use of carbon fibre or Kevlar® composites are allowed.
- q) **The chain guard may be removed as long as it is not incorporated in the rear hugger. If the chain guard is incorporated in the hugger then the chain guard section may be removed or modified to accommodate larger diameter rear sprockets.**
- r) The chain guard may be removed as long as it is not incorporated in the rear fender.
- s) The existing rear mudguard under the seat may be removed. A mudguard may be fitted directly onto the swing-arm however it may not cover more than 120 degrees of the wheel.
- t) The exact appearance, shape, size and location of the front headlights of the homologated motorcycle must be respected, and should be obtained by applying a plastic or metallic film on the front of the motorcycle.

#### 2.5.10.12 Seat

- a) Seat, seat base and associated bodywork may be replaced. The appearance from front, rear and profile must conform in principle to the homologated shape.
- b) The top portion of the rear body work around the seat may be modified to a solo seat.
- c) Holes may be drilled in the seat or rear cowl to allow additional cooling. Holes which are bigger than 10 mm must be covered with metal gauze or fine mesh. Mesh must be painted to match the surrounding material.
- d) Same materials as fairing must be used (article 2.5.10.11.a).
- e) All exposed edges must be rounded.

### 2.5.10.13 Fasteners

- a) Standard fasteners may be replaced with fasteners of any material and design.
- b) Aluminium fasteners may only be used in non-structural locations.
- c) Titanium fasteners may be used in structural locations, but the strength and design must be equal to or exceed the strength of the standard fastener it is replacing, internal engine bolts must remain of standard homologated materials or materials of higher specific weight.
- d) Special steel fasteners may be used in structural locations, but the strength and design must be equal to or exceed the strength of the standard fastener it is replacing.
- e) Fasteners may be drilled for safety wire, but intentional weight-saving modifications are not allowed.
- f) Thread repair using inserts of different material such as helicoils and timeserts.
- g) Fairing/bodywork fasteners may be changed to the quick disconnect type.

### 2.5.10.14 Rear Safety Light

All motorcycles must have a functioning red light mounted at the rear of the machine, this light must be switched on any time the motorcycle is on the track or being ridden in the pit lane and the session is declared WET. All lights must comply with the following:

- a) Lighting direction must be parallel to the machine centre line (motorcycle running direction), and be clearly visible from the rear at least 15 degrees to both left and right sides of the machine centre line.
- b) The rear light must be mounted near the end of the seat/rear bodywork and approximately on the machine centre line, in a position approved by the SBK Technical Director. In case of dispute over the mounting position or visibility, the decision of the SBK Technical Director will be final.
- c) Power output/luminosity equivalent to approximately: 10 - 15 (incandescent), 0.6 - 1.8 W (LED).
- d) The output must be continuous - no flashing safety light whilst on track, flashing is allowed in the pit lane when pit limiter is active.

- e) Safety light power **should be supplied by the control ECU.**
- f) The SBK Technical Director has the right to refuse any light system not satisfying this safety purpose.

**2.5.11 The following items MAY BE altered or replaced from those fitted to the homologated motorcycle**

- a) Any type of lubrication, brake or suspension fluid.
- b) Bearings (ball, roller, taper, plain, etc.) of any type or brand may be used.
- c) Gaskets and gasket materials.

**2.5.12 The following items MAY BE removed**

- a) Emission control items (anti-pollution) in or around the airbox and engine (O2 sensors, air injection devices).
- b) Speedometer and related wheel spacers.
- c) Bolt on accessories on a rear sub frame.

**2.5.13 The following items MUST BE removed**

- a) Headlamp, rear lamp and turn signal indicators (when not incorporated in the fairing). Openings must be covered by suitable materials.
- b) Rear-view mirrors.
- c) Horn.
- d) License plate bracket.
- e) Tool box.
- f) Helmet hooks and luggage carrier hooks.
- g) Passenger foot rests.
- h) Passenger grab rails.
- i) Safety bars, centre and side stands must be removed (fixed brackets must remain).
- j) Catalytic convertors.
- k) **Rear mudguards affixed to the seat unit.**



## 2.7 SUPERSPORT 300 TECHNICAL SPECIFICATIONS

The following rules are intended to permit limited changes to the homologated motorcycle in the interests of safety and improved competition between various motorcycle concepts.

### **EVERYTHING THAT IS NOT AUTHORISED AND PRESCRIBED IN THIS RULE IS STRICTLY FORBIDDEN**

### **If a change to a part or system is not specifically allowed in any of the following articles, then it is forbidden**

WorldSSP 300 motorcycles require an FIM homologation (see Appendix FIM Homologation procedure for Superstock, Supersport and Superbike motorcycles). All machines must be normally aspirated. All motorcycles must comply in every respect with all the requirements for road racing as specified in these Technical Regulations, unless they are already equipped as such on the homologated model.

Once a motorcycle has obtained the homologation, it may be used for racing in the corresponding class for a maximum period **stated** in Homologation Art. 1.4.4. Or until such time that the homologated motorcycle is disqualified by new rules or changes in the technical specifications of the corresponding class.

The appearance from the front, rear and the profile of WorldSSP 300 motorcycles must (except when otherwise stated) conform to the homologated shape (as originally produced by the manufacturer). The appearance of the exhaust system is excluded from this rule.

### 2.7.1 Motorcycle specifications

All parts and systems not specifically mentioned in the following articles must remain as originally produced by the manufacturer for the homologated motorcycle.

### 2.7.2 Eligible Machines

The class will be based around the machines sold in Europe as A2 class machines and excluding the A1 class machines. The Superbike Commission has the right to decide which machines will be eligible in the class.

The following will be legal (this list can be amended at any time by the Superbike Commission):

- Kawasaki Ninja 400 (EX400)
- KTM RC390
- KTM RC390R
- Yamaha YZF-R3 (Euro 3)
- Yamaha YZF-R3A (Euro 4)
- Yamaha YZF-R3 2019 (Euro 3 and 4)

### 2.7.3 Balancing various motorcycle concepts

The Superbike Commission reserve the right to applying balancing to the machines in the class as they see fit in order to maintain equality amongst machines. Methods may include but are not limited to the following:

- Rev Limit
- Weight limit change
- **Eligible Parts** (see **Eligible Parts for Competition - List 2021** [www.fim-live.com](http://www.fim-live.com)) - including restrictors

The decision to apply the handicap will be taken by FIM/DWO at any time deemed necessary to ensure fair competition.

Balancing parts and modifications will be documented in the **Eligible Parts for Competition List 2021** published on [www.fim-live.com](http://www.fim-live.com) and supersede all following regulations.

### 2.7.4 Minimum weight

The minimum weight for each model is as follows:

Brand	Bike Weight		Combined Minimum Bike and Rider Weight*
	Hard Minimum	Soft Maximum	
KTM RC 390/R	133 kg	146 kg	202 kg
Ninja 400	137 kg	150 kg	210 kg
YZF-R3 (all)	137 kg	150 kg	204 kg



- a) Combined weight is the weight of the rider (in full racing equipment) and bike, as used on track.
- b) IF the bike has achieved or exceeded the “Soft Maximum Weight” then the combined minimum weight does not need to be reached. The bike alone may never at any time be below the “Hard Minimum Weight”. This limits the maximum amount of ballast that can be added to the machines.
- c) At any time of the event, the weight of the whole motorcycle (including the tank and its contents) must not be lower than the minimum weight.
- d) There is no tolerance on the minimum weight of the motorcycle.
- e) During the final technical inspection at the end of the race, the selected motorcycles **and riders** will be weighed in the condition they finished the race, and the established weight limit must be met in this condition. Nothing may be added to the motorcycle. This includes all fluids.
- f) During the practice and qualifying sessions, riders may be asked to submit their motorcycle to a weight control. In all cases the rider must comply with this request.
- g) The use of ballast is allowed to stay over the minimum weight limit and may be required due to the handicap system. The use of ballast and weight handicap must be declared to the SBK Technical Director at the preliminary checks.

### 2.7.5 Numbers and number plates

The colours are (also see Eligible Parts for Competition - List 2021 for colour information):

Manufacturer:	Number/Figure	Background
Kawasaki	Green (RAL6018)	White
Yamaha	Blue (RAL5002)	White
KTM	Orange (KTM EB Orange)	White

The sizes for all the front numbers are:	Minimum height:	140 mm
	Minimum width:	80 mm
	Minimum stroke:	20 mm
	Minimum space between numbers	10 mm

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The size for all the side numbers is:	Minimum height:	120 mm
	Minimum width:	70 mm
	Minimum stroke:	20 mm
	Minimum space between numbers	10 mm

The allocated number (& plate) for the rider must be affixed on the motorcycle as follows:

- a) The numbers must use the design/font and precise colours **detailed in the Eligible Parts for Competition - List 2021** and prescribed by DWO for the season (Industry Ultra Italic).
- b) Only single or double digit numbers will be allowed.
- c) Once on the front, either in the centre of the fairing or slightly off to one side. The number must be centred on the background with no advertising within 25 mm in all directions.
- d) Once on each side of the motorcycle. The location for the numbers on each side of the motorcycle is on the lower rear portion of the main fairing near the bottom. The number must be centred on the background.
- e) A single outline is permitted and the outline must be of a contrasting colour and the maximum width of the outline is 3 mm. The background colour must be clearly visible around all edges of the number (including outline). Reflective or mirror type numbers are not permitted.
- f) Numbers cannot overlap.
- g) No machine may enter the circuit if it does not meet the above regulations. If the rider does enter the circuit then no lap times will be recorded and Race Direction will at their discretion black flag the rider.

In case of a dispute concerning the legibility of numbers, the decision of the SBK Technical Director will be final.

## 2.7.6 Fuel

See article 2.8 for full Fuel regulations - Only the official WorldSSP 300 fuel may be used.

## 2.7.7 Tyres

All tyres must be provided by the official tyre supplier. Tyres will only be supplied by the official tyre supplier fitted to the team's wheels.

No loose tyres will be supplied.

### Dry Tyres:

- a) **In events with 1 race** the rider may use a maximum of three (3) front and three (3) rear dry-weather tyres for each event. **In events with 2 races** the rider may use a maximum of four (4) front and four (4) rear dry-weather tyres for each event. The dry weather tyres must be returned to the official tyre supplier at the end of every event except any set that may have been fitted to the machine (and used) as it finished the race. That set must be returned at the beginning of the following event to the official tyre supplier or no further tyres will be supplied.
- b) The dry-weather tyres used in the free practices, qualifying practices, warm-up and race must be marked with an adhesive sticker.
- c) The sticker will show an identification number for each rider and it will have a different colour depending on whether it is applied to the front or rear tyre. At each race the SBK Technical Director will assign a number of his choice to the competitor, while the colours will change for each race/event.
- d) The dry tyre stickers will be collected by the teams in a sealed envelope, on the day before the first practice session in accordance with a timetable decided by DWO and the SBK Technical Director. The timetable will be mailed to the teams by the DWO at least a week before the event. In extraordinary situations the SBK Technical Director can/may alter this program.
- e) After delivery of the stickers, the teams will be responsible for their safekeeping and use.



**Wet Weather Tyres:**

- f) Two sets of wet weather tyres will be made available at every round. The wet weather tyres must be returned to the official tyre supplier at the end of every event except any set that may have been fitted to the machine (and used) as it finished the race. That set must be returned at the beginning of the following event to the official tyre supplier or no further tyres will be supplied.

The wet weather tyres do not need to be marked with a tyre sticker.

- g) Wet-weather tyres may only be used after the race or practice has been declared ‘wet’ by the Race Direction.

**Tyre Stickers:**

- h) The stickers must be applied to the left sidewall of the dry weather tyres. Personnel nominated by the SBK Technical Director will check that all the motorcycles in the pit lane and at pit exit are fitted with tyres carrying the sticker.
- i) The use of motorcycles with unmarked tyres (e.g. without the official stickers) will be immediately reported to the Race Direction which will take appropriate action.
- j) In exceptional cases, should the sticker be damaged or applied in the wrong way, up to 1 extra sticker may be provided at the sole discretion of the SBK Technical Director. However, the damaged sticker must be returned to the SBK Technical Director and/or the tyre it was applied to must be absolutely intact.
- k) In case of a red flag, a damaged tyre found on motorcycles checked in pit lane, may be replaced with a new tyre. The damage must be confirmed by the official tyre supplier.

**Tyre limitations for dry weather tyres:**

- l) Minimum tyre pressure:

Minimum Tyre Pressure	
Period	Pressure
At all times	1.65 bar
No tolerance	

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- m) At the 3 minute board the pressure will be checked on the grid for a minimum of three riders using the Pirelli approved tyre gauge. If the tyre is below the minimum limit according to the Pirelli approved gauge then the machine will be removed from the grid to the pit lane to have the pressure corrected and the rider will start the warm up lap from the pit lane (and the race from the back of the grid).
- o) Riders may be stopped in the pit lane at any time by the SBK Technical Director or his appointed staff to check the tyre pressure.
- p) Limits for wet and intermediate tyres will be published separately.

## **2.7.8 Engine**

The allocated number of engines is 3.

See Art. 2.3.9 For Sealing and Usage Details.

Machines may be randomly chosen for dyno testing.

### **2.7.8.1 Fuel injection system**

- a) The original homologated fuel injection system must be used without any modification.
- b) The fuel injectors must be stock and unaltered from the original specification and manufacture.
- c) Air Funnels must remain as originally produced by the manufacturer for the homologated motorcycle.
- d) Butterfly valves cannot be changed or modified.
- e) Secondary throttle valves plates may be removed or fixed in the open position and the electronics may be disconnected or removed. The secondary throttle shaft(s) must remain in place.
- f) All the parts of the variable intake tract device must remain and operate exactly as homologated. They cannot be added if not fitted to the homologated machine.
- g) Air and air/fuel mixture must go to the combustion chamber exclusively through the throttle bodies.

- h) Electronically controlled throttle valves, known as “ride-by-wire”, may only be used if the homologated model is equipped with the same system. Software may not be modified and all the safety systems and procedures designed by the original manufacturer must be maintained.
- i) **The idle adjuster screw may be replaced or modified (the use of flexible remote adjuster is allowed).**

#### 2.7.8.2 Cylinder Head

- a) Must be the originally fitted and homologated part with no modification allowed.
- b) The exhaust air bleed system must be blocked and the external fittings on the cam cover(s) may be replaced by plates.
- c) Valve spring shims may be changed freely.
- d) Head and base gasket - see **Eligible Parts for Competition - List 2021** for allowed head gaskets (per manufacturer).
- e) A restrictor may be required to be fitted between the cylinder head and inlet manifold. It will be a flat plate. No blending or filling will be allowed with sealant or otherwise. See **Eligible Parts for competition - List 2021**: [www.fim-live.com](http://www.fim-live.com).
- f) The minimum squish clearance (per machine) will be listed in the **Eligible Parts for competition - List 2021**.

#### 2.7.8.3 Camshaft Assembly

- a) Must be the originally fitted and homologated parts with no modification allowed.
- b) At the technical checks: for direct cam drive systems, the cam lobe lift is measured; for non-direct cam drive systems (i.e. with rocker arms), the valve lift is measured.

#### 2.7.8.4 Cam sprockets or gears

- a) Cam sprockets may be slotted to allow the adjustment of cam timing.
- b) Pressed on cam sprockets may be replaced with an adjustable boss and cam sprocket.
- c) The cam chain and tensioner must remain as homologated.

### **2.7.8.5 Cylinders**

Must be the originally fitted and homologated part with no modification allowed.

### **2.7.8.6 Pistons**

Must be the originally fitted and homologated part with no modification allowed.

### **2.7.8.7 Piston rings**

Must be the originally fitted and homologated part with no modification allowed.

### **2.7.8.8 Piston pins and clips**

Must be the originally fitted and homologated part with no modification allowed.

### **2.7.8.9 Connecting rods**

Must be the originally fitted and homologated part with no modification allowed.

### **2.7.8.10 Crankshaft**

Must be the originally fitted and homologated part with no modification allowed.

### **2.7.8.11 Crankcase / Gearbox housing**

Must be the originally fitted and homologated parts with no modification allowed.

#### **2.7.8.11.1 Lateral covers and protection**

- a) Lateral (side) covers may be altered, modified or replaced. If altered or modified, the cover must have at least the same resistance to impact as the original one. If replaced, the cover must be made in material of same or higher specific weight and the total weight of the cover must not be less than the original one.
- b) All lateral covers/engine cases containing oil and which could be in contact with the ground during a crash, must be protected by a second cover made from metal, such as aluminium alloy, stainless steel, or steel, composite covers are not permitted.



- c) The secondary cover must cover a minimum of 1/3 of the original cover. It must have no sharp edges to damage the track surface.
- d) Plates or crash bars made from aluminium or steel also are permitted in addition to these covers. All of these devices must be designed to be resistant against sudden shocks, abrasions and crash damage.
- e) Covers **Eligible Parts for competition - List 2021** will be permitted without regard of the material or its dimensions.
- f) These covers must be fixed properly and securely with a minimum of three (3) case cover screws that also mount the original covers/engine cases to the crankcases.
- g) Oil containing engine covers must be secured with steel bolts.
- h) The SBK Technical Director has the right to refuse any cover not satisfying this safety purpose.

#### **2.7.8.12 Transmission / Gearbox**

- a) Must be the originally fitted and homologated parts with no modification allowed except:
  - i) The positive neutral selector mechanism may be removed.
  - ii) Shift star/indexer, spring, roller and detent may be replaced but must function as originally designed.
- b) Downshift blipping is not allowed.
- c) Countershaft sprocket, rear wheel sprocket, chain pitch and size may be changed.
- d) The front sprocket cover may be modified or eliminated.
- e) Chain guard as long as it is not incorporated in the rear fender may be removed.

#### **2.7.8.13 Clutch**

- a) Clutch system (wet or dry type) and the method of operation (by cable or hydraulic) must remain as homologated.
- b) Friction and drive discs may be changed.



- c) Clutch springs may be changed.
- d) The clutch basket (outer) must be the originally fitted and homologated part but may be reinforced.
- e) The original clutch inner assembly may be modified or replaced by an aftermarket clutch, also including back torque limiting capabilities (slipper type).

#### **2.7.8.14 Oil pumps and oil lines**

Must be the originally fitted and homologated part with no modification allowed.

#### **2.7.8.15 Cooling System**

- a) The only liquid engine coolant permitted is water.
- b) Protective meshes may be added in front of the oil and/or water radiator(s).
- c) The cooling system hoses and catch tanks may be changed.
- d) Radiator fan and wiring may be removed. Thermal switches, water temperature sensor and thermostat may be removed inside the cooling system.
- e) Radiator cap is free.
- f) An additional water radiator may be fitted but the appearance of the front, the rear and the profile of the motorcycle must not be changed. Extra mounting brackets to accommodate the additional radiator are permitted.

#### **2.7.8.16 Airbox**

- a) The airbox must be the originally fitted and homologated part with no modification allowed.
- b) The air filter element may be modified or replaced but not eliminated and must be mounted in the original position.
- c) The airbox drains must be sealed.



- d) All motorcycles must have a closed breather system. All the oil breather lines must be connected, may pass through an oil catch tank and must exclusively discharge in the airbox. **Only the original breather vents may be used.**
- e) No heat protection may be attached to the airbox.

#### 2.7.8.17 Fuel supply

- a) Fuel pump and fuel pressure regulator must be the originally fitted and homologated part with no modification allowed.
- b) The fuel pressure must be as homologated.
- c) Fuel lines from the fuel tank up to the delivery pipe assembly (delivery pipe excluded) may be replaced and must be located in such a way that they are protected from crash damage.
- d) Quick connectors or dry break connectors may be used.
- e) Fuel vent lines may be replaced.
- f) Fuel filters may be added.

#### 2.7.8.18 Exhaust system

- a) Exhaust pipes and silencers may be modified or changed. Catalytic converters must be removed.
- b) The number of the final exhaust silencer(s) must remain as homologated. The silencer(s) must be on the same side(s) of the homologated model.
- c) For safety reasons, the exposed edges of the exhausts pipe(s) outlet must be rounded to avoid any sharp edges.
- d) Wrapping of exhaust systems is not allowed except in the area of the rider's foot or an area in contact with the fairing for protection from heat.
- e) The noise limit for WorldSSP 300 be 107 dB/A (with a 3 dB/A tolerance after the race only).



- f) The test RPM will be as follows:

Machine:	Test rpm
Kawasaki Ninja 400 (EX400)	6,500 rpm
KTM RC390 / R	5,500 rpm
Yamaha YZF-R3	7,500 rpm

## 2.7.9 Electrics and electronics

### 2.7.9.1 Electronic Control System

- a) The complete electronics system must be the Superport 300 Control Electronics System.
- b) Rev limits (start of 2021):

Machine:	Test rpm
Kawasaki Ninja 400 (EX400)	10,350 rpm
KTM RC390 / R	11,150 rpm
Yamaha YZF-R (A, Euro 3, Euro 4, Kit)	13,300 rpm

### 2.7.9.2 Supersport 300 Control Electronics System

- a) The ECU/Dashboard/Harness must be the Supersport 300 Control Electronic System. The sole official supplier of the Control Electronics System is Solo Engineering. [www.soloengineering.com](http://www.soloengineering.com), [sales@solengineering.com](mailto:sales@solengineering.com) as documented in the **eligible** parts list.
- b) The software and firmware used must be from the **Eligible Parts for Competition - List 2021**.
- c) The ECU must have the “FIM Settings” section up to date at all times - it is the teams responsibility to ensure that this is done.
- d) Optional equipment sold by the motorcycle Manufacturer for the homologated model is considered not homologated with the bike and must follow the requirements for **eligible** electronics/data loggers.
- e) At any time during an event the Technical Director has the right to make a team substitute their ECU with an FIM sample.

- f) Sensors may not be replaced, modified or substituted unless noted and the allowed OEM ECU sensors/channels are:
- i) Throttle position Sensor(s)
  - ii) **Grip position sensor - see Eligible Parts for Competition - List 2021 for substitutions**
  - iii) Map sensor, Map Sync (pressure sensor on the intake port used to synchronize the engine during the start)
  - iv) Airbox Pressure
  - v) Engine pick-ups (Cam, crank)
  - vi) Twist grip position
  - vii) Front Speed (from ABS sensor)
  - viii) Rear Speed (from ABS sensor)
  - ix) Gearbox output shaft speed
  - x) Gear position
  - xi) Barometric air pressure
  - xii) Water temperature
  - xiii) Air temperature
  - xiv) Oil Pressure Switch
  - xv) Tip-Over Switch (Internal to ECU)
- The following may be added:
- xvi) Gear shift load cell/switch (signal to ECU only)
  - xvii) Lambda sensor (Bosch LSU4.9)
  - xviii) Left and Right Hand switches (may be replaced from kit)
  - xix) Fork position (teams choice)
  - xx) Shock position (teams choice)
  - xxi) Front brake pressure sensor (teams choice)
  - xxii) Transponder/Lap time signal
  - xxiii) GPS receiver unit



- g) If handlebar switches are replaced from those supplied in the kit then they must meet the specification documented on [www.soloengineering.com](http://www.soloengineering.com). Their basic layout, switch function, position and colour must follow those supplied in the kit.
- h) No external modules may be fitted except:
  - i) Part of a quickshifter where the module may only provide a signal to the control ECU and only be connected to the battery and the quickshift connector on the control harness.
  - ii) Championship mandated devices (e.g. 2 way RF system).
  - iii) Datalogger.
- i) The Data logger must be:
  - i) From the DWO/FIM World Supersport 300 **eligible** logger list.
  - ii) The firmware/software of any data logging units must be an FIM/DWO **eligible** version.
  - iii) A copy of the software and documentation must be submitted by the manufacturer to the SBK Technical Director before it can be **eligible** for use.
  - iv) An external logger may only connect to the “CAN” connections in the harness. These supply CAN and 12v Power.
  - v) A GPS receiver/aerial may be connected to an external logging device.
  - vi) No other connections can be made to the data logger.
  - vii) Free analysis software must be available.
- j) Plug cap must remain as homologated
- k) Spark plugs may be replaced.
- l) Battery is free.

### 2.7.9.3 Generator, alternator, electric starter

- a) Must be the originally fitted and homologated part with no modification allowed.
- b) The stator must be fitted in its original position and without offsetting.
- c) The electric starter must operate normally and always be able to start the engine during the event.
- d) During parc fermé the starter must crank the engine at a suitable speed for starting for a minimum of 2 seconds without the use a boost battery. No boost battery may be connected to the machine after the end of the session.

### 2.7.10 Main frame

During the entire duration of the event, each rider can only use one (1) complete motorcycle, as presented for Technical Control, with the frame clearly identified with a seal. In case the frame will need to be replaced the rider or the team must request the use of a spare frame to the SBK Technical Director.

The pre-assembled spare part frame must be presented to the SBK Technical Director for the permission of rebuilding. The pre-assembly shall be strictly limited to:

- Main frame
- Bearings (steering pipe, swing-arm, etc)
- Swing-arm
- Rear suspension linkage and shock absorber
- Upper and lower clamps (triple clamp, fork bridges)
- Wiring harness

The spare frame will not be allowed in the pit box before the rider or the team has received authorization from the SBK Technical Director.

The rebuilt motorcycle must be inspected before its use by the technical stewards for safety checks and a new seal will be placed on the motorcycle frame.

No other spare machine may be at the track. If found penalties will be applied. For the remainder of the event the machine will be impounded and no part of that machine may be used for spare parts.

For a full explanation of the procedures please see article 2.5.10.

### **2.7.10.1 Frame body and sub frames**

- a) The frame must be the originally fitted and homologated part with no modification allowed.
- b) Holes may be drilled on the frame only to fix approved components (i.e. fairing brackets, steering damper mount, sensors).
- c) The sides of the frame-body may be covered by a protective part made of a composite material. These protectors must fit the form of the frame.
- l) Crash protectors may be fitted to the frame using existing points (max. length: 50 mm), or pressed into the ends of the wheel axles (max. length: 30 mm). Without exception, the wheel axles cannot be modified.
- d) The sidestand bracket may be cut or removed.
- e) Nothing else may be added or removed from the main frame body.
- f) All motorcycles must display a vehicle identification number punched on the frame body (chassis number).
- g) Engine mounting brackets or plates must remain as originally produced by the manufacturer for the homologated motorcycle.
- h) Front sub frame / fairing mount may be changed or altered, but the use of titanium and carbon (or similar composite materials) is forbidden.
- i) Rear Sub Frame:
  - i) If removable it may be changed or altered, but the type of material must remain as homologated, or be material of a higher specific weight.
  - ii) If part of the main frame assembly then it may not be altered except as noted below.



- iii) Additional seat support brackets may be added. Non-stressed protruding brackets may be removed if they do not affect the safety of the construction or assembly. Bolt-on accessories to the rear sub-frame may be removed.
- j) The paint scheme is not restricted but polishing the frame body or sub frames is not allowed.

#### 2.7.10.2 Suspension - General

- a) Participants in the Superstock class must only use the **Eligible Parts for Competition - List 2021**. The price limits are:
  - i) Fork: For the fork kit, including all parts such as but not limited to cartridge, springs (1 set), adjusters, fork caps, blanking inserts, seals, bushes but excepting oil and fitting the price limit is €700 excluding tax.
  - ii) Shock Absorber/RCU: For the complete shock absorber/RCU including but not limited to spring (1 of), the price limit is €850 excluding tax. The pre-load adjuster is free and excluded from the price limit.
- b) The **eligible** products from the suspension manufacturers must be available to all participants at least one month before the first round of the World Superbike season, and remain available all season. The products must be available within 6 weeks of a confirmed order.
- c) Setting parts and tuning parts must be provided by the suspension manufacturers to all customers/teams/participants using the manufacturer's products. These parts can be used by all participants during the season. These parts shall be available for immediate delivery to all teams/customers.
- d) Teams may not modify any part of the forks or shock absorber; all setting parts must be supplied by the Suspension manufacturer and available to all teams/riders.
- e) The suspension manufacturers are allowed to offer service contracts when the team is using the **eligible** suspension products. The suspension manufacturers cannot demand a service contract for a customer or participant in order to obtain a suspension product.



- f) No type of electronic suspension may be used even when fitted to the homologated machine.
- g) Electronic controlled steering damper cannot be used if not installed in the homologated model for road use. However, it must be completely standard (any mechanical or electronic part must remain as homologated).

### 2.7.10.3 Front Forks

- a) Forks (stanchions, stem, wheel spindle, upper and lower crown, etc.) must be the originally fitted and homologated part with the following modifications allowed:
- b) The upper and lower fork clamps (triple clamp, fork bridges) must remain as originally produced by the manufacturer on the homologated motorcycle.
- c) Steering stem pivot position must remain in the homologated position (as supplied on the production bike). If the standard bike has inserts then the orientation/position of the original insert may be changed but the insert cannot be replaced or modified.
- d) A steering damper may be added or replaced with an after-market damper.
- e) The steering damper cannot act as a steering lock limiting device.
- f) Fork caps on the mechanical forks may only be modified or replaced to allow external adjustment. (This does not include the mechanical fork leg that is part of the homologated electronic fork set).
- g) Dust seals may be modified, changed or removed if the fork remains totally oil-sealed.
- h) Original internal parts of the homologated forks may be modified or changed. Only aftermarket damper kits or valves **from the Eligible Parts for Competition - List 2021** may be installed. The original surface finish of the fork tubes (stanchions, fork pipes) may be changed. Additional surface treatments are allowed. (See 2.7.10.2.a).
- i) Electronic forks must have their complete internal parts (including all electronic control) replaced with a conventional damping system.

#### 2.7.10.4 Rear fork (Swing-arm)

- a) The rear fork must be the originally fitted and homologated part with no modification allowed.
- b) Rear fork pivot bolt Must be the originally fitted and homologated part with no modification allowed.
- c) Rear swingarm pivot position must remain in the homologated position (as supplied on the production bike). If the standard bike has inserts then the orientation/position of the original insert may be changed but the insert cannot be replaced or modified.
- d) A solid protective cover (shark fin) shall be fixed to the swing-arm, and must always cover the opening between the lower chain run, swingarm and the rear wheel sprocket, irrespective of the position of the rear wheel.
- e) Rear wheel stand brackets may be added to the rear fork by welding or by bolts. Brackets must have rounded edges (with a large radius). Fastening screws must be recessed. An anchorage system or point(s) to keep the original rear brake calliper in place may be added to the rear swing-arm.
- f) The sides of the swing-arm may be protected by a thin vinyl cover only, no composite or structural covers are allowed.

#### 2.7.10.5 Rear suspension unit

- a) Rear suspension unit (shock absorber) may be replaced with a unit **from the Eligible Parts for Competition - List 2021**.
- b) The original attachments to the frame and rear fork (swing arm) (or linkage) must be as homologated. (See 2.7.10.2.b).
- c) All the rear suspension linkage parts must be the originally fitted and homologated part with no modification allowed.
- d) Removable top shock mounts must be the originally fitted and homologated part with no modification allowed. A nut may be made captive on the top shock mount and shim spacers may be fitted behind it to adjust ride height.
- e) Rear suspension unit and spring may be changed. An electronic shock absorber can be replaced with a mechanical one.

### 2.7.10.6 Wheels

- a) Wheels must be the originally fitted and homologated part with no modification allowed.
- b) The wheel may be overpainted but the original finish cannot be removed.
- c) A non-slip coating/treatment may be applied to the bead area of the rim.
- d) If the original design includes a cushion drive for the rear wheel, it must remain as originally produced for the homologated motorcycle.
- e) Wheel axles and retaining nuts (or bolts) must remain as homologated, wheel spacers may be modified or replaced.
- f) Bearing spacers must remain as homologated.
- g) Wheel balance weights may be discarded, changed or added to.
- h) Aluminium or steel inflation valves are compulsory.

Angled valves are compulsory.

### 2.7.10.7 Brakes

- a) Brake discs may be replaced by aftermarket discs which comply with following requirements:
  - i) Brake discs must retain the same material as the homologated disc or be steel (max. carbon content 2.1 wt%).
  - ii) Non-floating or single piece discs may be replaced with floating discs. The disc carrier must be the same material as the homologated carrier, or steel or aluminium.
  - iii) The outside diameters of the brake disc must not be larger than the homologated disc.
  - iv) The thickness of the brake disc may be increased but the disc must fit into the homologated brake calliper without any modification. The number of floaters is free.
  - v) The fixing of the carrier on the wheel must remain the same as on the homologated disc.



- b) The front and rear brake calliper (mount, carrier, hanger) must be the originally fitted and homologated part with no modification allowed.
- c) In order to reduce the transfer of heat to the hydraulic fluid it is permitted to add metallic shims to the callipers, between the pads and the callipers, and/or to replace light alloy pistons with steel pistons made by the same manufacturer of the calliper.
- d) The rear brake calliper bracket may be mounted fixed on the swing-arm, but the bracket must maintain the same mounting (fixing) points for the calliper as used on the homologated motorcycle.
- e) The swing-arm may be modified for this reason to aid the location of the rear brake calliper bracket, by welding, drilling or by using a helicoil.
- f) The front and rear master cylinder must be the originally fitted and homologated part with no modification allowed.
- g) Front and rear brake fluid reservoirs may be changed.
- h) Front and rear hydraulic brake lines may be changed.
- i) The split of the front brake lines for both front brake callipers must be made above the lower fork bridge (lower triple clamp). **Brake line fittings (including banjo bolts) can only be Steel.**
- j) “Quick” (or “dry-break”) connectors in the brake lines are not allowed.
- k) Front and rear brake pads may be changed. Brake pad locking pins may be modified for quick change type.
- l) Additional air scoops or ducts are not allowed.
- m) The Antilock Brake System (ABS) must be removed. The ABS units electronic board may remain fitted to stop ECU errors.
- n) Motorcycles must be equipped with brake lever protection, intended to protect the handlebar brake lever from being accidentally activated in case of collision with another motorcycle. Composite guards are not permitted. **Covers from the Eligible Parts for Competition - List 2021** will be permitted without regard of the material. The SBK Technical Director has the right to refuse any guard not satisfying this safety purpose.

### 2.7.10.8 Handlebars and hand controls

- a) Handlebars may be replaced (except for the brake master cylinder).
- b) Handlebars and hand controls may be relocated.
- c) Throttle controls must be self-closing when not held by the hand.
- d) Throttle assembly and associated cables may be modified or replaced but the connection to the throttle body and to the throttle controls must remain as on the homologated motorcycle. Cable operated throttles (grip assembly) must be equipped with both an opening and a closing cable including when actuating a remote drive by wire grip/demand sensor.
- e) Clutch and brake lever may be replaced with an after-market model. An adjuster to the brake lever is allowed.
- f) Switches may be changed but the electric starter switch and engine stop switch must be located on the handlebars.
- g) Motorcycles must be equipped with a functional ignition kill switch or button mounted on the right hand handlebar (within reach of the hand while on the hand grips) that is capable of stopping a running engine. The button or switch must be RED.

### 2.7.10.9 Foot rest / Foot controls

- a) Foot rests, hangers/brackets and hardware may be replaced and relocated but the hangers/brackets must be mounted to their original frame mounting points.
- b) Foot controls; gear shift and rear brake must remain operated manually by foot.
- c) Foot rests may be rigidly mounted or a folding type which must incorporate a device to return them to the normal position.
- d) The end of the foot rest must have at least an 8 mm solid spherical radius. (See Diagram A & C).
- e) Non folding footrests must have an end (plug) which is permanently fixed, made of aluminium, plastic, Teflon® or an equivalent type material (minimum radius 8 mm). The plug surface must be designed to reach the widest possible area. The SBK Technical Director has the right to refuse any plug not satisfying this safety aim.

### 2.7.10.10 Fuel tank

- a) Fuel tank must be the originally fitted and homologated part with no modification allowed.
- b) All fuel tanks must be completely filled with fire retardant material (open-celled mesh, i.e. Explosafe®).
- c) Fuel tanks with tank breather pipes must be fitted with non-return valves that discharge into a catch tank with a minimum volume of 250 cc made of a suitable material.
- d) Fuel caps may be changed. Fuel caps when closed must be leak proof. Additionally, they must be securely locked to prevent accidental opening at any time.
- e) A rider spacer/pad may be fitted to the rear of the tank with non-permanent adhesive. It may be constructed of foam padding or composite material.
- f) The tank may not have a cover fitted over it unless the homologated machine also features a full cover.
- g) The sides of the fuel tank may be protected with a cover made of a composite material. These covers must fit the shape of the fuel tank.
- h) Fuel tank cannot have heat reflective material attached to its bottom surface.

### 2.7.10.11 Fairing / Bodywork

- a) Fairing and bodywork may be replaced with exact cosmetic duplicates of the original parts, but must appear to be as originally produced by the manufacturer for the homologated motorcycle, with slight differences due to the racing use (different pieces mix, fixing points, fairing bottom, etc). The material may be changed. The use of carbon fibre or carbon composite materials is not allowed. Specific reinforcements in Kevlar® or carbon are allowed locally around holes and stressed areas. Headlights must be included even when considered external.
- b) For all bodywork paint and decal design is free.
- c) Overall size and dimensions must be the same as the original part, with a tolerance of +-5 mm, respecting the design and features of the homologated fairing as far as possible. The overall width of the frontal area may be +5 mm maximum. The decision of the SBK Technical Director is final.

- d) Wind screen may be replaced with an aftermarket product. The height of the windscreen is free, within a tolerance of +/- 15 mm referred to the vertical distance from/to the upper fork bridge. The screen must conform to the same profile and style from the front as the original - no double bubble or wide types. From a top view the length of the windscreen may be shortened by 25 mm to allow clearance for the rider. The edge of the screen must have no sharp edges
- e) Fairing brackets may be altered or replaced.
- f) The ram-air intake must maintain the originally homologated shape and dimensions.
- g) The original air ducts running between the fairing and the airbox may be altered or replaced. Carbon fibre composites and other exotic materials are forbidden. Particle grilles or “wire-meshes” originally installed in the openings for the air ducts may be removed. Air ducts cannot be added if they are not present on the original machine.
- h) The lower fairing must to be constructed to hold, in case of an engine breakdown minimum 4 litres. The lower edge of all the openings in the fairing must be positioned at least 70 mm above the bottom of the fairing.
- i) The upper edge of the rear transverse wall of the lower fairing must be at least 70 mm above the bottom. The angle between this wall and the floor must be  $\leq 90^\circ$ .
- j) Original openings for cooling in the lateral fairing/bodywork sections may be partially closed only to accommodate sponsors’ logos/lettering. Such modification shall be made using wire mesh or perforated plate. The material is free but the distance between all opening centres, circle centres and their diameters must be constant. Holes or perforations must have an open area ratio  $> 60\%$ .
- k) Motorcycles may be equipped with a radiator shroud (inner ducts) to improve the air stream towards the radiator but the appearance of the front, the rear and the profile of the motorcycle must not be changed.
- l) The lower fairing must incorporate a single opening of  $\varnothing 25$  mm diameter in the front lower area. This hole must remain sealed in dry conditions and must be opened only in wet race conditions as declared by the Race Director.

- m) Front mudguards may be replaced with a cosmetic duplicate of the original parts and may be spaced upward for increased tyre clearance.
- n) Rear **hugger type** mudguard fixed on the swing arm may be replaced with a cosmetic duplicate of the original.
- o) The chain guard may be removed as long as it is not incorporated in the rear **hugger**. If the chain guard is incorporated in the hugger then the chain guard section may be removed or modified to accommodate larger diameter rear sprockets. See the Eligible Parts for Competition - List 2021 for bike specific information.

#### 2.7.10.12 Seat

- a) Seat, seat base and associated bodywork may be replaced.
- b) The appearance from front, rear and profile must conform to the homologated shape.
- c) The top portion of the rear bodywork around the seat may be modified to a solo seat.
- d) The homologated seat locking system (with plates, pins, rubber pads etc.) may be removed.
- e) Material as Fairing 2.7.10.11.a.
- f) All exposed edges must be rounded.

#### 2.7.10.13 Fasteners

- a) Standard fasteners may be replaced with fasteners of any material and design but titanium fasteners cannot be used. The strength and design must be equal to or exceed the strength of the standard fastener.
- b) Fasteners may be drilled for safety wire, but intentional weight-reduction modifications are not allowed.
- c) Thread repair using inserts of different material such as helicoils and timeserts.
- d) Fairing/bodywork fasteners may be replaced with the quick disconnect type.
- e) Aluminium fasteners may only be used in non-structural locations.

### 2.7.10.14 Rear Safety Light

All motorcycles must have a functioning red light mounted at the rear of the machine, this light must be switched on any time the motorcycle is on the track or being ridden in the pit-lane and the session is declared wet. All lights must comply with the following:

- a) Lighting direction must be parallel to the machine centre line (motorcycle running direction), and be clearly visible from the rear at least 15 degrees to both left and right sides of the machine centre line.
- b) The rear light must be mounted near the end of the seat/rear bodywork and approximately on the machine centre line, in a position approved by the SBK Technical Director. In case of dispute over the mounting position or visibility, the decision of the SBK Technical Director will be final.
- c) Power output/luminosity equivalent to approximately: 10 - 15 (incandescent), 0.6 - 1.8 W (LED).
- d) The output must be continuous - no flashing safety light whilst on track, flashing is allowed in the pit lane when pit limiter is active.
- e) Safety light power **should be supplied by the control ECU.**
- f) The SBK Technical Director has the right to refuse any light system not satisfying this safety purpose.

### 2.7.11 The following items **MAY** be altered or replaced from those fitted to the homologated motorcycle

- a) Any type of lubrication, brake or suspension fluid may be used.
- b) Gaskets and gasket materials.
- c) Material for brackets connecting non original parts (fairing, exhaust, instruments, etc) to the frame (or engine) cannot be made from titanium or fibre reinforced composites excepting the exhaust silencer hanger that may be in carbon.
- d) Protective covers for the frame, chain and footrests may be made in other materials like fibre composite material if these parts do not replace original parts mounted on the homologated model.



### 2.7.12 The following items **MAY BE Removed**

- a) Emission control items (anti-pollution) in or around the airbox and engine (O2 sensors, air injection devices).
- b) Bolt-on accessories on a rear sub frame.

### 2.7.13 The following items **MUST BE Removed**

- a) Headlamp, rear lamp and turn signal indicators (when not incorporated in the fairing). Openings must be covered by suitable materials.
- b) Rear-view mirrors.
- c) Horn.
- d) License plate bracket.
- e) Toolkit.
- f) Helmet hooks and luggage carrier hooks.
- g) Passenger foot rests.
- h) Passenger grab rails.
- i) Safety bars, centre and side stands must be removed (fixed brackets must remain excepting side stand bracket).
- j) Catalytic convertors.
- k) **Rear mudguards affixed to the seat unit.**

## 2.8 FUEL AND LUBRICANT

All vehicles must be fuelled with:

- unleaded fuel (from public pump station or race type) OR
- a mixture of unleaded fuel.

The unleaded fuel or the mixture of unleaded fuels used must comply with the FIM specifications as set out in Art. 2.8.1.

The mixture of unleaded fuel(s) and lubricant must comply with the FIM specifications as set out in Art. 2.8.2.

Riders/teams must declare to the FIM Technical Director (or the FMNR Chief Technical Steward when there is no FIM Technical Director appointed) the make and type of fuel to be used during practices and race(s), upon presentation of the rider/team's motorcycle(s) at the initial Technical Verifications. Riders/Teams are also recommended to provide a certificate issued by the fuel company which certifies that the fuel has been tested and is in conformity with FIM specifications.

Fuel companies which supply "race" fuels (fuels other than those obtained at public pump stations) to participating teams/riders must test their fuel at Intertek Schlieren (Switzerland) against FIM specifications set out in Art. 2.8.1.

Providing the fuel is within the FIM specifications, a certificate containing a test report and batch number will be issued to the fuel company.

The fuel company shall be able to provide a copy of such certificate to their client rider/teams before they take part in a race.

Contact for fuel analysis: [fimfuels@intertek.com](mailto:fimfuels@intertek.com).

A list of fuels which are in conformity with FIM specifications will be published by FIM on the FIM website.

Furthermore, in the cases in which only fuel from the appointed supplier is permitted (for a specific event or the entire World Championship, Prize or Cup), the aforementioned fuel shall have been previously tested in a FIM appointed laboratory in order to test its conformity with the FIM specifications as set out in Art. 2.8.1.

- in case of conformity, a certificate of conformity (including test report and tested batch number) shall be available and Art. 2.8.1 applies in case of controls for the riders/teams;
- in case the conformity is not achieved, the FMN of the organising country/the Organiser/the Promoter shall ask the FIM for a waiver in order to enable the use of fuel not corresponding to FIM specifications. If the waiver is granted, the riders/teams will be responsible for using the fuel provided without changing its composition. Controls may be carried out by FIM.

### 2.8.1 FIM specifications for unleaded fuels or mixtures of unleaded fuels

The following specifications are set for unleaded fuel or the mixture of unleaded fuels:

- a) The following properties shall be within the following thresholds (for each property, the relative test methods to be used for the measurement are indicated):

Property	Units	Min.*	Max.*	Test Method
RON		95.0	102.0	EN ISO 5164 or ASTM D2699
MON		85.0	90.0	EN ISO 5163 or ASTM D2700
Oxygen (includes 10% ethanol allowance)	% (m/m)		3.7	EN ISO 228541 or EN 13132 or elemental analysis
Nitrogen	% (m/m)		0.2	ASTM D 46292 or ASTM 5762
Benzene	% (V/V)		1.0	EN ISO 22854 or ASTM D6839 or ASTM D5580
Vapour pressure (DVPE)	kPa		100.0	EN 13016-1 or
ASTM D5191	mg/L		5.0	ICP-OES or AAS
Lead	mg/L		5.0	ICP-OES or AAS
Manganese	mg/L		2.0	ICP-OES or AAS
Density at 15°C	kg/m <sup>3</sup>	720.0	785.0	EN ISO 12185 or ASTM D4052
Oxidation stability	minutes	360		EN ISO 7536 or ASTM D525
Sulphur	mg/kg		10.0	EN ISO 20846 or ASTM D5453

<b><u>Distillation:</u></b>				EN ISO 3405 or ASTM D86
E at 70°C	% (V/V)	20.0	52.0	
E at 100°C	% (V/V)	46.0	72.0	
E at 150°C	% (V/V)	75.0		
Final Boiling Point	°C		210	
Residue	% (V/V)		2.0	
Appearance	clear, bright and visually free from solid matter and undissolved water			Visual inspection
Olefins	% (V/V)		18.0	EN ISO 22854 or ASTM D6839
Aromatics	% (V/V)		35.0	EN ISO 22854 or ASTM D6839
Total diolefins	% (m/m)		1.0	GC-MS or HPLC
<b><u>Oxygenates:</u></b>				EN ISO 228541 or EN 13132
Methanol	% (V/V)		3.0	The only oxygenates permitted are paraffinic mono- alcohols and paraffinic mono-ethers (of 5 or more carbon atoms per molecule) with a final boiling point below 210°C.
Ethanol	% (V/V)		10.0	
Isopropanol	% (V/V)		12.0	
Isobutanol	% (V/V)		15.0	
tert-Butanol	% (V/V)		15.0	
Ethers (C5 or higher)	% (V/V)		22.0	
Others	% (V/V)		15.0	

<sup>1</sup> In cases of dispute EN ISO 22854 will be the reference method.

<sup>2</sup> In cases of dispute ASTM D4629 will be the reference method.

\* All reported min. and max. thresholds do not include the tolerance, which needs to be calculated in accordance with ISO 4259 and taken into account to correct the min. and max. thresholds.

- b) The total of individual hydrocarbon components present at concentrations of less than 5% (m/m) must constitute at least 30% (m/m) of the fuel. The test method will be GC-FID (gas chromatography-flame ionisation detector) and/or GC-MS (gas chromatography-mass spectrometry).
- c) The total concentration of naphthenes, olefins and aromatics classified by carbon number must not exceed the values given in the following table:

% (m/m)	C4	C5	C6	C7	C8	C9+
Naphthenes	0	5	10	10	10	10
Olefins	5	20	20	15	10	10
Aromatics	-	-	1.2	35	35	30

Bicyclic and polycyclic olefins are not permitted. The fuel must contain no substances which are capable of exothermic reaction in absence of external oxygen.

## 2.8.2 FIM specifications for mixtures of unleaded fuel(s) and lubricant

The lubricant

- must not change the composition of the fuel fraction when added to the fuel;
- must not contain any nitro-compounds, peroxides or any other engine power boosting additives;
- must in no way contribute to an improvement in overall performance;
- during the distillation up to 250°C, must not show a reduction in mass by evaporation of more than 10% (m/m) (test method: simulated distillation GC);
- must contain a max. content of anti-knock agents (lead, manganese, iron) of 10 mg/Kg (test method: ICP-OES).

Moreover, the following specifications are set for the mixture of unleaded fuel(s) and lubricant:

- a) The following properties shall be within the following thresholds (for each property, the relative test methods to be used for the measurement are indicated):

Property	Unit	Min.	Max.	Test Method
RON			102.0*	EN ISO 5164 or ASTM D2699
MON			90.0*	EN ISO 5163 or ASTM D2700
Density at 15 °C	kg/m <sup>3</sup>	690**	815**	EN ISO 12185 or ASTM D4052

\* Reported min. and max. thresholds do not include the tolerance, which needs to be calculated in accordance with ISO 4259 and taken into account to correct the min. and max. thresholds.

\*\* Min. and max. thresholds do include the tolerance.

### 2.8.3 Air

Only ambient air may be mixed with the fuel as an oxidant.

### 2.8.4 Sampling and Testing

The FIM may require fuel controls, i.e. controls of the unleaded fuel, mixture of unleaded fuels or mixture of unleaded fuel and lubricant, used by riders/teams at events. These controls involve an initial sampling at the event and further testing in the FIM appointed laboratory.

#### 2.8.4.1 Sampling

- The FIM Technical Director (or the FMNR Chief Technical Steward when there is no FIM Technical Director appointed) is the sole official responsible for the sampling management and supervision.
- Riders/teams selected for fuel controls are directed to proceed with their vehicles to the area that has been designated for this purpose.
- The FIM Technical Director/FMNR Chief Technical Steward collects the fuel from the motorcycle by using only new sample containers and pipettes/hand pumps.



- d) The fuel is transferred through the use of the pipette/hand pump directly from the fuel tank into three containers, denominated A, B and C. The containers are closed and sealed by the FIM Technical Director/FMNR Chief Technical Steward.
- e) The FIM Technical Director/FMNR Chief Technical Steward fills in (in all its parts) and signs the Fuel Sample Declaration Form (see 63.04.03). The rider or a team representative also signs this Form, after verifying that all the information is correct.
- f) The FIM Technical Director/FMNR Chief Technical Steward prepares an appropriate shipping box containing the collected A, B and C samples and a copy of the respective, signed, Fuel Sample Declaration Form. The box is then shipped to the FIM appointed laboratory by registered courier.

#### **2.8.4.2 Testing**

- a) One or more properties to be checked (following the relevant testing method as per Art. 63.01 and 63.02) are set by the FIM for each selected rider/team.
- b) Sample A is the first sample to be tested by the FIM appointed laboratory.
- c) Sample B can be used for a second analysis if required by the FIM. The test result of the A or B sample more favourable to the rider/team is taken into account. Costs for the shipping and testing of sample A and B are paid by FIM.
- d) As soon as possible after completing the testing, the FIM appointed laboratory reports the test results directly to the responsible CTI Coordinator.
- e) For negative cases (i.e. conformity of the tested property(ies) with the specification), the riders/teams concerned will be individually informed by the FIM in due course, copying the rider/team's FMN, the FIM Technical Director/FMNR Chief Technical Steward, the competent authority (e.g. Race Direction, International Jury), the CTI Director, the Director and Coordinator(s) of the sporting Commission concerned.



f) Only for positive cases following testing of sample A or B or A and B (i.e. non-conformity of one or more properties\*), the responsible CTI Coordinator notifies by electronic mail\* the rider/team concerned (including the testing results) and, 24 hours after, forwards the relevant information to the rider/team's FMN, the FIM Technical Director/FMNR Chief Technical Steward, the competent authority (e.g. Race Direction, International Jury), the CTI Director, the Director and Coordinator(s) of the sporting Commission concerned.

\* Note: The non-conformity of one property (except the Appearance) is sufficient for declaring non-conformity of the fuel or the mixture.

g) If the rider/team wishes to request a counter-expertise, he must notify the responsible CTI Coordinator by electronic mail\* accordingly, within 72 hours of receipt by the FIM of the delivery status notification pertaining to the notification of the test results to the rider/team.

h) If a counter-expertise is requested, the sample dedicated to the counter-expertise is sample C and the test shall aim at checking the same property(ies) previously checked on sample A/B. The rider/team can request that sample C be tested at one of the available FIM appointed laboratories. Costs for shipping and testing of sample C are paid by the rider/team concerned.

i) Upon notification of the sample C results, the responsible CTI Coordinator notifies by electronic mail\* the rider/team concerned (including the testing results) and forwards the relevant information to the rider/team's FMN, the FIM Technical Director/FMNR Chief Technical Steward, the competent authority (e.g. Race Direction, International Jury), the CTI Director, the Director and Coordinator(s) of the sporting Commission concerned.

j) If no counter-expertise is requested within the time limit, the responsible CTI Coordinator forwards the relevant information by electronic mail\* the rider/team's FMN, the FIM Technical Director/FMNR Chief Technical Steward), the competent authority (e.g. Race Direction, International Jury), the CTI Director, Director and Coordinator(s) of the sporting Commission concerned.

k) The competent authority of the event concerned (e.g. Race Direction, International Jury) takes a decision based on the information received. The Coordinator of the sporting Commission concerned notifies the rider/team concerned regarding the decision by electronic mail\*.

l) The non-conformity of:

- A sample (in the cases B sample was not used) or
- B sample (in the cases A sample result was not conclusive) or
- A and B samples or
- A and B and C samples (in the cases B sample was used and a counter-expertise was requested) or
- A and C samples (in the cases B sample was not used and a counter-expertise was requested) automatically results in the disqualification of the rider/team from the entire event.
- No disqualification will be applied in case of conformity of sample C.

Furthermore, in any case, other penalties may be applied.

m) The rider/team has the right to appeal against the decision of competent authority of the event concerned (e.g. Race Direction, International Jury) in accordance with FIM Disciplinary and Arbitration Code applicable to the relevant discipline.

\* The receipt of a delivery status notification will be deemed as proof of delivery.

### **2.8.5 Fuel Storage**

Fuel must only be stored in metal, sealable containers in the competitor's pit.

Firefighting equipment, protective devices and staff must conform to the requirements imposed by the local authorities and by-laws.

The organiser must have fire extinguishers of a size and type approved by the local by-laws, available to each competitor in the pit area.

### **2.8.6 Coolants**

The only liquid engine coolants permitted other than lubricating oil shall be water.

## 2.9 PROTECTIVE CLOTHING AND HELMETS

### 2.9.1

Riders must wear a complete leather suit with additional leather padding or other protection on the principal contact points, knees, elbows, shoulders, hips that conform to EN1621-1:2012.

The use of sliders (specific parts of the riders safety equipment, either permanently fixed or removable, intended to make regular contact with the track surface to assist the rider while cornering), is permitted on the knees, elbows or any other parts of the race suit, where it is deemed necessary. They must not be manufactured from or contain any material that when in contact with the track surface may cause visual or other disturbance to other riders.

### 2.9.2

Linings or undergarments must not be made of a synthetic material which might melt and cause damage to the riders' skin.

### 2.9.3

Riders must also wear leather gloves and boots, which with the leather suit provide complete coverage from the neck down.

### 2.9.4

Leather substitute materials may be used, providing they have been checked by the Chief Technical Steward.

### 2.9.5

Use of a chest and back protector is compulsory (**with or without airbag protection in the suit**) and must be clearly marked with the following norms:

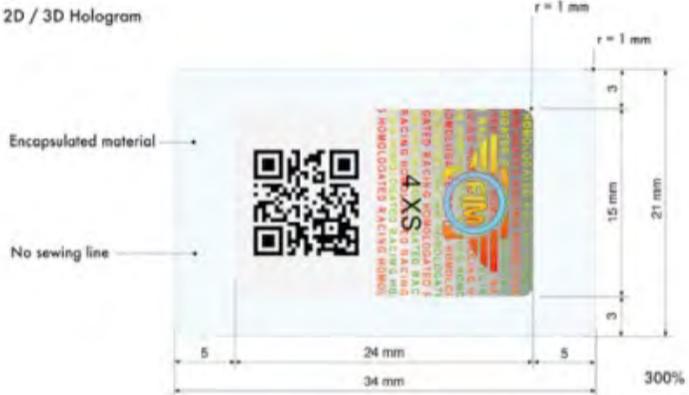
- a) The back protector must comply with EN1621-2, CB (“central back”) or FB (“full back”) Level 1 or 2.
- b) The chest protector must comply with prEN1621-3 or EN 14021.

## 2.9.6

Riders must wear a helmet which is in good condition, provides a good fit and is properly fastened.

## 2.9.7 Helmet Standards

Helmets must comply with the FIM helmet standard. A list of FIM Homologated helmets is available on [www.frhp.org](http://www.frhp.org).

FIM FRHPhe-01	Compulsory from 01/01/2020
	<p>2D / 3D Hologram</p> 

## 2.9.8

Visors must be made of a shatterproof material.

## 2.9.9

Disposable “tear-offs” are permitted.

## 2.9.10

Any question concerning the suitability or condition of the riders clothing and/or helmet shall be decided by the SBK Technical Director, who may, if he so wishes, consult with the manufacturers of the product before making a final decision.



## 2.10 PROCEDURES FOR TECHNICAL CONTROL

A rider is at all times responsible for his motorcycle.

### 2.10.1

At each circuit the Technical Checking Area consisting of the parc fermé and the inspection area must be clearly defined:

#### a) Parc fermé

The parc fermé\* is a restricted access area sealed with fences or other physical divisions with one or more gates.

The gates and the area are under the control of marshals when the parc fermé is in use (e.g. after practice/race).

The parc fermé area must be sufficiently large to give shelter to all participating motorcycles.

The only persons allowed to enter the parc fermé are the:

- SBK Technical Director and Technical Stewards
- Race Direction Members
- FIM Stewards
- Tyre Manufacturer's staff
- Riders of the motorcycles staying in the parc fermé. **The rider and Team Manager should move to the edge of the parc fermé as soon as possible and leave when the rider is no longer required (eg after weighing or protective equipment inspections).**
- **Two** mechanics per motorcycle - until dismissed by the technical stewards

No other persons have the right to enter and stay in the parc fermé unless invited by the SBK Technical Director.

\* Under special circumstances the Teams allocated garage may be used as the parc fermé.

## b) Inspection area

The inspection area is a sensitive area where motorcycles are disassembled and inspected and technical meetings are held. Therefore, the inspection area is highly restricted.

The following persons are allowed to remain in the inspection area:

- The SBK Technical Director and Technical Stewards
- The Race Direction Members
- The FIM Stewards
- The Riders, Team managers or their representatives of the inspected motorcycles
- For disassembling operations up to 3 mechanics per motorcycle may be present

Any other persons may enter or stay in the inspection area at the sole discretion of the SBK Technical Director.

In case of an engine inspection, the inspected entrant has the right to request a reserved area where other entrants cannot watch closely.

In the inspection areas, under the control of the Chief Technical Steward and the supervision of the SBK Technical Director, suitable equipment will be installed to conduct the various tests, e.g.

- i) Equipment for measuring the sound of the motorcycle.
- ii) Weighing scales with check weights for calibration purposes.
- iii) Instruments for measuring engine capacity.
- iv) Rulers and degree discs and gauges for measuring other dimensions.

### 2.10.2

The technical control procedure will be carried out in accordance with the schedule set out in the final instructions. The Technical Stewards must be available throughout the event to check motorcycles and equipment as required by the SBK Technical Director.

### 2.10.3

Presentation of a motorcycle will be deemed as an implicit statement of conformity with the technical regulations. A rider's presence at the technical control is not mandatory.

### 2.10.4

The motorcycle will be inspected under the name of the rider.

### 2.10.5

For each motorcycle the Technical Stewards will prepare a technical control card (or **computerised spreadsheet**) on to which will be recorded, amongst other information, the team presenting the motorcycle and the rider.

### 2.10.6

The Technical Stewards must inspect the motorcycle for obvious safety omissions and the SBK Technical Director may, at his discretion, choose to check the motorcycles for technical compliance with all other aspects of these Regulations.

### 2.10.7

The SBK Technical Director will refuse any motorcycle that does not have a correctly-positioned positive transponder attachment. The transponder must be fixed to the motorcycle in the position and orientation as shown in the Timekeeping information given to teams pre-season and available at each event. Positive attachment of the transponder bracket consists of a minimum of tie-wraps, but preferably by screw or rivet. Velcro or adhesive alone will not be accepted. The transponder retaining clip must also be secured by a tie-wrap.

### 2.10.8

At the conclusion of the check, the Technical Stewards will place a small sticker on the motorcycle frame indicating that it has passed the safety checks.

### 2.10.9

The Chief Technical Steward will prepare a report on the results of technical control which, will be submitted to the International Jury via the SBK Technical Director.

### 2.10.10

The Technical Stewards must re-inspect any motorcycle that has been involved in an accident. This would normally be carried out at the garage of the rider concerned. For riders/teams located in the working Paddock, an inspection will be made when the motorcycle is returned to the Technical Inspection area.

### 2.10.11

The Technical Stewards must be available, based on instructions from the SBK Technical Director, to re-inspect any motorcycle for technical compliance during the meeting or after the race and to supervise inspection of a motorcycle following a protest on a technical matter.

### 2.10.12

**As noted on the timetable at the end of sessions the machines will be:**

- a) **Free:** Free to go to the team garage or awning.
- b) **Garage Parce Fermé:** The machines will be allowed to return to their allocated garages where following confirmation of tyre stickers by the SBK Technical Director or his approved staff the wheels may be removed. Data may be downloaded, NO other work may be carried out until 15 minutes after the end of Superbike Superpole 2 (see Art. 3.4.3).

The garage doors must remain fully open at all times during this period.

- c) **Parce Fermé:** The Chief Technical Steward will ensure that all classified motorcycles are placed in the parc fermé for a period of at least 30 minutes from the end of the **noted session or race** (unless held longer at the discretion of the SBK Technical Director).

The motorcycles must be checked for compliance according to the Verification Guidelines (Art. 2.10), and any other technical requirement if requested by the SBK Technical Director.

Competitors or teams must retrieve their motorcycles within approximately 30 minutes after the motorcycle entered the parc fermé, except for those motorcycles chosen for disassembly. After this time limit, the parc fermé officials will no longer be responsible for the motorcycles left behind.

### 2.10.13

The SBK Technical Director may require a team to provide such parts or samples as he may deem necessary.

### 2.10.14

If a motorcycle or rider is involved in an accident, then it is the responsibility of the rider to present helmet and clothing for re-examination.

If the helmet is clearly defective, the Chief Technical Steward must arrange to retain this helmet. The IMS must send this helmet, together with the accident and medical report (and pictures and video, if available) to the Federation of the rider, with a copy to the CMI and to the CTI. If there are head injuries stated in the medical report, the helmet then must be sent to a neutral institute for examination.

### 2.10.15

Sound may be checked after Superpole as well as after the race. Sound may be checked at any time of the event by request of the SBK Technical Director. On request of rider, team or mechanic, sound of their own motorcycles can be checked at any time during the event.

### 2.10.16

The random weight check during practices will be held with minimum disturbance to the riders. The weight scales will be placed in the pit-lane. The actual place is decided by the SBK Technical Director.

The SBK Technical Director has the final authority in case of a dispute on the conformity of the parts in question and for their acceptance.

### 2.10.17

The SBK Technical Director may at any time during the event and until one hour after the finish of the last race, choose to inspect any machine, or team equipment (including but not limited to laptop and other computer equipment) for conformity to these regulations. **Logged data may be collected at any point (for any session) for analysis.**

### 2.10.18

**Dyno tests of any Superpsport or Supersport 300 machine may be made at any point during the event at the discretion of the technical director.**



## 2.11 VERIFICATION GUIDELINES FOR TECHNICAL STEWARDS

### 2.11.1 Verification for the three classes (SBK, SS)

- Make sure all necessary measures and administrative equipment are in place at least 1 hour before the Technical control (see separate list) is due to open.
- Decide who is doing what and note decisions. “Efficiency” must be the watchword. Always keep cheerful and remember the reasons for Technical controls: SAFETY AND FAIRNESS.
- Be well informed. Make sure your FMN has supplied you with all technical “updates” that may have been issued subsequent to the printing of the Technical Regulations. Copies of all homologation documents must be in your possession.
- Inspection must take place under cover with a large enough area (min. surface 100 sq. metres).
- Weighing apparatus must be accurate and practical. The scale must be certified in the current year.
- Rules regarding sound level and measurement must be respected.
- The scales and sound meter will be available to the teams or riders for pre-race checking in the technical control area.

#### In general

- The motorcycles will not be required for weight and/or sound check at the pre-race technical inspection.
- Sound test must take place in a clear area adjacent to the Technical control at least 5 metres from any possible sound reflecting obstruction.
- The riders and teams must be aware that the weight and sound may be checked at random during practice in the pit-lane, at the end of Superpole and at the end of each race.
- Claiming that the sound and weight were not officially controlled before the race will not be grounds for appeal. Conformity of the rules is the responsibility of the rider and the team (or of the participants).



- The SBK Technical Director reserves the right to spot check the weight and sound of any motorcycles on pit row during free practice and official practice. This can occur at any time during the free practice and in the first forty minutes of any official (timed) practice. This will be carried out with the least possible inconvenience to the rider or the team.
- Motorcycles arriving later than the first free practice must be controlled in the technical control area.
- At the conclusion of the inspections, a small sticker or coloured mark will be placed on the frame indicating that the motorcycle had passed inspection.
- The SBK Technical Director/Chief Technical Steward must re-inspect any motorcycle that has been involved in an accident.
- The Technical Stewards must be available, based on instructions from the SBK Technical Director or the Chief Technical Steward, to re-inspect any motorcycle for compliance during the meeting.

### **Dry Superpole**

- Each motorcycle which completed the Superpole may be checked.
- The minimum checks are weight and sound.
- The SBK Technical Director may request other checks.

### **Superbike Race 1**

- The first ten motorcycles plus one at random from eleven through fifteen can be checked for the following compliance points:
- Weight: The weight will be checked in the condition that the motorcycle has finished the race. No elements can be added to the motorcycle, neither fuel, oil, water nor tyres.
- Sound.
- **Any other checks at the discretion of the SBK Technical Director.**



## **Superbike Race 2**

The first ten motorcycles plus one at random from eleven through fifteen can be checked for the following compliance points:

- **Weight:** The weight will be checked in the condition that the motorcycle has finished the race. No elements can be added to the motorcycle neither fuel, oil, water nor tyres.
- **Sound.**
- **Any other checks at the discretion of the SBK Technical Director.**
- The SBK Technical Director may require a team to provide parts or samples, as he may deem necessary to confirm compliance with the rules.

## **Supersport & Supersport 300 Races**

The first ten motorcycles plus one at random from eleven through fifteen can be checked for the following compliance points:

- **Weight:** The weight will be checked in the condition that the motorcycle has finished the race. No elements can be added to the motorcycle neither fuel, oil, water or tyres.
- **Sound.**
- **Tyre, air box and electric starter - compliance.**
- The random choice can be determined by the finishing positions selected prior to the race by the Chief Technical Steward.

The SBK Technical Director may at his absolute discretion require the control of any additional motorcycle and other checks.



## 2.11.2 Timetable

The Technical Stewards must be present and available during the opening hours of the Technical control area. The SBK Technical Director and the Chief Technical Steward will instruct the Technical Stewards to verify motorcycles for compliance with technical and safety rules.

### **The day before the practice sessions: See event timetable:**

- For all riders in Superbike and Supersport 600: in pit (Riders without a pitbox must bring their machine to the technical scrutineering garage) 2 people
- For all riders in Supersport 300 3 people
- Tasks: Inspection of motorcycle safety, clothing and helmets (NO NOISE OR WEIGHT CONTROL)
- Administration tasks: 1 person

### **During practice days: See event timetable:**

- Technical control: Practice, qualifying and Superpole sessions
- Task: Inspection of motorcycle safety; Noise and Weight after the Superpole 4 people
- Inspection of crashed motorcycles and technical controls 2 people
- Administration tasks: 1 person

### **Technical control on race day: See event timetable:**

- Before the race: safety checks on starting grid at the request of the SBK Technical Director
- After the race: Technical control noise weight and carburation instruments 8 people
- Displacement checks: 2 people
- Administration: 1 person

This is the required minimum of Technical Stewards. The number may of course be higher.

### **2.11.3 Minimum Equipment List**

- Revolution meter
- Sound meter and calibrator
- Slide calliper
- Depth gauge
- Steel measuring tape
- Seals
- Weighing apparatus (scales) with calibration weights
- Tools for measuring engine capacity
- Tools for measuring valve lift
- Weighing apparatus for investigation of valve weights
- Colour for marking parts
- Magnet for materials testing
- Computer with Homologation Documents

### **2.11.4 Documents list**

- Regulations of the CURRENT year
- Homologation documents
- Homologations Information
- Technical control forms
- Writing materials

## 2.12 SOUND LEVEL CONTROL

### Sound limits in force:

The maximum sound level, shall be measured at a mean piston speed of 11 m/sec. The fixed RPM specified in Art. 2.12.6 may be used.

- For Superbike the sound limit is 115 dB/A.
- For Supersport and Supersport 300, the sound limit is 107 dB/A.

### 2.12.1

With the microphone placed at 50 cm from the exhaust pipe at an angle of 45° measured from the centre-line of the exhaust end and at the height of the exhaust pipe, but at least 20 cm above the ground. If this is not possible, the measurement can be taken at 45° upwards.

### 2.12.2

During a sound test, motorcycles not equipped with a gear-box neutral must be placed on a stand.

### 2.12.3

The silencers will be marked when they are checked and it is not allowed to change them after the verification, except for any spare silencer which has also been checked and marked.

### 2.12.4

The rider shall keep his engine running out of gear and shall increase the engine speed until it reaches the specified Revolutions Per Minute (RPM). Measurements must be taken when the specified RPM is reached.

### 2.12.5

The RPM depends upon the mean piston speed corresponding to the stroke of the engine.

The RPM will be given by the relationship:

$$N = \frac{30,000 \times cm}{l}$$

in which:    N    =    prescribed RPM of engine  
                   cm   =    fixed mean piston speed in m/s  
                   l     =    stroke in mm

### 2.12.6            Sound control

Due to the similarity of the piston stroke in different engine configurations within the capacity classes, the sound test will be conducted at a fixed RPM. For reference only, the mean piston speed at which the sound test is conducted is calculated at 11 m/sec (see also Art. 2.12.5).

	<b>2 cylinders</b>	<b>3 cylinders</b>	<b>4 cylinders</b>
600cc	5,500 RPM	6,500 RPM	7,000 RPM
750cc	5,500 RPM	6,000 RPM	7,000 RPM
over 750cc	5,000 RPM	5,000 RPM	5,500 RPM

### 2.12.7

The maximum sound level for engines with more than one cylinder will be measured on each exhaust end.

### 2.12.8

A motorcycle which does not comply with the maximum sound limits may be presented several times at pre-race control.

### **2.12.9**

The surrounding sound must not exceed 90 dB/A within a 5 metres radius from the power source during tests.

### **2.12.10**

Apparatus for sound control must be to international standard IEC 651, Type 1.

The sound level meter must be equipped with a calibrator for control and adjustment of the meter during periods of use.

### **2.12.11**

The “slow response” setting must always be used.

### **2.12.12            Sound control after the competition**

In a competition which requires a final examination of motorcycles before the results are announced, this examination must include a sound control measurement of at least the first three motorcycles listed in the final classification. At this final test, there will be a 3 dB/A tolerance.

### **2.12.13            Sound control during a competition**

In a competition which requires sound control tests during the event, motorcycles must comply with the sound limits without the tolerance in Article 2.11.

## **2.13 GUIDELINES FOR USE OF SOUND LEVEL METERS**

### **2.13.1**

The Sound Control Officer (NCO) must arrive in sufficient time for discussions with the SBK Technical Director and other Technical Stewards in order that a suitable test site and testing policy can be agreed.

### **2.13.2**

Sound level measuring equipment must include a compatible calibrator, which must be used immediately before testing begins and always just prior to a re-test if a disciplinary sanction may be imposed.

Two sets of equipment must be available in case of failure of tachometer, sound level meter or calibrator during technical control.

### **2.13.3**

Tests may take place in rain or excessively damp conditions. Motorcycles considered excessively noisy must be individually tested if conditions allow.

### **2.13.4**

In other than moderate wind, motorcycles must face forward in the wind direction. (Mechanical sound will blow forward, away from microphone).

### **2.13.5**

“Slow” meter response must be used.

### **2.13.6**

“A” weighted setting on sound level meter.

### **2.13.7**

No rounding down of the meter reading, that is: 110.9 dB/A = 110.9 dB/A.

### **2.13.8 Corrections**

Type 1 meter: deduct 1 dB/A

### **2.13.9 Precision of the method (tolerances)**

All corrections are accumulative. Action and decisions will depend on the Sporting Discipline concerned, and decisions taken during prior discussions with the SBK Technical Director.



**FIM ROAD RACING  
SUPERBIKE & SUPERSPORT  
WORLD CHAMPIONSHIPS  
FIM AND SUPERSTOCK CUP**

FUEL SAMPLES TAKEN ON ..... / ..... / ..... FOR LABORATORY ANALYSIS

RIDER N°:	Sample Can "A"	
	Can Label N°	Can Seal N°
SESSION:	Sample Can "B"	
	Can Label N°	Can Seal N°
RIDER NAME:	Sample Can "C"	
	Can Label N°	Can Seal N°

MOTORCYCLE MAKE: \_\_\_\_\_

TEAM: \_\_\_\_\_

The above listed details refer to fuel samples taken from the fuel tank of the motorcycle specified after the race whilst in the Check Area for a period of 60 minutes pending any protest. Sample "A" will go to the laboratory appointed by the FIM/IMS for analysis. Sample "B" will be safeguarded by the FIM in case a counter-expertise is required.

As a responsible member of the team named on this sheet, I,

(print name): \_\_\_\_\_

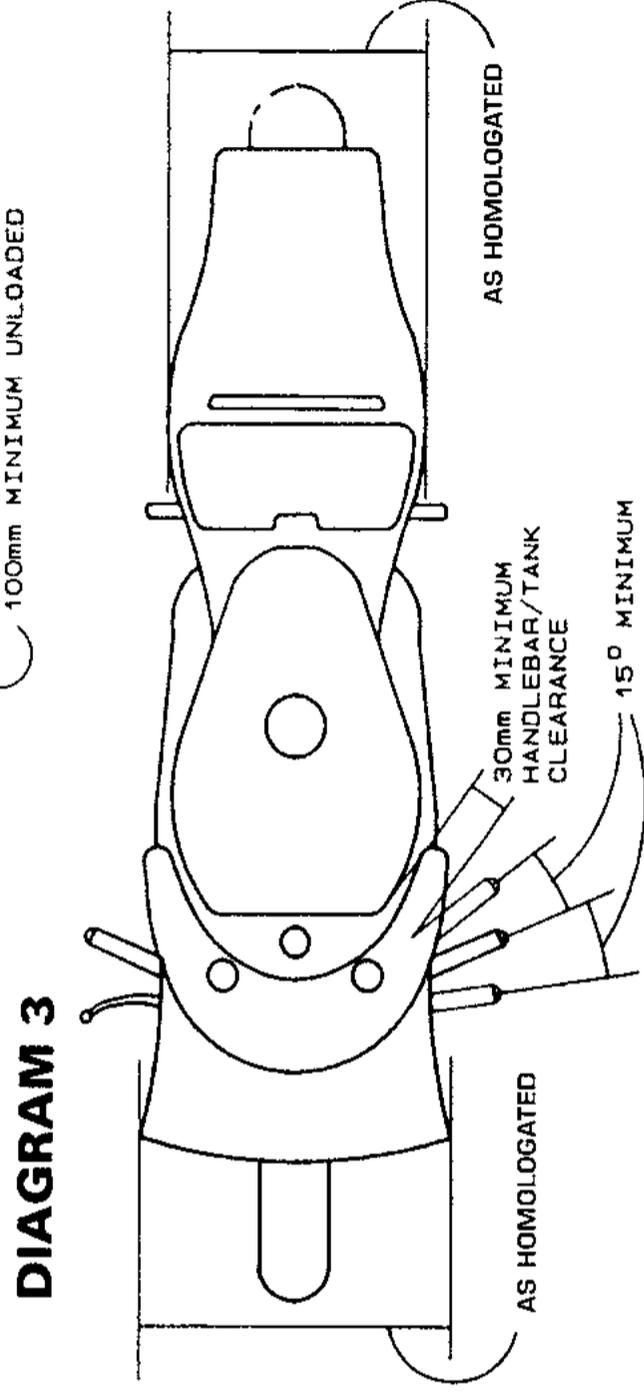
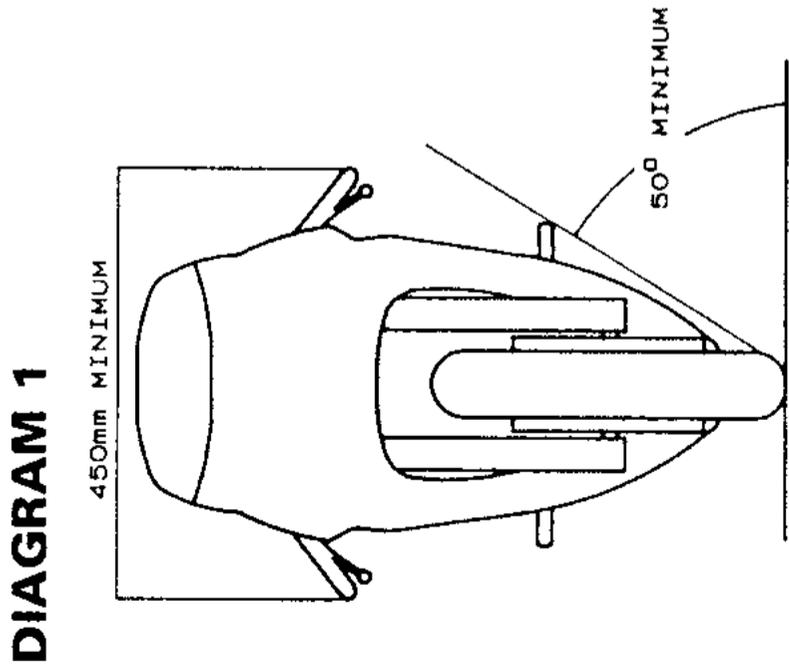
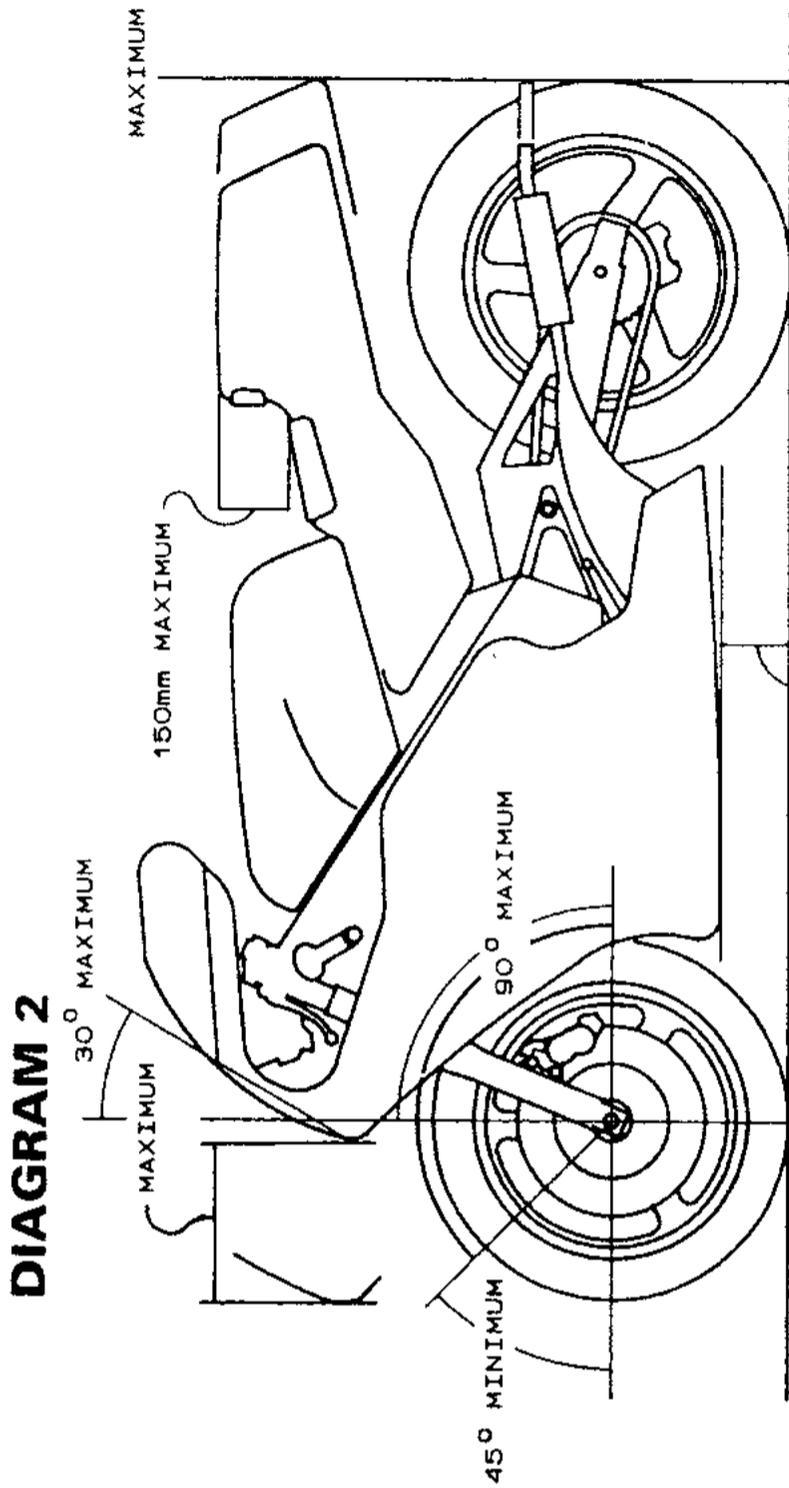
have controlled the serial numbers of can seals and serial numbers of can labels and hereby certify the accuracy of the listed information.

Time: \_\_\_\_\_ (Signature)

Position in team: \_\_\_\_\_  
(OWNER/MANAGER/MECHANIC)

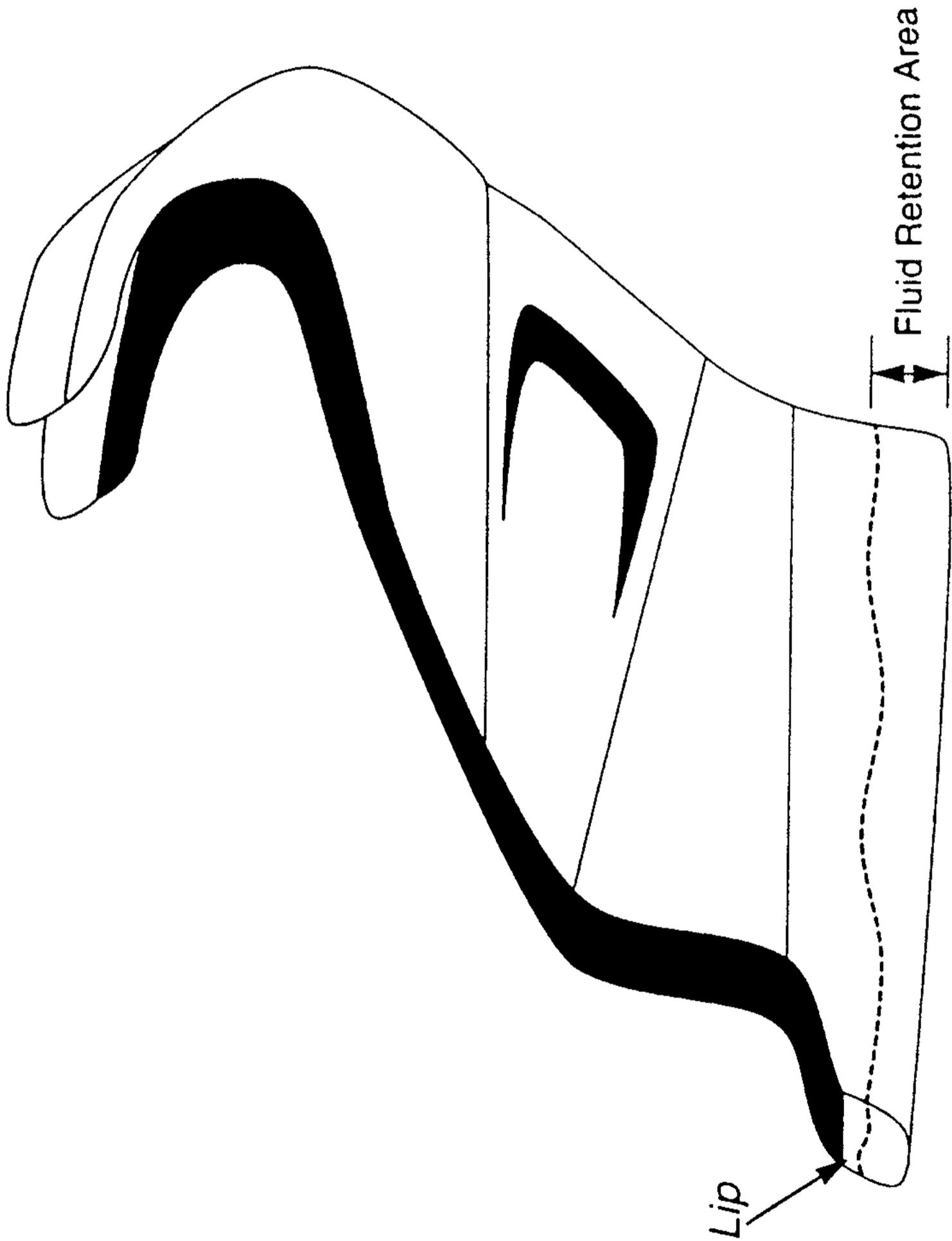
# ROAD/ROUTE

**A**



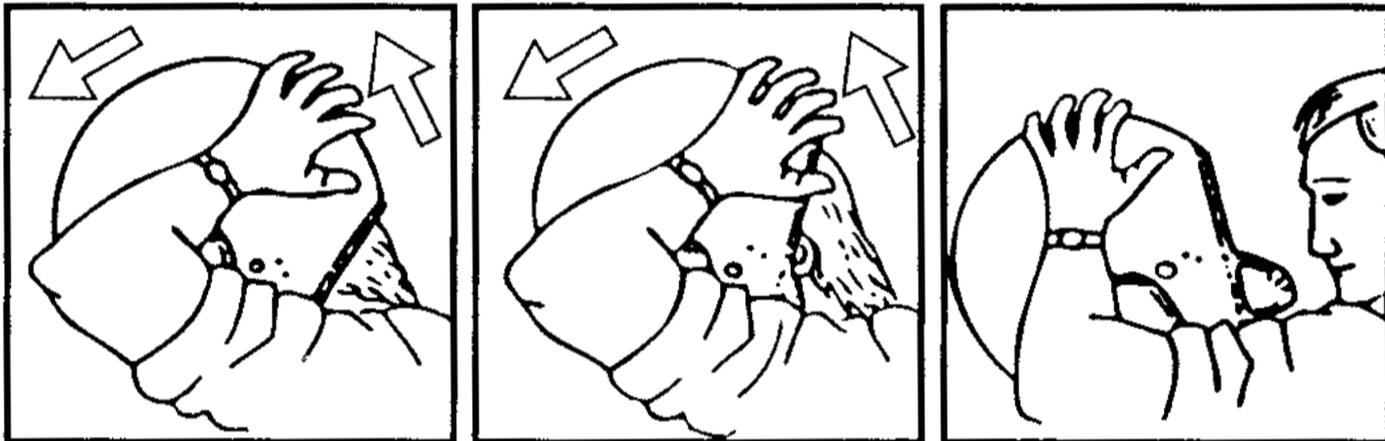
# ROAD/ROUTE

C



## TEN FITTING TESTS FOR HELMETS DIX TESTS D'ADAPTATION POUR LES CASQUES

1. *Obtain correct size by measuring the crown of the head*  
Avoir la bonne grandeur en mesurant le sommet de la tête
2. *Check there is no side to side movement*  
Vérifier qu'il n'y ait pas de déplacement d'un côté à l'autre
3. *Tighten strap securely*  
Serrer solidement la jugulaire
4. *With head forward, attempt to pull up back of helmet to ensure helmet cannot be removed this way*  
Tête en avant, essayer de soulever le casque pour s'assurer qu'il ne peut pas être enlevé de cette façon



5. *Check ability to see clearly over shoulder*  
Vérifier si vous pouvez voir clairement par-dessus l'épaule
6. *Make sure nothing impedes your breathing in the helmet and never cover your nose or mouth*  
S'assurer que rien ne gêne votre respiration dans le casque et ne jamais couvrir le nez ou la bouche
7. *Never wind scarf around neck so that air is stopped from entering the helmet. Never wear scarf under the retention strap*  
Ne jamais enrouler une écharpe autour du cou, car cela empêche l'air d'entrer dans le casque. Ne jamais porter d'écharpe sous la jugulaire
8. *Ensure that visor can be opened with one gloved hand*  
S'assurer que la visière peut être ouverte avec une main gantée
9. *Satisfy yourself that the back of your helmet is designed to protect your neck*  
S'assurer que l'arrière de votre casque a une forme telle qu'il vous protège la nuque
10. *Always buy the best you can afford*  
Toujours acheter le meilleur que vous pouvez vous offrir



## APPENDIX

### HOMOLOGATION REGULATIONS

#### 1.1 FIM HOMOLOGATION PROCEDURE FOR SUPERBIKE, SUPERSTOCK AND SUPERSPORT MOTORCYCLES

Homologation is the official assessment made by the FIM for a particular model of motorcycle for which a sufficient number of series production motorcycles have been built and put on sale to the public to justify classification in the relevant Sport Production class.

#### REQUIREMENTS FOR AN FIM HOMOLOGATION

##### Application

Any manufacturer of mass production motorcycles may apply for an FIM homologation of one or more of his models in order to qualify for competing in the Road Racing Superbike & Supersport World Championship and the Superstock Cup as long as the model belongs to one of these classes.

##### Eligibility requirements

Motorcycles must have a valid international homologation for road use or a national homologation for road use in one of these countries or regions: USA, EU or Japan. The motorcycles must represent machines of mass production.

- a) The motorcycles must be of current production.
- b) The motorcycles are to be sold for every day public use.
- c) At the time of the FIM inspection for homologation, the motorcycles must be completely equipped with all road-using equipment (e.g. full lighting equipment).
- d) Only the original manufacturer may present the motorcycle for homologation.
- e) The manufacturer must be a holder of an FIM licence for manufacturers.
- f) If the motorcycle is presented with an engine from a motorcycle manufacturer different from the manufacturer requesting the homologation, a permission or commercial agreement must be presented at the time of the homologation request.
- g) The motorcycle must have a manufacturer's certificate of origin.



## 1.2 MINIMUM PRODUCTION QUANTITIES AND MARKET AVAILABILITY

Evidence of production quantities must be provided to the FIM, certified by the manufacturer's auditing firm and/or any other institution which may provide reliable documentation. This certificate must be written in English or French and the model/type must be specified.

Market availability and sale to the public may be demonstrated by waybills, bills of lading and/or any other import, export or customs documents duly certified by the relevant authority.

Proof must be provided to the FIM by means of a business/manufacturing plan for the model in question that the requirements listed below will be met.

### 1.2.1 Homologations for Superbike, Supersport and Superstock machines.

- a) The maximum retail price for the homologated model:
  - i) The maximum retail price for a Superbike 1000 class motorcycle is 40.000 Euro inc taxes.
  - ii) The maximum retail price for a Superstock 1000 class motorcycle machine is 33.000 Euro inc taxes.
  - iii) The maximum retail price for a Supersport & Superstock 600 class motorcycle is 20.000 Euro inc taxes.
  - iv) The maximum retail price for a Supersport 300 class motorcycle is 8.500 Euro inc taxes.
- b) The minimum production numbers of the model intended to be raced are:
  1. Superbike Category:
    - i) 125 units of the motorcycle on the date of the homologation visit.
    - ii) A total of 250 units on the 31<sup>st</sup> December of the intended first racing year.
    - iii) A total of 500 units on the 31<sup>st</sup> December of the following year.

- iv) If a new homologation has been made by the manufacturer in this category in the subsequent year of the homologation then point 1.2.1.b.1.iii is voided and the new homologation will be subject to points i-iv again.

## 2. Supersport Category:

- i) 125 units of the motorcycle model intended to be raced at the time of homologation inspection visit.
- ii) A total of 500 units on the 31<sup>st</sup> December of the first racing year.

## 3. Supersport 300 and Superstock 1000 Categories:

- i) 250 units of the motorcycle model intended to be raced at the time of homologation inspection visit.
- ii) A total of 500 units on the 31<sup>st</sup> December of the first racing year.
- iii) A total of 1000 units on the 31<sup>st</sup> December of the following year.

### 1.2.2

Manufacturers may compete with their machine in the Superbike Category of the World Superbike Championship without earning points until 125 units have been produced. Should the minimum required number (125 units) of the motorcycle-to-be-homologated not have been produced within FOUR (4) months of its first outing in a Superbike race then the SBK Commission reserves the right to refrain the team/manufacturer from participation for a period of time to be determined.

### 1.2.3

The homologated machine may be fitted with any components respecting Art. 1.2.1.a. However to compete in the World Superbike Championship the machine must comply with the prevailing regulations.

### 1.2.4

The SBK Commission reserves the right to include the note \*STH (Subject to homologation) on the official entry lists of the championship until the minimum required number (125 units) are produced.

### 1.2.5

Manufacturers may request a homologation inspection for machines that will not be legal for competition in any of the above categories. This will be for the purposes of competition in other series whose regulations are based on FIM technical regulations.

## 1.3 HOMOLOGATION PROCEDURE, CALENDAR FOR APPLICATIONS, SUBMISSIONS & PUBLICATIONS

A homologation inspection is a complete verification and check of all drawings of the corresponding parts, as well as the documentation for the necessary minimum quantities. These checks will be carried out by the FIM.

- a) The deadline for receiving requests for homologation to [sptech@fim.ch](mailto:sptech@fim.ch) is 30 days before the homologation inspection is to take place.
- b) At the latest 14 calendar days before the inspection for homologation by the FIM, manufacturers are required to send by e-mail the completed and signed homologation forms A, B and C together with all relating documentation and drawings (see Art. 1.6) to the missing or incomplete documents and/or drawings will postpone the homologation inspection until a full corrected set is available. The documents and drawings have to be sent in paper and in electronic form (\*.pdf and form C as .pdf and .xlsx to [ccr@fim.ch](mailto:ccr@fim.ch) and [cti@fim.ch](mailto:cti@fim.ch)). The email address is: [sptech@fim.ch](mailto:sptech@fim.ch) (and copy to [cti@fim.ch](mailto:cti@fim.ch)).
- c) At the latest 3 days before the date of the inspection by the FIM, manufacturers are required to send to the FIM by e-mail, proof of production quantities of the first lot of motorcycles, according to Art. 1.2.1.
- d) If the inspection fails, the homologation is postponed until the established shortcomings have been resolved and at least for one (1) month.
- e) In case of failing the inspection, the original manufacturer may apply for a new homologation, a maximum of 2 more times in the same year, in each racing class.
- f) The homologation forms will be studied by the technical members and the CTI Secretariat (SPTECH), to confirm that they are complete and correct, prior to granting the homologation.

- g) The manufacturer shall at all times be responsible for completing the homologation documents with the correct information. All dimensions must be given according to the metric system, excluding wheel dimensions, and with the actual manufacturing tolerances.
- i) Chassis (frame) ISO2768-c (coarse)
  - ii) Engine Parts (castings/forgings) ISO2768-m (medium)
  - iii) Engine (between machined surfaces) ISO2768-f (fine)
  - iv) Specific measurements - See table 1.6.3
- h) All currently accepted drawings may be requested to be re-submitted with updated tolerances and missing dimensions. Any drawings not re submitted will be assumed to comply with the tolerances in Art. 1.3.g.
- i) The homologation drawings must fully dimension ALL centres and dimensions to surfaces (including machined faces on frame) allowing a fully resolved 3 dimensional model to be created. The drawings must follow the FIM templates for each sheet.
- j) Manufacturers must supply 3 dimensional models of the noted homologated parts (frame, swingarm, fairing, seat, fenders, tank, piston, cylinder head and combustion chamber). These do not have to include material details. The files must be supplied as .igs AND .stp. The origin must be aligned centrally on the swingarm pivot axis and aligned with the steering head. The steering head must be presented normal to the z-plane (parallel to the Z-axis). X-axis positive forward, z-axis positive upwards, y-axis positive right to left (left hand rule). These files are required retrospectively.
- k) For World Supersport 300 and Supersport Homologations the manufacturer must supply rotational inertia information for the following parts:
- i) Wheels
  - ii) Engine overall referenced to the crankshaft rotation; excluding flywheel but including the rotational component of the reciprocating parts
  - iii) ACG Flywheel
- l) The manufacturer is entitled to request a notice in order to know whether the documents and drawings submitted by him are formally correct 7 days before the homologation inspection date.
- m) At the latest within 30 days after having successfully passed the homologation inspection, an updated list of the valid homologations is published.



- n) The following documents will then be published to the FMN's (national federations) and licensed manufacturers via the FIM restricted access FTP site.
- i) Form C
  - ii) Workshop Manual
  - iii) Parts Book
  - iv) Diagrams E,F,X
  - v) Photographs E,F,X
- o) The following documents will NOT be published, and only approved persons will have access:
- i) 3D (CAD) Data
  - ii) Camshaft Profile .xlsx
  - iii) F23/4 CAN bus detail
- p) These motorcycles must be available for sale to the public in the shops and dealerships representing the manufacturer in at least one of the following countries or regions: USA, EU or Japan, to be allowed to be used in the remaining Championship events.
- i) For those manufacturers who commence competition in the Championship during or before March: The end of April of the current year.
  - ii) For those manufacturers who commence competition in the Championship during or after April: The end of the month following the first date of competition.
- q) Any machine that is intended to be raced before 125 units are produced under the exemption in 1.2.2 must have all the relevant documentation submitted in accordance with article 1.3 and the parts requested in article 1.4 in order for permission to race to be granted.
- One complete example of the production machine must be supplied in road specification running as production, to be dyno tested, will not be returned.
- r) The FIM may request, at its discretion, to make a homologation inspection before the 125 machines are built.
- s) A machine that is given permission to race before 125 units are produced will be considered "Subject to homologation".

### 1.3.1 Schedule for Supersport (300 and 600) Machines

- a) The deadline for receiving requests for homologation to [sptech@fim.ch](mailto:sptech@fim.ch) is 6 months before the homologation inspection is to take place.
- b) The homologation must take place a minimum of 10 weeks before the first event in which the machine is due to compete.
- c) 5 months before the homologation date the manufacturer must supply 3 complete wiring harnesses', throttle bodies (complete) and all sensors required for engine management (including wheel speed sensors), to the FIM in Europe in order to manage development of the Supersport and Supersport 300 control electronics system.
- d) A minimum of 6 weeks before the start of the first event a machine must be delivered to the FIM (in Italy) in running condition with racing exhaust (and racing kit if required). The machine will be calibrated for starting and made available to the manufacturer fitted with the control electronics system after 1 week for engine calibration purposes. Manufacturers calibration must be finished a minimum of 1 month before the first event.
- e) One month before the first event the manufacturer must have the engine (and ancillaries) tested on the SBK commission approved dyno to measure the complete torque map, including tests made with ignition offsets. Full details of the required tests are available from [sbk.technical.director@fim.ch](mailto:sbk.technical.director@fim.ch) and the tests will be at the manufacturers expense.

The engine (and ancillaries) must remain with the FIM or its approved partner in case any balance (re)checks are required during the term of the homologation. The specification of the tested engine (powertrain) will form part of the restricted specification of Supersport class machines. For WSS300 and Supersport ignition timing map will be fixed at this point.

- f) 2 weeks before the first event any required balancing for the machine will be finalised.
- g) If this schedule is not met the machine will only be allowed to compete when the timeline is completed.
- h) For further information regarding calibration (engine mapping) and balancing contact [sbk.technical.director@fim.ch](mailto:sbk.technical.director@fim.ch).

## 1.4 LIST OF REQUIRED DRAWINGS, 3D DATA AND PHOTOGRAPHS:

Drawing #	3D Data Required	Sample Required	Description	Not required for SBK only homologation
E1/1		X	Throttle bodies and variable intake tract devices if used	
E1/2		X	Injector(s); sample of all different injectors, if used	
E1/3		X	Airbox	
E1/4			Air funnels	
E1/5			Air funnel activation mechanism	
E1/6		X	Airbox complete assembly (incl. air funnel, mechanism, injectors)	
E1/7			Ride by Wire Motor Assembly and full specification	
E2		X	Fuel pump and fuel pressure regulator	
E3/1			Crankcases - upper (Left)	
E3/2			Crankcases - upper (Left)	
E3/3			Crankcases - lower	
E3/4		X	Crankcases Assembly	
E4/1	X	X	Cylinderhead	
E4/2			Cylinderhead, Cross section, incl. valve guide position	
E4/3	X		Combustion chamber detail	
E4/4		X	Cylinder if separate	
E4/5		X	Cylinder liner if removable	
E5/1		X	Intake camshaft (including gear) (.xlsx lift profile, see 1.3.k)	
E6/1		X	Exhaust camshaft (including gear) (.xlsx lift profile, see 1.3.k)	
E7/1		X	Intake valve	
E7/2		X	Intake valve spring inner	
E7/3		X	Intake valve spring outer	
E7/4		X	Intake valve spring collet and retainer	
E7/5		X	Intake valve spring seat	
E7/6		X	Intake tappet/bucket/follower	
E8/1		X	Exhaust valve	



Drawing #	3D Data Required	Sample Required	Description	Not required for SBK only homologation
E8/2		X	Exhaust valve spring inner	
E8/3		X	Exhaust valve spring outer	
E8/4		X	Exhaust valve spring collet and retainer	
E8/5		X	Exhaust valve spring seat	
E8/6		X	Exhaust tappet/bucket/follower	
E9/1	X (complete)	X	Piston	
E9/2		X	Piston Ring Assembly	
E9/3		X	Piston Pin	
E10/1		X	Con-rod	
E10/2		X	Shell Bearings (crankshaft and big-end)	
E11/1		X	Crankshaft	
E11/2			Crankshaft machined area detail	
E11/3		X	Balance Shaft	
E12/1			Method camdrive	
E12/2		X	Cam Chain Tensioner	
E13/1		X	Primary Gear	
E13/2		X	Gearbox	
E14/1		X	Clutch Assembly including Basket	
E14/2			Clutch Basket - Views	
E15/1		X	ACG Assembly including stator and flywheel	
E15/2			ACG flywheel	
E15/3			Flywheel if separate from E15/1	
E16/1		X	Oil pump and drive system	
E17/1		X	Water pump and drive	
E18/1		X	Generator cover including section showing stator to crankcase offset	
E18/2			Left side cover	
E18/3		X	Head or valve or Cam cover	
K_Ex/x		X	<b>All parts included in Superport 300 and Supersport EVO engine Kits (full document as above)</b>	

Drawing #	3D Data Required	Sample Required	Description	Not required for SBK only homologation
KIT		X	Manufacturer Race Kit ECU and Harness (used for National series eligibility lists)	
NA		X	All sensors required for engine management (see art 1.3.1.c)	
F1/1	X	X	Main frame Side	
F1/2	X	X	Main frame Top View	
F1/3	X		Main frame Bottom View	
F1/4	X		Headstock detail	
F1/5	X		Main frame assembly, detailing engine, countershaft sprocket, shock mount and all pivot positions	
F1/6	X	X	Steering head cup inserts	
F1/7	X	X	Swingarm pivot inserts	
F1/8			Extra frame information if required - i.e. construction detail	
F2			Rear Sub frame (if separate)	
F3	X	X	Fuel tank	
F4	X		RAM Air Tubes	
F5/1	X		Fairing Left	
F5/2	X		Fairing Right	
F5/3	X		Fairing Front	
F5/4	X	X	Wings and other aerodynamic devices	
F6	X		RAM opening (scale and dimensioned drawing)	
F7			Seat	
F8/1	X		Front fender	
F8/2	X		Hugger (if applied)	
F9/1		X	Fork bridge* (top)	
F9/2		X	Fork bridge* (bottom) including stem	
F10		X	Front fork assembly	
F11*	X	X	Swing Arm	
F12		X	Rear suspension unit	
F13/1		X	Rear suspension linkage assembly	



Drawing #	3D Data Required	Sample Required	Description	Not required for SBK only homologation
F13/2		X	Rear Suspension linkage detail	
F13/3		X	Rear Suspension linkage detail	
F13/4		X	Rear suspension unit top mount	
<b>F14/1</b>		<b>X</b>	<b>Front Axle</b>	
<b>F14/2</b>			<b>Rear Axle</b>	
<b>F14/3</b>			<b>Swingarm Axle/Pivot</b>	
<b>F15/1</b>		<b>X</b>	<b>Front brake discs</b>	<b>X</b>
<b>F15/2</b>			<b>Rear brake discs</b>	<b>X</b>
<b>F16/1</b>			<b>Front brake calliper</b>	<b>X</b>
<b>F16/2</b>			<b>Rear brake calliper</b>	<b>X</b>
<b>F17</b>			<b>Rear calliper hanger</b>	<b>X</b>
<b>F18/1</b>			<b>Front master cylinder</b>	<b>X</b>
<b>F18/2</b>			<b>Rear master cylinder</b>	<b>X</b>
<b>F19/1</b>			<b>Front wheel (type)</b>	<b>X</b>
<b>F19/2</b>			<b>Rear wheel (type)</b>	<b>X</b>
<b>F19/3</b>			<b>Cushion drive</b>	<b>X</b>
<b>F20</b>			<b>Oil cooler</b>	<b>X</b>
<b>F21</b>			<b>Radiator</b>	<b>X</b>
<b>F22</b>			<b>Intercooler</b>	<b>X</b>
<b>F23/1</b>		<b>X</b>	<b>Electronics ECU Diagram</b>	<b>X</b>
<b>F23/2</b>			<b>Wiring Harness Diagram</b>	<b>X</b>
<b>F23/3</b>		<b>X</b>	<b>Quickshift Sensor</b>	<b>X</b>
<b>F23/4</b>			<b>CAN bus message detail and description. .dbc file (not for publication)</b>	<b>X</b>
<b>X1</b>			<b>Front view (faired)</b>	
<b>X3</b>			<b>Rear view (faired)</b>	
<b>X5</b>			<b>Left view (faired)</b>	
<b>X7</b>			<b>Right view (faired)</b>	
<b>X9</b>			<b>Top view (faired)</b>	
<b>X10/1</b>			<b>Vin Location Frame</b>	
<b>X10/2</b>			<b>Vin Location Engine</b>	



Other Required Documents			
			Form A, B, C
			Form C in excel format
			Workshop Manual, .pdf
			Parts List, .pdf
			Camshaft Profile, .xlsx

Assemblies may be individually represented on one page. Extra drawings should be supplied if required by the machines specifics. Any drawings that don't apply should be ignored: \* means .igs and .stp are additionally required.

For certain parts, extra pictures of the part may be required to show special features e.g. cylinder head ports.



## 1.5 HOMOLOGATION, INSPECTION, CONTROL & PERIOD

- a) The inspection of the motorcycle and the parts consigned by the manufacturer for homologation will be carried out according to the information requested on the forms produced by the FIM (homologation forms A, B and C).
- b) **For Superbike homologations:** At the time of inspection Dyno tests must be carried out using an ENGINE DYNO ONLY, a different engine (to d) may be used and mounted in advance. All ancillary powertrain parts (including but not limited to; airbox, exhaust system, air valves, breathing system) must be as the parts being homologated. The engine will perform a sweep test to establish the RPM range of maximum power. A step test will then be performed with 100 rpm steps to establish the point of maximum power. The SBK Technical Director's interpretation of this data is final.
- c) During the inspection a production motorcycle must be stripped to confirm the required documentation.
- d) The FIM may check motorcycles of the homologated model chosen at the manufacturer, or from dealerships' or importers' showrooms. The motorcycles must be in conformity with the homologated model. The expenses for the disassembling of a maximum of two (2) units will be borne by the manufacturer.
- e) The manufacturer must consign to the FIM the parts noted in 1.4 The parts are to be received by the FIM at the latest on the Wednesday of the first European event. In the case of any checks or protests before the parts have been received, any protested or inspected parts can be impounded at the discretion of the SBK Technical Director.

### 1.5.1 Control

- a) These parts will be stored by the FIM in sealed boxes and moved by the Promoter to the SBK Championship events at the discretion of the Superbike Technical Director.
- b) The FIM may at its discretion obtain further parts as samples.



- c) The inspector/s must satisfy him/them that the statements made on the production certificate (Form 2) are correct.
- d) At the end of the parts and documents inspection, the inspector/s will sign the completed certificate of homologation. These signed homologation forms indicate that the manufacturer complies with the specifications documented on the homologation forms.
- e) The drawings and the consigned “homologation sample” parts will be regarded equally in ascertaining the legality of any inspected race machines.
- f) In case of not achieving minimum production numbers after the first or second years, all the points counting towards the Manufacturers’ Championship in the current year will be withdrawn and further penalties may also be imposed.

### **1.5.2 Period**

- a) Once a motorcycle has obtained the homologation, it may be used for racing in the corresponding class for a maximum period of:
  - i) Superbike and Superstock 1000: 8 years,
  - ii) Supersport: 8 years
  - iii) Supersport 300: 5 yearsor until such time that the homologated motorcycle no longer complies with the technical rules.
- b) A homologation will be granted only if the fee has been paid.
- c) The Manufacturer of the homologated model can request an extension of a homologation before the end of the 8 year homologation period. The FIM may grant an extension of the homologation period. All Homologation documents must be updated to the latest standard but no fee will be charged for a homologation extension.

## 1.6 NEW HOMOLOGATION, PARTS AND PRODUCT UPDATE

Any change or update in the specifications of the following parts of a FIM homologated motorcycle will require a new homologation of the model:

- a) New range of engine prefix numbers
- b) New range of frame prefix numbers
- c) Crankcase(s) (\*1)
- d) Throttle body assembly
- e) Air box (complete, with injectors if change of injector model)
- f) Frame: main dimensions [in relation to wheelbase, caster, steering head angle, relative location of the swing-arm, relative location of rear shock absorber(s) and linkages] weight, construction method and technology
- g) ECU or electronic system is changed
- h) Crankshaft
- i) Con-rod
- j) Piston
- k) Camshaft
- l) Valve
- m) Suspension - manufacturer or design
- n) Fairing shape - when considered “facelift”

FIM can consider granting a part and product update differing from above rule, purely for the scope of production cost saving provided that at least the following provisions are kept:

- (\*1) Crankcase is not lighter\* than the original homologated unit. The positions of crankshaft, gearbox, frame attachments, main shafts and position of cylinders remain unchanged (\*apart casting method for mass production).

### 1.6.1 Differentiation of Homologated Machines

Parts that differ between different homologation dates of the “same” model may not be used on machines from another homologation date including when sharing the model name, but excepting when the part is superseded for production reasons and also accepted by the FIM.

### 1.6.2 Homologation of Parts and Production Update

- a) Product updates on any homologated parts (those included in x-,e-,f-drawings, form C and any sample parts) require a homologation update.

- b) It is the manufacturer's responsibility to notify the FIM and Superbike Technical Director of any parts updates and or changes to part number of the listed homologated parts.
- c) The FIM will consider if the part requested for update can be homologated.
- d) Application:
  - i) The manufacturer must send a notice to the [sptech@fim.ch](mailto:sptech@fim.ch) and [sbk.technical.director@fim.ch](mailto:sbk.technical.director@fim.ch) requesting a homologation update not later than 30 days before the first race in which the model containing new parts will compete.
  - ii) The application for homologation of these parts will require a copy of the accompanying "Technical Bulletin/Part Update" issued by the Manufacturer to their official dealership network in every country or region where the homologated model is available to the public.
  - iii) With the formal notice, the manufacturer is required to send the 1, 2 and 3 homologation forms, together with all relating documentation about the parts and product update (the drawings of the old and new products/parts, etc.) including a statement with the VIN-Number pertinent to the updated parts and product, to the FIM CCR/CTI Secretariat, both in paper and electronic form at [sptech@fim.ch](mailto:sptech@fim.ch).
- e) If an inspection is necessitated then at the latest within one (1) week before the homologation inspection by the FIM, manufacturers must ensure themselves that the parts requested by the FIM are received at the indicated place which will be in a European state.

All updated parts (assemblies) shall be accepted to be fitted on all further units produced of the homologated model, without any dimensional modifications or changes to other standard fitted parts of the homologated model and not linked with other updated parts. Should multiple parts be required to be changed then it shall be considered as a new homologation. The updated part may retrofitted, as long as it is a "superseded" part and the preceding part is no longer produced and can be used without any dimensional changes or modifications when assembled to other part(s) of the homologated model preceding the model "update".

Should an updated part not be retrofittable to machines from earlier production the Manufacturer MUST provide the FIM with the VIN number at which this update should be applied, If a manufacturer adopts a numbering system out of sequence, they MUST supply the FIM with the list of the motorcycles produced after the product/part update. The FIM will at their discretion decide if this update shall require a new homologation or can be regarded as a homologation update.

- f) Parts from multiple suppliers will only be accepted if the design, specification, materials and production methods are the same from all suppliers.
  - g) If parts from multiple suppliers differ in design, then the updated or newer parts will only be accepted if the alternative manufacturer part(s) are originally fitted during production to a minimum of the number of units required for homologation.
    - iv) Should the updated part no longer be available or the production machines revert to the original homologated part, then the FIM reserves the right to withdraw the approval of alternative manufacturer part at any time.
- Or,
- v) If parts from multiple suppliers differ in design, then only the original part as fitted during the homologation inspection will be accepted as homologated.
  - h) FIM may at its discretion decide that product updates result in a new homologation. If more than 3 items need to be updated during the machine's life, a new homologation will be necessary.
  - i) Homologation of factory build option parts: Any part that is considered an option but is fitted on the normal production line AND supplied for road use can have an application made for homologation but must be fitted to a minimum of 250 units of the homologated bike.
  - j) The FIM will withdraw the homologation if these rules are not respected. The homologation fee is not refundable.



### 1.6.3 Tolerances Table

Drawing #	Description	2021
E1/1	Throttle bodies and variable intake tract devices if used	At Butterfly: +/- 0.02
E3/1	Crankcases - upper (Left)	Shaft Centres: +/- 0.02, Crankshaft Centre to cylinder base +/- 0.02, Crankshaft Center to Head Surface
E4/1	Cylinderhead	Dist upper and lower surface. +/- 0.05 mm
E4/3	Combustion chamber detail	Volume: +/- 3%
E4/4	Cylinder if separate	Base gasket to Head Gasket Surface: +0.15 mm, -0.0 mm
E5/1	Intake camshaft (including gear) (.xls lift profile, see 1.3.k)	Base circle: +/- 0.013 mm, Ramp: +/- 0.030 mm, Flank: +/- 0.038 mm, Nose: +/- 0.030 mm
E6/1	Exhaust camshaft (including gear) (.xls lift profile, see 1.3.k)	Base circle: +/- 0.013 mm, Ramp: +/- 0.030 mm, Flank: +/- 0.038 mm, Nose: +/- 0.030 mm
E7/1	Intake valve	Head: +/- 0.1 mm, Stem: +0.02/-0.035 mm, Weight +/- 2%
E8/1	Exhaust valve	Head: +/- 0.1 mm, Stem: -0.02/-0.035 mm, Weight +/- 2%
E9/1	Piston (3D of complete piston)	Crown diameter, both axes, +0.000 mm -0.020 mm Weight should be a 3%
E9/3	Piston Pin	Length: +/- 0.1 mm, OD: +0/-0.005 mm, ID: +0.1/-0.2 mm
E10/1	Con-rod	Dist. Holes centers +/- 0.03 mm; weight +/- %
E11/1	Crankshaft	Weight +/- 3%
E11/3	Balance Shaft	Weight +/- 3%
E15/2	ACG flywheel	Weight +/- 2%
K_Ex/x	All parts included in Superport 300 and Supersport EVO engine Kits (as above)	As above



Drawing #	Description	2021
F1/1	Main frame Side	SBK/STK1000/WSS600; +/- 0°12' = 0.2° metric, WSS300; +/- 0°30' = 0.5°
F1/2	Main frame Top View	Frame head pipe to swingarm pivot +/- 1 mm (measured normal to head pipe)
		Engine hanger positions +/-2 mm in X and Z
F1/5	Main frame assembly, detailing engine, countershaft sprocket, shock mount and all pivot positions	Holes centers: +/- 0.5 mm
F9/1	Fork bridge (top)	Holes centers: +/- 0.05
F9/2	Fork bridge (bottom) including stem	Holes centers: +/- 0.05
F10	Front fork assembly	Leg total length: +/- 4 mm
F11*	Swing Arm	Dist. Wheel axis/swing arm pivot +/- 2 mm, Dist Suspension fulcrum axis/swing arm pivot: +/- 1 mm
F13/1	Rear suspension linkage assembly	+/- 0.1 mm
F14/1	Front Axle	No linear tolerances, Weight tolerance +/- 2%
F14/2	Rear Axle	No linear tolerances, Weight tolerance +/- 2%
F14/3	Swingarm Axle/Pivot	No linear tolerances, Weight tolerance +/- 2%
F17	Rear calliper hanger	No dimensional tolerances, Weight tolerance +/- 2%

	Other Required Documents	2021
	Camshaft Profile (.xlsx)	Every 0.5 degrees: Base circle: +/- 0.013 mm, Ramp: +/- 0.030 mm, Flank: +/- 0.038 mm, Nose: +/- 0.030 mm



### **3. DISCIPLINARY AND ARBITRATION CODE**

#### **3.1 PRINCIPLES**

The obligations incumbent upon the participants, officials and organisers are set out in the Regulations published by the FIM.

Proven violation or non-observance of these obligations will be subject to the penalties laid down in this chapter.

#### **3.2 PENALTIES**

The penalties are:

- warnings
- fines
- drop of position
- ride through
- time penalties
- grid penalty
- disqualification
- withdrawal of Championship points
- suspension
- exclusion

### 3.2.1 Definition and application of penalties

Warnings:	can be made privately or publicly, and can be made without a hearing.
Fines:	cash penalty up to 50'000€ A fine of up to 1'000 Euros can be imposed without a prior hearing being necessary. However, the right of protest remains as set out in Article 3.4.1.
Drop of position:	the rider must go back the number of positions decided by the FIM WSBK Stewards Panel.
Ride through:	see Art. 1.19.
Time penalties:	the imposition of time affecting the rider's actual result up to 2 minutes and the cancellation of time.
Grid penalty:	the imposition of a drop of any number of grid positions or the imposition of starting the race from the pit lane exit at the rider's next race or next event. A grid position penalty may be imposed without a prior hearing being necessary. However, the right of protest remains as set out in Article 3.4.1.
Disqualification:	entails automatically and independently of any other penalty, the invalidation of the results obtained in an event, practice, race or ranking. An immediate disqualification from a practice session or a race may also be pronounced by means of a black flag or a black flag with orange disc.
Withdrawal of championship points:	the loss of points from the Championship races already run.



**Suspension:** entails the loss of rights to participate for a specified period of time in any activity under FIM control.

**A suspension penalty from one or more official practice sessions (or part thereof) of the event may be imposed without a prior hearing being necessary. However, the right of protest remains as set out in Article 3.4.1.**

**Exclusion:** the final and complete loss of all rights of participation in any activity under FIM control.

### **3.2.2 Plurality of penalties**

Any offender may have several penalties pronounced against him according to the circumstances.

## **3.3 THE RACE DIRECTION AND THE FIM DISCIPLINARY AND ARBITRATION BODIES**

The bodies of the FIM, qualified to deal with race decisions, disciplinary and arbitration matters, are:

- The Race Direction
- The FIM WSBK Stewards Panel
- The FIM Appeal Stewards
- The WSBK Court of Appeal

### **3.3.1 The Race Direction**

#### **3.3.1.1 Constitution**

The Constitution of the Race Direction is in accordance with the requirements laid down in Article 1.6.

### **3.3.1.2 Authority and Competence**

The Race Direction has the authority to refer any case involving riders, teams' personnel, Officials and Promoters/Organisers, and all persons involved in any capacity whatsoever in the event or in the Championship, to the FIM WSBK Stewards Panel for possible disciplinary for:

- any voluntary or involuntary action or deed accomplished by a rider or team member or any other person as mentioned above, contrary to the current Regulations or instructions given by an official of the meeting.
- any voluntary or involuntary action of Officials and Promoters/Organisers for having been unable to ensure the smooth and efficient running of the event or for serious breaches of the Regulations and Protocols covering the event organisation.

### **3.3.2 The FIM WSBK Stewards Panel**

#### **3.3.2.1 Constitution**

The Constitution of the FIM WSBK Stewards Panel is in accordance with the requirements laid down in Article 1.7.

#### **3.3.2.2 Authority and Competence**

The FIM WSBK Stewards Panel has the authority to penalise riders, teams' personnel, officials, promoters/organisers and all the persons involved in any capacity whatsoever in an event or in the Championship, without the necessity of a hearing in the case of minor offences, for:

- Infringements of the Regulations.
- any voluntary or involuntary action or deed accomplished by a person or a group of persons during a meeting, contrary to the current Regulations or instructions given by an official of the meeting.
- any corrupt or fraudulent act, or any action prejudicial to the interests of the meetings or of the sport, carried out by a person or a group of persons occurring during an event.

The FIM WSBK Stewards Panel is competent to adjudicate upon a protest relating to infringements of the Regulations.

### **3.3.2.3 Penalties that may be pronounced by the FIM WSBK Stewards Panel:**

- a warning
- a fine
- a drop of position
- a ride through
- a time penalty
- a grid penalty
- a disqualification
- a withdrawal of Championship points
- a suspension

Furthermore, the FIM WSBK Stewards Panel can refer the case to the WSBK Court of Appeal in order to impose a higher penalty than the FIM WSBK Stewards Panel is empowered to do.

## **3.3.3 The FIM Appeal Stewards**

### **3.3.3.1 Constitution**

The FIM Appeal Stewards will consist of:

- one FIM Steward with FIM Sporting Steward Superlicence, who will be the chairman of the FIM Appeal Stewards and exercise a casting vote if necessary. This Steward will be nominated by the FIM and approved by the Permanent Bureau,
- and one FMNR Steward with FIM Sporting Steward Licence, nominated by the FMNR and approved by the FIM.

### **3.3.3.2 Authority and Competence**

The FIM Appeal Stewards will hear any appeals against decisions taken by the FIM WSBK Stewards Panel.

The FIM Appeal Stewards may confirm or overturn a decision of the FIM WSBK Stewards panel, or impose a different penalty according to the penalties described in Art. 3.3.2.3.

The FIM Appeal Stewards may refer the case to the WSBK Court of Appeal if it appears impossible to deal with the case for any valid reason. Such a decision will be justified in writing by the FIM Appeal Stewards.

### **3.3.4 The International Judicial Panel**

The International Judicial Panel (CJI) is composed of qualified persons from which the member of the WSBK Court of Appeal is nominated.

#### **3.3.4.1 Constitution**

The International Judicial Panel shall consist of members nominated by FMNs. Each FMN may nominate one or several members having the nationality of that FMN. The appointments shall be confirmed by the General Assembly for 4-year periods.

#### **3.3.4.2 Qualifications**

In order to qualify for appointment to the International Judicial Panel, a candidate must be in possession of a diploma in Law studies of University level. He must be able to express himself in at least one of the official languages of the FIM. He cannot however be an officer or a licence holder of the FIM.

### **3.3.5 The WSBK Court of Appeal**

#### **3.3.5.1 Appointment of the Members**

The FIM Legal Director in collaboration with the Director of the CJI will appoint, each time, the judge(s) who will constitute the WSBK Court of Appeal.

#### **3.3.5.2 Procedures**

The name of the judge(s) appointed must be communicated to all interested parties in the case, who have the right to make a duly documented objection to the composition of the Court, the day after having received the information. If the Permanent Bureau considers that a reasonable objection is made, they must appoint the necessary replacements. Otherwise they reject the objection and fix the date for the hearing.

The court may request the opinion of an expert or summon a witness who it considers useful.

### **3.3.5.3 Authority and Competences**

The WSBK Court of Appeal will hear any appeals against decisions taken by the FIM Appeal Stewards.

The WSBK Court of Appeal adjudicates upon request of the Race Direction, the FIM WSBK Stewards Panel, or the FIM Appeal Stewards.

The President of the FIM, the Executive Board or the Management Council may, within 4 days after an Event, refer to the WSBK Court of Appeal matters of violation or infringement of the FIM regulations not concerning sporting or technical regulations.

### **3.3.6 The FIM as a Party in the Legal Proceedings**

#### **3.3.6.1 Function**

For all the appeals to the WSBK Court of Appeal, the FIM is entitled to assert its interests or to explain its position by means of a prosecution address.

#### **3.3.6.2 Appointment**

The Executive Board shall appoint in each case, the person who will represent the FIM.

#### **3.3.6.3 Procedure**

The intervention of the FIM is optional and is left to the appreciation of the Executive Board.

As a party, the FIM enjoys the same rights and obligations as the other parties.

The FIM may be present in person at a hearing or may present its claims in writing.

#### **3.3.6.4 Cases concerning behaviours of an exceptional gravity**

In case of a behaviour of an exceptional gravity, the President of the FIM, the FIM Executive Board may refer the case to the FIM CDI which will hear such a case according to the procedures and time limits laid down by the General FIM Disciplinary and Arbitration Code.

## **3.4 PROTESTS AND APPEALS**

### **3.4.1 Protests**

**A protest is an action taken by any legal entity or any individual, rider, team, manufacturer, official etc. against another legal entity or any individual, rider, team, manufacturer, official etc.**

#### **3.4.1.2 Right of protest**

**A protest can be lodged against:**

- **an entry of a Rider, a Team or a Manufacturer,**
- **an alleged non-compliance of a machine with the regulations,**
- **a classification established at the end of a practice or a race,**
- **any alleged error, irregularity or breach of the regulations occurring during an event,**
- **a presumed wrongdoing behaviour of a competitor, not seen or not sanctioned by the disciplinary authorities, having occurred during an event.**

**However, no protest may be lodged against an immediate decision made by any judges of fact in the exercise of their duties, entailing or not:**

- **a fine, resulting from a pit lane speeding, pit lane exit, or practice start violation.**
- **a drop of position.**
- **long lap penalty(ies).**
- **a time penalty given in lieu of any penalty not subject to appeal.**
- **a ride through.**
- **a cancellation of the lap time concerned for a rider exceeding the track limits during practices.**
- **a disqualification from the practice sessions or races by means of a black flag or black flag with orange disc.**

**No protest may be lodged against a decision of whether a rider is actively competing in the case of an interrupted race.**

**No protest may be lodged against a decision of the Race Direction or FIM WSBK Stewards Panel based on a photo finish.**

### 3.4.1.3 Procedure and time limit for protests

All protests must be submitted in writing and signed only by the person directly concerned.

Each protest must specify:

- the relevant regulations,
- the concerns of the protesting party,
- against whom the protest is lodged (when relevant).

Each protest must refer to a single subject only and the intention to protest should be notified to the Race Direction or to the FIM WSBK Stewards Panel within 30 minutes of the publication of the results (within 15 minutes of the publication of the results for the FIM World Superbike “Superpole” qualifying session, the “Superpole Race”, and the FIM World Supersport “Superpole” qualifying session for technical matters).

The protest must then be notified in writing or withdrawn within 1 hour at the latest after the publication of the results.

A protest against the eligibility of a rider, team or a motorcycle to enter a class or event must be made before the start of the official practice. A protest against a machine on technical control compliance grounds (eg. weight, noise, materials, etc.) may be made after the start of official practice.

### 3.4.1.4 Security Deposit for protests

Protests must be handed to a responsible official (Clerk of the Course, Race Director, FIM Steward or Secretary of the Meeting) together with the security deposit of 660 Euros or equivalent.

This security deposit may only be returned if the protest is upheld.

In the case of protests referring to the alleged non-compliance of machines with the regulations and requiring the dismantling and re-assembly of clearly defined parts of a machine, an additional deposit may be specified in the Technical Regulations of the category (WSBK) or by the stewards on a proposal from the SBK Technical Director. This additional deposit must be paid by the protester within one hour upon notification of the stewards and before the dismantling has started.

### **3.4.1.5 Hearing of a protest**

After an immediate hearing, the FIM WSBK Stewards Panel must make a decision on any protest presented. The protest has to be judged according to the provisions of the Regulations.

### **3.4.1.6 Effect of the decision upon a protest**

The decision of the FIM WSBK Stewards Panel of determination of penalty is immediate.

## **3.4.2 Appeals**

An appeal is an action taken by any legal entity or any individual, rider, team, manufacturer, official etc. affected by a decision issued by the FIM authorities (whether arising from a protest or otherwise).

### **3.4.2.1 Right of appeal**

The rules concerning appeals against FIM disciplinary decisions are:

- 1. To the FIM Appeal Stewards against a decision of the FIM WSBK Stewards Panel.**

No appeal may be lodged against a decision made by any judges of fact in the exercise of their duties, entailing or not:

- a fine for speeding in the pit lane, pit exit line violation, or practice start violation.
- a drop of position.
- **long lap penalty(ies).**
- a time penalty given in lieu of any penalty not subject to appeal.
- a ride through.
- a cancellation of the lap time concerned for a rider exceeding the track limits during practices.
- a disqualification from the practice sessions or races by means of a black flag or black flag with orange disc.
- a disqualification from the practice sessions or the race following a positive results to the breath alcohol test carried out at such event.



- **a suspension from one or more official practice sessions (or part thereof) of the event.**
- a grid penalty for the race of the event.

No appeal may be lodged against a decision of whether a rider is actively competing in the case of an interrupted race.

No appeal may be lodged against a decision based on a photo finish.

When no appeal may be lodged to the **WSBK Court of Appeal**, the decision of the FIM Appeal Stewards is final.

## **2. To the WSBK Court of Appeal against a decision of the FIM Appeal Stewards.**

No appeal may be lodged against a decision made by any judges of fact in the exercise of their duties, entailing or not:

- a fine for speeding in the pit lane, pit exit line violation, or practice start violation.
- a drop of position.
- **long lap penalty(ies).**
- a time penalty given in lieu of any penalty not subject to appeal.
- a ride through.
- a cancellation of the lap time concerned for a rider exceeding the track limits during practices.
- a disqualification from the practice sessions or races by means of a black flag or black flag with orange disc.
- a disqualification from the practice sessions or the race following a positive results to the breath alcohol test carried out at such event.
- **a suspension from one or more practice sessions (or part thereof) of the event.**
- a grid penalty for the race of the event.

No appeal may be lodged against a decision of whether a rider is actively competing in the case of an interrupted race.



No appeal may be lodged against a decision based on a photo finish.

No appeal may be lodged if the FIM Appeal Stewards confirm the previous decision of the FIM WSBK Stewards. In this case, the decision of the FIM Appeal Stewards is final.

### 3. To the CAS

No appeal may be lodged against a decision made by any judges of fact in the exercise of their duties, entailing or not:

- a fine, resulting from a pit lane speeding, pit lane exit, or practice start violation.
- a drop of position.
- long lap penalty(ies).
- a cancellation of the lap time concerned for a rider exceeding the track limits during practices.
- a ride through.
- a disqualification from the practice sessions or races by means of a black flag or black flag with orange disc.
- a disqualification from the practice sessions or the race following a positive results to the breath alcohol test carried out at such event.
- a fine for speeding in the pit lane, pit exit line violation, or practice start violation.
- a suspension from one or more practice sessions (or part thereof) of the event.
- a grid penalty for the race of the event.

No appeal may be lodged against a decision of whether a rider is actively competing in the case of an interrupted race.

No appeal may be lodged against a decision based on a photo finish.

### 3.4.2.2 Time limits for the lodging of an appeal

The time limit for lodging a statement of appeal is:

against a decision of the FIM WSBK Stewards Panel	<b>1 hour</b>
against a decision of the FIM Appeal Stewards	1 hour
statement of appeal against a decision of the WSBK Court of Appeal before the Court of Arbitration for Sports (CAS)	<b>5 days</b>

The time limits shall be taken from the date and time of receipt of the decision by the appellant.

### 3.4.2.3 Lodging of an appeal

To be admissible, the statement of appeal must be submitted in writing (appeal before the FIM Appeal Stewards) or submitted or sent by registered letter or special courier or by electronic mail to the FIM Executive Secretariat and postmarked (appeal before the WSBK Court of Appeal).

The correct security deposit for appeal must be paid to the FIM WSBK Stewards (appeal before the FIM Appeal Stewards) or paid in to the FIM Executive Secretariat (appeal before the WSBK Court of Appeal).

Within 24 hours following the statement of appeal before the WSBK Court of Appeal, the appellant assigns to the FIM Executive Secretariat a brief of appeal stating the facts.

If the appeal was not lodged and/or the security deposit for appeal not paid within the dead line specified in article 3.4.6, the appeal will be declared inadmissible without hearing.

### 3.4.2.4 Security deposit for appeals

The amount of the security deposit is 1'320 Euros.

**This security deposit may only be returned if the appeal is upheld.**



### **3.4.3 Security deposit payable upon an adjournment**

If an adjournment to call further witnesses is ordered upon the request of one of the parties involved, this party must provide an additional financial guarantee within a time limit to be fixed by the disciplinary body. The hearing will not be continued until this guarantee has been paid. In case of no provision of the guarantee within the time limit, the disciplinary body will make a determination on the appeal based on the evidence of the original witness.

### **3.4.4 Time limits to be observed for appeal hearings**

The FIM Appeal Stewards must be convened to examine an appeal immediately after the brief of appeal is received.

The FIM Appeal Stewards must in all cases announce a decision immediately following the hearing of the appeal.

The WSBK Court of Appeal must be convened to examine an appeal not later than 4 weeks after the brief of appeal is received.

The WSBK Court of Appeal must in all cases pronounce a decision, within 4 weeks after the brief of appeal is received.

### **3.4.5 Effect of an appeal**

On request of the appellant, the FIM Appeal Stewards may decide a stay of the provisional execution adjudicated by the FIM WSBK Stewards Panel by injunction or in its decision.

On request of the appellant, the WSBK Court of Appeal may decide a stay of the provisional execution adjudicated by the FIM Appeal Stewards by injunction or in its decision.

## **3.5 PROCEDURE BEFORE ALL THE DISCIPLINARY AND ARBITRATION BODIES**

### **3.5.1 Right to a hearing**

It shall be the unquestionable right of any person or body charged with any offence under the Regulations to defend themselves, either in person or by proxy.

Any party convened before a disciplinary or arbitration body has the right to be represented by one defense counsel of its own choice and at its own expense. Adequate notice of this intention must be given in order that this may also be notified to all other parties in the case. Failure to do so may result in the disciplinary or arbitration body upholding an objection to such representation.

If any of the parties duly convened do not appear, judgment can be rendered by default.

The disciplinary or arbitration bodies may decide that the hearing take place by means of a telephone conference call or through any other means of communication using a telephone or electronic device. Such a method of conducting a hearing shall only take place with the consent of all parties involved.

### **3.5.2 The hearing**

The hearing shall be public unless the disciplinary or arbitration body itself decides otherwise in exceptional circumstances.

The hearing shall be conducted in one of the official languages of the FIM. Should one of the parties wish to use another language, it shall provide the necessary interpreters at its own costs.

The appellant must be present or duly represented, failing which, the protest will not be admissible and the costs shall be borne by the appellant.

Once the Judge(s) has opened the proceedings, he will invite the parties involved to state their respective cases without the witnesses being present.

After statements of the parties concerned, the disciplinary or arbitration body shall hear the various witnesses and experts in order to complete the evidence. The parties involved in the case shall have the right to question all witnesses and experts on their evidence.

Any member of the disciplinary or arbitration body may, at any time during the hearing and with the Judge's approval, question any of the parties involved, the witnesses and experts.

### **3.5.3 Witnesses and Experts**

Each party is responsible for the convening and appearance of its own witnesses, as well as their expenses unless decided otherwise by the Court.

The disciplinary or arbitration body has no authority to oblige the witnesses to swear on oath; therefore, testimony shall be given freely. The witnesses may only testify to the facts they know and shall not be allowed to express an opinion, unless the disciplinary or arbitration body should regard them as experts on a particular subject and should ask them to do so.

After having made their statements, the witnesses may not leave the Courtroom and shall not be allowed to speak to any other witness who has still to give evidence.

The Court may summon experts.

### **3.5.4 Judgement**

Decisions of all disciplinary or arbitration bodies will be reached in camera by a simple majority of votes. All members will have equal voting rights which must be exercised when a decision is required. Abstention is not permitted.

Each member of the disciplinary or arbitration body binds himself to keep all deliberations secret.

### **3.5.5 Notification of judgements**

The decisions of the FIM WSBK Stewards Panel and of the FIM Appeal Stewards must be notified directly at the event venue, or failing that, addressed by registered letter with acknowledgement of receipt or by electronic mail.

All judgements of the WSBK Court of Appeal must be notified, in writing, by registered letter with acknowledgement of receipt or by electronic mail in order to inform all the parties concerned.

### **3.5.6 Publication of judgements**

The disciplinary or arbitration body imposing a penalty or adjudicating a protest or an appeal must have its findings published and quote the names of all parties concerned. The persons or bodies quoted in these statements have no right of action against the FIM nor against any person having published the statement.

Furthermore, final decisions will be published in the Media Centre and in the FIM Magazine unless the Court itself decides otherwise.

## **3.6 COSTS OF PROCEDURE**

The costs of a disciplinary or arbitration decision will be assessed by the FIM Executive Secretariat and will be awarded against the losing party, unless the Court decides otherwise.

### **3.6.1 Payment of fines and costs**

If the penalty is definitive, all fines must be paid into the Benevolent Fund before the beginning of the first practice of the second Grand Prix following the final decision. The costs must be paid to the FIM Executive Secretariat within 30 days of notification of the judgement decision according to Article 3.5.5.

The person or body affected by the decision shall be automatically suspended from participation in all FIM activities, until such time as full payment has been received.

### **3.7 RECIPROcity OF PENALTIES**

As a consequence of the agreement of reciprocity concluded on April 30<sup>th</sup>, 1949 between the 4 organisations controlling motorised sports internationally, i.e. in addition to the FIM, namely:

- the Fédération Internationale de l'Automobile (FIA)
- the Fédération Aéronautique Internationale (FAI)
- the Union Internationale Motonautique (UIM)

penalties of suspension or exclusion may also be applied to one or another of the sports represented by the above organisations, upon request of the FIM.

### **3.8 LAW OF MERCY**

The Management Council, after consultation with the CJI President or upon his proposal, may mitigate or completely forgive the penalty of a person or group of persons after having exhausted all the appeal procedures.

### **3.9 ARBITRATION CLAUSE**

Final decisions made by the disciplinary bodies (exception Art. 3.4.2.3) or the General Assembly of the FIM may be submitted exclusively to the Court of Arbitration for Sport by way of appeal within the time limit as laid down in article 3.4.2.2, which shall have exclusive authority to impose a definitive settlement in accordance with the Code of Arbitration applicable to sport.



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#### 4. **CIRCUIT STANDARDS**

Circuit standards will be defined by the “FIM Standards for Circuits”.



## **5. MEDICAL CODE**

- a) The Medical Code contains guidelines, standards and requirements for the following: medical fitness in order to obtain a rider's licence (5.1 - 5.2.4), medical services at events (5.3 - 5.3.14), procedure in the event of an injured rider (5.3.15) - insurance (5.4), professional confidence (5.5), statistics (5.6) and documentation [Appendices A, B, C, D, E, F, G, H1, L, M and N].
- b) The WSBK Medical Code is contained within the FIM WSBK World Championship Regulations and reflects the relevant sections within the FIM Medical Code. The requirements of the Medical Code must be met at all FIM WSBK World Championship events.
- c) In circumstances not covered explicitly by the FIM Medical Code, if such a situation occurs during an event, a binding decision will be made by mutual agreement between the CMO, the FIM WSBK Medical Director and FIM Medical Representative, if present.
- d) Any amendments to this WSBK Medical Code must be approved by the WSBK Commission.
- f) The FIM WorldSBK Championships: Superbike, Supersport 600 and Supersport 300, will be herein collectively referred to as "WSBK".

### **5.1 INTRODUCTION**

#### **MEDICAL CERTIFICATE AND EXAMINATION**

- a) Every rider taking part in motorcycle competition events must be medically fit. For this reason a satisfactory medical history and examination are essential. It is the responsibility of the rider to immediately inform the relevant FIM WSBK Medical Director and the CMO of any state of health or medical condition or any deterioration in their health or medical condition that may adversely affect their ability to ride or compete safely. Failure to do so will result in an immediate exclusion from competition and may lead to further sanctions

- b) The medical certificate is valid for not more than one year. In the event of serious injury or illness occurring following the issue of a medical certificate, a further examination and medical certificate are necessary.

### **5.1.1 GUIDELINES FOR THE EXAMINING DOCTOR**

The examination should be performed by a doctor familiar with the applicant's medical history. The examining doctor must be aware that the person to be examined is applying for a licence to participate in motorcycle events. The purpose of the examination is to determine whether the applicant is physically and mentally fit to control a motorcycle in order to ensure the safety of other riders, officials and spectators during an event, having regard to the type of event for which the rider is applying.

Certain disabilities exclude the granting of a licence.

The FMN of every rider issuing the licence shall provide a certificate confirming the rider is medically fit or unfit to participate in FIM competitions after verifying the rider has undergone the following medical assessment:

#### **A) LIMBS**

The applicants should have sufficient function of their limbs to permit full control of their machine during events. In the case of loss or functional impairment of all or part of a limb or limbs the applicant must be referred for the opinion of the medical commission of his FMN and of the FIM, if necessary.

#### **B) EYESIGHT**

- a) The minimum corrected visual acuity must be 6/6 [10/10] with both eyes open together. The minimum field should measure 160 degrees, 30 degrees vertical.
- b) Spectacles, if required, should be fitted with shatterproof lenses and contact lenses, if worn, should be of the "soft" variety.

- c) Double vision is not compatible with the issuing of a competition licence.

The applicant must have normal colour vision, in that they can distinguish the primary colours of red and green. If there is any doubt, a simple practical test is recommended under conditions similar to those of a race.

### **C) HEARING AND BALANCE**

A licence can be issued to an applicant with impaired hearing but not to an applicant with a disturbance of balance.

A rider with impaired hearing must be accompanied at the riders briefing by a person with normal hearing who can communicate the information either by signing or in writing. The rider must wear a clearly visible tag that identifies him/her as hearing-impaired to the marshals and medical personnel in case of an accident/incident. The rider must also comply with the requirements of Article 5.2.4. of the FIM WSBK Medical Code.

### **D) DIABETES**

In general, it is not considered advisable for diabetics to enter motorcycle events.

However, a well-controlled diabetic not subject to hypoglycaemic or hyperglycaemic attacks, and having no neuropathy nor any ophthalmoscopic evidence of vascular complications, may be passed as fit to compete.

### **E) CARDIO-VASCULAR SYSTEM**

In general, a history of myocardial infarction or serious cardio-vascular disease would normally exclude a rider. Special attention should be paid to blood pressure and cardiac rhythm disorders. In such cases a certificate from a cardiologist including the results of any test the cardiologist considers necessary, must be submitted with the medical examination form.

### **F) NEUROLOGICAL AND PSYCHIATRIC DISORDERS**

In general, applicants with a serious neurological or psychiatric disorder will not be granted a licence.

## **G) FITS OR UNEXPLAINED ATTACKS OF LOSS OF CONSCIOUSNESS**

A licence will not be issued if the applicant suffers from epilepsy, has suffered a single epileptic fit, or has suffered any episodes of unexplained sudden loss of consciousness during a period of 5 (five) years. If no other epileptic fit or other unexplained sudden loss of consciousness has occurred during these 5 (five) years, the applicant may be granted a licence.

## **H) USE OF WADA PROHIBITED SUBSTANCES**

Applicants using substances included in the WADA Prohibited List will not be accepted except with a valid Therapeutic Use Exemption (TUE) approved by the FIM.

## **I) ALCOHOL**

1. Applicants with an alcohol addiction will not be accepted.
2. For safety reasons riders must not participate in competition if they are found to have a blood alcohol concentration superior to the threshold of 0.10. g/L.
3. The presence of alcohol in concentration higher than the threshold and the consumption/use of alcohol (ethanol) are prohibited in motorcycling sport during the \*in-competition period and will be considered as a violation of the Medical Code.
4. Such violation(s) of the Medical Code will be sanctioned as follows:
  - The riders will be immediately excluded and disqualified from the relevant event by the Race Direction. Further sanctions may be applied in accordance with the FIM Disciplinary & Arbitration Code and/or the relevant Sporting Regulations.
5. \* For the purpose of the alcohol testing procedure, the in-competition\* period is defined as the period commencing 12 hours before the rider rides his bike for the first time during the event\*\*, ending thirty (30) minutes after the end of the last race\*\*\* in his class and category. This is the minimum period of time that riders should abstain from alcohol prior to competition for safety reasons. For the avoidance of doubt the possession, use and consumption of alcohol during the podium ceremony is not considered a violation under the FIM Medical Code providing that the podium ceremony takes place at the end of the event.

6. Detection will be conducted by analysis of breath and/or blood. The alcohol violation threshold is equivalent to a blood alcohol concentration of 0.10 g/L.

7. Riders may be subject to alcohol breath and/or blood testing.

\*\* Event is a single sporting event composed, depending on the discipline, of practice sessions, qualifying practice sessions and race(s).

## **J) MEDICATION & DRUGS**

Applicants will not be accepted if they are using medication including those legitimately prescribed with potentially adverse side effects that could pose a risk to the safety of the rider or others during competition. This includes drugs that cause sedation, blurred vision, psychomotor retardation or other side effects that can adversely affect their ability to have full and complete control of a motorcycle in competition.

## **K) TREATMENT WITH PROHIBITED SUBSTANCES OR METHODS AT EVENTS**

Any treatment requiring a prohibited substance or method to be used by any doctor to treat a rider during an event must be discussed and agreed with the FIM WSBK Medical Director. If this is required a TUE must be submitted immediately for retroactive approval to be received by the FIM no later than the following day after the event.

## **L) ANAESTHESIA**

Riders will not be permitted to participate in practice or competition until at least 48 hours have elapsed following any general, epidural, spinal or regional anaesthesia.

See also Art. 5.2.3 and appendix D.

## **M) CONCUSSION**

Assessment of the injured rider and return to competition should be in accordance with the guidelines for the assessment and management of concussion as contained within the Consensus Statement On Concussion In Sport – The 5<sup>th</sup> International Conference On Concussion in Sport held in Berlin, October 2016.

See also Art. 5.2.3 and appendix D.



In the event of a suspected concussion the rider should be assessed using a recognised assessment tool such as SCAT5 or similar (see appendix M). If the assessment confirms a concussion the rider should immediately be excluded from competition for at least the rest of the event. Prior to returning to competition the rider should be assessed for and provide documentary evidence of a return to normal neuro-psychological function using for example the IMPACT system, functional MRI scan or similar in accordance with the current International Consensus Statement on Concussion in Sport.

#### **N) PROCEDURE IN CASE OF DOUBT OF MEDICAL FITNESS**

The examining doctor may not feel able to approve an applicant on medical grounds. In such a case he should complete the certificate, having ticked the relevant box, sign it, and then send it to the applicant's FMN with his observations, including past history. If necessary, he should request that the applicant be examined by a member of the medical committee of the FMN or a doctor appointed by the FMN.

If, following the rider being assessed as being medically fit to participate in competition evidence emerges of a medical condition that represents a significant risk to the rider and/or other competitors, the FIM Medical Director and WSBK Medical Director together with other relevant parties such as the CMO and FMN doctor have the right to withdraw the riders' licence at any time until further assessment of the rider is undertaken and a subsequent satisfactory medical report is provided to the FMN and FIM Medical Director or FIM WSBK Medical Director.

#### **O) THE USE OF INTRAVENOUS FLUIDS**

In accordance with Section M2.2 of the 2021 WADA Prohibited List Intravenous infusions and/or injections of more than a total of 100 mL per 12 hour period are prohibited except for those legitimately received in the course of hospital treatments, surgical procedures or clinical diagnostic investigations.



Intravenous fluids must therefore not be administered to any competitor during any FIM WSBK WC event from the official start time of the event until the official event end time unless by the official FIM approved medical service for the event. In all cases there should be a formal medical need for the fluids demonstrated by documented assessment of the rider's medical condition including their vital signs. Rehydration should be sufficient to return vital signs to normal and no more.

If the rider's medical condition is such that treatment requiring the use of intravenous fluids is necessary during an event he will not be permitted to compete for at least the remainder of that day. Return to competition will require a further medical assessment to ensure he is medically fit to do so.

#### **P) ORAL HYDRATION**

Where the temperature is sufficient to cause significant risk of dehydration as assessed by the CMO or FIM WSBK Medical Director, the organiser must make drinking water available in sufficient quantities for all competitors and officials as soon as possible and within a time frame to address the risk. Where possible the need for water should be assessed before the event start.

#### **Q) COST OF MEDICAL EXAMINATION**

Any fee arising from the examination or completion of the medical certificate is the responsibility of the applicant.

#### **5.1.2 AGE OF RIDERS**

Refer to Art. 1.10.

#### **5.2 SPECIAL MEDICAL EXAMINATION**

At any time during an event a special medical examination may be carried out (this may include urine dipstick testing for drugs) by an official doctor or by another doctor nominated by the Chief Medical Officer (CMO) at the request of the Race Director, FIM WSBK Medical Director or FIM Medical Representative.



### **5.2.1 REFUSAL TO UNDERGO SPECIAL MEDICAL EXAMINATION**

Any rider who refuses to submit himself to such special medical examination must be excluded from the event, and his case notified to the Race Direction and FIM.

### **5.2.2 LIST OF MEDICALLY UNFIT RIDERS (Appendix G)**

The information provided on this list must be treated in the strictest confidence and must be only made available to the FIM WSBK Medical Director and the CMO at the event. It is the rider's responsibility to inform the CMO and the FIM WSBK Medical Director, FIM Medical Director and FIM Medical Officer of any injury or illness sustained between events for inclusion in the list.

The CMO shall examine all riders listed as medically unfit who wish to compete in order to assess their medical fitness to do so the day before they use a motorcycle on the track. The list shall be supplied by the FIM WSBK Medical Director who will attend this examination. It is the rider's responsibility to inform the FIM WSBK Medical Director and CMO of any injury or illness sustained between events for inclusion in the list.

### **5.2.3 MEDICAL FITNESS TO RACE**

- a) A rider must be sufficiently medically fit to control his machine safely at all times. There must be no underlying medical disorder, injury or medication that may prevent such control or place other riders at risk. Failure of a rider to disclose such a condition may lead to the application of sanctions.
- b) Riders will not be permitted to participate in practice or competition until at least 48 hours have elapsed following any general, epidural, spinal or regional anaesthesia.
- c) In the event of a suspected concussion the rider should be assessed and managed in accordance with the guidelines for the assessment and management of concussion as contained within the Consensus Statement On Concussion In Sport – The 5<sup>th</sup> International Conference On Concussion in Sport held in Berlin, October 2016. The rider should be assessed using a recognised assessment tool such as SCAT5 or similar. If the assessment confirms a concussion the rider should immediately be excluded from competition for at least the rest of the event.

- d) Prior to returning to competition the rider should be assessed for and provide documentary evidence of a return to normal neuro-psychological function using for example the IMPACT system, a functional MRI or similar in accordance with the current International Consensus Statement on Concussion in Sport.
- e) The decision regarding medical fitness to compete is normally at the discretion of the CMO. The CMO should be provided with and consider a report from the practitioner treating the rider including details of X-rays, scans, other investigations and any interventions before assessing a rider's fitness to return to competition. As necessary and appropriate decisions regarding fitness to compete should be made in consultation with the FIM WSBK Medical Director and FIM Medical Representative if present.

#### **5.2.4 RIDERS WITH SPECIAL MEDICAL REQUIREMENTS**

Riders with certain medical conditions and who may require special treatment in the event of injury, or who have been in hospital during the previous 12 months or who are being treated for any medical conditions are responsible for informing the CMO/ FIM WSBK Medical Director before the event regarding their condition and that they may require such special treatment.

#### **5.3 MEDICAL SERVICES AT EVENTS**

- a) Any treatment at the circuit during an event is free of charge to the riders. The costs for transferring an injured rider to a hospital designated by the CMO are the responsibility of the organiser of the event.
- b) Medical services must guarantee assistance to all riders as well as any other authorised persons injured or taken ill at the circuit during event.
- c) A medical service for the public, separate from the above services must be provided by the event organisers. This service is not described in this code but must conform to any regulation enforced by the relevant country and reflect the size of crowd expected. This service must be controlled by a deputy CMO or other doctor but not directly by the CMO.



- d) Unless otherwise authorised by the rider, The CMO, the FIM WSBK Medical Director, the FIM Medical Representative, the Clinica Mobile and other members of the medical services, are not authorised to make statements to any third party, other than immediate relatives, about the condition of injured riders, without reference to and authorisation from the FIM and Dorna.

All doctors must adhere to their professional ethics and medical codes of practice at all times.

- e) Appropriate medical services are defined as follows:
1. During all official track activity a fully functional medical services, including medical centre, ground posts, vehicles, helicopter and personnel in accordance with the circuit medical homologation.
  2. During the days with track activity as well as the day before it begins the Medical Centre must be fully staffed in accordance with the medical homologation from 08:00 hrs or at least 1 hour before the track activity on the day before the official track activity (first practice session) commences until 20:00 hrs or at least three hours after the end of the last race or track activity.
  3. At all other times when there is no official track activity as above from 08.00 hrs on the Monday before the event until 20.00 hrs on the day after the event there must always be a doctor and a nurse/paramedic with an ambulance available at the medical centre.
- f) **At events where no one sleeps in the paddock overnight it may be permissible following consultation with the FIM Medical Director/ Representative to not have any medical staff available from 23:00hrs to 07:00hrs.**
- g) The full Medical service available for FIM events must remain in place for any national or supporting races that occur during FIM events and that the FIM procedure in case of serious /fatal accidents must be followed.

### 5.3.1 TERMS OF REFERENCE OF THE CHIEF MEDICAL OFFICER (CMO)

#### The CMO:

1. Is a holder of the corresponding FIM WSBK CMO Superlicence. This licence is valid for a maximum of one year and shall be issued by the FIM.
2. Is appointed by the FMNR/Organiser.
3. Should be the same throughout the event.
4. Must be able to communicate in at least one of the FIM official languages, either English or French.
5. Should be familiar with the FIM Medical Code and FIM Anti-Doping Code.
6. Must be named in the event information.
7. Must be a fully registered medical practitioner authorised to practice in the relevant country or state in which the event is taking place.
8. Must have malpractice insurance appropriate to the relevant country or state, where the event is being held.
9. Must have attended the FIM CMO Superlicence seminar which takes place every year.
10. Must be familiar with the circuit and the organisation of the medical services at which he/she is appointed.
11. Must be familiar with the principles of emergency medical care and the associated organisational requirements necessary for a circuit medical service to deliver effective emergency medical interventions to injured riders in keeping with current accepted best practice.
12. Is responsible for the positioning of medical and paramedical staff and vehicles under his control.



13. Must complete the FIM CIRCUIT CMO QUESTIONNAIRE (appendix F) and return it to the FIM, FIM WSBK Medical Director at least 60 days prior to the event. Failure to comply with this deadline may result in sanctions being applied. The Circuit CMO Questionnaire must be accompanied by:
  - a) A medical plan and maps of the medical service including the position and number of all of the medical resources including all personnel and vehicles.
  - b) A plan of the circuit medical centre.
  - c) A map showing the location, distances and routes to the designated hospitals.
  - d) A list of the doctors including a brief professional curriculum vitae of their experience and qualification relevant to the provision of out of hospital emergency medical care. This should be presented at the latest on the day before the event following the initial track safety inspection.
14. No alterations to the questionnaire and associated medical plan and circuit map showing the position of the medical personnel and vehicles, are permitted without previous consultation with the FIM WSBK Medical Director.
15. Must contact, in writing, at least 60 days before the event, hospitals in the vicinity of the event that are able to provide the following specialist services, and include them in the questionnaire:
  - a) CT Scan
  - b) MRI
  - c) Trauma resuscitation
  - d) Neurosurgery
  - e) General surgery
  - f) Vascular surgery
  - g) Trauma and Orthopaedic surgery
  - h) Cardio-Thoracic surgery
  - i) Intensive Care
  - j) Burns and plastic surgery

16. Must send copies electronically to the FIM WSBK Medical Director and to the FIM at least 30 days before the event and have available at the event the letters they have written to the hospitals and copies of the letters of confirmation that every hospital to be used for treatment of injured persons is aware that the event is taking place and, is prepared to accept and treat injured riders with minimum delay. The letter of confirmation of every hospital must mention its equipment (x-ray, scanner etc.) the name (and telephone numbers) of the doctor in charge for each day and a map showing the quickest route from the circuit to the hospital.
17. Any change to the above mentioned information must be immediately forwarded to the FIM WSBK Medical Director, FIM Medical Representative and to the FIM.
18. Should attend the meetings of the Event Management Committee.
19. Must attend the safety track inspection together with the Clerk of the Course and the Race Director/Direction one day prior to the first practice session.
20. Will collaborate with the FIM WSBK Medical Director to organize a simulation of a medical intervention on track on the day prior to the first practice session.
21. Must brief the medical personnel prior to the start of the first practice session of the event, as well as debrief the staff after the event.
  - a) This briefing should include practical scenario-based examples of incident responses.
  - b) Compulsory scenario-based demonstration and training in the initial response to and management of an injured rider should take place on the day before the event and be attended by the CMO, FIM WSBK Medical Director and the FIM Medical Representative.
  - c) To inspect the circuit with the FIM WSBK Medical Director, Clerk of the Course and Race Director the day before the first practice session. A further check will be made no later than 30 minutes before the first practice session or race each day to ensure that all medical facilities and staff, including the medical centre are ready to function and in accordance with the agreed medical plan and the Medical Code, and to report any shortcomings to the FIM WSBK Medical Director, Race Director and FIM Safety Officer.



22. When motorcycles are on the track the CMO;
- a) must be stationed in Race Control.
  - b) must be in close proximity to and liaise directly with the FIM WSBK Medical Director, FIM Medical Representative, Clerk of the Course and Race Director.
  - c) must be in direct communication with the medical ground posts, ambulances, medical vehicles and medical centre at all times, and test this communication at the start of each day before or during the medical assessment.
  - d) provide immediate updates from trackside medical personnel to the FIM WSBK Medical Director and Race Direction regarding the condition of any injured rider in order to facilitate the most appropriate medical response to their condition.
  - e) participate with the FIM WSBK Medical Director and Race Direction in the immediate deployment of appropriate medical resources to injured riders.
23. Must recommend to the Race Director/Clerk of the Course that a practice session or a race be stopped if:
- a) There is danger to life or of further injury to a rider or officials attending an injured rider if other riders continue to circulate.
  - b) The Medical personnel are unable to reach or treat a rider for any reason.
  - c) If a rider is unconscious, or suspected of having a spinal or other serious injuries and will require prolonged trackside medical intervention. Such information must be communicated immediately to the CMO by ground post personnel.
  - d) There is a risk of physiological harm to riders or of inability by riders to control their motorcycle, due to extreme weather conditions. In such circumstances of actual or potential harm from extreme weather conditions such as extreme heat the CMO and FIM WSBK Medical Director should consider and recommend to the Race Direction that the race distance and length of sessions be adjusted accordingly with the provision of adequate periods for rest, recovery and rehydration. If necessary and appropriate the CMO and FIM WSBK Medical Director can recommend that the race be stopped.



24. Must inform and update the FIM WSBK Medical Director, and FIM Medical Representative, regarding the condition of injured riders and liaise with the relevant hospitals to ascertain and report the progress of their condition and treatment.
25. Will prepare a list of injured riders (MEDICALLY UNFIT LIST) to be given to the FIM WSBK Medical Director and FIM Medical Representative (if present).
26. Shall ascertain that fallen riders during practice are medically fit to continue in competition. All riders injured during an event who refuse or avoid a Special Medical Examination must be placed on the medically unfit list.
27. In accordance with normal medical practice will complete a clinical record of all medical examinations and assessments. A copy of the clinical record should be provided to the rider or their nominated representative to facilitate ongoing treatment after the event and referral to the rider's medical insurance provider.
28. Will meet with the FIM WSBK Medical Director every morning after the medical assessment, and every afternoon after the official activity has ended to discuss the medical interventions and the status of any injured riders. Evaluation of the interventions should include video of the performance of the medical activity. Such evaluation will then be included in and inform the subsequent briefing of the medical personnel by the CMO.
29. To participate with the FIM WSBK Medical Director and FIM Medical Representative if present in decisions regarding riders who have been injured and who wish to compete.
30. Must ensure an interpreter in English is available in the hospital permanently when an injured rider is there.
31. Must send electronically the completed forms Appendices A and L to the FIM Medical Department at [cmi@fim.ch](mailto:cmi@fim.ch) by the day following the event. (The forms are available as Excel files from the FIM Medical Department).
32. Must liaise with the FIM WSBK Medical Director during the year before the event to manage and improve the medical service in any way necessary and ensure the requirements of the FIM Medical Code are completely respected.

### 5.3.2 FIM WSBK MEDICAL DIRECTOR

The FIM WSBK Medical Director will be a member of the FIM Medical Commission appointed by the FIM in consultation with the Contractual Partner.

The duties of the FIM WSBK Director shall be:

1. The CMO's point of reference for all medical aspects during the week of the race, as well as the months before during its preparation.
2. To ensure that all aspects of the medical service including the local medical service, the Clinica Mobile are to the required standards.
3. To be able to communicate at all times with all elements of the medical service in order to be fully informed of any medical issues.
4. To inspect the circuit with the CMO the day before the first practice session. A further check will be made no later than 30 minutes before the first practice session or race each day to ensure that medical facilities and staff including the medical centre are ready to function and in accordance with the agreed medical plan and the Medical Code, and to report any shortcomings to the Race Director, FIM Safety Officer, CMO and FIM Medical Representative.
5. To receive from the CMO a signed copy of the FIM Circuit Medical Report Form and the medical plan as agreed during the FIM Medical Homologation and to ensure that the facilities comply with it.
6. To ensure in collaboration with the FIM Medical Representative and CMO that all necessary steps are taken to address any deficiencies in the medical plan or performance of the medical responses.
7. To be present in Race Control when motorcycles are on the track to observe the performance of the medical responses and to direct and advise the CMO and Race Direction accordingly.
8. To inform the Race Director in consultation with the CMO of any situations where it may be necessary to stop the event in order to deploy the medical intervention vehicles.
9. To in conjunction with the CMO ensure that the intervention in the event of an injured rider is adequate, timely and appropriate.



10. To participate as necessary with the CMO and the FIM Medical Representative in decisions regarding riders who have been injured and who wish to compete and there is uncertainty as to their medical fitness to do so.
11. To attend Event Management Committee meetings.
12. To assist the FIM Medical Representative in ensuring the requirements of the FIM Medical code are met.
13. To obtain from the CMO at the end of each practice session or race a list of fallen riders and to ensure that the list of medically unfit riders held by the CMO is up to date to ensure medically unfit riders are not allowed on the circuit.
14. To meet with the CMO every morning after the medical assessment, and every afternoon after the official activity has ended to discuss the medical interventions and the status of any injured riders. Evaluation of the interventions should include video of the performance of the medical activity. Such evaluation will then be included in and inform the subsequent briefing of the medical personnel by the CMO.
15. To visit the designated hospital for a first event or if there is a change in the designated hospital to ensure the services provided are in accordance with the FIM Medical Code.
16. To provide a full written report to the FIM regarding the performance of the medical service and the status of the medical homologation with if necessary any recommendations required for improvement.
17. To provide a full written report to the CMO with an evaluation of the Medical Service during the weekend. The report should include aspects requiring improvement prior to the next race and reflect good practice by the medical service during the event.
18. To receive from the CMO the List of Medically Unfit riders and forward it to the CMO of the next event.
19. Must liaise with CMO during the year before the event to manage and improve the medical service in any way necessary and ensure the requirements of the FIM Medical Code are completely respected.

### 5.3.3 FIM MEDICAL REPRESENTATIVE

The FIM Medical Representative at an event will be a member of the FIM Medical Commission.

The duties of the FIM Medical Representative will be:

1. To represent and be responsible to the FIM and the FIM International Medical Commission.
2. To inspect the circuit with the CMO, the FIM WSBK Medical Director, Clerk of the Course and Race Director the day before the first practice session. A further check will be made no later than 30 minutes before the first practice session or race each day to ensure that all medical facilities and staff including the Medical Centre are ready to function and in accordance with the agreed medical plan and the Medical Code and to report any shortcomings to the CMO, FIM WSBK Medical Director, Race Director and FIM Safety Officer.
3. To visit the designated hospital for a first event or if there is a change in the designated hospital to ensure the services provided are in accordance with the FIM Medical Code.
4. To receive and review the CMO Medical Questionnaire in advance of the event to confirm it is in compliance with the FIM Medical Homologation and the FIM Medical Code.
5. To ensure the medical service provision is in accordance with the requirements of the FIM Medical Code.
6. To observe and advise the application of the FIM Medical Code and make recommendations accordingly.
7. To inform the Chief Steward, the International Jury, the FIM Medical Commission, the FIM WSBK Medical Director and if necessary the Race Direction of any medical arrangement that contravenes the FIM Medical Code.
8. To participate with the FIM WSBK Medical Director and CMO in the daily **medical reviews** of the track to ensure that medical facilities are in accordance with the agreed medical plan and Medical Code and to report any shortcomings to the Race Director, FIM Safety Officer, FIM WSBK Medical Director and CMO as appropriate.

9. To ensure in collaboration with the FIM WSBK Medical Director and CMO the response of the medical service is fit for purpose and to the required standard on the track and in the medical centre through direct observation and in Race Control.
10. To ensure in collaboration with the FIM WSBK Medical Director and CMO that all necessary steps are taken to address any deficiencies in the medical plan or performance of the medical responses.
11. To in conjunction with the FIM WSBK Medical Director and CMO ensure that the intervention in the event of an injured rider is adequate, timely and appropriate.
12. To assist the FIM WSBK Medical Director and CMO in ensuring the medical service provision is to the required operational standard.
13. To participate as necessary with the CMO and the FIM WSBK Medical Director in decisions regarding riders who have been injured and who wish to compete and there is uncertainty as to their medical fitness to do so.
14. To attend Event Management Committee, and International Jury meetings.
15. To provide a full written report to the FIM regarding the performance of the medical service and the status of the medical homologation with if necessary any recommendations required for improvement.

#### **5.3.4 OTHER DOCTORS**

- a) Any injured rider must first be seen and assessed by the official event medical staff for emergency treatment and be declared medically fit or unfit to compete as appropriate. He may then attend any other doctor of his choice. If the CMO advises against this, the rider must sign a declaration that he is seeking other advice and treatment (appendix C).
- b) Any rider, who, after treatment by a doctor not part of the event team, wishes to compete, must first obtain authorisation for this from the CMO of the event or his deputy, who should be provided with a report of any investigations or interventions and consider any recommendation by the doctor treating him.

### 5.3.5 CLINICA MOBILE

For many years the CLINICA MOBILE, or its personnel, has attended FIM WSBK World Championships events and has gained a considerable reputation among riders and support staff.

The CLINICA MOBILE has treatment facilities and its staff have considerable experience in treating riders' injuries and illness. Many riders prefer treatment by the CLINICA MOBILE staff to treatment by others. The parties involved in the FIM Circuit Racing GP and WSBK World Championships fully support the CLINICA MOBILE staff and the CLINICA MOBILE will be in attendance at events with the full co-operation of event organisers and CMOs.

The CLINICA MOBILE staff will treat those riders who wish to be treated by them only after they have been seen by the CMO or their nominated deputy. The CMO should declare riders medically fit or unfit as normal, after which they may go to the CLINICA MOBILE if they wish.

The CLINICA MOBILE staff will give a medical report to the CMO and the FIM WSBK Medical Director after assessment and treatment. A rider who has been declared medically unfit to compete, who after treatment by the CLINICA MOBILE staff then wishes to race, must present himself back to the CMO for re-examination.

A rider who prefers treatment by the CLINICA MOBILE staff when advised by the CMO otherwise is entitled to take his own course of action, but should sign a form indicating it was against local medical advice (see appendix C). If the rider decides he wishes to be treated in a hospital of his own choice, the CMO, using the means at his disposal at the circuit (ambulance, helicopter, etc.) must allow the rider to reach such hospital: i.e. the rider must be allowed to be transported by ambulance or helicopter from the circuit to the nearest airport.

One doctor from the CLINICA MOBILE will normally be present in the Medical Centre to observe when a rider is being assessed and treated. Similarly a doctor from the CLINICA MOBILE may, when necessary and feasible, accompany an injured rider to hospital.

When it is not feasible to accompany a rider, a doctor from the Clinica Mobile may follow the rider to hospital.

## 5.3.6 QUALIFICATION OF MEDICAL PERSONNEL

### 5.3.6.1 QUALIFICATION OF DOCTORS

Any doctor participating at a motorcycle event who will provide initial medical interventions to an injured rider either at the trackside, in the medical centre or during transport to hospital:

- a) must be a fully qualified and registered medical practitioner.
- b) must be authorised to practice in the relevant country or state.
- c) must be qualified in and able to carry out emergency treatment and resuscitation.

### 5.3.6.2 QUALIFICATION OF PARAMEDICS OR EQUIVALENT

Any paramedic or equivalent participating at a motorcycle event:

- a) must be fully qualified and registered as required by the relevant country or state.
- b) must be experienced in emergency care.

### 5.3.6.3 IDENTIFICATION OF MEDICAL PERSONNEL

All medical personnel must be clearly identified.

All doctors and paramedics must wear a garment clearly marked with “DOCTOR” or “DOCTEUR” and “MEDICAL” respectively, preferably in red on a white background on the back and on the front.

## 5.3.7 VEHICLES

### 5.3.7.1 DEFINITION OF VEHICLES

Vehicles are defined as follow:

**Type A:** A vehicle for rapid intervention at accident areas to give the injured immediate assistance for respiratory and cardio-circulatory resuscitation.

This vehicle should have “MEDICAL” clearly marked on it in large letters. The type of vehicle used should be appropriate for this purpose in the relevant discipline.



**Type B:** A highly specialised vehicle for the provision of advanced treatment, transport and can serve as a mobile resuscitation centre.

**Type C:** A vehicle capable of transporting an injured person on a stretcher in reasonable conditions.

### 5.3.8 MINIMUM MEDICAL REQUIREMENTS FOR EVENTS

- a) The medical service comprising of equipment, vehicles and personnel must be organised in such a way and in sufficient number to ensure that an injured rider can be provided with appropriate and all necessary emergency treatment with the minimum of delay and to facilitate their rapid transfer to further medical treatment in an appropriately equipped medical centre or definitive medical care in a hospital with the necessary facilities to deal with their injuries or illness should this be required.
- b) The CMO will therefore determine the number, location and type of vehicles, helicopter, equipment and personnel that are required to achieve this for a specific event taking into consideration the circuit and event location.
- c) The minimum medical requirements will be subject to confirmation and agreement following assessment and review by the FIM WSBK Medical Director and FIM Medical Representative.
- d) A doctor or doctors must be available to provide initial medical intervention directly or following initial assessment and treatment by the paramedic teams.
- e) In all cases the medical equipment and personnel must be capable of providing treatment for both serious and minor injuries in optimal conditions and with consideration for climatic conditions.

Where the temperature is sufficient to cause significant risk of dehydration as assessed by the CMO or FIM WSBK Medical Director, the organiser must make drinking water available in sufficient quantities for all competitors and officials as soon as possible and within a time frame to address the risk. Where possible the need for water should be assessed before the event start.



- f) In all cases, the transfer of an injured rider to a medical centre or hospital either by ambulance or by helicopter must not interfere with the event and the CMO must plan to have sufficient replacement equipment and personnel available to allow the event to continue.
1. Vehicles type A (number and position as per the FIM medical homologation) are to be placed in such a way and in such numbers that a fallen rider can be reached by them with the minimum of delay from their deployment by Race Control.
  2. Vehicle(s) type B (number and position as per the FIM Medical Homologation) are to be placed in such a way that a fallen rider can be reached and transported with minimum delay after coming to rest with ongoing treatment being provided during transport.
  3. Vehicle(s) type C (number and position as per the FIM Medical Homologation) are to be placed in such a way that a fallen rider can be transported with minimum delay after coming to rest only if no treatment is required.
  4. Medical Ground posts (number and position as per FIM Medical Homologation) are to be placed in such a way that a fallen rider can be reached and initial assessment and treatment commenced with the minimum of delay.
  5. Pit lane ground post
  6. A medical centre
  7. A helicopter

N.B. the only amendment permitted to this in principle is that a vehicle Type C may be replaced by a vehicle Type B.

- g) Official Testing
- a) 1 Type A
  - b) 2 Type B
  - c) 1 CMO
  - d) Medical Centre

## 5.3.9 MEDICAL EQUIPMENT

### 5.3.9.1 EQUIPMENT FOR MEDICAL INTERVENTION VEHICLE

#### A. Personnel:

##### Type A1:

1. a driver, experienced in driving the Type A vehicle and familiar with the course
2. a doctor experienced in emergency care
3. a second doctor or paramedic (or equivalent), experienced in emergency care

##### Type A2:

1. a driver, experienced in driving the Type A vehicle and familiar with the course
2. paramedics (or equivalent) experienced in emergency care

#### B. Medical equipment:

1. Portable oxygen supply
2. Manual ventilator
3. Intubation equipment
4. Suction equipment
5. Intravenous infusion equipment
6. Equipment to immobilise limbs and spine (including cervical spine)
7. Sterile dressings
8. ECG monitor and Defibrillator
9. Drugs for resuscitation and analgesia /IV fluids
10. Sphygmomanometer and stethoscope

#### C. Other equipment:

A method e.g. protective canvas/tarpaulin in order to screen the rider or the accident scene from public view.

Equipment should be easily identified and stored in such a way that it can be used at ground level at the trackside.

**D. Technical equipment:**

1. Radio communication with Race Control and the CMO
2. Visible and audible signals
3. Equipment to remove suits and helmets

The minimum number of medical intervention vehicles (Type A) is 2. In the case of an accident during the warm up lap or first lap of the race, the medical intervention vehicles should not stop unless instructed to do so by the Race Director.

**5.3.9.2 EQUIPMENT FOR VEHICLE TYPE B****A. Personnel:****Type B1:**

1. A driver
2. A doctor experienced in emergency care
3. Paramedics or equivalent

**Type B2:**

1. A driver
2. Two paramedics or equivalent experienced in emergency care

**B. Medical equipment:**

1. Portable oxygen supply
2. Manual and an automatic ventilator
3. Intubation equipment
4. Suction equipment
5. Intravenous infusion equipment
6. Equipment to immobilise limbs and spine (including cervical spine)
7. Sterile dressings
8. Thoracic drainage/chest decompression equipment
9. Tracheotomy/surgical airway equipment

10. Sphygmomanometer and stethoscope
11. Stretcher
12. Scoop stretcher
13. ECG monitor and defibrillator
14. Pulse oximeter
15. Drugs for resuscitation and analgesia/IV fluids

**C. Technical equipment:**

1. Radio communication with Race Control and the CMO
2. Visible and audible signals
3. Equipment to remove suits and helmets
4. Air conditioning and refrigerator are recommended

One (1) such ambulance must be on stand by at the medical centre.

### **5.3.9.3 EQUIPMENT FOR VEHICLE TYPE C**

**A. Personnel**

1. Two ambulance personnel or paramedics of whom one would be the driver and the other would be a person capable of giving first aid.

**B. Medical equipment:**

1. Stretcher
2. Oxygen supply
3. Equipment to immobilise limbs and spine (including cervical spine)
4. First aid medicaments and materials

**C. Technical equipment:**

1. Radio communication with Race Control and the CMO
2. Visible and audible signals

### 5.3.10 HELICOPTER

- a) A helicopter which is normally required must be fully equipped with adequate personnel and equipment and be appropriately licensed for the relevant country and flown by an experienced pilot familiar with medical air evacuation and the potential landing sites. The medical personnel - doctor and paramedic(s) or equivalent - should be qualified in and able to carry out emergency treatment and resuscitation. The helicopter should be of a design and size that will allow continuing resuscitation of an injured rider during the journey. It should be positioned close to the medical centre such that an ambulance journey between medical centre and helicopter is not necessary.
- b) By exception, following consultation between the CMO, FIM WSBK Medical Director and FIM Medical Representative if there is a hospital which has been accepted by the FIM for the management of significant trauma with an agreement in place to treat injured riders 20 minutes or less by road under emergency driving conditions from the circuit, a helicopter may not be required to be present for that event providing adequate vehicles type B are available.**
- c) It is permissible for the helicopter to leave the circuit to transfer an injured rider to hospital without the need to stop the event with the agreement of the Chief Medical Officer, FIM WSBK Medical Director and Race Director providing that it will have returned to the circuit within the time required to prepare a further rider for transfer by helicopter. If the distance to hospital by air or severe weather does not permit this a further helicopter “on site” may be required.
- d) In these circumstances or if the weather conditions or other factors prevent the use of the helicopter after consultation between the CMO, FIM WSBK Medical Director and FIM Medical Representative further transfers may be undertaken by road by emergency ambulance providing the hospital is in reasonable distance. The designated hospital should normally be within 20 minutes by air and 45 minutes by road.
- e) If the hospital is not within a reasonable distance of the event and transfer by helicopter is not possible, consideration should be given to stopping the event.
- f) To ensure the availability of a helicopter at all times during the event, it is recommended that 2 helicopters be available.

### 5.3.11 MEDICAL GROUND POSTS

- a) These are placed at suitable locations and in sufficient numbers around the circuit to provide rapid medical intervention and if appropriate evacuation of the rider from danger with the minimum of delay. The personnel must have sufficient training and experience to take action autonomously and immediately in case of an accident.
- b) For protection of riders and the ground post staff, the ground post should be equipped with easily movable safety barriers and if possible protective canvas/tarpaulins to be used in order to screen the rider or the accident scene from public view.

#### A. Personnel:

There should be a minimum of three personnel at each medical ground post at least one of which should be a doctor or paramedic (or equivalent) experienced in emergency care with the others to assist them, carry equipment and act as stretcher bearers.

#### B. Medical equipment:

Equipment for initiating resuscitation and emergency treatment including:

1. Initial airway management
2. Ventilatory support
3. Haemorrhage control & circulatory support
4. Cervical collar
5. Extrication device - This should be a Scoop stretcher or if not available a spinal board or equivalent.

Devices such as “NATO” or other canvas stretchers that require the rider to be lifted on to them are no longer acceptable.

#### C. Technical equipment:

1. Radio communication with Race Control and the CMO
2. Adequate shelter for staff and equipment should be available.

### **5.3.12 PIT LANE GROUND POST**

#### **A. Personnel:**

1. A doctor and paramedic (or equivalent) experienced in emergency care must be positioned in the pit lane.
2. One or more Pit lane ground posts, depending on the length of the pit lane are required.

#### **B. Medical equipment:**

1. Airway management and Intubation equipment
2. Drugs for resuscitation and analgesia/IV fluids
3. Cervical collars
4. Manual respiration system
5. Intravenous Infusion Equipment
6. First Aid Equipment
7. Scoop Stretcher or if not available a spinal board or equivalent

#### **C. Technical Equipment:**

1. Radio communication with Race Control and the CMO

### **5.3.13 MEDICAL CENTRE**

Refer to Art. 13.3 of the FIM Standards for Circuit Racing (SRC).

#### **Doping Test facilities**

See Anti-Doping Code, Art. 5.9.10 or 13.3.2.3 of the SRRC.

#### **5.3.13.1 EQUIPMENT FOR RESUSCITATION AREAS**

- a) Equipment for endotracheal intubation, tracheotomy and ventilatory support, including suction, oxygen and anaesthetic agents.
- b) Equipment for intravenous access including cut-down and central venous cannulation and fluids including colloid plasma expanders and crystalloid solutions.



- c) Intercostal drainage equipment and sufficient surgical instruments to perform an emergency thoracotomy to control haemorrhage.
- d) Equipment for cardiac monitoring and resuscitation, including blood pressure and ECG monitors and a defibrillator.
- e) Equipment for immobilising the spine at all levels.
- f) Equipment for the splinting of limb fractures.
- g) Drugs/IV fluids including analgesic, sedating agents, anticonvulsants, paralysing and anaesthetic agents, cardiac resuscitation drugs/IV fluids.
- h) Tetanus toxoid and broad spectrum antibiotics are recommended.
- i) Equipment for diagnostic ultrasound.
- j) A Permanent or portable digital X-ray machine, appropriate to detect usual bone fractures in motorcycle sport, must be available.

#### **5.3.13.2 EQUIPMENT FOR MINOR INJURIES AREA**

The area must have beds, dressings, suture equipment and fluids sufficient to treat up to three riders with minor injuries simultaneously. Sufficient stocks to replenish the area during the event must be available and sufficient. Doctors, nurses and paramedics or equivalent experienced in treating trauma must be available.

#### **5.3.13.3 STAFF OF MEDICAL CENTRE**

The following specialists should be immediately available in the medical centre:

1. Trauma resuscitation specialist (e.g. Anaesthetist, Accident and emergency specialist, Intensive care specialist)
2. Surgeon experienced in trauma

Medical personnel, nurses and paramedics (or equivalent) should be present in a sufficient number and should be experienced in resuscitation, diagnosis and treatment of seriously injured patients.

### **5.3.14 MEDICAL HOMOLOGATION OF CIRCUITS / MEDICAL ASSESSMENTS OF EVENTS**

- a) Circuits of WorldSBK Championships, require medical assessment and homologation in order to hold FIM World Championship events.
- b) The specific requirement for each circuit will be decided by the Assessor appointed by the FIM CMI in collaboration with the Circuit CMO who has to be present according to the requirements of the Championships organisers/promoters and with reference to the FIM Medical Code. A medical assessment report will be issued by the FIM Medical Assessor.
- c) Sample drawings of medical centre models are available from the FIM Administration for reference.
- d) The FIM also reserves the right to review such a homologation at any time.
- e) For details of the procedure, see appendix H1.
- f) In those disciplines where a FIM Medical Director/Officer/Representative is normally present the medical homologation is an integral part of the overall circuit assessment and an assessment will be undertaken jointly with the relevant Sporting Commission representatives.

#### **5.3.14.1 GRADING OF CIRCUIT ASSESSMENTS AND HOMOLOGATIONS**

The medical assessment and homologation will be graded as follows:

A: 1 year.

A medical assessment and medical homologation report will be issued.

B: Further improvements to the medical service are required and a further medical assessment is compulsory the following year.

Medical assessment may be required prior to next event.

In the event of two successive assessments resulting in grade B, the circuit will automatically be downgraded to grade C as defined below.

C: The medical service provision does not comply with the requirements of the FIM Medical Code and further medical assessments are compulsory prior to any FIM event taking place.

Further medical assessment is required before any FIM event can take place until the circuit obtains at least a grade B.

### 5.3.15 PROCEDURE IN THE EVENT OF AN INJURED RIDER

The management of an injured rider is under the control of the CMO and should be the following:

- a) A fallen rider must be reached by a Doctor or Paramedic who can begin treatment with the minimum of delay of the rider coming to rest. If the rider is injured, the CMO must be informed by radio so that further procedures can be initiated.
- b) The CMO must be stationed in Race Control with the FIM WSBK Medical Director with access to Closed Circuit Television to monitor the situation. Upon request by the CMO any Medical Vehicle can be dispatched to the scene of the incident, only the Race Director can authorize entry onto, or response via track. Similarly, interruption or cessation of racing or practice session can only be authorized by the Race Director. It is the responsibility of the CMO and FIM WSBK Medical Director to advise the Race Director of incidences where access to a fallen rider(s) necessitates this.

Response codes are:

**Code 0      No medical intervention required**

Confirmation by radio and CCTV to CMO & FIM WSBK Medical Director that no medical intervention required

Rider gets up unassisted

**Code 1      Short rescue**

Confirmation by radio and CCTV to CMO & FIM WSBK Medical Director that:

Rider able to walk with assistance

Rider will be cleared from track in less than 1 minute

**Code 2 Long rescue**

Confirmation by radio and CCTV to CMO & FIM WSBK Medical Director that the rider is conscious and no spinal injury is suspected

Rider can be safely evacuated by scoop stretcher or spinal board

Rider will be cleared from track in less than 2 minutes and transferred directly to the medical centre.

**Code 3 Prolonged rescue**

Confirmation by radio and CCTV to CMO & FIM WSBK Medical Director that the rider(s) is (are) unconscious, a spinal injury is suspected or the rider is otherwise seriously injured

Rider requires immobilisation and/or stabilisation before being moved

Rescue will take longer than 3 minutes

Medical intervention required on track

The medical cars will be deployed in which case the rider(s) should not be moved or transferred until their arrival

**A. Transfer to the medical centre**

- a) The injured rider will be transferred to the medical centre when his condition permits. The CMO shall decide the time and method of transfer. Rarely, at the discretion of the CMO only, a rider may be transferred to hospital directly from the trackside.
- b) The vehicle used to transfer the rider must be on scene of the accident with minimum delay following the order to intervene.



## **B. Medical centre**

- a) At the medical centre, medical staff will be available to treat the rider. The CMO remains responsible for the treatment of the rider.
- b) If the rider is unconscious, he will be treated by the medical centre staff under the responsibility of the CMO. The rider's personal doctor may observe this treatment and may accompany the rider to hospital.
- c) A rider who is conscious may choose the medical staff by whom he wishes to be treated. A rider who does not wish to be treated by the medical centre staff against their advice must sign a "Rider Self Discharge" Form (Appendix C).
- d) Refer also to the SCAT5™ document in the appendix M which is a standardised tool for evaluating injured athletes for concussion.

## **C. Transfer to hospital**

- a) The CMO shall decide the time of transfer, the mode of transfer and the destination of an injured rider. Having made the decision, it is his/her responsibility to ensure that the receiving hospital and appropriate specialists are informed of the estimated time of arrival and the nature of injuries. It is also the responsibility of the CMO to ensure appropriately skilled and equipped staff accompany the rider.
- b) A doctor of the Clinica Mobile will accompany the rider.

## **5.4 MEDICAL MALPRACTICE INSURANCE**

All doctors and other medical staff at an event must have adequate medical malpractice insurance cover.

## 5.5 PROFESSIONAL CONFIDENCE OF MEDICAL PERSONNEL

- a) The rider's right to medical confidentiality regarding their medical information, injuries and treatment must be respected at all times by the CMO, their medical service personnel and the FIM Medical Director. The rider's express consent must be obtained to disclose any medical information related to the rider.

If the rider is unable to consent to share their information through illness or injury, the CMO must only provide appropriate and strictly necessary information to the rider's and nominated representative/s and those healthcare professionals directly involved in the rider's treatment or in decisions regarding their fitness to compete including the FIM WSBK Medical Director. The FIM WSBK Medical Director at the event will also respect the confidentiality of this information and must only provide it to those healthcare professionals directly involved in the rider's treatment or in decisions regarding their fitness to compete, such as the CMO of the next event at which the rider wishes to compete. Other than in exceptional circumstances such as a fatal injury or serious injury that is potentially life-threatening the Race Direction or other officials should only be provided with sufficient information regarding the rider's fitness or otherwise to compete.

- b) Any breach of confidentiality by the CMO, members of the medical team, FIM Medical Directors, FIM Medical Officer, FIM Medical representatives or other officials holding FIM licences may result in withdrawal of their FIM licence.
- c) In any other circumstances, it is forbidden for the CMO or any other medical personnel to disclose any information to the media or other information services without the authorisation of the FIM and Dorna.
- d) All doctors must adhere to their professional ethics and medical codes of practice at all times.



## 5.6 ACCIDENT STATISTICS

The CMO, the FIM WSBK Medical Director will provide statistics to the FIM concerning accidents and injuries that occur during events (appendix A). This information must be anonymised except in relation to the provision of medical information to other doctors involved in the on-going medical assessment and treatment of the rider including the CMOs at subsequent events who will assess the rider for their fitness to return to competition (appendix G).

All fatal accidents occurring during an FIM event will be reported to the FIM Medical Department at [cmi@fim.ch](mailto:cmi@fim.ch) immediately as per the procedure in case of fatal accidents (appendix L).

## 5.7 DATA PRIVACY

The FIM WSBK Medical Director, CMO, CMI Coordinator, FIM Medical Representative may store, process or disclose personal information relating to Riders when necessary and appropriate in order to conduct their activities under the Medical Code. They are also responsible for ensuring that Personal Data and Sensitive Personal Data they process is protected as required by data protection and privacy laws in force by applying all necessary security safeguards.

The FIM WSBK Medical Director, CMO, CMI Coordinator, FIM Medical Representative shall not disclose any of the Rider's Personal Data or Sensitive Personal Data except where such disclosures are strictly necessary in order to fulfil their obligations under the FIM Medical Code.

The FIM WSBK Medical Director, CMO, CMI Coordinator, FIM Medical Representative shall ensure that Personal Data and Sensitive Personal Data is only retained when it remains relevant to fulfilling their obligations under the FIM Medical Code. Once it no longer serves the above-mentioned purposes, it shall be deleted, destroyed or permanently anonymised. As a general rule, retaining Sensitive Personal Data requires stronger or more compelling reasons than for Personal Data.



Any rider who submits information including Personal Data and Personal Sensitive Data in order to obtain a FIM licence shall be deemed to have agreed, pursuant to applicable data protection laws and otherwise, that such information be collected, processed, disclosed and used for the purposes of the implementation of the FIM Medical Code by the FIM WSBK Medical Director, CMO, CMI Coordinator, FIM Medical Representative, in accordance with data protection laws (including specifically, the International Standard for the Protection of Privacy and Personal Information).

Riders shall be entitled to request to erase, rectify or obtain any Personal Data or Sensitive Personal Data that the FIM holds about them in accordance with the FIM Medical Code by sending a written request to [gdpr-medical@fim.ch](mailto:gdpr-medical@fim.ch).







**APPENDIX B  
WSBK**

**MEDICAL ASSESSEMENT REPORT FORM**

**HIGHLY CONFIDENTIAL**

**To be completed by the CMO**

**To be strictly shared only with: FIM Medical Representative  
FIM WSBK Medical Director - Race Direction**

**Name of event:**

**Date of event:**

**IMN :**

**Name of CMO :**

The CMO, FIM Medical Representative, FIM WSBK Medical Director and members of the Race Direction are bound to ensure that this Personal Data and Sensitive Personal Data they process is protected as required by the data protection and privacy laws in force by applying all necessary security safeguards.

This information shall not be disclosed to any other person except when strictly necessary in order to fulfil their obligations under the FIM Medical Code and in accordance with its Art. 5.7.

Signature of CMO:

Date of completion:



**APPENDIX C  
WSBK**

**RIDER SELF DISCHARGE FORM**

PART 1 (to be completed by the rider)

I, \_\_\_\_\_ rider no \_\_\_\_\_

in the \_\_\_\_\_ class, discharge myself against local medical advice

and understand the possible consequences of such action that have been explained to me by Dr \_\_\_\_\_

I confirm to have agreed pursuant to applicable data protection laws and otherwise that my medical information be collected, processed, disclosed and used for the purposes of the implementation of the FIM Medical Code by any CMO, FIM WSBK Medical Director, CMI Coordinator, FIM Medical Representative of the Medical Code.

I am entitled to request to erase, rectify or obtain any Personal Data or Sensitive Personal Data the FIM holds about myself in accordance with the FIM Medical Code by sending a written request to [gdpr-medical@fim.ch](mailto:gdpr-medical@fim.ch).

Signed: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

PART 2 (To be completed by the Chief Medical Officer-CMO)

I, Dr \_\_\_\_\_, CMO at the

\_\_\_\_\_ circuit, confirm that I have explained the possible consequences of the rider discharging himself/herself against my advice.

In view of the language difficulties, this explanation was given through an interpreter

(delete as appropriate).

Signed: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

TO: CMO, Rider, FIM WSBK Medical Director, FIM Medical Representative



## APPENDIX D

### DURATION OF CONVALESCENCE

FIM Medical Panel document establishing the general evaluation principles for resumption of motorcycling competition after an accident

### INTRODUCTION

The decision to consider a rider fit or unfit for continued engagement in motorcycling competition after an incapacitating accident falls within the competence of the CMO.

The increasing professionalism of all parties concerned in the various championships often places riders under contractual commitments that accustom them to a professional reality which is sometimes dehumanised and on which the CMI must keep a watchful eye.

### OBJECTIVES

The development of new medical techniques, which are less invasive and, consequently, less physically disruptive for the patient, permit shorter periods of hospitalisation and earlier rehabilitation.

However, this technological adaptation cannot also shorten the periods of cicatrisation and bone consolidation and thereby invalidate all the histophysiological concepts.

Hence, while the rider's overall recuperation might be accelerated in this way, allowing him to envisage the wildest sporting feats, the physicians authorized to issue the medical certificate of fitness for the resumption of competition will have to ascertain whether the rider would be able to face unforeseen situations in order to avoid jeopardizing not only his safety but also that of his fellow riders and other parties involved.

### MEANS

The criteria to be defined should be based on the following requirements:

1. Assurance of the immediate personal safety of the rider
2. Maintenance of a balance between the immediate and long-term physical well being of the rider.
3. Assurance of the immediate safety of the riders in all the collective motorcycling disciplines.

4. Assurance of the immediate safety of the other parties involved, such as stewards, paramedics, first-aid workers, physicians, mechanics, etc.

It would not be feasible to list in this document all the pathological situations encountered in the practice of motorcycling sport.

We will therefore give an overall perspective of the situations that are common to most injuries.

However, three points are worth emphasizing due to the frequency of the problems encountered in these situations:

1. Cutaneous cicatrisation needs time to be accommodated by the body as a whole. In principle, stitches should be removed when a wound has healed before any resumption of competition.
2. With regards to osteosyntheses using percutaneous pins of the Kirschner type, while the duration of the fracture consolidation is classic and agreed by most authors, we must emphasize that, in such a case, the resumption of competition is contraindicated due to the risk of displacement of such pins.
3. The resumption of competition is also contraindicated in the presence of means of immobilization such as orthoses or plaster cast designed to stabilize a lesion. In fact, the materials used, being less elastic than human body tissue, could pose a threat to the competitor in the event of a further accident.

Hence, on the whole, injuries suffered during the practice of motorcycling sport follow a common pattern: treatment of the lesion, cicatrisation and consolidation and, finally, rehabilitation and re-adaptation to the sporting discipline.

The internationally recognized periods of time needed for bone consolidation are therefore 4-8 weeks for an upper limb and 4-12 weeks for a lower limb, depending on the site of the fracture.

These minimum periods would, of course, be adjusted in the light of the follow-up of the bony callus, but the stress to which it would be subjected by the rider's activity would also be taken into account.

In order to maximize the safety not only of the rider but also of his entourage in competitions, the CMO should be able to carry out a set of simple, easily reproducible and effective tests to assess the motorcyclist's new physical capacities before he resumes competition.

Tests for lesions of a lower limb:

1. Mobility equivalent to or exceeding 50% of the physiological articular amplitude of the hip and knee joints.
2. Stand on one foot, both left and right, for at least 5 seconds.
3. Cover a distance of 20m unaided in a maximum time of 15 seconds.
4. Climb up and down 10 steps in a maximum time of 20 seconds.



Tests for lesions of a upper limb:

- To carry out 5 push ups

## **HEAD INJURIES**

Assessment of the injured rider and return to competition should be in accordance with the guidelines for the assessment and management of concussion as contained within the Consensus Statement On Concussion In Sport — The 5th International Conference On Concussion in Sport held in Berlin, October 2016.

In the event of a suspected concussion the rider should be assessed using a recognised assessment tool such as SCAT5 or similar (see appendix M). If the assessment confirms a concussion the rider should immediately be excluded from competition for at least the rest of the event. Prior to returning to competition the rider should be assessed for and provide documentary evidence of a return to normal neuro-psychological function using for example the IMPACT system, functional MRI scan or similar in accordance with the current International Consensus Statement on Concussion in Sport.

## **ABDOMINAL SURGERY**

In the event of any abdominal surgery, with or without incision of the peritoneum, the period of unfitness for competition would range from 15 days to one month.

## **CONCLUSION**

Provided that the various periods of cicatrisation, and particularly bone consolidation, are respected by their therapists, injured riders should be able to undergo these fitness tests without danger so that they can all resume competition in conditions of optimal safety.



**APPENDIX E**

Licence Nr.   
 (will be filled in by  
 FIM/CMI)

**Curriculum Vitae**

Name:  First Name:  Title:

DoB:  (Date of Birth) FMN:

Specialization:

Address:

Phone - office  FAX-office

Phone- home  FAX-home

E- Mail Address:

Work place:

Office  Hospital  Other

I started as doctor in motorcycling sport in: (year)

Activities as doctor in motorcycling sport in the last 3 years:

Event	Function	Year

**Date:**

**Return to the FIM Medical Department at [cmi@fim.ch](mailto:cmi@fim.ch)**



**APPLICATION FOR A CMO LICENCE  
BULLETIN D'INSCRIPTION POUR UNE LICENCE CSM**

Name/*Nom* : \_\_\_\_\_ First name/*Prénom* : \_\_\_\_\_

Adress/*Adresse* : \_\_\_\_\_ No tél. : \_\_\_\_\_

\_\_\_\_\_ No fax : \_\_\_\_\_

\_\_\_\_\_ E-mail : \_\_\_\_\_

The undersigned confirms that :

*Le soussigné confirme :*

- I am familiar with the FIM MEDICAL & ANTI-DOPING CODE  
*Je connais le CODE MEDICAL & ANTIDOPAGE FIM*
- I have attended a FIM CMO seminar in....., date.....  
*J'ai participé au séminaire CSM à ....., date.....*
- I am experienced at motor sport events and have attended at least two national or continental or international events as a doctor.

*Je dispose d'expérience dans les manifestations motorisées et ai assisté à au moins deux manifestations nationales ou continentales ou internationales à titre de médecin.*

- I am familiar with the circuit at which I will be CMO  
*Je connais le circuit pour lequel je serai le CSM*
- I am experienced in the provision of emergency medical care  
*J'ai de l'expérience dans les soins médicaux d'urgence*
- I am a fully registered and appropriately qualified medical practitioner  
*Je suis inscrit à l'ordre des médecins et j'ai l'expérience en tant que praticien*
- I enclose my completed professional and motorsport C.V.  
*Je joins mon complet C.V. professionnel et celui du sport motocycliste*

Date : \_\_\_\_\_ Participant Signature  
*Signature du participant* : \_\_\_\_\_

Licence N°: \_\_\_\_\_ (to be completed by the FIM/CMI)  
*(à remplir par la FIM/CMI)*



## **APPENDIX E**

### **CMO CURRICULUM VITAE**

**&**

### **APPLICATION FOR A CMO LICENCE**

#### Data Privacy

The CMO expressly consents that such information be collected, processed, disclosed and used for the purposes of the implementation of the FIM Medical Code in accordance with data protection laws.

CMOs shall be entitled to request the FIM to erase, rectify or obtain any Personal Data the FIM holds about them in accordance with the FIM Medical Code by sending a written request to [gopr-medical@fim.ch](mailto:gopr-medical@fim.ch)



**APPENDIX F**  
Circuit Racing

Fédération Internationale de Motocyclisme  
11, route Suisse - CH-1295 Mies (Suisse)  
E-mail: cmi@fim.ch

**CIRCUIT CMO QUESTIONNAIRE**

(Form to be used by CMO)

This questionnaire has to be completed by the CMO (in accordance with Art. 09.6.1 of the FIM Medical Code) and returned to the FIM by e-mail 60 days prior to the event with the following attachments:

- 1) A plan of the medical centre
- 2) A map of the circuit/ posts indicating the medical services
- 3) A map of the circuit indicating the routes for urgent evacuation
- 4) Written confirmation that the necessary personnel is available during practice and racing

A copy of this form has to be handed over the Medical Director before the first track inspection (Art. 09.6.2 of the FIM Medical Code)

<b>Discipline</b>	<input type="text"/>	<b>IMN No.</b>	<input type="text"/>
<b>Circuit</b>	<input type="text"/>	<b>Date</b>	<input type="text"/>
<b>Country</b>	<input type="text"/>		
<b>CHIEF MEDICAL OFFICER</b>	<input type="text"/>		
	<b>LIC. N°</b>	<input type="text"/>	



**Discipline**

**IMN No.**

- 1 a) Are all medical services under the control of the Chief Medical Officer YES  NO
- 1 b) Is the medical service for the general public under the control of a deputy CMO or other doctor than the CMO himself

2) **Total personnel (medical centre, track)** (please fill in the number)

		day	0	1	2	3	4
0 Thursday	Doctor (including CMO)	number	<input type="text"/>				
1 Friday	Nurses		<input type="text"/>				
2 Saturday	Paramedic or equivalent		<input type="text"/>				
3 Sunday	Other Medical personnel		<input type="text"/>				
4 Monday	Stretcher bearer		<input type="text"/>				
	Driver		<input type="text"/>				
	Other (e.g.Pilot)		<input type="text"/>				
	Total		<input type="text"/>				

3) **Medical Intervention Vehicle (type A1)** **Number**

- Do positions conform to map of circuit/ posts?
- Doctor as per Medical Code YES  NO
- Second doctor, nurse, paramedic or equivalent as per Medical Code
- Driver as per Medical Code

**Medical Intervention Vehicle (Type A2)** **Number**

- Do positions conform to map of circuit/ posts?
- Doctor as per Medical Code YES  NO
- Nurse, Paramedic or equivalent as per Medical Code
- Driver as per Medical Code

- Medical Equipment**
- Portable oxygen supply
- Manual ventilator
- Intubation equipment
- Suction equipment
- Intravenous infusion equipment
- Equipment to immobilise limbs and spine (including cervical spine)
- Sterile dressings
- ECG monitor and defibrillator
- Drugs for resuscitation and analgesia/IV fluids
- Sphygmomanometer and stethoscope

**Other equipment**

Protective canvas/tarpaulins

- Technical Equipment**
- Radio communication with Race Control and CMO/Medical Director
- Visible and audible signals
- Equipment to remove suits and helmets
- Type of vehicle Quad  Bike
- Ambulance
- other
- Car





**Discipline**

**IMN No.**

**6a) Medical Ground posts**

**Number**

Do positions conform to map of circuit/ posts?

YES	NO
<input type="checkbox"/>	<input type="checkbox"/>

**GP1 Personnel**

Doctor experienced in resuscitation and the pre-hospital management of trauma  
First aiders or stretcher bearers

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

**GP2 Personnel**

Paramedic or equivalent experienced in resuscitation and pre-hospital management of trauma  
Two first aiders or stretcher bearers

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

**Medical Equipment**

Equipment for initiating resuscitation and emergency treatment  
Initial airway management  
Ventilatory support  
Haemorrhage control & circulatory support  
Cervical collar  
Extrication device - Scoop stretcher or spinal board or equivalent

<input type="checkbox"/>	<input type="checkbox"/>

**Technical Equipment**

Radio communication with Race Control and CMO  
Adequate shelter for staff and equipment  
and ground post staff

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

**Other equipment**

Protective canvas / tarpaulins

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

**6b) Pit lane ground posts**

**Number**

Do positions conform to map of circuit/ posts?

YES	NO
<input type="checkbox"/>	<input type="checkbox"/>

**Personnel**

Doctor, Paramedic or equivalent experienced in emergency care  
Stretcher bearer

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

**Medical Equipment**

Airway management and intubation equipment  
Drugs for resuscitation and analgesia/ IV fluids  
Cervical collars  
Manual respiration system  
Intravenous infusion equipment  
First Aid equipment  
Scoop stretcher or spinal board or equivalent

<input type="checkbox"/>	<input type="checkbox"/>

**Technical Equipment**

Radio communication with Race Control and CMO

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

**7) Medical Centre**

Is a medical centre available at this circuit as per Medical Code?  
(compulsory at GP, SBK, Endurance WC) if "NO" go to 7d)  
Is it a permanent structure?  
Is it less than 10 mins from any part of the circuit?  
Refer to Art. 13.3 of the FIM Standards for Circuits

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>



<b>Discipline</b>	<input type="text"/>	<b>IMN No.</b>	<input type="text"/>		
Number of rooms			<input type="text"/>		
Secure environment from which media and public can be excluded			<input type="checkbox"/>	<input type="checkbox"/>	
Area easily accessible by First Aid vehicles			<input type="checkbox"/>	<input type="checkbox"/>	
Helicopter landing area nearby			<input type="checkbox"/>	<input type="checkbox"/>	
One or two rooms large enough to allow resuscitation of at least two severely injured riders simultaneously (resuscitation area)			<input type="checkbox"/>	<input type="checkbox"/>	
X-ray room or portable digital X-ray machine			<input type="checkbox"/>	<input type="checkbox"/>	
A room large enough to treat more than one rider with minor injuries simultaneously			<input type="checkbox"/>	<input type="checkbox"/>	
Temporary separation in this area, e.g. curtains or screens			<input type="checkbox"/>	<input type="checkbox"/>	
			<b>YES</b>	<b>NO</b>	
Reception and waiting area			<input type="checkbox"/>	<input type="checkbox"/>	
Doctor's room			<input type="checkbox"/>	<input type="checkbox"/>	
Toilet and shower room with disabled access			<input type="checkbox"/>	<input type="checkbox"/>	
A staff changing room with male and female toilets			<input type="checkbox"/>	<input type="checkbox"/>	
Medical staff room for 12 or more persons			<input type="checkbox"/>	<input type="checkbox"/>	
Radio communication with Race Control, the CMO, ambulances and ground posts			<input type="checkbox"/>	<input type="checkbox"/>	
If the Medical Centre has normal electric power supply, it must also be permanently connected to its own U.P.S. (Uninterruptible Power Supply)			<input type="checkbox"/>	<input type="checkbox"/>	
Water supply, heating, air-conditioning and sanitation appropriate to the country			<input type="checkbox"/>	<input type="checkbox"/>	
Closed Circuit TV			<input type="checkbox"/>	<input type="checkbox"/>	
Office facilities			<input type="checkbox"/>	<input type="checkbox"/>	
Dirty utility room			<input type="checkbox"/>	<input type="checkbox"/>	
Equipment storage			<input type="checkbox"/>	<input type="checkbox"/>	
Security fence			<input type="checkbox"/>	<input type="checkbox"/>	
Telephones			<input type="checkbox"/>	<input type="checkbox"/>	
Security Guard			<input type="checkbox"/>	<input type="checkbox"/>	
Parking for ambulances			<input type="checkbox"/>	<input type="checkbox"/>	
<b>7a) Room requirements</b>					
1 resuscitation room			<input type="checkbox"/>	<input type="checkbox"/>	
or					
2 resuscitation rooms			<input type="checkbox"/>	<input type="checkbox"/>	
Entrance separate to entrance for general public			<input type="checkbox"/>	<input type="checkbox"/>	
Minor treatment room			<input type="checkbox"/>	<input type="checkbox"/>	
X-ray room			<input type="checkbox"/>	<input type="checkbox"/>	
Medical staff room			<input type="checkbox"/>	<input type="checkbox"/>	
Wide corridors and doors to move patients on trolleys			<input type="checkbox"/>	<input type="checkbox"/>	
<b>7b) Equipment for resuscitation areas</b>					
Equipment for endotracheal intubation, tracheostomy and ventilation support including suction, oxygen and anaesthetic agents			<input type="checkbox"/>	<input type="checkbox"/>	
Equipment for intravenous access including cut down and central venous cannulation and fluids including colloid plasma expanders and crystalloid solutions			<input type="checkbox"/>	<input type="checkbox"/>	
Intercostal drainage equipment			<input type="checkbox"/>	<input type="checkbox"/>	
Equipment for cardiac monitoring and resuscitation, including ECG monitoring, defibrillation and blood pressure measurement			<input type="checkbox"/>	<input type="checkbox"/>	
Equipment for immobilising the spine at all levels			<input type="checkbox"/>	<input type="checkbox"/>	
Equipment for the splinting of limb fractures			<input type="checkbox"/>	<input type="checkbox"/>	



**Discipline**

**IMN No.**

Drugs/ IV fluids including analgesia, sedating agents, anticonvulsants, paralyzing and anaesthetic agents, cardiac resuscitation drugs/ IV fluids  
Tetanus toxoid and broad spectrum antibiotics (recommended)  
Equipment for diagnostic ultrasound  
Digital X-Ray (compulsory for GP, Superbike and Endurance WC)  
recommended for all other events provided it is not prohibited by national legislation)

<input type="checkbox"/>	<input type="checkbox"/>

**7c) Equipment for minor injuries area**

The area must have beds, dressings, suture equipment and fluids to treat up to three riders with minor injuries simultaneously. Sufficient stocks to replenish the area during the event must be available and sufficient doctors, nurses and paramedics or equivalent experienced in treating trauma must be available

<input type="checkbox"/>	<input type="checkbox"/>
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**7d) Is there another facility for treatment of injured riders-**

Room, container or tent (please describe/specify) - only to be filled in if there is no Medical Centre

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

**7e) Personnel**

(please fill in the number)

Doctor
Nurses
Paramedic or equivalent
Other medical
Stretcher bearer
Driver
Other
Total

- 0 Thursday
- 1 Friday
- 2 Saturday
- 3 Sunday
- 4 Monday

day	0	1	2	3	4
number	<input type="text"/>				
	<input type="text"/>				
	<input type="text"/>				
	<input type="text"/>				
	<input type="text"/>				
	<input type="text"/>				
	<input type="text"/>				
	<input type="text"/>				

Specialists at medical centre (mentioning specialty)

	yes	no
1. Surgeon experienced in trauma	<input type="checkbox"/>	<input type="checkbox"/>
2. Trauma resuscitation specialist	<input type="checkbox"/>	<input type="checkbox"/>

Other Specialists

3. <input type="text"/>
4. <input type="text"/>

**7f) Doping facilities (refer to Art. 13.3.2.3 of FIM Standards for Circuits)**

<b>YES</b>	<b>NO</b>
<input type="checkbox"/>	<input type="checkbox"/>

**8) Vehicles for transport to hospital**

**Number**

**9) Helicopter**

Helicopter with medical equipment

**Number**



**Discipline**

**IMN No.**

Fluids and drugs  
Respirator  
Oxygen  
ECG/defibrillator

YES	NO
<input type="checkbox"/>	<input type="checkbox"/>

**Personnel (specify)**

Doctor
Nurse, Paramedic or equivalent
Pilot

0 Thursday  
1 Friday  
2 Saturday  
3 Sunday  
4 Monday

day	0	1	2	3	4
Number	<input type="text"/>				

**10) Clothing of medical personnel as per Medical Code**

Doctor  
Nurse, Paramedics or equivalent

YES	NO
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

**11) Closed Circuit TV**

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

**12) Radio Operator (Medical Service)**

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

**13) Hospitals**

Type of hospital	Name of Hospital
a) Local hospital	<input type="text"/>
b) General Surgery	<input type="text"/>
c) Orthopaedic/Trauma	<input type="text"/>
d) Neurosurgery	<input type="text"/>
e) Spinal Injuries	<input type="text"/>
f) Cardio/Thoracic Surgery	<input type="text"/>
g) Burns/Plastic Surgery	<input type="text"/>
h) Vascular Surgery	<input type="text"/>
i) Micro Surgery	<input type="text"/>

Time to Hospital		Distance
Road	Air	
min	min	km
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

**A route map to the hospitals is enclosed**

YES	NO
<input type="checkbox"/>	<input type="checkbox"/>



**Discipline**

**IMN No.**

**14) Trackside positions of Doctors**

Please enter for every doctor (CMO,2,3,...) where he/she will be stationed. Remember to enter only one x in each column (except where is an asterix (Type A1 and B1), please enter the post n°)

Doctor (number)		CMO	1	2	3	4	5	6	7	8	9	10
Race Control												
other place												
Type A1*												
Type B1*												
Medical GP 1												
Pit lane ground post												
Medical Centre/ Art. 7d)												
Doctor (number)		11	12	13	14	15	16	17	18	19	20	
Race Control												
other place												
Type A1*												
Type B1*												
Medical GP 1												
Pit lane ground post												
Medical Centre/ Art. 7d)												

The **CIRCUIT CMO QUESTIONNAIRE** has been completed by the CMO

**YES**

**NO**

**Remarks:**

**CMO signature:**

**Date of completion :**



**HIGHLY CONFIDENTIAL**  
**LIST OF MEDICALLY UNFIT RIDERS FOR DOCTORS ONLY**  
**To be completed by the Chief Medical Officer**  
**To: FIM WSBK Medical Director ONLY**

To the Chief Medical Officer at \_\_\_\_\_ Circuit  
 for event IMN N° \_\_\_\_\_ (the next event in the series)

The following riders were rendered medically **unfit** to ride at

Event IMN N°

Date of event:

NAME	RIDING N°	CLASS	DATE OF INJURY	NATURE OF INJURY / ILLNESS



**HIGHLY CONFIDENTIAL**  
**LIST OF MEDICALLY UNFIT RIDERS FOR DOCTORS ONLY**  
 To be completed by the Chief Medical Officer  
 To: FIM WSBK Medical Director ONLY

The following riders were included on a previous "List of Medically Unfit Riders" and have not yet been passed as "medically fit to ride".

NAME	RIDING N°	CLASS	DATE OF INJURY	NATURE OF INJURY / ILLNESS

Date \_\_\_\_\_ Signature of Chief Medical Officer \_\_\_\_\_

Any rider on these lists wishing to compete must have a Special Medical Examination to determine their medical fitness to ride in accordance the FIM Medical Code before they next compete at an event. The list must also include any rider who has been treated by a doctor other than the official doctors of the event. At the end of an event this form must be completed by the CMO to include any rider who has been injured. The form must then be given directly to the relevant FIM WSBK Medical Director as above, for delivery to the CMO of the next event in an envelope marked "Highly Confidential". The information contained in this form must be treated in the strictest confidence and is for the FIM Medical WSBK Director and CMO only.



**HIGHLY CONFIDENTIAL**  
**LIST OF MEDICALLY UNFIT RIDERS FOR DOCTORS ONLY**  
**To be completed by the Chief Medical Officer**  
**To: FIM WSBK Medical Director GP ONLY**

#### Data Privacy

The CMO and the FIM WSBK Medical Director shall not disclose this Rider's Personal Data or Sensitive Personal Data except where such disclosures are strictly necessary in order to fulfil their obligations under the FIM Medical Code. They shall ensure that this Personal Data and Sensitive Personal Data is only retained when it remains relevant to fulfilling their obligations under the FIM Medical Code. Once it no longer serves the above-mentioned purposes, it shall be deleted, destroyed or permanently anonymised. As a general rule, retaining Sensitive Personal Data requires stronger or more compelling reasons than for Personal Data.

Any rider going through Medical Examination and therefore submitting this information including Personal Data and Personal Sensitive Data to be able to compete, shall be deemed to have agreed pursuant to applicable data protection laws and otherwise that such information be collected, processed, disclosed and used for the purposes of the implementation of the FIM Medical Code by the CMO and the FIM WSBK Medical Director.

A rider or his authorised representative shall be entitled to request to erase, rectify or obtain any Personal Data or Sensitive Personal Data the FIM holds about him in accordance with the FIM Medical Code by sending a written request to [gdp-medical@fim.ch](mailto:gdp-medical@fim.ch).

**APPENDIX H1**

**CIRCUIT RACING GP, WSBK, ENDURANCE, MXGP, MXoN, SGP CIRCUITS**



**PROCEDURE FOR A MEDICAL ASSESSMENT AND HOMOLOGATION  
FOR CIRCUIT RACING GP, WSBK, ENDURANCE, MXGP, MXoN, SGP CIRCUITS**

Medical Assessment

A medical assessment is a visit by an FIM Medical Assessor (FIM Medical Officer/Director/Delegate/Representative) during an event following receipt of the CMO questionnaire of the relevant circuit in order to:

- establish the level of the medical facilities and the medical centre of the circuit in order to ensure the highest standard of services for the safety of the riders and to establish their conformity with the FIM Medical Code and make recommendations as necessary with a view to a medical homologation based on the CMO questionnaire previously received and reviewed by the FIM Medical Assessor.

and

- verify all medical facilities and the medical centre together with the services required to provide appropriate and necessary medical interventions.

and

- issue a medical assessment and homologation report for the circuit.

An initial medical assessment before the event (Medical Pre-assessment) may be compulsory:

- To determine the minimum medical requirements and facilities for any new circuit to be used for the first time. Such an assessment may be followed by a further medical pre-assessment if necessary but will be followed by a compulsory medical review during the event to confirm the provision and appropriateness of these medical services.



An intermediate medical assessment before the event may be required for:

- a) existing circuits that have already been used and received a grade A but have undergone significant changes in the layout of the circuit or the medical centre.
- b) existing circuits which have received a grade B or C in the previous assessment.

A medical assessment during the event is compulsory for:

- a) any new circuit to be used for the first time.
- b) existing circuits which have received a grade B or C in the previous assessment.
- c) existing circuits that have already been used and received a grade A but have undergone significant changes in the layout of the circuit or the medical centre.
- d) the circuits for which the previous medical homologation has expired.

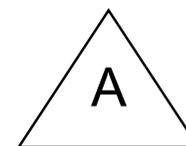
#### Assessment requests

- The FMN can request a medical assessment, but the FIM reserves the right to review a medical homologation and require a medical assessment at any time.
- In the event of inadequate medical facilities or work to be carried out to the medical centre, the medical assessor may decide to carry out one or more further intermediate medical reviews, if necessary.
- The medical homologation becomes effective only after a FINAL medical assessment resulting in a grade A or B as defined below.
- The CMI will appoint the FIM Medical Assessor.

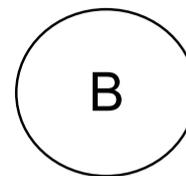
Documents to be submitted for a medical assessment to be returned to the FIM at least 2 months prior to the medical assessment.

- The FIM Circuit CMO Questionnaire to be completed by the Chief Medical Officer (CMO) (see Appendix F of the FIM Medical Code).
- Two (2) copies of a map of the circuit medical services, one in hard copy and the other in electronic format to a minimum scale of 1:2000 indicating the positions.

- vehicle type A in red with



- vehicle type B in blue with



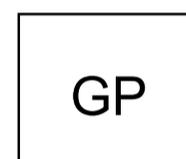
- vehicle type C in green with



- medical centre in green with



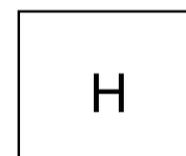
- ground post in yellow with



- pit lane ground post in yellow with



- helicopter landing area in orange with



and routes for urgent evacuation

- Plan of the circuit medical centre.



## Medical assessment procedure

At all medical assessments, it shall be the duty of the FIM Medical Assessor to examine all the medical facilities at the circuit and make recommendations when required to ensure that these conform to the FIM Medical Code.

During the medical assessment, the presence of the Chief Medical Officer (CMO), the Clerk of the Course and/or a responsible representative of the circuit is required.

## Grading of circuit medical assessment and homologations

The medical assessment and homologation will be graded as follows:

A: 1 year

A medical assessment and medical homologation report will be issued.

B: Further improvements to the medical service are required and a further medical assessment is compulsory the following year.

In the event of two successive assessments resulting in grade B, the circuit will automatically be downgraded to grade C as defined below.

C: The medical service provision does not comply with the requirements of the FIM Medical Code and a further detailed medical review is compulsory prior to any FIM event taking place.

Further medical assessment is required before any FIM event can take place until the circuit obtains at least a grade B.

## Expenses for medical assessment/homologations

The costs of transport and accommodation of the Medical Assessor for final medical assessment of track or circuits resulting in a grade A, are borne by the FIM.



When the medical assessment results in a grade B or C requiring further assessment and takes place before the date of the event, these costs are invoiced to the FMNR, by way of the quarterly invoice of amounts payable by the FMNR. Following a grade C, an intermediate assessment is compulsory before the next event takes place. In this case, the costs of such an assessment will be borne by the FMNR.

When a track or circuit is assessed without a race being included in the calendar of the current or the coming year, the costs are also later invoiced to the FMNR, even if the circuit obtains a grade A.

The costs pertaining to a medical assessment during the event obtaining grade A are included in the inscription fees. Nevertheless, the costs of assessments obtaining grade B or C must be borne by the FMNR concerned and are, thus, not included in these inscription fees.



**APPENDIX L  
WSBK**

**HIGHLY CONFIDENTIAL**

Fédération Internationale de Motocyclisme  
11, route Suisse - CH-1295 Mies (Suisse)

To return to: [cmi@fim.ch](mailto:cmi@fim.ch) only

**Confidentiality note:** The data and information contained in this questionnaire are strictly confidential  
This information is intended only for use of the FIM

**QUESTIONNAIRE FATAL ACCIDENT**

1) **FMNR**

2) **DISCIPLINE**

3) **EVENT**                      National       International       FIM

4) **CIRCUIT**       **VENUE**

**PRACTICE**       RACE       Lap N°

   Track       Paddock       Outside

   Ground post N°       Turn N°

5) **CMO**

6) **DIAGNOSES**

1

2

3

4



**HIGHLY CONFIDENTIAL**

Fédération Internationale de Motocyclisme  
11, route Suisse - CH-1295 Mies (Suisse)

To return to: [cmi@fim.ch](mailto:cmi@fim.ch) only

**Confidentiality note:** The data and information contained in this questionnaire are strictly confidential  
This information is intended only for use of the FIM

**QUESTIONNAIRE FATAL ACCIDENT**

7) **DATE of ACCIDENT**

8) **TIME of ACCIDENT**

9) **PROTECTIVE DEVICES WORN BY THE RIDER:**

**Neckbrace:** YES  NO

**Type:**

**Brand:**

**Other protective devices:  
(Please specify)**

10) **TIME of DEATH**

11) **DEATH** immediate  evacuation  hospital

12) **TIME of ARRIVAL of the FIRST AIDERS**

13) **TIME of START RESUSCITATION**

14) **THERAPY**



**HIGHLY CONFIDENTIAL**

Fédération Internationale de Motocyclisme  
 11, route Suisse - CH-1295 Mies (Suisse)

**To return to: cmi@fim.ch only**

**Confidentiality note:** The data and information contained in this questionnaire are strictly confidential  
 This information is intended only for use of the FIM

**QUESTIONNAIRE FATAL ACCIDENT**

15) **AUTOPSY** YES  NO

16) **RESULT of the AUTOPSY**

17) **REMARKS** oil  dry track  wet track

collision  fall

other

18) **DOCUMENTS** videos  pictures  magazines

other

19) **COMMENTS**



**HIGHLY CONFIDENTIAL**

Fédération Internationale de Motocyclisme  
 11, route Suisse - CH-1295 Mies (Suisse)

**To return to: cmi@fim.ch only**

**Confidentiality note:** The data and information contained in this questionnaire are strictly confidential  
 This information is intended only for use of the FIM

**QUESTIONNAIRE FATAL ACCIDENT**

**Data Privacy**

The CMO shall not disclose this Rider's Personal Data or Sensitive Personal Data except where such disclosures are strictly necessary in order to fulfil his obligations under the FIM Medical Code. He shall ensure that this Personal Data and Sensitive Personal Data is only retained when it remains relevant to fulfilling his obligations under the FIM Medical Code. Once it no longer serves the above-mentioned purposes, it shall be deleted, destroyed and permanently anonymised. As a general rule, retaining Sensitive Personal Data requires stronger or more compelling reasons than for Personal Data.

Any rider going through Medical Examination and therefore submitting this information including Personal Data and Personal Sensitive Data to be able to compete, shall be deemed to have agreed pursuant to applicable data protection laws and otherwise that such information be collected, processed, disclosed and used for the purposes of the implementation of the FIM Medical Code by the CMO.

A rider or his authorised representative shall be entitled to request to erase, rectify or obtain any Personal Data or Sensitive Personal Data the FIM holds about him in accordance with the FIM Medical Code by sending a written request to [gopr-medical@fim.ch](mailto:gopr-medical@fim.ch).

20) **SIGNATURE of CMO  
of the EVENT:**

**NAME of the CMO:**

**DATE:**

# SCAT5<sup>©</sup>

## SPORT CONCUSSION ASSESSMENT TOOL – 5TH EDITION

DEVELOPED BY THE CONCUSSION IN SPORT GROUP  
FOR USE BY MEDICAL PROFESSIONALS ONLY

supported by



FIFA<sup>®</sup>



FEI

### Patient details

Name: \_\_\_\_\_

DOB: \_\_\_\_\_

Address: \_\_\_\_\_

ID number: \_\_\_\_\_

Examiner: \_\_\_\_\_

Date of Injury: \_\_\_\_\_ Time: \_\_\_\_\_

## WHAT IS THE SCAT5?

**The SCAT5 is a standardized tool for evaluating concussions designed for use by physicians and licensed healthcare professionals<sup>1</sup>. The SCAT5 cannot be performed correctly in less than 10 minutes.**

If you are not a physician or licensed healthcare professional, please use the Concussion Recognition Tool 5 (CRT5). The SCAT5 is to be used for evaluating athletes aged 13 years and older. For children aged 12 years or younger, please use the Child SCAT5.

Preseason SCAT5 baseline testing can be useful for interpreting post-injury test scores, but is not required for that purpose. Detailed instructions for use of the SCAT5 are provided on page 7. Please read through these instructions carefully before testing the athlete. Brief verbal instructions for each test are given in italics. The only equipment required for the tester is a watch or timer.

**This tool may be freely copied in its current form for distribution to individuals, teams, groups and organizations. It should not be altered in any way, re-branded or sold for commercial gain. Any revision, translation or reproduction in a digital form requires specific approval by the Concussion in Sport Group.**

## Recognise and Remove

A head impact by either a direct blow or indirect transmission of force can be associated with a serious and potentially fatal brain injury. If there are significant concerns, including any of the red flags listed in Box 1, then activation of emergency procedures and urgent transport to the nearest hospital should be arranged.

### Key points

- Any athlete with suspected concussion should be **REMOVED FROM PLAY**, medically assessed and monitored for deterioration. No athlete diagnosed with concussion should be returned to play on the day of injury.
- If an athlete is suspected of having a concussion and medical personnel are not immediately available, the athlete should be referred to a medical facility for urgent assessment.
- Athletes with suspected concussion should not drink alcohol, use recreational drugs and should not drive a motor vehicle until cleared to do so by a medical professional.
- Concussion signs and symptoms evolve over time and it is important to consider repeat evaluation in the assessment of concussion.
- The diagnosis of a concussion is a clinical judgment, made by a medical professional. The SCAT5 should **NOT** be used by itself to make, or exclude, the diagnosis of concussion. An athlete may have a concussion even if their SCAT5 is “normal”.

### Remember:

- The basic principles of first aid (danger, response, airway, breathing, circulation) should be followed.
- Do not attempt to move the athlete (other than that required for airway management) unless trained to do so.
- Assessment for a spinal cord injury is a critical part of the initial on-field assessment.
- Do not remove a helmet or any other equipment unless trained to do so safely.

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Davis GA, et al. *Br J Sports Med* 2017;0:1–8. doi:10.1136/bjsports-2017-097506SCAT5

1

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1

### IMMEDIATE OR ON-FIELD ASSESSMENT

The following elements should be assessed for all athletes who are suspected of having a concussion prior to proceeding to the neurocognitive assessment and ideally should be done on-field after the first first aid / emergency care priorities are completed.

If any of the “Red Flags” or observable signs are noted after a direct or indirect blow to the head, the athlete should be immediately and safely removed from participation and evaluated by a physician or licensed healthcare professional.

Consideration of transportation to a medical facility should be at the discretion of the physician or licensed healthcare professional.

The GCS is important as a standard measure for all patients and can be done serially if necessary in the event of deterioration in conscious state. The Maddocks questions and cervical spine exam are critical steps of the immediate assessment; however, these do not need to be done serially.

### STEP 1: RED FLAGS

#### RED FLAGS:

- Neck pain or tenderness
- Double vision
- Weakness or tingling/ burning in arms or legs
- Severe or increasing headache
- Seizure or convulsion
- Loss of consciousness
- Deteriorating conscious state
- Vomiting
- Increasingly restless, agitated or combative

### STEP 2: OBSERVABLE SIGNS

Witnessed  Observed on Video

Lying motionless on the playing surface	Y	N
Balance / gait difficulties / motor incoordination: stumbling, slow / laboured movements	Y	N
Disorientation or confusion, or an inability to respond appropriately to questions	Y	N
Blank or vacant look	Y	N
Facial injury after head trauma	Y	N

### STEP 3: MEMORY ASSESSMENT MADDOCKS QUESTIONS<sup>2</sup>

*“I am going to ask you a few questions, please listen carefully and give your best effort. First, tell me what happened?”*

\_\_\_\_\_

\_\_\_\_\_

Mark Y for correct answer / N for incorrect

What venue are we at today?	Y	N
Which half is it now?	Y	N
Who scored last in this match?	Y	N
What team did you play last week / game?	Y	N
Did your team win the last game?	Y	N

Note: Appropriate sport-specific questions may be substituted.

Name: \_\_\_\_\_

DOB: \_\_\_\_\_

Address: \_\_\_\_\_

ID number: \_\_\_\_\_

Examiner: \_\_\_\_\_

Date: \_\_\_\_\_

### STEP 4: EXAMINATION GLASGOW COMA SCALE (GCS)<sup>3</sup>

Time of assessment			
Date of assessment			

#### Best eye response (E)

No eye opening	1	1	1
Eye opening in response to pain	2	2	2
Eye opening to speech	3	3	3
Eyes opening spontaneously	4	4	4

#### Best verbal response (V)

No verbal response	1	1	1
Incomprehensible sounds	2	2	2
Inappropriate words	3	3	3
Confused	4	4	4
Oriented	5	5	5

#### Best motor response (M)

No motor response	1	1	1
Extension to pain	2	2	2
Abnormal flexion to pain	3	3	3
Flexion / Withdrawal to pain	4	4	4
Localizes to pain	5	5	5
Obeys commands	6	6	6
<b>Glasgow Coma score (E + V + M)</b>			

### CERVICAL SPINE ASSESSMENT

Does the athlete report that their neck is pain free at rest?	Y	N
If there is <b>NO neck pain at rest</b> , does the athlete have a full range of ACTIVE pain free movement?	Y	N
Is the limb strength and sensation normal?	Y	N

**In a patient who is not lucid or fully conscious, a cervical spine injury should be assumed until proven otherwise.**



### OFFICE OR OFF-FIELD ASSESSMENT

Please note that the neurocognitive assessment should be done in a distraction-free environment with the athlete in a resting state.

### STEP 1: ATHLETE BACKGROUND

Sport / team / school: \_\_\_\_\_

Date / time of injury: \_\_\_\_\_

Years of education completed: \_\_\_\_\_

Age: \_\_\_\_\_

Gender: M / F / Other

Dominant hand: left / neither / right

How many diagnosed concussions has the athlete had in the past?: \_\_\_\_\_

When was the most recent concussion?: \_\_\_\_\_

How long was the recovery (time to being cleared to play) from the most recent concussion?: \_\_\_\_\_ (days)

#### Has the athlete ever been:

	Yes	No
Hospitalized for a head injury?		
Diagnosed / treated for headache disorder or migraines?		
Diagnosed with a learning disability / dyslexia?		
Diagnosed with ADD / ADHD?		
Diagnosed with depression, anxiety or other psychiatric disorder?		

Current medications? If yes, please list:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Name: \_\_\_\_\_

DOB: \_\_\_\_\_

Address: \_\_\_\_\_

ID number: \_\_\_\_\_

Examiner: \_\_\_\_\_

Date: \_\_\_\_\_

2

### STEP 2: SYMPTOM EVALUATION

The athlete should be given the symptom form and asked to read this instruction paragraph out loud then complete the symptom scale. For the baseline assessment, the athlete should rate his/her symptoms based on how he/she typically feels and for the post injury assessment the athlete should rate their symptoms at this point in time.

Please Check:  Baseline  Post-Injury

Please hand the form to the athlete

	none	mild	moderate	severe			
Headache	0	1	2	3	4	5	6
"Pressure in head"	0	1	2	3	4	5	6
Neck Pain	0	1	2	3	4	5	6
Nausea or vomiting	0	1	2	3	4	5	6
Dizziness	0	1	2	3	4	5	6
Blurred vision	0	1	2	3	4	5	6
Balance problems	0	1	2	3	4	5	6
Sensitivity to light	0	1	2	3	4	5	6
Sensitivity to noise	0	1	2	3	4	5	6
Feeling slowed down	0	1	2	3	4	5	6
Feeling like "in a fog"	0	1	2	3	4	5	6
"Don't feel right"	0	1	2	3	4	5	6
Difficulty concentrating	0	1	2	3	4	5	6
Difficulty remembering	0	1	2	3	4	5	6
Fatigue or low energy	0	1	2	3	4	5	6
Confusion	0	1	2	3	4	5	6
Drowsiness	0	1	2	3	4	5	6
More emotional	0	1	2	3	4	5	6
Irritability	0	1	2	3	4	5	6
Sadness	0	1	2	3	4	5	6
Nervous or Anxious	0	1	2	3	4	5	6
Trouble falling asleep (if applicable)	0	1	2	3	4	5	6

Total number of symptoms: \_\_\_\_\_ of 22

Symptom severity score: \_\_\_\_\_ of 132

Do your symptoms get worse with physical activity? Y N

Do your symptoms get worse with mental activity? Y N

If 100% is feeling perfectly normal, what percent of normal do you feel?

If not 100%, why?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Please hand form back to examiner



3

### STEP 3: COGNITIVE SCREENING

Standardised Assessment of Concussion (SAC)<sup>4</sup>

#### ORIENTATION

What month is it?	0	1
What is the date today?	0	1
What is the day of the week?	0	1
What year is it?	0	1
What time is it right now? (within 1 hour)	0	1
<b>Orientation score</b>	<b>of 5</b>	

#### IMMEDIATE MEMORY

The Immediate Memory component can be completed using the traditional 5-word per trial list or optionally using 10-words per trial to minimise any ceiling effect. All 3 trials must be administered irrespective of the number correct on the first trial. Administer at the rate of one word per second.

Please choose EITHER the 5 or 10 word list groups and circle the specific word list chosen for this test.

I am going to test your memory. I will read you a list of words and when I am done, repeat back as many words as you can remember, in any order. For Trials 2 & 3: I am going to repeat the same list again. Repeat back as many words as you can remember in any order, even if you said the word before.

List	Alternate 5 word lists					Score (of 5)		
						Trial 1	Trial 2	Trial 3
A	Finger	Penny	Blanket	Lemon	Insect			
B	Candle	Paper	Sugar	Sandwich	Wagon			
C	Baby	Monkey	Perfume	Sunset	Iron			
D	Elbow	Apple	Carpet	Saddle	Bubble			
E	Jacket	Arrow	Pepper	Cotton	Movie			
F	Dollar	Honey	Mirror	Saddle	Anchor			
<b>Immediate Memory Score</b>						<b>of 15</b>		
<b>Time that last trial was completed</b>								

List	Alternate 10 word lists					Score (of 10)		
						Trial 1	Trial 2	Trial 3
G	Finger	Penny	Blanket	Lemon	Insect			
	Candle	Paper	Sugar	Sandwich	Wagon			
H	Baby	Monkey	Perfume	Sunset	Iron			
	Elbow	Apple	Carpet	Saddle	Bubble			
I	Jacket	Arrow	Pepper	Cotton	Movie			
	Dollar	Honey	Mirror	Saddle	Anchor			
<b>Immediate Memory Score</b>						<b>of 30</b>		
<b>Time that last trial was completed</b>								

Name: \_\_\_\_\_  
 DOB: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 ID number: \_\_\_\_\_  
 Examiner: \_\_\_\_\_  
 Date: \_\_\_\_\_

#### CONCENTRATION

##### DIGITS BACKWARDS

Please circle the Digit list chosen (A, B, C, D, E, F). Administer at the rate of one digit per second reading DOWN the selected column.

I am going to read a string of numbers and when I am done, you repeat them back to me in reverse order of how I read them to you. For example, if I say 7-1-9, you would say 9-1-7.

Concentration Number Lists (circle one)					
List A	List B	List C			
4-9-3	5-2-6	1-4-2	Y	N	0
6-2-9	4-1-5	6-5-8	Y	N	1
3-8-1-4	1-7-9-5	6-8-3-1	Y	N	0
3-2-7-9	4-9-6-8	3-4-8-1	Y	N	1
6-2-9-7-1	4-8-5-2-7	4-9-1-5-3	Y	N	0
1-5-2-8-6	6-1-8-4-3	6-8-2-5-1	Y	N	1
7-1-8-4-6-2	8-3-1-9-6-4	3-7-6-5-1-9	Y	N	0
5-3-9-1-4-8	7-2-4-8-5-6	9-2-6-5-1-4	Y	N	1
List D	List E	List F			
7-8-2	3-8-2	2-7-1	Y	N	0
9-2-6	5-1-8	4-7-9	Y	N	1
4-1-8-3	2-7-9-3	1-6-8-3	Y	N	0
9-7-2-3	2-1-6-9	3-9-2-4	Y	N	1
1-7-9-2-6	4-1-8-6-9	2-4-7-5-8	Y	N	0
4-1-7-5-2	9-4-1-7-5	8-3-9-6-4	Y	N	1
2-6-4-8-1-7	6-9-7-3-8-2	5-8-6-2-4-9	Y	N	0
8-4-1-9-3-5	4-2-7-9-3-8	3-1-7-8-2-6	Y	N	1
<b>Digits Score:</b> of 4					

##### MONTHS IN REVERSE ORDER

Now tell me the months of the year in reverse order. Start with the last month and go backward. So you'll say December, November. Go ahead.

Dec - Nov - Oct - Sept - Aug - Jul - Jun - May - Apr - Mar - Feb - Jan	0	1
<b>Months Score</b>	<b>of 1</b>	
<b>Concentration Total Score (Digits + Months)</b>	<b>of 5</b>	



4

### STEP 4: NEUROLOGICAL SCREEN

See the instruction sheet (page 7) for details of test administration and scoring of the tests.

Can the patient read aloud (e.g. symptom checklist) and follow instructions without difficulty?	Y	N
Does the patient have a full range of pain-free PASSIVE cervical spine movement?	Y	N
Without moving their head or neck, can the patient look side-to-side and up-and-down without double vision?	Y	N
Can the patient perform the finger nose coordination test normally?	Y	N
Can the patient perform tandem gait normally?	Y	N

### BALANCE EXAMINATION

#### Modified Balance Error Scoring System (mBESS) testing<sup>5</sup>

Which foot was tested (i.e. which is the non-dominant foot)  Left  Right

Testing surface (hard floor, field, etc.) \_\_\_\_\_

Footwear (shoes, barefoot, braces, tape, etc.) \_\_\_\_\_

Condition	Errors
<b>Double leg stance</b>	of 10
<b>Single leg stance (non-dominant foot)</b>	of 10
<b>Tandem stance (non-dominant foot at the back)</b>	of 10
<b>Total Errors</b>	of 30

Name: \_\_\_\_\_  
 DOB: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 ID number: \_\_\_\_\_  
 Examiner: \_\_\_\_\_  
 Date: \_\_\_\_\_

5

### STEP 5: DELAYED RECALL:

The delayed recall should be performed after 5 minutes have elapsed since the end of the Immediate Recall section. Score 1 pt. for each correct response.

*Do you remember that list of words I read a few times earlier? Tell me as many words from the list as you can remember in any order.*

Time Started

Please record each word correctly recalled. Total score equals number of words recalled.

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Total number of words recalled accurately:  of 5 or  of 10

6

### STEP 6: DECISION

Domain	Date & time of assessment:		
Symptom number (of 22)			
Symptom severity score (of 132)			
Orientation (of 5)			
Immediate memory	of 15 of 30	of 15 of 30	of 15 of 30
Concentration (of 5)			
Neuro exam	Normal Abnormal	Normal Abnormal	Normal Abnormal
Balance errors (of 30)			
Delayed Recall	of 5 of 10	of 5 of 10	of 5 of 10

Date and time of injury: \_\_\_\_\_

If the athlete is known to you prior to their injury, are they different from their usual self?  
 Yes  No  Unsure  Not Applicable  
 (If different, describe why in the clinical notes section)

Concussion Diagnosed?  
 Yes  No  Unsure  Not Applicable

If re-testing, has the athlete improved?  
 Yes  No  Unsure  Not Applicable

**I am a physician or licensed healthcare professional and I have personally administered or supervised the administration of this SCAT5.**

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Registration number (if applicable): \_\_\_\_\_

Date: \_\_\_\_\_

**SCORING ON THE SCAT5 SHOULD NOT BE USED AS A STAND-ALONE METHOD TO DIAGNOSE CONCUSSION, MEASURE RECOVERY OR MAKE DECISIONS ABOUT AN ATHLETE'S READINESS TO RETURN TO COMPETITION AFTER CONCUSSION.**



**CLINICAL NOTES:**

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Name: \_\_\_\_\_  
 DOB: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 ID number: \_\_\_\_\_  
 Examiner: \_\_\_\_\_  
 Date: \_\_\_\_\_



**CONCUSSION INJURY ADVICE**

**(To be given to the person monitoring the concussed athlete)**

This patient has received an injury to the head. A careful medical examination has been carried out and no sign of any serious complications has been found. Recovery time is variable across individuals and the patient will need monitoring for a further period by a responsible adult. Your treating physician will provide guidance as to this timeframe.

**If you notice any change in behaviour, vomiting, worsening headache, double vision or excessive drowsiness, please telephone your doctor or the nearest hospital emergency department immediately.**

Other important points:

**Initial rest: Limit physical activity to routine daily activities (avoid exercise, training, sports) and limit activities such as school, work, and screen time to a level that does not worsen symptoms.**

- 1) Avoid alcohol
- 2) Avoid prescription or non-prescription drugs without medical supervision. Specifically:
  - a) Avoid sleeping tablets
  - b) Do not use aspirin, anti-inflammatory medication or stronger pain medications such as narcotics
- 3) Do not drive until cleared by a healthcare professional.
- 4) Return to play/sport requires clearance by a healthcare professional.

**Clinic phone number:** \_\_\_\_\_  
 Patient's name: \_\_\_\_\_  
 Date / time of injury: \_\_\_\_\_  
 Date / time of medical review: \_\_\_\_\_  
 Healthcare Provider: \_\_\_\_\_

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**Contact details or stamp**

## INSTRUCTIONS

Words in *Italics* throughout the SCAT5 are the instructions given to the athlete by the clinician

### Symptom Scale

The time frame for symptoms should be based on the type of test being administered. At baseline it is advantageous to assess how an athlete "typically" feels whereas during the acute/post-acute stage it is best to ask how the athlete feels at the time of testing.

The symptom scale should be completed by the athlete, not by the examiner. In situations where the symptom scale is being completed after exercise, it should be done in a resting state, generally by approximating his/her resting heart rate.

For total number of symptoms, maximum possible is 22 except immediately post injury, if sleep item is omitted, which then creates a maximum of 21.

For Symptom severity score, add all scores in table, maximum possible is  $22 \times 6 = 132$ , except immediately post injury if sleep item is omitted, which then creates a maximum of  $21 \times 6 = 126$ .

### Immediate Memory

The Immediate Memory component can be completed using the traditional 5-word per trial list or, optionally, using 10-words per trial. The literature suggests that the Immediate Memory has a notable ceiling effect when a 5-word list is used. In settings where this ceiling is prominent, the examiner may wish to make the task more difficult by incorporating two 5-word groups for a total of 10 words per trial. In this case, the maximum score per trial is 10 with a total trial maximum of 30.

Choose one of the word lists (either 5 or 10). Then perform 3 trials of immediate memory using this list.

Complete all 3 trials regardless of score on previous trials.

*"I am going to test your memory. I will read you a list of words and when I am done, repeat back as many words as you can remember, in any order."* The words must be read at a rate of one word per second.

Trials 2 & 3 MUST be completed regardless of score on trial 1 & 2.

Trials 2 & 3:

*"I am going to repeat the same list again. Repeat back as many words as you can remember in any order, even if you said the word before."*

Score 1 pt. for each correct response. Total score equals sum across all 3 trials. Do NOT inform the athlete that delayed recall will be tested.

### Concentration

#### Digits backward

Choose one column of digits from lists A, B, C, D, E or F and administer those digits as follows:

Say: *"I am going to read a string of numbers and when I am done, you repeat them back to me in reverse order of how I read them to you. For example, if I say 7-1-9, you would say 9-1-7."*

Begin with first 3 digit string.

If correct, circle "Y" for correct and go to next string length. If incorrect, circle "N" for the first string length and read trial 2 in the same string length. One point possible for each string length. Stop after incorrect on both trials (2 N's) in a string length. The digits should be read at the rate of one per second.

#### Months in reverse order

*"Now tell me the months of the year in reverse order. Start with the last month and go backward. So you'll say December, November ... Go ahead"*

1 pt. for entire sequence correct

#### Delayed Recall

The delayed recall should be performed after 5 minutes have elapsed since the end of the Immediate Recall section.

*"Do you remember that list of words I read a few times earlier? Tell me as many words from the list as you can remember in any order."*

Score 1 pt. for each correct response

#### Modified Balance Error Scoring System (mBESS)<sup>5</sup> testing

This balance testing is based on a modified version of the Balance Error Scoring System (BESS)<sup>5</sup>. A timing device is required for this testing.

Each of 20-second trial/stance is scored by counting the number of errors. The examiner will begin counting errors only after the athlete has assumed the proper start position. The modified BESS is calculated by adding one error point for each error during the three 20-second tests. The maximum number of errors for any single condition is 10. If the athlete commits multiple errors simultaneously, only

one error is recorded but the athlete should quickly return to the testing position, and counting should resume once the athlete is set. Athletes that are unable to maintain the testing procedure for a minimum of five seconds at the start are assigned the highest possible score, ten, for that testing condition.

OPTION: For further assessment, the same 3 stances can be performed on a surface of medium density foam (e.g., approximately 50cm x 40cm x 6cm).

#### Balance testing – types of errors

- |                                 |   |   |
|---------------------------------|---|---|
| 1. Hands lifted off iliac crest | 3. Step, stumble, or fall                 | 5. Lifting forefoot or heel               |
| 2. Opening eyes                 | 4. Moving hip into > 30 degrees abduction | 6. Remaining out of test position > 5 sec |

*"I am now going to test your balance. Please take your shoes off (if applicable), roll up your pant legs above ankle (if applicable), and remove any ankle taping (if applicable). This test will consist of three twenty second tests with different stances."*

(a) Double leg stance:

*"The first stance is standing with your feet together with your hands on your hips and with your eyes closed. You should try to maintain stability in that position for 20 seconds. I will be counting the number of times you move out of this position. I will start timing when you are set and have closed your eyes."*

(b) Single leg stance:

*"If you were to kick a ball, which foot would you use? [This will be the dominant foot] Now stand on your non-dominant foot. The dominant leg should be held in approximately 30 degrees of hip flexion and 45 degrees of knee flexion. Again, you should try to maintain stability for 20 seconds with your hands on your hips and your eyes closed. I will be counting the number of times you move out of this position. If you stumble out of this position, open your eyes and return to the start position and continue balancing. I will start timing when you are set and have closed your eyes."*

(c) Tandem stance:

*"Now stand heel-to-toe with your non-dominant foot in back. Your weight should be evenly distributed across both feet. Again, you should try to maintain stability for 20 seconds with your hands on your hips and your eyes closed. I will be counting the number of times you move out of this position. If you stumble out of this position, open your eyes and return to the start position and continue balancing. I will start timing when you are set and have closed your eyes."*

#### Tandem Gait

Participants are instructed to stand with their feet together behind a starting line (the test is best done with footwear removed). Then, they walk in a forward direction as quickly and as accurately as possible along a 38mm wide (sports tape), 3 metre line with an alternate foot heel-to-toe gait ensuring that they approximate their heel and toe on each step. Once they cross the end of the 3m line, they turn 180 degrees and return to the starting point using the same gait. Athletes fail the test if they step off the line, have a separation between their heel and toe, or if they touch or grab the examiner or an object.

#### Finger to Nose

*"I am going to test your coordination now. Please sit comfortably on the chair with your eyes open and your arm (either right or left) outstretched (shoulder flexed to 90 degrees and elbow and fingers extended), pointing in front of you. When I give a start signal, I would like you to perform five successive finger to nose repetitions using your index finger to touch the tip of the nose, and then return to the starting position, as quickly and as accurately as possible."*

#### References

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3. Jennett, B., Bond, M. Assessment of outcome after severe brain damage: a practical scale. Lancet 1975; i: 480-484
4. McCrea M. Standardized mental status testing of acute concussion. Clinical Journal of Sport Medicine. 2001; 11: 176-181
5. Guskiewicz KM. Assessment of postural stability following sport-related concussion. Current Sports Medicine Reports. 2003; 2: 24-30



## CONCUSSION INFORMATION

**Any athlete suspected of having a concussion should be removed from play and seek medical evaluation.**

### Signs to watch for

Problems could arise over the first 24-48 hours. The athlete should not be left alone and must go to a hospital at once if they experience:

- Worsening headache
- Drowsiness or inability to be awakened
- Inability to recognize people or places
- Repeated vomiting
- Unusual behaviour or confusion or irritable
- Seizures (arms and legs jerk uncontrollably)
- Weakness or numbness in arms or legs
- Unsteadiness on their feet.
- Slurred speech

**Consult your physician or licensed healthcare professional after a suspected concussion. Remember, it is better to be safe.**

### Rest & Rehabilitation

After a concussion, the athlete should have physical rest and relative cognitive rest for a few days to allow their symptoms to improve. In most cases, after no more than a few days of rest, the athlete should gradually increase their daily activity level as long as their symptoms do not worsen. Once the athlete is able to complete their usual daily activities without concussion-related symptoms, the second step of the return to play/sport progression can be started. The athlete should not return to play/sport until their concussion-related symptoms have resolved and the athlete has successfully returned to full school/learning activities.

When returning to play/sport, the athlete should follow a stepwise, **medically managed exercise progression, with increasing amounts of exercise.** For example:

### Graduated Return to Sport Strategy

Exercise step	Functional exercise at each step	Goal of each step
1. Symptom-limited activity	Daily activities that do not provoke symptoms.	Gradual reintroduction of work/school activities.
2. Light aerobic exercise	Walking or stationary cycling at slow to medium pace. No resistance training.	Increase heart rate.
3. Sport-specific exercise	Running or skating drills. No head impact activities.	Add movement.
4. Non-contact training drills	Harder training drills, e.g., passing drills. May start progressive resistance training.	Exercise, coordination, and increased thinking.
5. Full contact practice	Following medical clearance, participate in normal training activities.	Restore confidence and assess functional skills by coaching staff.
6. Return to play/sport	Normal game play.	

In this example, it would be typical to have 24 hours (or longer) for each step of the progression. If any symptoms worsen while exercising, the athlete should go back to the previous step. Resistance training should be added only in the later stages (Stage 3 or 4 at the earliest).

**Written clearance should be provided by a healthcare professional before return to play/sport as directed by local laws and regulations.**

### Graduated Return to School Strategy

Concussion may affect the ability to learn at school. The athlete may need to miss a few days of school after a concussion. When going back to school, some athletes may need to go back gradually and may need to have some changes made to their schedule so that concussion symptoms do not get worse. If a particular activity makes symptoms worse, then the athlete should stop that activity and rest until symptoms get better. To make sure that the athlete can get back to school without problems, it is important that the healthcare provider, parents, caregivers and teachers talk to each other so that everyone knows what the plan is for the athlete to go back to school.

**Note: If mental activity does not cause any symptoms, the athlete may be able to skip step 2 and return to school part-time before doing school activities at home first.**

Mental Activity	Activity at each step	Goal of each step
1. Daily activities that do not give the athlete symptoms	Typical activities that the athlete does during the day as long as they do not increase symptoms (e.g. reading, texting, screen time). Start with 5-15 minutes at a time and gradually build up.	Gradual return to typical activities.
2. School activities	Homework, reading or other cognitive activities outside of the classroom.	Increase tolerance to cognitive work.
3. Return to school part-time	Gradual introduction of school-work. May need to start with a partial school day or with increased breaks during the day.	Increase academic activities.
4. Return to school full-time	Gradually progress school activities until a full day can be tolerated.	Return to full academic activities and catch up on missed work.

If the athlete continues to have symptoms with mental activity, some other accommodations that can help with return to school may include:

- Starting school later, only going for half days, or going only to certain classes
- More time to finish assignments/tests
- Quiet room to finish assignments/tests
- Not going to noisy areas like the cafeteria, assembly halls, sporting events, music class, shop class, etc.
- Taking lots of breaks during class, homework, tests
- No more than one exam/day
- Shorter assignments
- Repetition/memory cues
- Use of a student helper/tutor
- Reassurance from teachers that the child will be supported while getting better

**The athlete should not go back to sports until they are back to school/learning, without symptoms getting significantly worse and no longer needing any changes to their schedule.**



## Sport concussion assessment tool - 5th edition

*Br J Sports Med* published online April 26, 2017

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**APPENDIX N****APPENDIX N****FIM Alcohol Testing Procedure**

Riders participating in any FIM WorldSBK Championship round will be subject to alcohol breath and/or blood testing in-competition\* in accordance with the following procedure:

\*In-Competition = for the purpose of the alcohol testing procedure, the in-competition period is defined as the period commencing 12 hours before the rider rides his bike for the first time during the event\*\*, ending thirty (30) minutes after the end of the last race\*\*\* in his class and category. This is the minimum period of time that riders should abstain from alcohol prior to competition for safety reasons. For the avoidance of doubt, the possession, use and consumption of alcohol during the podium ceremony is not considered a violation under the FIM Medical Code providing that the podium takes place at the end of the event.

\*\*Event: an event is defined as a single sporting event (composed, depending on the discipline, of practice sessions, qualifying practice sessions and race.

1. Such testing will be undertaken by an FIM official at the event using an FIM approved testing device.
2. Testing will be undertaken at the event by an FIM official who is trained in the use of the alcohol testing device.
3. Testing will be performed with no prior notice.
4. Riders will be selected randomly by ballot or at the discretion of FIM officials.
5. At least three riders will be tested at each event.
6. In-competition\* alcohol testing may be included as part of a special medical examination conducted at the request of the CMO, Race Director, Clerk of the Course, Medical Director, any member of the Race Direction or the FIM Medical Representative in accordance with the FIM Medical Code.
7. Following notification of selection for alcohol testing, the rider must immediately attend the designated location for testing.
8. A refusal to undergo alcohol testing will be regarded for the purpose of the application of sanctions as identical to a test reading above the permitted threshold.
9. Any rider who refuses to submit himself to alcohol testing will be automatically and immediately excluded from further participation in, and disqualified from the event by the Race Direction.

Such decision is final and may not be appealed against. Such automatic and immediate decision may not under any circumstances give rise to any claim from the rider or any other affected party. The details of the case will be notified immediately to the FIM Legal Department (legal@fim.ch) by the Race Direction.



10. Alcohol testing will normally take place in a location that maintains rider confidentiality, is secure with restricted access, and is in a suitable location with adequate facilities such as light and ventilation.
11. Each rider will be tested individually and in private.
12. The alcohol testing device will be determined and provided by the FIM.
13. The device will be calibrated in accordance with the manufacturer's instructions.
14. The alcohol test procedure will take place where possible in the presence of a witness.
15. The testing procedure and use of the device will be explained to the rider.
16. The rider will be allowed to select an individual mouthpiece from a selection of individually sealed mouthpieces for their individual use and attach it to the device.
17. The rider will blow steadily into the mouthpiece until the device indicates that an adequate sample of breath has been obtained.
18. The test result displayed on the device will be shown to the rider and recorded on the test record documentation.
19. The time of each test will also be recorded on the documentation.
20. The documentation will then be signed by the rider and officials present at the test. Any refusal by a rider to sign the documentation will be duly noted and recorded on the documentation but will not invalidate the result of the test.
21. The results and associated documentation will be forwarded to the FIM Administration.
22. If the test reading is greater than the permitted threshold of 0.10g/L, a confirmatory test will be performed following a waiting period of at least fifteen minutes starting after the first result of the first test has been recorded. If the first test reading is below or equal to 0.00g/L, no further test will be conducted.
23. As part of this confirmatory test the rider will again be asked to select a further mouthpiece from a selection of sealed mouthpieces. (The purpose of conducting a confirmatory test after a period of fifteen minutes in the event of a positive test is to ensure that any residual alcohol in the rider's mouth from food, mouth wash etc. is no longer present in order to limit false positive results).
24. If the result of the confirmatory test is above the permitted threshold the rider will be automatically and immediately excluded from further participation in, and disqualified from the event by the Race Direction.  
Such decision is final and may not be appealed against. Such automatic and immediate decision may not under any circumstances give rise to any claim from the rider or any other affected party.  
The details of the case will be notified immediately by the Race Direction to the FIM Legal Department ([legal@fim.ch](mailto:legal@fim.ch)).
25. Following the automatic and immediate disqualification at the event, the Race Direction may further give additional sanctions which can reach to a suspension of up to a maximum of 18 (eighteen) months. The length of the suspension shall be decided on the riders' degree of fault and on any aggravating (e.g. recidivism) and/or mitigating factors. Riders and other persons shall receive credit for a Provisional Suspension against any period of Ineligibility which is ultimately imposed. If the rider establishes that he bears no fault (i.e. no negligent or intentional failure; e.g. no negligence), no suspension or other sanctions may be imposed on him.



26. If the result of the confirmatory test is below the permitted threshold no further action will be taken.
27. Any sanction following the immediate disqualification of the event (suspension for further events) that may be imposed to the rider may be petitioned to the FIM Stewards Panel in writing and with reasons.



**APPENDIX N  
HIGHLY CONFIDENTIAL  
BREATH ALCOHOL TEST**

Rider's name, first name: \_\_\_\_\_ Riding Number: \_\_\_\_\_

Title of the event: FIM \_\_\_\_\_

Venue: \_\_\_\_\_ Country: \_\_\_\_\_ Date: \_\_\_\_\_

FMNR: \_\_\_\_\_ IMN N°: \_\_\_\_\_

FIM Jury Pres. or Race Direction member or FIM Official: \_\_\_\_\_  
\_\_\_\_\_

Witness 1: (if any) \_\_\_\_\_ Position: \_\_\_\_\_

Witness 2: (if any) \_\_\_\_\_ Position: \_\_\_\_\_

Other (if present): \_\_\_\_\_ Position: \_\_\_\_\_

Other (if present): \_\_\_\_\_ Position: \_\_\_\_\_

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In accordance with the FIM Medical Code, the following rider must take part of the control (Breath Alcohol Test). The Alcohol control can take place anytime during the event.

The undersigned certifies to have tested the above-mentioned rider with the following results (N.B Positive Test means >0.10g/L):

Test 1: Positive  Negative  Result: \_\_\_\_\_ .g/L Time: \_\_\_\_\_

Test 2: Positive  Negative  Result: \_\_\_\_\_ .g/L Time: \_\_\_\_\_

**Data Privacy**

The FIM Jury President, members of the Race Direction and appointed FIM Officials shall not disclose this Personal Data or Sensitive Personal Data of the riders except where such disclosures are strictly necessary in order to fulfil their obligations under the FIM Medical Code. They shall ensure that this Personal Data and Sensitive Personal Data is only retained when it remains relevant to fulfilling their obligations under the FIM Medical Code. Once it no longer serves the above-mentioned purposes, it shall be deleted, destroyed and permanently anonymised. As a general rule, retaining Sensitive Personal Data requires stronger or more compelling reasons than for Personal Data.



**APPENDIX N  
HIGHLY CONFIDENTIAL  
BREATH ALCOHOL TEST**

Any rider going through breath alcohol tests and therefore submitting this information including Personal Data and Personal Sensitive Data to be able to compete shall be deemed to have agreed, pursuant to applicable data protection laws and otherwise, that such information be collected, processed, disclosed and used for the purposes of the implementation of the FIM Medical Code by the FIM Jury President, members of the Race Direction and appointed FIM Officials.

Riders or their authorised representative shall be entitled to request to erase, rectify or obtain any Personal Data or Sensitive Personal Data the FIM holds about them in accordance with the FIM Medical Code by sending a written request to [gdp-medical@fim.ch](mailto:gdp-medical@fim.ch).

Rider's signature: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_

FIM Jury Pres. or Race Direction member or Appointed FIM Official signature: \_\_\_\_\_

Witness 2: signature: (if any) \_\_\_\_\_

Witness 1: signature: (if any) \_\_\_\_\_

Other person present: signature: \_\_\_\_\_

Other person present: signature \_\_\_\_\_

\*\*\* Original of this document must be sent to the FIM Medical Department: [cmi@fim.ch](mailto:cmi@fim.ch) \*\*\* Copy of this document must be given to the rider \*\*\*



## 6. ANTI-DOPING CODE

The regulations will be defined by the “FIM ANTI-DOPING CODE”.



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## **7. ENVIRONMENTAL CODE**

The regulations will be defined by the “FIM ENVIRONMENTAL CODE”.



## 8. CODE OF ETHICS

The regulations will be defined by the “FIM CODE OF ETHICS”.