



FÉDÉRATION INTERNATIONALE  
DE MOTOCYCLISME

*Appendices / Annexes*

# **FIM ENDURANCE WORLD CHAMPIONSHIP AND CUP REGULATIONS**

# **2021**

*RÈGLEMENTS FIM DU CHAMPIONNAT  
ET DE LA COUPE DU MONDE D'ENDURANCE*



# Appendices

## FIM Endurance World Championship and Cup Regulations



SEASON 2021

update 22 February 2021

Technique

EWC

SST

EXP

FEDERATION INTERNATIONALE DE MOTOCYCLISME (FIM)

11, route Suisse

CH - 1295 MIES

Tel: +41-22-950 950 0

[www.fim-moto.com](http://www.fim-moto.com)

[paul.duparc@fim.ch](mailto:paul.duparc@fim.ch)

[victoria.corredoira@fim.ch](mailto:victoria.corredoira@fim.ch)

EUROSPORT EVENT LTD (EEL)

3, rue Gaston et René Caudron

F - 92798 Issy Les Moulineaux Cedex

François Ribeiro

Head of Eurosport Events

[Francois\\_Ribeiro@discovery.com](mailto:Francois_Ribeiro@discovery.com)

Renaud Jeanfils

Team Coordinator

+32 4 75 44 50 93

[operations@fimewc.com](mailto:operations@fimewc.com)

Valérie Moreno

Media Delegate

+33 6 10 35 52 72

[media@fimewc.com](mailto:media@fimewc.com)

## CONTENTS

1.	Sporting Endurance World Championship and Cup Regulations ...	6-69
2.	Technical Endurance World Championship and Cup Regulations..	70-179
3.	Disciplinary Endurance World Championship and Cup Regulations....	180-196

**Articles amended for the season 2021 are in bold type**



## FIM ENDURANCE WORLD CHAMPIONSHIP AND CUP REGULATIONS

<b>1.</b>	<b>SPORTING REGULATIONS.....</b>	<b>6</b>
1.1	INTRODUCTION .....	6
1.2	EVENTS .....	6
1.3	THE PADDOCK .....	8
1.4	OFFICIALS AND BODIES .....	9
1.5	INTERNATIONAL JURY .....	12
1.6	THE RACE DIRECTION.....	14
1.7	THE FIM EWC STEWARDS PANEL.....	15
1.8	THE CALENDAR .....	16
1.9	MOTORCYCLES .....	16
1.10	ELIGIBLE COMPETITORS .....	18
1.11	STARTING NUMBERS.....	23
1.12	REQUIREMENTS FOR EVENTS TAKING PLACE PARTLY AT NIGHT .....	23
1.13	SCHEDULE .....	24
1.14	TECHNICAL CONTROL - MEDICAL CONTROL - DOPING CONTROL .....	26
1.15	PRACTICE SESSIONS .....	27
1.16	GRID POSITIONS .....	29
1.17	RACES.....	29
1.18	START PROCEDURE.....	35
1.19	“STOP & GO” PROCEDURE .....	41
1.20	BEHAVIOUR DURING PRACTICE AND RACE .....	42
1.21	FLAGS AND LIGHTS.....	45
1.22	MARSHALS’ UNIFORMS.....	52
1.23	MEDICAL CARS .....	52
1.24	STANDARD PROCEDURE FOR FINISHING A RACE; RESULTS	52
1.25	SUSPENSION OF A RACE .....	54
1.26	RE-STARTING A RACE THAT HAS BEEN SUSPENDED ...	55
1.27	CHECK AREA .....	57
1.28	PODIUM .....	57
1.29	FINAL TECHNICAL CONTROL .....	57
1.30	PRIZES .....	57
1.31	EXTRA DEPOSITS IN CASE OF MACHINE CONTROL FOLLOWING A PROTEST .....	58
1.32	EXTRA DEPOSIT FOR FUEL CONTROLS FOLLOWING A PROTEST .....	58
1.33	SANCTION FOR NON-COMPLIANCE WITH THE FUEL RULES .....	59



1.34	CHAMPIONSHIP AND CUP POINTS; CLASSIFICATION ...	59
1.35	INSTRUCTIONS AND COMMUNICATIONS TO COMPETITORS .....	63
<b>2.</b>	<b>TECHNICAL REGULATIONS .....</b>	<b>70</b>
2.1	INTRODUCTION .....	70
2.2	CLASSES .....	70
2.3	GENERAL ITEMS .....	71
2.6	FORMULA EWC TECHNICAL SPECIFICATIONS .....	87
2.7	SUPERSTOCK TECHNICAL SPECIFICATIONS .....	111
2.9	EXPERIMENTAL TECHNICAL SPECIFICATIONS .....	135
2.10	FUEL (PETROL), LUBRICANT AND COOLANTS .....	144
2.11	PROTECTIVE CLOTHING AND HELMETS .....	154
2.12	PROCEDURES FOR TECHNICAL CONTROL .....	156
2.13	VERIFICATION GUIDELINES FOR TECHNICAL STEWARDS .....	160
2.14	SOUND CONTROL .....	169
2.15	GUIDELINES FOR USE OF SOUND LEVEL METERS .....	172
<b>3.</b>	<b>DISCIPLINARY AND ARBITRATION CODE .....</b>	<b>180</b>
3.1	PRINCIPLES .....	180
3.2	PENALTIES .....	180
3.3	THE RACE DIRECTION AND THE FIM DISCIPLINARY AND ARBITRATION BODIES .....	182
3.4	PROTESTS AND APPEALS .....	186
3.5	PROCEDURE BEFORE ALL THE DISCIPLINARY AND ARBITRATION BODIES .....	193
3.6	COSTS OF PROCEDURE .....	195
3.8	LAW OF MERCY .....	196
3.9	ARBITRATION CLAUSE .....	196
<b>4.</b>	<b>STANDARDS FOR CIRCUITS .....</b>	<b>197</b>
<b>5.</b>	<b>MEDICAL CODE .....</b>	<b>198</b>
<b>6.</b>	<b>ANTI-DOPING CODE .....</b>	<b>199</b>
<b>7.</b>	<b>ENVIRONMENTAL CODE .....</b>	<b>200</b>
<b>8.</b>	<b>CODE OF ETHICS .....</b>	<b>201</b>

## 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, teams' personnel, officials, organizers and all the persons involved in any capacity whatsoever participating in the FIM Endurance World Championship and Cup (hereinafter 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. ANTI-DOPING CODE
7. ENVIRONMENTAL CODE
8. CODE OF ETHICS

as supplemented and amended from time to time.

All the persons mentioned above may be penalised in accordance with the provisions of the FIM Endurance World Championship and Cup Regulations (hereinafter referred to "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 machine 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 machine 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.



## ANTI-DOPING CODE

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





## SUPPLEMENTARY REGULATIONS

In special circumstances, the FIM may allow the organiser of individual event to mention in the Supplementary Regulations particular provisions not included in or different from the current Regulations.

## **1. SPORTING REGULATIONS**

### **1.1 INTRODUCTION**

#### **1.1.1**

A series of motorcycle races counting toward the Endurance FIM World Championship and FIM World Cup for Teams, Riders and Constructors will be organised.

#### **1.1.2**

Official documents relating to a meeting must conform to article 100.5 of the FIM Sporting Code.

### **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 homologated by the FIM for the Championship.

#### **1.2.3**

Events must not include any other races except for support races approved by the FIM which may not alter the event schedule **(1.13)**.

#### 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.

#### 1.2.5

Organisers will be nominated by the Promoter and submitted for approval to the 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

The organiser shall obtain insurance for third party liability according to article 110.1.1 of the FIM Sporting Code.

#### 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 the EEL:

- a) Confirmation of the name and address of the 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 teams and riders 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.
- j) The Supplementary Regulations for the event in English and French (see appendix).

### 1.2.9

At least 90 days before the Event, the FIM will propose the time schedule to the Promotor.

### 1.2.10

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

## 1.3 THE PADDOCK

### 1.3.1

The Paddock, pit boxes and all other facilities must be available to teams at least on the day prior to the first practice day and remain available to competitors for at least one day after the event.

### 1.3.2

Access must be available for teams arriving to set up between the hours of 08:00 and 20:30.

### 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

At all times that the Paddock is occupied there must be a basic medical service and fire fighting service in the circuit.

A fire truck must be provided with the following minimum characteristics: tank capacity 4 cubic meters; pressure: 40 kg/cm<sup>2</sup> (high), 12 kg/cm<sup>2</sup> (low); water rate 300 - 400 litres/minute.

### 1.3.5

Full security must be supplied to the Paddock area from at least midnight of the day prior to the first practice day until midnight of the day after the event.

## 1.4 OFFICIALS AND BODIES

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

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 International Jury and the **FIM Stewards Panels**.

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 Safety cars.
- e) 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 may from time to time issue and update general design guidelines which are considered as part of the technical regulations.**

FIM Medical Director: Responsible for liaison with the Chief Medical Director appointed by the Organisers to ensure compliance with the Medical Code.

FIM Safety Officer(s): Responsible for the supervision of all aspects of safety.

#### **1.4.2 Individual Event officials**

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

##### **1. 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 car / 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 meters behind the track marshals or leave. Only sportive personnel should stay at the edge of the track for the “sporting” inspection.

The Race Director, the FIM Safety Officer, the Clerk of the Course and the Chief Medical Officer 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) The use of the Safety Car upon request of the Race Director or of the Race Direction.
- e) Ensuring that the event is run within the Regulations.
- f) Notification of protests to the **FIM EWC Stewards Panel**.
- g) Immediate approval and signature with time of provisional results (practices, warm-up, starting grid and race) and presentation of reports to the International Jury.

## 2. Secretaries

Responsible for:

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

## 3. Other Officials

**Marshals, Technical Stewards, Security Personnel, Medical Staff 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.

## 1.5 INTERNATIONAL JURY (EVENT ADMINISTRATIVE MANAGEMENT)

### 1.5.1

The management of the event will be carried out by the International Jury which will comprise the following delegates:

**The Jury President appointed by the FIM - who will chair the meetings;**  
**The 2<sup>nd</sup> FIM and 3<sup>rd</sup> Jury Members appointed by the FIM;**  
 The FIM Race Director;  
 The FIM Safety Officer;  
 The FIM Medical Director;  
 The Delegate appointed by EEL;  
 The Clerk of the Course;  
 The FIM Chief Medical Officer;  
 The FIM Technical Director.

### 1.5.2

At any time the duties of the members of the International Jury are:

- a) To ensure that every rider and team is regularly holder of the appropriate licences and authorisations.



- b) To confirm the eligibility of motorcycles in each class after the completion of technical controls.
- c) To ensure the smooth and efficient running of the event.
- d) To make recommendations to the Race Direction concerning any matter that is in contradiction to the **Organiser's protocols or the Regulations**.
- e) To report to the **FIM EWC Stewards** any infringements of the Regulations.
- f) To receive reports from the various Officials concerning scrutineering, practice and races.
- g) To make recommendations to the organiser to improve the smooth and efficient running of the event.
- h) To confirm the practices and the race results.

### 1.5.3

The International Jury 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 International Jury is two persons.

If a decision needs a vote, only the Jury President, the 2<sup>nd</sup> and 3<sup>rd</sup> Jury Members have a voting right.

Decisions are based on a simple majority. In the case of a tie, then the President will exercise a casting vote.

The **FIM Stewards**, the technical and the Medical FIM Representatives as well as the Environmental Steward may attend the meetings of the International Jury. The International Jury President may also invite the participation of Officials or other persons to assist in the meetings. However, the FIM Observers, the Environmental Steward and the invited officials or other persons will have no voting right.



## **1.6 THE RACE DIRECTION**

**The Race Direction shall be appointed for the Championship by the FIM.**

### **1.6.1**

**The Race Direction will comprise the following persons:**

- The FIM Race Director - who will chair the meetings.
- The FIM Safety Officer(s), present alternately for registered races of more than 12 hours.
- The EEL Representative

Each member has one vote. Decisions are based on a simple majority.

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

The quorum for a meeting of the Race Direction is two persons. In case of absence of the FIM Race Director (temporary rest or other reason), it is the FIM Safety Officer who will chair the meetings.

### **1.6.2**

**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 Endurance Regulations.
- c) To make change in the conduct and/or format of a race and/or a practice session based on safety considerations and provided that such decision is absolutely necessary to resolve a situation not foreseen in the Regulations. In such exceptional cases, such decision may prevail over specific provisions of the 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 Regulations.

## **1.7 THE FIM EWC STEWARDS PANEL**

### **1.7.1**

There will be a panel comprised of three persons holders of an FIM EWC Steward Superlicence, supervised by the Chief Steward who will chair the meetings. Each FIM EWC Steward may be a permanent appointment, or appointed by rota.

### **1.7.2**

The quorum for a meeting of the FIM EWC 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**

If the Chief Steward is indisposed during the Event then the second FIM Steward will fill the vacancy.

### **1.7.5**

The FIM EWC 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. 1.7.7.

### **1.7.6**

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

### 1.7.7

The FIM EWC Stewards Panel is responsible for:

- a) Taking decisions as provided in the Regulations.
- b) Imposing penalties for any infringements of the Regulations.
- c) imposing penalties on organisers for having been unable to ensure the smooth and efficient running of the event or for serious breaches of the Regulations.
- d) Adjudicating on any protest relating to infringements of the Regulations.

### 1.7.8

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

## 1.8 THE CALENDAR

### 1.8.1

The calendar of races counting for the Championship will be, in principle, published by no later than 6 months before the beginning of the Championship.

## 1.9 MOTORCYCLES

### 1.9.1 Classes

- The class admitted for the FIM World Championship is Formula EWC.
- The class admitted for the FIM World Cup is SUPERSTOCK.
- The organiser may allow another class named: “EXPERIMENTAL”.

The technical specifications for this class must be indicated in these Regulations and in the Supplementary Regulations, as per the Technical Director recommendations. The teams of this class will not be classified in the classification of the races they have been entered and will not receive points, prizes and allocations.

A podium can be set up for this category, provided that, at least, 3 machines are registered in the starting list.

During the scrutineering preceding the 1st official practice session, the team managers must sign a declaration confirming the class in which their motorcycle is entered. No change of class will be admitted after the signing of this document.

A team is authorised to present during the technical scrutineering maximum two machines of the same class only.

### **1.9.2 Lighting and signalling**

At least one retro-reflective armband of a plastic material with an efficient fastener, supplied by the organisers, must be compulsorily worn by the riders at any time during the practices, warm-up and race.

Furthermore, the organiser must provide a bracelet in the same colour as the armband. The bracelet and the armband cannot be changed without the express authorisation of the International Jury.

Helmets should be fitted with self-adhesive retro-reflective surface on the back and sides, one of 25 cm<sup>2</sup> in red colour, and the other also of 25 cm<sup>2</sup> in white colour.

All the lights of the motorcycles must be switched on during the practices and race.

The headlights of the Formula EWC machine must emit a white light beam.

The headlights of the other classes of motorcycles must emit a yellow light beam.

The electrical equipment of the motorcycles must be in conformity with Art. 2.3.11.

The motorcycles must be fitted with number plates in conformity with Art. 2.3.12.

For the night practices and the race, the figures must strictly be electroluminescent. Upon the request of the Race Director, the electroluminescent numbers must be switched on. The instructions will be communicated by means of a board (100 cm horizontal x 80 cm vertical - black background - word: "LIGHT" in yellow).

During the Technical controls, these electroluminescent numbers will be verified.



### **1.9.3 Means of propulsion**

A motorcycle can only be propelled by its own motive power, the muscular effort of its rider and by the natural forces of gravity.

## **1.10 ELIGIBLE COMPETITORS**

### **1.10.1 Licences**

Riders must hold a valid licence.

Teams must hold a valid licence. The teams will be entered and classified under the name mentioned on their licence.

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

### **1.10.2 Entries**

All entries must be made in writing on an entry form on which all information regarding the rider, team, sponsor and make of the machine must be indicated.

For the teams’ registration, the entry form must include, at least, the name of one rider for race under 24 hours; the name of 2 riders for the 24 hours races.

The rider(s) must be part of the team registered at the administrative control, except in case of force majeure.

The entry form must be printed in the official languages of the FIM and shall mention Art. 60.5 of the Sporting Code.

The entry form must be signed by the team manager and sent to the organisers.

The number of teams entered cannot exceed the number written in the homologation report or in the Supplementary Regulations with a maximum of **65** for practices and race.

Should more entries are received by the organiser than the authorised capacity of the track; a selection committee would make a selection among all candidates.

Entries must be received one month in advance, but, in the case of “force majeure”, may be modified up until the scrutineering.

### **1.10.3 Composition of the teams**

Each motorcycle is ridden by a team made up of 2 or 3 riders.

For events of more than 12H or of more than 1800 km, a reserve rider will be admitted.

The composition of the team must be communicated by the entrants according to the procedure in force but the latest during the administrative checks by means of the official document.

The change of teams' composition or the change of the order (armbands) of riders in the same team will be prohibited from the end of the administrative checks up to the end of the last qualifying practice session.

Only in case of force majeure, a change of the team composition can exceptionally be done by written. Such a change must be communicated to the International Jury which will give approval and instructions for an eventual change of armbands and bracelets.

In the absence of any change, the list confirmed after the last qualifying practice sessions will automatically become valid.

The name of the starting race rider has to be communicated the latest within the hour following the warm-up.

The organiser is not allowed to impose any kind of fee for any change in the composition of the team, at any time.

#### **1.10.4 Briefings for riders and for team managers**

A compulsory briefing for all riders who are participating for the first time in the current Championship or in the Cup will be organised the day before the beginning of the 1<sup>st</sup> official practice session.

A compulsory briefing for all the team managers will be held the day before the beginning of the 1<sup>st</sup> official practice session.

The date, time and place of these two briefings will be indicated in the Supplementary Regulations.

Failure to attend the briefing in full may result in a penalty for the rider or the team.

The licences of the riders and teams will be checked.

A waiver may be granted by the Jury President.

#### **1.10.5 Age of the riders**

Licenses for riders are issued only when the age of 18 years has been attained. The limit for the minimum age starts on the date of the rider's birthday.

#### **1.10.6 Contracted teams and Manufacturers**

##### **1.10.6.1**

30 days before each event, the Promoter will publish a list of contracted teams. This list can be updated until the day preceding the 1<sup>st</sup> session of the official practice.

##### **1.10.6.2**

Each contracted team commits itself to competing in all the events of the Championship (Suzuka 8H excepted).

If a team withdraws from additional events in the Championship for any reason, it must propose to the Promoter and to the FIM a replacement team for remaining rounds of the Championship. The replacement team cannot be a former contracted team of the current year. If unable to do so, that team will not be selected as contracted team for the next year's Championship or Cup.



### 1.10.6.3

30 days before each event, the Promoter will publish a list of contracted manufacturers.

### 1.10.7 Acceptance

The entries must be made according to the following priority:

- Before the 1<sup>st</sup> event of the Championship:
  - The contracted teams;
  - The teams having obtained points in the Championship of the previous season (N-1);
  - The teams having obtained points in the Cup of the previous season (N-1);
  - 2 places will be granted for teams entering a machine in the “Experimental” class provided that they meet the requirements of Article 2.9 and the agreement of the Endurance Technical Director;
  - The teams having obtained points in the Championship of the penultimate season (N-2);
  - The teams having obtained points in the Cup of the penultimate season (N- 2);
  - Other teams.
- After the 1<sup>st</sup> event of the Championship:
  - The contracted teams;
  - The teams having obtained points in the Championship of the current season at the closing date of entries;
  - The teams having obtained points in the Cup of the current season at the closing date of entries;
  - 2 places will be granted for teams entering a machine in the “Experimental” class provided that they meet the requirements of Article 2.9 and the agreement of the Endurance Technical Director;

- The teams having obtained points in the Championship of the previous season (N-1);
- The teams having obtained points in the Cup of the previous season (N-1);
- Other teams.

#### **1.10.8 Entry fee**

An entry fee may be made obligatory for each team.

Should this be the case:

For races of less than 24H, the maximum amount is fixed at 1'500 Euros.

For 24H races, the maximum amount is fixed at 2'500 Euros.

It must be paid to the organisers 30 days at the latest before the race.

#### **1.10.9 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 International Jury 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 and Cup.

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

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

#### **1.10.10 Withdrawal from an event**

A team may withdraw from an event which has already started, due to injury, irreparable damage to the motorcycle(s) or in case of "Force Majeure".

Withdrawal shall be approved by the International Jury.

### **1.10.11 Participation in an event**

A team shall be deemed to have taken part in the event when he participates in, at least, one practice session.

### **1.10.12 Participation in the race**

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

## **1.11 STARTING NUMBERS**

The contracted teams will have a permanent number.

The organisers will allocate the numbers to the other teams.

Teams who have already participated in an event of the Championship during the season will have priority on other teams for keeping their numbers during the full season.

The final decision of the Starting number is subject to the FIM approval.

## **1.12 REQUIREMENTS FOR EVENTS TAKING PLACE PARTLY AT NIGHT**

For races taking place partly at night, the following conditions must be fulfilled:

- Red lights (minimum diameter 15 cm) will be put in place. Their number and location will be fixed during the homologation. These lights will be controlled by the Race Control Post and will give the Clerk of the Course the possibility of immediately informing the competitors of the stopping of the practice or the race.
- Flag Marshals should be in possession of retro-reflective boards according the FIM Standards for Circuits. Moreover, the track Marshals should be equipped with retro-reflective shoulder-belts.
- Each circuit organising night events should be equipped with light signals fixed to each Marshal's post. These signals should be controlled by the post on which it depends and by the next post.



- Each Marshal's post situated in an unlit area should be equipped with a minimum of two 1500 lumen independent torch lights.
- The track should be marked out in an effective manner on the corners (on the inside and outside of the corner).

## 1.13 SCHEDULE

### 1.13.1 Practice schedule

Participation in this practice is only possible if the machine has passed the scrutineering.

Official practice will start at the earliest 2 hours after the end of the scrutineering.

Practice takes place during the 2 or 3 days preceding the race. The colour of the riders blue, yellow, red, green (if reserved rider), in the same team, is the one mentioned on the entry form.

Each rider will receive a bracelet which will be provided and fitted by the organiser. This bracelet must be of the same colour as the armband.

The bracelet and the armband cannot be changed or exchange between riders without the express authorisation of the International Jury.

During official practice, only one machine of each team can be on the track.

During one of the free practice sessions, a neutralisation test with the SAFETY CARS must be organised.

Unless the Supplementary Regulations provide otherwise, it is recommended that the minimum practices take place as follows:

**1<sup>st</sup> day:** Scrutineering and administrative controls

**2<sup>nd</sup> day:**

Free practice 120 minutes

Interval: 3 hours

1<sup>st</sup> qualifying practice session rider blue 20 minutes

Interval: 10 minutes

1<sup>st</sup> qualifying practice session rider yellow 20 minutes

Interval: 10 minutes

1<sup>st</sup> qualifying practice session rider red 20 minutes

Interval: 10 minutes

1<sup>st</sup> qualifying practice session reserve rider green 20 minutes

+ For races taking place partly at night:

Interval: 3 hours

Night practice minimum 1 hour

The organisers must arrange that there are no noisy events after midnight.

### 3<sup>rd</sup> Day:

2<sup>nd</sup> qualifying practice session rider blue 20 minutes

Interval: 10 minutes

2<sup>nd</sup> qualifying practice session rider yellow 20 minutes

Interval: 10 minutes

2<sup>nd</sup> qualifying practice session rider red 20 minutes

Interval: 10 minutes

2<sup>nd</sup> qualifying practice session reserve rider green 20 minutes

The last qualifying practice should be finished at the latest at 12h00, the day before the start of the race.

## **1.13.2 Warm-up**

The organiser must schedule 45 minutes minimum of warm-up before the start of the race reserved for the qualified teams. The time must be indicated in the Supplementary Regulations.

It is recommended that an interval of two hours minimum be respected between the end of the warm-up and the start of the race.

### **1.13.3 Change of schedule**

The above schedule can only be varied as follows:

- i) Prior to the event by the FIM in collaboration with the Promoter;
- ii) During the event by the Race Direction.

All the riders and teams shall be immediately and in writing informed of any schedule change.

## **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.

Teams may present more than one motorcycle for Technical Control which will be specially identified by the Technical Controllers.

Unless a waiver is granted by the International Jury, 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 2.12 and 2.13.

The procedure for Medical Control is described in the FIM Medical Code.

### **1.14.3**

Any rider to be tested for doping control must report to the doping control room in the Medical Centre with sufficient identification within one hour of notification.

One associate may accompany the rider.

Unless otherwise determined by a competent judicial authority (FIM International Jury, **FIM EWC Stewards**, **FIM Appeal Stewards**, CDI or TAS), if a rider is found in violation of the rules of the FIM Anti-Doping Code and penalised by disqualification or suspension, this will result de facto in disqualification of the entire team for the event where such rider has been found positive.

## **1.15 PRACTICE SESSIONS**

### **1.15.1 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 a chequered flag at which time the pit exit will be closed. A rider's times will continue to be recorded until he passes the finish line after the allotted time has elapsed. After the chequered flag, riders may complete one additional lap prior to entering the pits.
- 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 at the moment the red flags were waved, unless otherwise adjusted by Race Direction.
- v) After practice has started, it is not permitted for any person to alter the condition of the racing surface of the circuit. This includes track Marshals and other Officials who cannot clean the track surface without prior instructions and/or authorisation from the Race Director and/or the FIM Safety Officer.

### **1.15.2 Night practices**

During the night practices the teams must complete a minimum of one timed lap (to see the machines in night conditions).

### 1.15.3 Lap time

All laps of the riders will be timed.

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.

Both for practice and for 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.

### 1.15.4 Results of qualifying practice

- **Riders**

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

In the case where all qualifying practices 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.

Classification of the qualifying practice will be drawn up, for each group of riders (blue, yellow, red, green).

- **Teams**

The results will be based on the average of the time of the riders (reserve rider not included) of the teams as mentioned above.

### 1.15.5 Qualification for the race

To qualify for the race, a rider must have completed, during practice, the minimum number of laps laid down in the Supplementary Regulations.

He must also achieve a time at least equal to **108%** of the time recorded by the fastest rider of his group, in at least one qualifying session.



Qualifying time is identical for all classes.

A machine can start when the team is composed of two or three riders who are qualified as mentioned above.

## **1.16 GRID POSITIONS**

The side position of the riders on the starting grid will be determined during the homologation of the circuit.

At the Jury meeting which follows the last qualifying practice session, a provisional starting grid will be drawn up which will include the number of teams qualified for the race. It will be based on the average of the best time of the qualifying results of the riders (reserve rider not included) of the teams.

The definitive starting grid will be published one hour after the end of the warm-up and will clearly mention the name of the rider who will start the race.

Teams will keep the same position as on the provisional starting grid (even if some riders are changed).

## **1.17 RACES**

### **1.17.1 Admission to the start**

Only machines, whose engines and frames have been marked by the technical staff, will be admitted to start.

### **1.17.2 Duration or distance**

1. Specific duration: the race must last a minimum of 3 hours and a maximum of 24 hours.

Or

2. Specific distance: the race distance must not be less than 200 miles and must not be more than 3600 km.

### 1.17.3 Procedure to follow after a fall which requires the evacuation to the medical centre

In the case of a rider must be evacuated to the medical centre. He will be allowed, with the approval of Chief Medical Officer, to return to his machine. He must at all times be accompanied by an official.

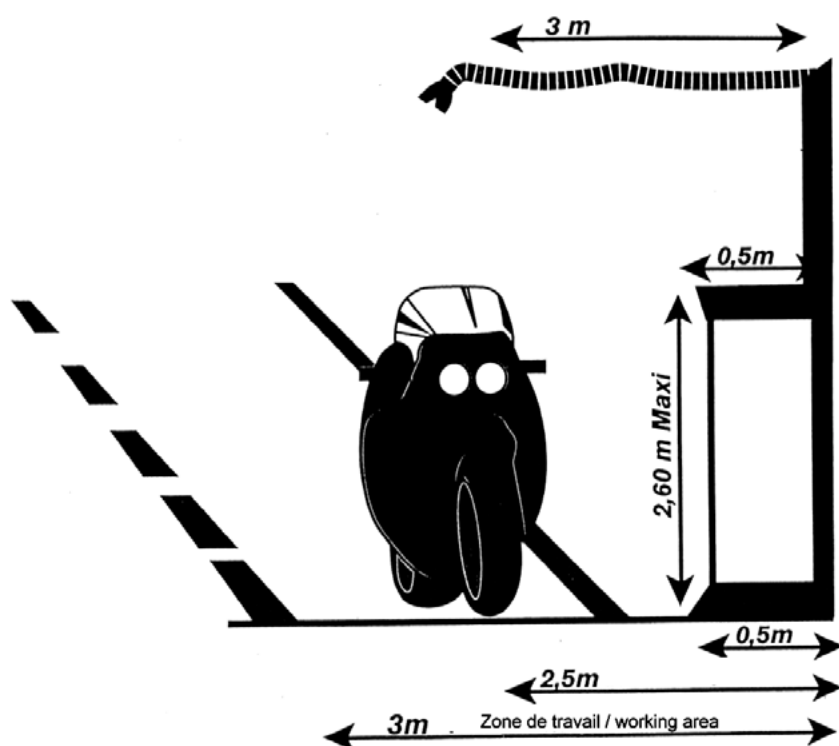
### 1.17.4 Penalties during a race

If penalties are inflicted upon a rider during a race, they must rapidly be communicated to the person responsible for the team in question.

### 1.17.5 Pit stops

No naked flames in the pit boxes are allowed at any time.

The use of (an) extra lighting device(s) to illuminate the working area in front of the pit box is permitted. This device must be strongly fixed to the wall at a minimum height of 2 metres. The lighting devices composed of a mobile stand placed on the ground are not allowed.



The maximum height of the top of the fuel reservoir (fixed or moving), is 2.60 m.

When fixed, the most extreme point of the fuel reservoir shall not be more than 50 cm, measured at a right angle to the vertical (wall).

When a pit stop has to be made, it is compulsory to stop the engine. It can be started up, for a short while, for testing and adjustment.

The headlights shall only be switched off during a pit stop. Lights must be switched on when the engine is running and the motorcycle is moving.

Only the team staff holding the appropriate credentials, directly involved in the pit stop and identified by the compulsory wearing of helmet (accepted helmet standard EN 1078 A, SNELL B95 or later) are permitted in the working area. These helmets must be presented by the team to the Technical Director during the initial Technical Verifications.

During track activities, the team staff, present in the working area, must wear protective clothing, with body, arms and legs covered, made from cotton or fire retardant material. Footwear shall be closed one.

During the pit stop in the pit lane, only the 4 persons clearly identified by the wearing of an official armband are permitted to work on the machine. These 4 persons cannot receive any assistance from anybody. In the pit lane, only the persons wearing the official armband can give or receive wheels, various parts or other tools.

If the rider takes part in the work, he will be included in these 4 persons.

Apart from interventions, the team staff cannot stay in the pit lane.

When the work on the machine is carried out inside the pit box, the number of persons working on the motorcycle is not limited.

In case of loss or malfunction of the transponder, an official is authorised to carry out the change.

Throughout the race, refuelling (petrol) and all other interventions can only be carried out at the pit allocated to the team.

Before refuelling (petrol), the machine must be put on a stand.

During the refuelling, the rider cannot stay on his machine.

Refuelling (petrol) must take place after all mechanical interventions on the machine are finished, before the rider tries to restart the machine.

During refuelling (petrol), the use of tyre warmers is not allowed.

If an exchange of the fuel tank is necessary, it will be placed EMPTY on the motorcycle. It will then be filled as per the usual procedure.

A maximum of 60 litres of **fuel per team** is permitted in the **pit box**.

**A maximum of 60 litres of fuel per team is permitted outside and at the immediate proximity of the pit box (paddock side).**

From the beginning of the official practices, each team must appoint one person for fire safety. This person must be equipped with a reliable extinguisher for fuel fires and is strictly obliged to be present at all refuelling (petrol) operations. All personnel who are involved in the refuelling operations, including the person responsible for the fire extinguisher, must wear an overall made of fire retardant materials, hands and feet must be protected with gloves and protective footwear, safety goggles/mask and balaclava of fire-retardant quality or a helmet for eye protection.

This procedure is applicable during the practices and the race.

All “active” tyre warmers on wheels (not mounted on the bike) must be at least 50 cm above ground level. Any fuel manipulation must take place at a minimum of 5 metres from the tyre warmers or from any source of elements that could start a fire.

The connections on multiple sockets are prohibited at less than 5 m from the machine.

The person in charge of the Technical Stewards can demand the demarcation on the ground of these 5 m (adhesive tape, paint, etc...).

Any electric power or connection to a power grid must be held with uncoiled cables. They should not remain coiled on a spool.

After refuelling any mechanical intervention on the machine must be carried out only inside the box allocated to the team.

During pit-stops, apart from normal hand tool, only portable battery-powered tools, air pressurised tools and inactive tyre warmers may be used in front of the pit-box.

In order to leave the pit again, once the rider is on his machine, 2 persons are allowed to push the machine. Alternatively, the rider can use the machine's starter. The use of an additional battery is forbidden. The use of a self-contained starting device is permitted.

**Except in cases of force majeure duly recognised by the FIM EWC Stewards Panel, at least one change of rider during a pit stop, must be made during the race.**

Any breach of this article will be sanctioned with a Stop & Go penalty.

#### **1.17.6 Stops on the track / Possible recovery car assistance**

In case of a breakdown on the track, the rider must immediately move his motorcycle, in such a way that it does not hinder the other riders. He may proceed to make a repair with the means at his disposal.

If he wants to take his motorcycle back to the pit, he must push it in the direction of the race, without any outside help, and by keeping to the verge of the track.

For quicker access to the pits, organisers may authorise the riders to take short cuts. However, these short cuts, if any, must be indicated in the Supplementary Regulations.

In case of a breakdown in front of the pits, the rider may, under surveillance of a Marshal, return by the pit exit lane, engine stopped. He must push his machine in the opposite direction until he reaches his pit.

The rider pushing his motorcycle in the pit lane can be helped by two mechanics.

If the team so wishes, it can ask for assistance for the rider and its bike to be taken back in a vehicle provided by the organisers. In that case, both will be dropped off as near as possible to the pit lane entry, to the pit boxes entry or in front of the Technical Scrutineering office (to be clarified in the SR). From this point, 2 persons from the team are allowed to bring the machine back to the pits under a track marshal control.

His lap will be counted in his end-of-race total.

This procedure is also valid in the case of a rider being transported to the medical center. His machine can be brought back and one of his teammates can resume the race.

If several teams ask for such assistance following a problem involving a number of riders, the teams will be assisted in the order of the starting grid.

No protest can be made with regards to the order of the recovery car services.

The number of recovery vehicles available on the track has to be clearly indicated in the Supplementary Regulations.

No other assistance than that provided by the organisers will be permitted.

#### **1.17.7 Changing of motorcycle parts**

During the practices, all defective parts may be replaced including the complete engine.

During the race, all defective parts may be replaced with the exception of the frame-and engine case.

#### **1.17.8 Neutralisation of a race / Safety Car Procedure**

If, during a race, an incident (climatic conditions or any other cause) puts safety at risk and renders impossible the normal progress of the competition, the clerk of the Course in collaboration with the Race Director may decide to neutralise it.

In this case, two special **safety** vehicles visibly bearing the words “SAFETY CAR”, on the side and the rear, equipped with orange revolving/flashing lights on the top of each car, will be introduced onto the track. They will go at an identical speed, in order to always keep the same distance between them. Immediately after they enter the track, the pit lane exit will be closed (red lights and red flag).

During the neutralisation, a white retro-reflective board (70 cm horizontal x 50 cm vertical) with the words “SAFETY CARS” or “SC” will be placed on the start line to inform the riders.

When these vehicles are introduced onto the track, they will light up their orange revolving/flashing lights on an order from the Clerk of the Course/ Race Director. From this moment, yellow flags will be waved and SC Board will be displayed at the flag marshal posts, and all riders who catch up the “SAFETY CARS” will line up in single file behind them, without overtaking them.

During the neutralization of the race, the machines may stop at the pits.

After stopping at the pits, riders must line up in single file at the pit lane exit and may only rejoin the track when the green light situated there is turned on.

It will be turned on for a 10-second period, 15 seconds after safety car has passed the red light. The pit lane exit will then be closed once again (red light). The riders who have not left the pit lane will have to wait for the next group.

SAFETY CARS can be in different colours.

When the Clerk of the Course Course/Race Director decides to call in the “SAFETY CARS”, they must switch off their orange revolving/flashing lights at the first SC post and leave the track at the next Safety Car post.

Overtaking remains forbidden until the “SAFETY CARS” leave the track.

The “SAFETY CARS” must leave the track at the same time.

When the SAFETY CARS have left the track, all yellow flags and SC boards must be withdrawn along the track simultaneously and the exit of the pit lane will then be open again permanently 15 seconds after a rider passed the pit-lane exit.

The locations of the “SAFETY CARS” must be indicated on the edge of the track by yellow reflective boards (40 cm horizontal x 30 cm vertical) bearing visibly the words “SAFETY CAR” in black letters.

During the intervention of the “SAFETY CARS”, each lap raced will be counted as a “race lap”.

All other rules of the race remain valid.

## 1.18 START PROCEDURE

1. Under no circumstances riders may push their machine onto the grid from the pit lane.
2. At least 45 Minutes before the Start of the Race - Pit lane exit opens for sighting lap.

Green lights (lit) on at the pit lane exit.

Count-down boards of 5, 4, 3, 2 and 1 minute are shown at the pit exit.

3. 40 Minutes before the Start of the Race - Pit lane exit closes.

Red lights (lit) on at the pit lane exit.

4. 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.

Any rider who encounters a problem with his machine during the sighting lap may return to the pit lane and make repairs or change machine.

Riders starting the warm-up lap from the pit lane will be penalised with a Stop & Go.

5. When the 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 their grid position. The rider may dismount or remain on the motorcycle to be pushed to his grid position.

On the grid, the riders may be attended by maximum seven persons, one of whom may hold an umbrella. All attendants on the grid must wear a “Grid Pass”. Having taken up their grid position, the riders must take off their helmets.

One generator per machine may be used to power tyre warmers on the grid. The generator must be a compact portable type.

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 Race Direction.

6. 35 minutes before the start of the race: The rider which will start the race will sit on his machine without his helmet, his teammates, the team manager and 2 mechanics standing at his side.
7. 15 minutes before the start of the race: People non-essential for the start of the race must leave the track. The rider starting the race, the team manager and 2 mechanics can remain. A board announcing the track evacuation must be presented on the whole grid.



Teams on the grid may, at this stage, make adjustments to the machine or change tyres to suit the track conditions.

All adjustments must be completed by the display of the 3 minute board. After this board is displayed, riders who still wish to make adjustments must push their machine to the pit lane. Such riders and their machine 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 or change machine.

Such riders will start the warm-up lap from the pit lane and will be penalised with a Stop & GO.

Working on the machine on the grid after the 3 minutes board is presented will be sanctioned by a Stop & Go.

Refuelling or changing fuel tank on the grid is forbidden.

8. 10 Minutes before the Start of the Race - Display of 5 Minute Board on the grid.
9. 9 Minutes before the Start of the Race - National Anthem
10. 8 Minutes before the Start of the Race - Display of 3 Minute Board on the grid.

Generators must immediately be disconnected and removed from the grid.

Immediate removal of tyre warmers from machines on the grid.

At this point, all persons except one mechanic per machine, 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. 6 Minutes before the Start of the Race - Display of 1 Minute Board on the grid.

At this point, all team personal except one mechanic holding the machine will leave the grid. All riders must be in position, sitting on their machines.

12. 30 Seconds Before the Start of the Warm-up lap - Display of 30 Second Board on the grid.

13. 5 minutes before the start of the Race: Green flag waved to start the warm-up lap.

Each rider will start the engine and begin the warm-up lap.

In the interest of safety, should a rider cannot start his machine, he may be assisted but only after the yellow board with the word “PUSH” in black has been displayed at the starter rostrum.

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 or where the rider may change machine. Such riders may start the warm-up laps from the pit lane and will be penalised with a Stop & Go.

The riders will make one lap, at unrestricted speed, followed by a medical car. This car will overtake slow riders which will be directed to the pit lane.

As soon as the riders have passed the pit lane exit lights at the start of the warm-up lap, this 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 riders must stop their machine with engine off on their position. Only one mechanic per rider is allowed on the grid to hold the machine. Riders must go immediately in the circle opposite their machine.

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

Any rider who encounters a problem with his machine on the warm-up lap may return to the pit lane and make repairs or change machine.

When the medical car has taken up its position, 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. 70 Seconds Before the Start of the Race - The EWC Championship anthem is played.
15. 1 Minute Before the Start of the Race - Display of the 1 minute board on the grid.

All riders must be in their circle or on the white dot opposite their machine.

16. 30 Seconds Before the Start of the Race - Display of the 30 seconds board on the grid + red lights on (except if the national flag is used to start the race).
17. Red lights out or national flag dropped (to be specified in the Supplementary Regulations) to start the race.

Each rider will run towards his motorcycle, start the engine alone (no outside assistance allowed) and start the race. When a rider is using an airbag within his leather suit, a second person is permitted behind the motorcycle to connect the wire to the rear body work).

A medical car will follow behind the motorcycles for the whole of the first lap. The car will 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 will be required to carry out the Stop & Go Procedure described under article 1.19.

An anticipated start is defined when a rider is outside his circle or with his feet away from the white dot when the race is started. The **FIM EWC Stewards Panel** will decide if a penalty will be imposed and must arrange for the team to be notified of such penalty as soon as practically possible.

18. If a rider cannot start his machine, then he may be assisted by being pushed along the track until the engine starts but only after the yellow board with the word “PUSH” in black has been displayed at the starter rostrum.

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. He may also change machine until the leader has finished the first lap of the race.

Riders who change machine will be penalised with 2 Stops & Go's.

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

Riders who start the race from the pit-lane can repair or change machine. They will be penalised with 2 Stops & Go's. They can join the race at any time but as soon as they have started the race, no change of machine is allowed.

20. No further changes of machines are permitted unless the race is interrupted. After the leader of the race has completed his 3<sup>rd</sup> lap, spare motorcycles and spare engines must be taken away from the pit boxes.
21. Should there be a problem that might prejudice safety at the start, the Starter will invoke the Start Delayed procedure as follows:
  - A red flag is waved in front of the starting grid.
  - Red lights are switched on.
  - The “Start Delayed” board is displayed in front of the starting grid.

The start procedure will be re-commenced at the 1 minute board stage, the riders will complete one additional warm-up lap.

Any person who, due to his behaviour on the grid is responsible for a “start delayed”, may be penalised with one of the following penalties: fine - Stop & Go - disqualification - withdrawal of Championship points.

## 1.19 “STOP & GO” PROCEDURE

During the race, the rider will be requested to stop in the penalty area, clearly identified in the pit lane. Stopping elsewhere in the pit lane is not permitted. He must bring his motorcycle to a complete stop and remain stationary for 30 seconds. He may then rejoin the race.

The rider must respect the speed limit (**Art 1.20.13**), in the pit lane. In case of infraction of this speed limit, the stop & go procedure will be repeated; in case of a second infraction of this speed limit, the black flag will be shown to the rider.

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 and, if there is a second part, the rider will be required to stop after the start of the second part of the race.

In the case of a rider carrying forward a penalty for anticipation of the start into the second part of a race and subsequently found to have anticipated the second start, the rider will be shown the black flag.

After notification has been made to the team, a yellow board (100 cm horizontal x 80 cm vertical) **with the mention “STOP & GO”** displaying the rider’s number (black colour, height 50 cm, stroke width 10 cm) 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 stop, having been shown the yellow **“STOP & GO”** board 5 times, will result in that rider being shown the black flag.

If more than one rider is penalised, the riders will be signalled to stop on subsequent laps. The order of the riders will be based on the qualifying times with the faster rider stopping first.

If a rider incurs a stop & go penalty, then the team may have one mechanic standing by at the penalty box to assist their rider, under the direction of the marshals, to re-start his machine should he stalls the engine. The mechanic must not interfere with the actual stop & go procedure which is under the strict control of the marshals.

In the case of a rider failing to respond to the instruction to stop, and there being more than one rider penalised, no subsequent rider will be signalled to stop until the previous rider has stopped or been shown the black flag.

In the case where the organisation has been unable to carry out the Stop & Go penalty before the end of the race, the relevant team will be automatically penalised with one lap penalty.

## **1.20 BEHAVIOUR DURING PRACTICE AND RACE**

1. Riders must obey the flag signals, the light signals, and the boards which convey instructions. Any infringement to this rule will be penalised according to the provisions of article 1.19.
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 penalised with one of the following penalties: fine - Stop & Go - time penalty - disqualification - withdrawal of Championship points - suspension.
3. Riders should use only the track and the pit-lane. However, if a rider accidentally leaves the track then he may rejoin 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 may be penalised by the cancellation of the lap time concerned and during the race, by a Stop & Go. Further penalties (such as fine - disqualification - withdrawal of Championship points) may also be imposed.



4. Any repairs or adjustments along the race track must be made by the rider working alone with absolutely no outside assistance except that rendered by the marshals. The marshals may assist the rider to the extent of helping him to lift the machine and holding it whilst any repairs or adjustments are made. The rider may then be assisted by marshals or others to re-start or to move the machine on track, trackside or in the service road, under the control of the Race Direction.
5. If the rider intends to retire then he must park his motorcycle in a safe area as indicated by the marshals.
6. If the rider encounters a problem with the machine which will result in his retirement from the practice or the race, then he should not attempt to tour at reduced speed to the pits but should pull off the track and park his machine 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 may enter the pit-lane during the race to make adjustments to their machines, refuel or change tyres. All such work must be carried out in the pit lane on the working apron in front of the boxes. Heavy work can be done inside the pit-box.
9. Riders who stop their engines in the pits may be assisted to re-start their motorcycle by two mechanics.
10. Riders are not allowed to transport another person on their machine or to be transported by another rider on his machine (exception: Another rider or by another rider after the chequered flag).
11. Riders must not ride or push 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.

12. No signal of any kind may pass between a moving machine and the rider's team, or anyone connected with the machine's team entrant or rider, except for the signals of the time keeping transponder, lap trigger, GPS, legible messages on a pit board, or body movements by the rider or team.

Radio communications between a team and its riders may be exceptionally authorised for promotional and TV coverage purposes only after prior request and agreement between the FIM, the promoter and the team concerned.

Onboard TV camera signals are allowed, but only when such signals are for the purposes of and managed by the FIM.

Lights allowed to be installed by the teams on the signalling platform must not be flashing and cannot be red.

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 practice will be subject to a fine of 150 Euros.

Any rider who exceeds the pit lane speed limit during a race will be penalised with a Stop & Go.

Excessively high speed, in the judgement of the **FIM EWC Stewards Panel**, and multiple repeat offences during the event may incur higher fines and may also be subject to further penalties.

14. The **FIM EWC Stewards Panel** must communicate the offence to the pit of the rider after having received the information from the Official in charge.
15. Stopping on the track during practices and races is forbidden.



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

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 whose machine spill oil on the track causing interruption of practice, warm-up or race twice in the same event may be penalised with one of the following penalties: fine - disqualification - withdrawal of Championship points - suspension.
20. A pit lane exit road may be defined by the Safety Officer and marked with painted lines. A dotted white line (interrupted line) will then 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 (practices and race).

Infractions may be penalised by the **FIM EWC Stewards Panel**.

## 1.21 **FLAGS AND LIGHTS**

Marshals and other officials display flags or lights to provide information and/or convey instructions to the riders during practices as well as the races.

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.

#### 1.21.1 Flags and lights used to provide information

- **National flag:**

May be used waved to start the race.

- **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 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.

- **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 and passing within a group of lapped riders is forbidden under the blue flag.

Any Infringement of this rule may be penalised.

- **Chequered Black / White Flag:**

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

After having received the chequered flag, riders must return slowly to the pits. They cannot stop on the track right after the finish line.

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

The chequered black/white flag will be waved together with the blue flag at the finish line on track level when a rider(s) precedes closely the leader during the final lap before the finish line (See Art. 1.24.2).

- **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 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.

## 1.21.2            **Flags and lights Which Convey Information and Instructions**

- **Yellow Flag**

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 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.**

Overtaking is forbidden up until the point where the green flag is waved.

- Any Infringement of this rule during a practice session will result in the cancellation of the time of the lap during which the infraction occurred.
- Any Infringement of this rule during the race will be penalised with a Stop & Go.

In both cases, further penalties may also be imposed.

If immediately after having overtaken, the rider realises that he committed an infraction, he must raise his hand and let pass the rider(s) that he has overtaken. In this case, no penalty will 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.

- **White Flag:**

Waved at the flag marshal post, this flag indicates that riders will encounter a rider pushing his machine or riding slowly in the current section of the track.

It is forbidden for riders to overtake other riders during the display of the white flag.

Overtaking the rider pushing his machine or riding slowly is permitted.

NB: The white flag will always be presented with the yellow flag(s).

- **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.

The red flag will be shown motionless at the back of the starting grid at the end of the sighting lap.

The red flag will be presented motionless at the front of on the starting grid at the end of the warm-up lap.

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

- **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 and cannot restart when this flag results from a penalty.

This flag can also be presented to a rider for a reason other than a penalty (ie. for checking or changing a transponder).

Any Infringement of this rule may be penalised.

- **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. This rider may then ask for the recovery car assistance or may go back to the pit pushing his motorcycle engine switched off. He cannot rejoin the track unless he is authorised to do so by an official.

Any Infringement of this rule may be penalised.

### **1.21.3 Flag Dimension**

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

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

### **1.21.4 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.

### **1.21.5 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.

### **1.21.6 Flags Marshals posts**

The location will be fixed during the circuit homologation.

### **1.21.7 Light signals**

Lights must be used for events being run at night.

### **1.21.8 Signalling by board**

- A reflecting white board with the letters “SC” in black (black C):  
Presented at flag marshal posts combined with yellow waved flags, the race is neutralised.  
  
Riders must slow down and be prepared to catch up a SAFETY CAR or an intervention vehicle.  
  
It is forbidden for a rider to overtake another rider during the display of this flag.  
  
Overtaking the intervention vehicle is authorised.  
  
Overtaking the SAFETY CAR is forbidden. Riders must line up in single file behind it.
- A yellow reflecting board with the word “PUSH” clearly written in black must be displayed when a rider pushes his motorcycle on the track. It would have to be displayed from the moment the rider passes a post until the moment he has reached the 2<sup>nd</sup> next post. This board must be used by day and by night.
- For events taking place at night, the flags must be replaced by boards.

## 1.22 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

## 1.23 MEDICAL CARS

It is recommended that the medical cars, if they are to go on the track, be white colour, equipped with blue revolving lights. The words "MEDICAL CAR" should be clearly indicated on the back and the sides of the car. For events taking place partly at night, these words should be retro-reflective.

Overtaking of these cars is authorised.

If another vehicle (e.g. ambulance), is required to go on the track at the same time as the medical car, the other vehicle must be dispatched first.

## 1.24 STANDARD PROCEDURE FOR FINISHING A RACE; RESULTS

### 1.24.1

For races run over a prescribed distance, the last 10 laps will be shown on the finish line.

### 1.24.2

**The race is considered as finished once the chequered flag has been presented to the leading rider** by an official standing at the finish line, at track level. The chequered flag will continue to be displayed to the subsequent riders.

If the leading rider does not cross the finish line within 5 minutes, then the 2<sup>nd</sup> rider on the provisional classification will be shown the chequered flag.



When the chequered flag is shown, no rider will exit from the pit lane to reach the track. To this purpose, once the chequered flag is shown, the red light will be switched on at the exit of the pit lane and a marshal with a red flag will stand at the exit of the pit lane.

If a rider(s) closely precedes the rider who will be shown the chequered flag, the official will show simultaneously the chequered flag and the blue flag.

That means that the rider(s) closely preceding the one who will receive the chequered flag has (have) to complete one more lap and take the chequered flag.

### 1.24.3

In case of a photo-finish between two, or more, riders, the decision shall be taken in favour of the rider whose front wheel leading edge crosses the plane of the finish line first. In case of ties, the teams concerned will be ranked in the order of the best lap time made during the race.

### 1.24.4

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

### 1.24.5

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

- a) Completed 75% of the number of laps carried out by the winner of his class.
- b) Crossed the finish line on the race track (not in the pit lane) after the race winner within 5 minutes. 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.

### 1.24.6

The classification including the FIM, FMNR and title sponsor logos, will mention at least following information:

1. The name of the team (as it is mentioned on the licence);
2. The make of the machine;
3. The names of the riders;
4. The performance carried out (laps, time);
5. The number of points;

It is compulsory for the **FIM officials** to send a list of fines and results by e-mail immediately after the approval of results to the FIM Executive Secretariat.

## 1.25 SUSPENSION OF A RACE

### 1.25.1

If the Race Direction decides to **suspend** a race due to climatic conditions or some other reason, then red flags will be displayed at the finish line and at all flag marshals' posts and he will switch on the red lights around the circuit. Riders must immediately slow down and return to the pit lane in order to reach the parc fermé.

The results will be the results taken at the last point where the leader had completed a full lap without the red flag being displayed.

#### 1.25.1.1 If the interrupted race is not restarted (and is considered as final):

To be included in the final results, a team must have completed **75%** of the number of laps carried out by the winner of his class.

Exception: if the race is interrupted after the chequered flag, the following procedure will apply:

1. For all the teams to whom the chequered flag was shown before the interruption, a partial classification will be established at the end of the last lap of the race.

2. For all the teams to whom the chequered flag was not shown before the interruption, a partial classification will be established at the end of the penultimate lap of the race.
3. The complete classification will be established by combining both partial classifications as per the principle of the lap/time.

#### **1.25.1.2      If the suspended race is restarted:**

All teams that have not signed their official withdrawal will be allowed to take part at the restarted race.

#### **1.25.1.3**

The FIM EWC Stewards will be the sole judge of whether a team is actively competing, and no appeal is possible against the its decision.

For the purposes of these regulations “active” is 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.

### **1.26              RE-STARTING A RACE THAT HAS BEEN SUSPENDED**

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 Direction will announce **as soon as possible**, a new time for the start procedure.

**The race is considered suspended.**

The intermediary placings must be available to teams before the following part of a race can be started.

#### **1.26.1**

The start procedure of the resumed race will be done behind one (or two) safety car(s).

Depending on the track and weather conditions the following re-start procedure is recommended:

- All motorcycles allowed to restart are to be stored in covered secured area.

- **15 Minutes before the opening of the pit lane:**  
 2 Mechanics per machine will be allowed to bring their machines from this covered secured area and push them on a dedicated zone (neutral zone - parc fermé) in front of their boxes.  
 No work is permitted on the motorcycle.
- **5 Minutes before the opening of the pit lane:**  
 the dedicated zone (neutral zone - parc fermé) in front of their boxes will be open.  
 2 Mechanics maximum per machine will recover their motorcycle and bring it to their pit box.  
 Work on the motorcycle is permitted.
- **At hour “H”: opening of the pitlane for 2 minutes:**  
 The riders will complete the sighting lap.  
 At the end of the sighting lap, the riders will take their position on the grid according to the classification published after the suspension.
- **The race will be resumed behind one or two safety cars depending on the decision of the Race Direction:**

#### **1.26.1.1 Behind one safety car:**

All riders will follow the safety car in a single line.

After one lap (or more) under safety car, the Race Direction will decide to resume the race and ask them to leave the track

#### **1.26.1.2 Behind two safety cars:**

The first Safety Car will leave the starting line followed by the first half of the riders, in a single line, according to the classification published at the start of the suspension of the race.

When this safety car has reached mid-circuit the second Safety Car will start followed by the rest of the riders, in a single line.

The Race Director will decide on the end of the Safety car operation. In this particular case, the first group of riders should be the one who crosses the start/finish line first without Safety car.

## **1.27 CHECK AREA**

With the exception of Jury members, the Clerk of the Course and officials who are in charge of keeping watch over the closed park area, no-one may at any time or for any reason be admitted into this area unless they have a written and signed authorisation from the Clerk of the Course.

After the end of the race, all the machines which have finished the race must remain at the disposal of the officials, for 60 minutes, in the closed park. They cannot be removed without the approval of the **FIM EWC Stewards Panel**.

## **1.28 PODIUM**

The Team Managers and the riders placed in the first three positions will be escorted by officials, as quickly as possible, to the podium for the awards ceremony. Participation at the podium ceremony is compulsory.

## **1.29 FINAL TECHNICAL CONTROL**

At the end of each race, a technical control with dismantling may be carried out on the first 3 machines and other machines chosen at random by the International Jury President and the FIM Technical Director.

The dismantling of engines may take place on the following day of the race to enable the final technical control.

## **1.30 PRIZES**

### **1.30.1 Currency**

All amounts are net from which no deductions are allowed. They are payable in Euros.

### **1.30.2 Placings for obtaining prizes**

The placings for obtaining prizes are drawn up upon the basis of:

- Teams classified;
- Non classified teams;

### **1.30.3 Payment**

Prizes and allowances will be paid to the teams at the end of the race after the protest time has expired.

### **1.30.4 Prizes - Allowances**

Prizes, participation and travel allowances are subject to contracts between EEL, Organisers and Teams.

## **1.31 EXTRA DEPOSITS IN CASE OF MACHINE CONTROL FOLLOWING A PROTEST**

The deposit in case of dismantling and reassembling a machine to measure the cylinder capacity, following a protest, is 250 € (material included)

The deposit in case of partial or complete dismantling of an engine or gearbox is 400 €.

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 **660 €** 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 SANCTION FOR NON-COMPLIANCE WITH THE FUEL RULES**

A fuel control may be carried out in accordance with Art. 2.10.5 of the Endurance Technical Regulations. A rider whose fuel does not correspond to the technical requirements will be sanctioned as follows:

1. Exclusion from the whole event in question independent of the moment of the fuel sampling;
2. Fine of 500 €;
3. Payment of all costs connected to the fuel test(s) for his case.

### **1.34 CHAMPIONSHIP AND CUP POINTS; CLASSIFICATION**

#### **1.34.1**

Teams, Riders and Constructors will compete for the Championship and the Cup.

#### **1.34.2**

For Teams and Riders, the points will be those gained in each race.

#### **1.34.3**

For Constructors, only the two highest placed motorcycles of a Constructor will gain points, according to their positions in the race.

#### **1.34.4**

The classification, in addition, will mention following information:

1. The name of the team (as it is mentioned on the licence);
2. The make of the machine;
3. The class;
4. The name of the riders with whom the team had scored points;
5. The total number of points;

### 1.34.5

For each race, Championship and Cup points will be awarded on the following scale:

Places	Points for registered races of 8H or less	Points for races registered more than 8 up to 12H	Points for registered races of more than 12H
1	30	35	40
2	24	29	33
3	21	25	28
4	19	21	24
5	17	18	21
6	15	16	19
7	14	14	17
8	13	13	15
9	12	12	13
10	11	11	11
11	10	10	10
12	9	9	9
13	8	8	8
14	7	7	7
15	6	6	6
16	5	5	5
17	4	4	4
18	3	3	3
19	2	2	2
20	1	1	1

Furthermore, the points allocated for the final round of the season will be multiplied by a factor of 1,5.



### 1.34.6

Furthermore, the 5 teams that are qualified at the 1<sup>st</sup> 5 places of their class of the **final** starting grid will receive points as follows:

Grid position	Points
1	5
2	4
3	3
4	2
5	1

These points will be awarded independently with the results of the race.

Constructors are not concerned by this rule and will not receive points for qualification.

### 1.34.7

For registered races with duration from 12 to 24 hours, a partial classification will be established.

At exactly 8 hours and 16 hours after the start of the race, a partial classification will be printed. The 10 teams (and their riders) in each class, that are leading the race at that time will receive bonus points as follow:

Places	At 8 hours after the start of the race	At 16 hours after the start of the race
1	10	10
2	9	9
3	8	8
4	7	7
5	6	6
6	5	5
7	4	4
8	3	3
9	2	2
10	1	1

These bonus points will be awarded independently with the results of the race.

Constructors are not concerned by this rule and will not receive bonus points.

#### **1.34.8**

If the Championship is composed by more than 6 rounds (5 for the World Cup), the worst results for the teams and for the riders (cumulated total points of the race) of the season will not be taken into account for the general classification rounds. This means that each team must drop one result (whether that is a “No show”, a DNF or the lowest number of points obtained in one event).

This general classification will be calculated after the final round of the season concerned.

#### **1.34.9**

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, in their classes (number of first places, number of second places etc.). In the event that there is still a tie, then the date in the Championship and Cup round at which the highest place was achieved will be taken into account with precedence going to the latest result.

#### **1.34.10**

In the case where a team participates on different machines during the season, it is the make of the machine with which it obtained the most points that will appear next to its name in the final classification, without, however, modifying the calculation for the Constructors' classification.

#### **1.34.11**

The classification of the “Rider” World Championship or World Cup will be determined at the end of the season, taking into account the classification of the “Team” World Championship or Cup.

The riders must have been registered on the final starting list in 75% of the rounds (number rounded up) in which the team has participated.

The classification of the “Rider” World Championship or World Cup will not mention any points gained.

#### 1.34.12

Riders “World Champion” and one representative of the World Champion winner team are obliged to attend an official FIM ceremony.

### 1.35 INSTRUCTIONS AND COMMUNICATIONS TO COMPETITORS

#### 1.35.1

Instructions may be given by the International Jury and/or Race Direction **and/or the FIM Stewards Panels** to Teams and/or Riders by means of special circulars in accordance with the Regulations. Circulars must be posted on the official board **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.

#### 1.35.2

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 or otherwise delivered to the Teams. Posting at the official notice board and/or delivery to the Teams by other means will be deemed as proof of delivery and official publication.

#### 1.35.3

Any communication from the International Jury or the Race Direction **or the FIM EWC Stewards Panel** to a team or rider must be communicated in writing or via electronic means including but not limited to email and official Timekeeping monitors. Similarly, any communication from a team or rider to the **International Jury, the Race Direction, the FIM EWC Stewards Panel, the Permanent Officials, the Clerk of the Course** must also be made in writing including electronic means such as email.



## SUPPLEMENTARY REGULATIONS (Suggestion for Organisers)

### 1. ANNOUNCEMENT

The \_\_\_\_\_ on behalf of \_\_\_\_\_  
will organise the \_\_\_\_\_ at the circuit \_\_\_\_\_

This meeting will be held on \_\_\_\_\_ and will count towards  
the **2021** FIM Endurance World Championship / World Cup IMN:

### 2. THE SECRETARIAT OF THE ORGANISING COMMITTEE

Address of the organising committee: \_\_\_\_\_

Before the: \_\_\_\_\_

After the: \_\_\_\_\_

During the meeting: \_\_\_\_\_

### 3. CIRCUIT

The length of the circuit is \_\_\_\_\_ km.

The race will be run clockwise / anti-clockwise.

A drawing of the circuit is enclosed.

### 4. JURISDICTION

The meeting will be held in accordance with the FIM Sporting Code, the CCR rules and these Supplementary Regulations.

The Organiser also commits to respect as much as possible the “Green line” charter of good practice.



5. OFFICIALS

Race Direction

- |                        |                   |
|------------------------|-------------------|
| - FIM Race Director:   | Patrick COUTANT   |
| - FIM Safety Officers: | Rezső BULCSU      |
| - EEL Representative:  | Doriano VALERIANI |

FIM International Jury

- |                       |              |
|-----------------------|--------------|
| - FIM Jury President: | Igor ESKINJA |
| - FIM Jury member 2:  | Matej SMRZ   |
| - FIM Jury member 3:  | _____        |

FIM EWC Steward panel

- |                          |              |
|--------------------------|--------------|
| - FIM EWC Chief Steward: | Igor ESKINJA |
| - FIM EWC Steward 2:     | Matej SMRZ   |
| - FIM EWC Steward 3:     | _____        |

FIM Appeal Steward panel

- |                                   |                                       |
|-----------------------------------|---------------------------------------|
| - FIM Appeal Steward:             | _____                                 |
| - FMNR Appeal Steward:            | _____                                 |
| - FIM Medical Director:           | David McMANUS                         |
| - Head of organisation:           | _____                                 |
| - Clerk of the Course:            | _____                                 |
| - FIM Endurance Coordinator:      | _____                                 |
| - Secretary of the meeting:       | _____                                 |
| - Technical Directors:            | Dominique HEBRARD<br>& Miguel SANCHEZ |
| - Chief of technical inspections: | _____                                 |
| - Chief timekeeper:               | _____                                 |
| - Chief Medical Officer:          | _____                                 |
| - Environment Steward:            | _____                                 |
| - Promoter Representative:        | _____                                 |

Address of Jury members during the meeting:



**6. CATEGORIES AND CLASSES**

Motorcycles of the following classes are eligible:

**7. NUMBER OF TEAMS ALLOWED**

Practice:

Admitted to the start of the race:

**8. ENTRIES, ENTRY FEE, DEPOSIT**

Applications for entry must be made on the official forms included with these regulations.

Applications must be approved by the rider's FMN and must reach the organisers not later than \_\_\_\_\_ midnight.

The organiser will select the applications and advise teams within 72 hours after the closing date of entries whether their applications have been accepted or rejected.

The entry fee is the one mentioned in the Rules.

The maximum deposit amount for transponders is....

**9. TECHNICAL INSPECTIONS**

No rider or machine is permitted onto the track unless he/it has passed the technical inspections which will be held according to the following schedule:

Thursday	Friday	Saturday
from to	from to	from to
from to	from to	from to
from to	from to	from to



**10. PRACTISING**

It is strictly forbidden to ride racing motorcycles on the course outside the official practice periods.

The practice sessions will be as follows:

date	free practice	qualifying practice	warm-up
	from to	from to	from to
	from to	from to	
	from to	from to	

**11. RACE: SCHEDULE**

Date of the start:

Time:

Distance or duration:

Minimum to be classified

**12. PRIZES**

Payment of prizes \_\_\_\_\_ (time) at \_\_\_\_\_ (place).

**13. PRIZE-GIVING**

Place - date

**14. PROTESTS**

All protests must be made in accordance with the requirements of the FIM Disciplinary and Arbitration Code and be accompanied by a fee of \_\_\_\_\_ (local currency - amount equivalent to 660 Euros).

**15. FUEL**

If fuel is supplied by the organisers at the fuel-station, it will be in conformity with Art. 2.10 of the Endurance Technical Regulations.



## 16. INSURANCE

By endorsing the application form for entry the FMN of the rider certifies that the rider is insured in accordance with the FIM requirements.

In conformity with Article 110.1 of the Sporting Code, third party insurance in respect of riders covering accidents occurring during the meeting including practices will be the responsibility of the organiser.

This insurance includes a guarantee of \_\_\_\_\_ (local currency).

The organiser disclaims all responsibility for damage to a motorcycle, its accessories and components arising out of an accident, fire or other cases.

## 17. RENUNCIATION OF ANY RECOURSE AGAINST SPORTING AUTHORITIES

Apart from the requirements of the FIM Sporting Code, riders and teams by participating renounce all rights of appeal against the organiser, his representatives or agents by arbitration or before a tribunal or any other manner not foreseen by the FIM Sporting Code for any damages for which they could be liable in consequence of all acts or omissions on the part of the organiser, his officials, representatives or agents in the application of these regulations or contributed to or arising out of their actions.

Enclosures:

- drawing of the circuit
- entry form

Place and date: \_\_\_\_\_

The President of the Organising Committee: \_\_\_\_\_

The Clerk of the Course: \_\_\_\_\_

The Secretary of the Meeting: \_\_\_\_\_

Approved on: \_\_\_\_\_

(FMNR)

Approved on: \_\_\_\_\_

(FIM/CCR)



## 2021 Technical rules for Endurance

### Corrections and changes

Article	Subject
<b>2.3</b>	<b>GENERAL ITEMS</b>
2.3.4	Control levers
2.3.6	Tyres
2.3.11	Electrical equipment (lights) and electroluminescent numbers
2.3.15	Refuelling
2.3.18	Timekeeping Instruments
<b>2.6</b>	<b>FORMULA EWC TECHNICAL REGULATIONS</b>
2.6.2	Minimum weight
2.6.6.1	Main Frame Body and Rear subframe
2.6.6.2	Front Forks
2.6.6.3	Swingarm
2.6.6.6	Brakes
2.6.6.30	Crankcase, other engine cases and covers
2.6.6.31	Transmission/Gearbox
2.6.11	Additional Equipment
<b>2.7</b>	<b>SUPERSTOCK TECHNICAL REGULATIONS</b>
2.7.2	Minimum weight
2.7.6.1	Main Frame Body and Rear subframe
2.7.6.3	Swingarm
2.7.6.6	Brakes
2.7.6.8	Handlebars and Hand controls
2.7.6.15	Radiator, Cooling system and oil coolers
2.7.6.28	Crankcase, other engine cases and covers
2.7.6.32	Electronic Control System
2.7.11	Additional Equipment
<b>2.9</b>	<b>EXPERIMENTAL TECHNICAL REGULATIONS</b>
2.9.3	Minimum / Maximum weight
2.9.11	Exhaust System
2.9.16	Additional Equipment
<b>2.10</b>	<b>FUEL (PETROL), LUBRICANT AND COOLANTS</b>
2.10.5	Fuel Storage
2.10.6	Coolants
<b>2.11</b>	<b>PROTECTIVE CLOTHING AND HELMETS</b>
2.11.1	
2.11.5	
2.11.7	
<b>2.13</b>	<b>VERIFICATION GUIDELINES FOR TECHNICAL STEWARDS</b>
2.13.1	Verification
2.13.2	Preparation, Procedures

## 2. TECHNICAL REGULATIONS

Amendments to the Technical Regulations may be made at any time in order to ensure fair competitions.

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 **starting** grid positions for the 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 FIM Endurance World Championship 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 being eligible to participate in the Championship events of the current year.

### 2.2 CLASSES

#### 2.2.1

The Sports Production classes will be designated by engine capacity (EWC, Art. 2.6) and **by** state of tuning (SUPERSTOCK, Art. 2.7), **both** with a valid FIM homologation.

The OPEN classes will be designated by engine type and/or technology (EXPERIMENTAL, 2.9).

## 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 **is forbidden**. The use of titanium or aluminium alloys in the construction of swing arm spindles and the wheel spindles is forbidden. **Double or “twin” treaded bolts/spindles are not allowed (from 01/01/2021).**

The use of titanium and light alloys for nuts and bolts is allowed.

### 2.3.3 Handlebars

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

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

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

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 when on full lock to prevent trapping the rider's fingers (see diagrams A, B, C).

The repair by welding of light alloy handlebars is prohibited.

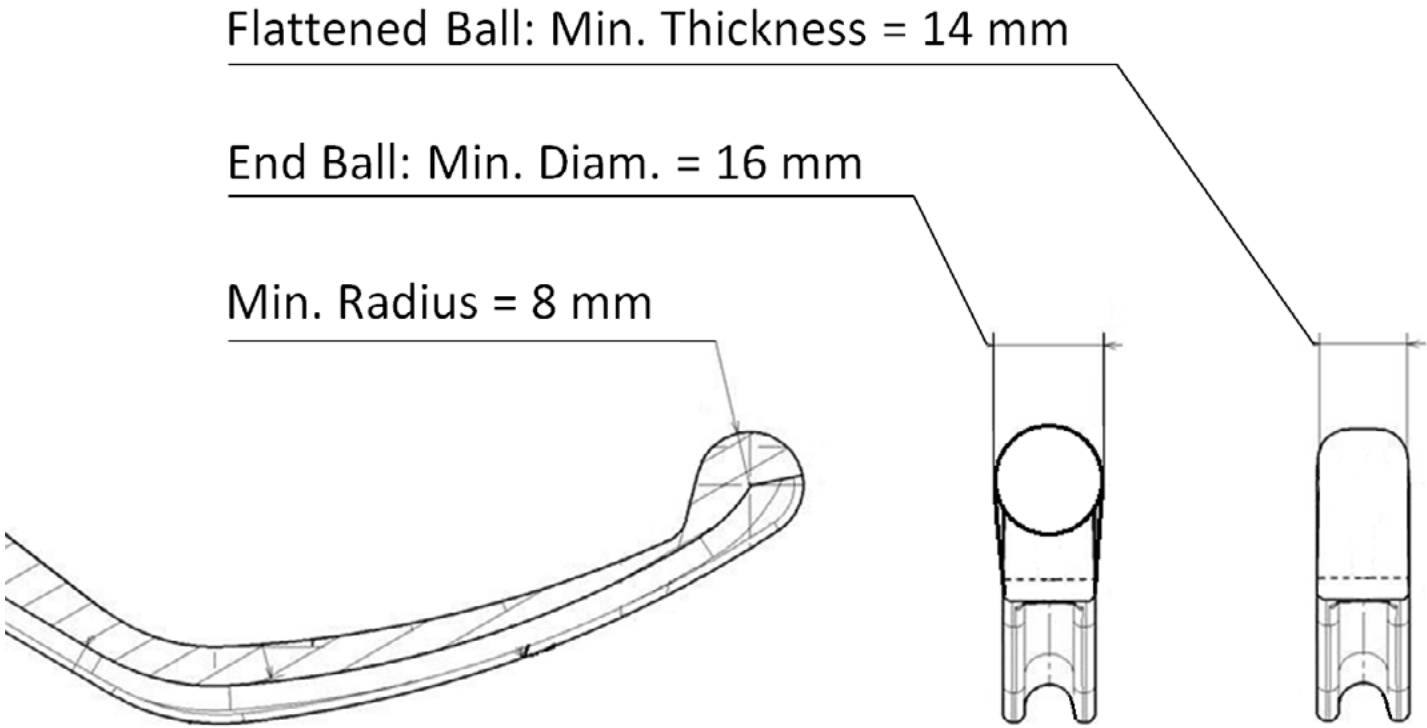
Handlebars made from composite materials are not permitted.

### 2.3.4 Control levers

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 **(see drawings hereunder)**.

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

The front brake lever must be protected by an adapted guard.



The rear brake lever, if pivoted on the footrest axis must work under all circumstances. **If damaged, it must be repaired immediately in working order during the next pitstop.**

Modified rider controls will be considered for the mobility challenged subject to a review and approval by the Medical Director. The Technical Director’s decision on the modifications is final.

**2.3.5 Wheel & rims (See Table 1)**

1. All tyres will be measured mounted on the rim at a pressure of 1 kg/cm<sup>2</sup> (14 lb./sq.in.); measurements taken at a tyre section located at 90° from the ground.
2. 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 rim is modified for these purposes bolts, screws etc. must be fitted.
3. The wheel rim widths are (in inches):
  - **Formula EWC**

Front:	3.50"
Rear:	6.00"
Diameter:	17.00"
  - **Superstock** according to the homologated size

4. The rim width is the distance between the rim walls measured inside the flange walls in accordance with ETRTO.
5. Only wheels made out of the same material as the homologated wheels are permitted, or **only for EWC**, wheels in aluminium (See Art. 2.6.6.5 and Art. 2.7.6.5).
6. Only steel or aluminium air valves are allowed. Angled tyre air valves are recommended.

### 2.3.6 Tyres

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

#### 1. Requirements

With the exception of slick tyres and tyres marked “NOT FOR HIGHWAY USE” (NHS), the manufacturer must identify the tyre with a mark indicating:

- The DOT mark and/or the E mark (used for “homologated tyres” or tyres marked for highway use only)
- The name of the manufacturer
- The year of manufacture (in code)
- The tyre dimension
- The speed rating
- Any other features necessary for the correct use of the tyre

#### 2. Fitting

- The tyre must be mounted on the correct rim.
- The rim must not be deformed or damaged.

#### 3. Permitted minimum speed

- The minimum speed rating for use in Superstock is: (W).

#### 4. Tyre surface tread pattern

The tread pattern is unrestricted.

The tread pattern must be made exclusively by the manufacturer when producing the tyre. No **handcutting** is allowed.

The choice of slick and/or WET weather tyres (and type of tread pattern, where applicable) is **left to** the discretion of the rider.

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 shoulder 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.

In case of dispute, the decision of the FIM Endurance Technical Director will be final.

#### 5. Tyre Control Method

1. Tyre Restriction for the Formula EWC and Superstock is controlled by FIM tyre stickers. These tyre restriction rules will **apply on every new circuit in the championship, even with new asphalt (resurfaced circuits).**
2. With the exception of “full wet” type tyres (drawings of “full wet” type tyres need to be presented by each tyre manufacturer for each event), every tyre used during the event must be marked with an adhesive numbered sticker allocated by the FIM Officials.
3. Numbered tyre stickers will be assigned to each team (5 for a 2-rider Team; 7 for a 3 rider Team) in a sealed envelope, the day before the first QP practice. The teams will be responsible for the correct application and use.

4. Both stickers (for the front and the rear tyre) must be applied on the same side of the motorcycle (pit box side). Officials will check that all EWC and Superstock motorcycles in the pit lane are fitted with tyres carrying the sticker. **All riders must stop to the “control point” of tyre stickers and wait for the “OK” of the Technical stewards before to rejoin the track. All motorcycles found without tyre sticker(s) will be send back to its pit box by the Officials.**
5. The use of motorcycles without the official stickers or a **“forcing” of the control point of tyre stickers** will be immediately reported to the **FIM EWC Stewards Panel** who will take appropriate action (see Sporting rules).
6. In exceptional cases, i.e. should the sticker be damaged, up to **1 (one)** extra stickers may be provided at the sole discretion of the FIM Technical Director. The damaged sticker and the tyre it was applied to, **must be absolutely intact (i.e. not used) and shown** to the FIM Technical Director. The Technical Director may decide to retrieve and hold the tyre in question.
7. A **“Stop and Go”** penalty may be given for each additional tyre given to a Team.

## 6. Tyre Sticker Quantities

Each Team will be given a fixed number of FIM tyre stickers, **assigned to the Team. Each tyre needs to be marked with one sticker**, applied carefully to the tyre sidewall (**pit box side**) (NB: 1 sticker per tyre), before the rider/motorcycle leaves the pit box.

**With the exception of FULL WET type tyres all “slick” or intermediate type tyres, used by each Team will be marked with an FIM tyre sticker prior to their use during the Qualifying Practice Sessions (QP).**

1. EWC Class - per Team/(#) = 2-rider Team:
  - **All events: 7 (#5) stickers for the QP's**
2. SUPERSTOCK Class - per Team/(#) = 2-rider Team:

- **All events: 7 (#5) stickers for the QP's**

Note:

- The “reserve” rider is not required to use tyres marked with FIM stickers during his QP sessions.
- A tyre is considered as “used” as soon as the rider has left the pit lane with his motorcycle.
- The Team is solely responsible for the application of the tyre sticker on the tyre.
- **Any tyre found without this marking will be sanctioned by the FIM EWC Stewards Panel.**

### 2.3.7 Tyre Clearance

The Team must guard that a minimum safe distance between the surface of the tyre (at its largest point) and any fixed part of a motorcycle is guaranteed at all time (safe distance = no scrubbing of the tyre against any fixed parts).

### 2.3.8 Adaptation of the tyre's surface

In order to obtain optimal tyre adhesion, new unused tyres can be adapted by scuffing the surface. 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.

### 2.3.9

The use of tyre warmers is allowed.

### 2.3.10 Starting devices

A starting device are compulsory on **all** motorcycles, regardless of the class entered.



## 2.3.11 Electrical equipment (lights) and electroluminescent numbers

### INSTALLATION / PREPARATION:

All motorcycles must be equipped with a complete electric lighting system with all components in good working order. A complete electrical lighting system means: front and rear lights (no brake lights, no turn signals, no “flashing” lights).

The following components are part of the electrical lighting system:  
- headlights, - batteries, - generator, - rear lights and one (1) emergency rear light with the respective cable harnesses.

Whatever the choice of the point 1 or 2 hereunder, the location of the main sources of lighting (main bulb(s)) must be respected as on the homologated motorcycle.

1. The original headlight housing, - (bulbs), the internal parts of headlight(s) and headlight brackets may be modified or replaced. If the optics is glass, it must be completely covered with an adhesive clear plastic film to prevent it from breaking in the event of an accident.
2. If the original headlamp (s) is/are replaced, the opening or shape of the original headlamp at the front of the fairing must be respected. The original shape and location of the light-housing(s) or each light-housing, shall be duplicated with a tolerance of +/- 20 mm (as for the shape of headlight plexi/glass cover (as long as the shape of the fairing will not change).
3. Each front light source must be a minimum 1200 lumens bulb (or must be in compliance with ECE R112 Class A Headlamp standard). The technical sheet of the factory will prevail.
  - In EWC class the headlights must emit a WHITE light beam (colour temperature equal or upper than 5000K “cold white”).
  - For SST and other class(es), the headlights must emit a YELLOW light beam (colour temperature equal or lower than 3000K “yellow / warm white”).

4. A rear light contains a non-flashing red light (lamp/LED,\*).
- \* Each rear light will meet the following specifications: max. 250 lumens, red 630-670 nm recommended; the technical specification sheet will prevail.
5. At least one headlamp and one taillight must be “ON” at all times during the race (except during the pitstop).
6. Following a crash or incident, when one front/rear light is broken, this/these must be repaired/replaced during the next pitstop. A motorcycle without any lights must exit the track and continue on the service road, on its own power (and at a pace as ordered by Race Direction), by human power or with the recovery vehicle.

When modified, the original or modified wireloom circuit must include:

7. One (1) ON/OFF switch on a wireloom, connected with two (2) head lights, two (2) rear lights, with either single or multiple halogen lights (i.e. xenon, LEDs, OLEDs or LASER).
8. A third, RED rear “emergency” light\* on a separate wireloom with fuse and an ON/OFF switch, connected to a battery and within reach to be operated by the rider, or an “autonomous” type with same capacity.

Either model, the capacity of the battery used must offer 36 hours of lighting. (Li-Po batteries are excluded because they cannot be extinguished). This battery must have the same guarantee of safety as the main battery in terms of attachment to the machine.

- \* Each rear light will meet the following specifications: max. 250 lumens, red 630-670 nm recommended; the technical specification sheet will prevail.
9. Magnetic or electronic relays can be used to control each circuit individually,
10. The electroluminescent display of the competitor’s number can have its own on / off switches and may be on an independent circuit,

11. A red, retro-reflective flat reflector (minimum 60 cm<sup>2</sup>) must be installed at the rear of the motorcycle, perpendicular to the ground and slightly inclined towards the rear (maximum inclination 30 ° from the vertical).
12. Extra identification lights, non-flashing, (no red, yellow or green, max intensity 100 lumens/max. 5 W), may be added, fixed on the streamlining, visible only when viewed from the front and from the side of the motorcycle.

## OPERATIONS

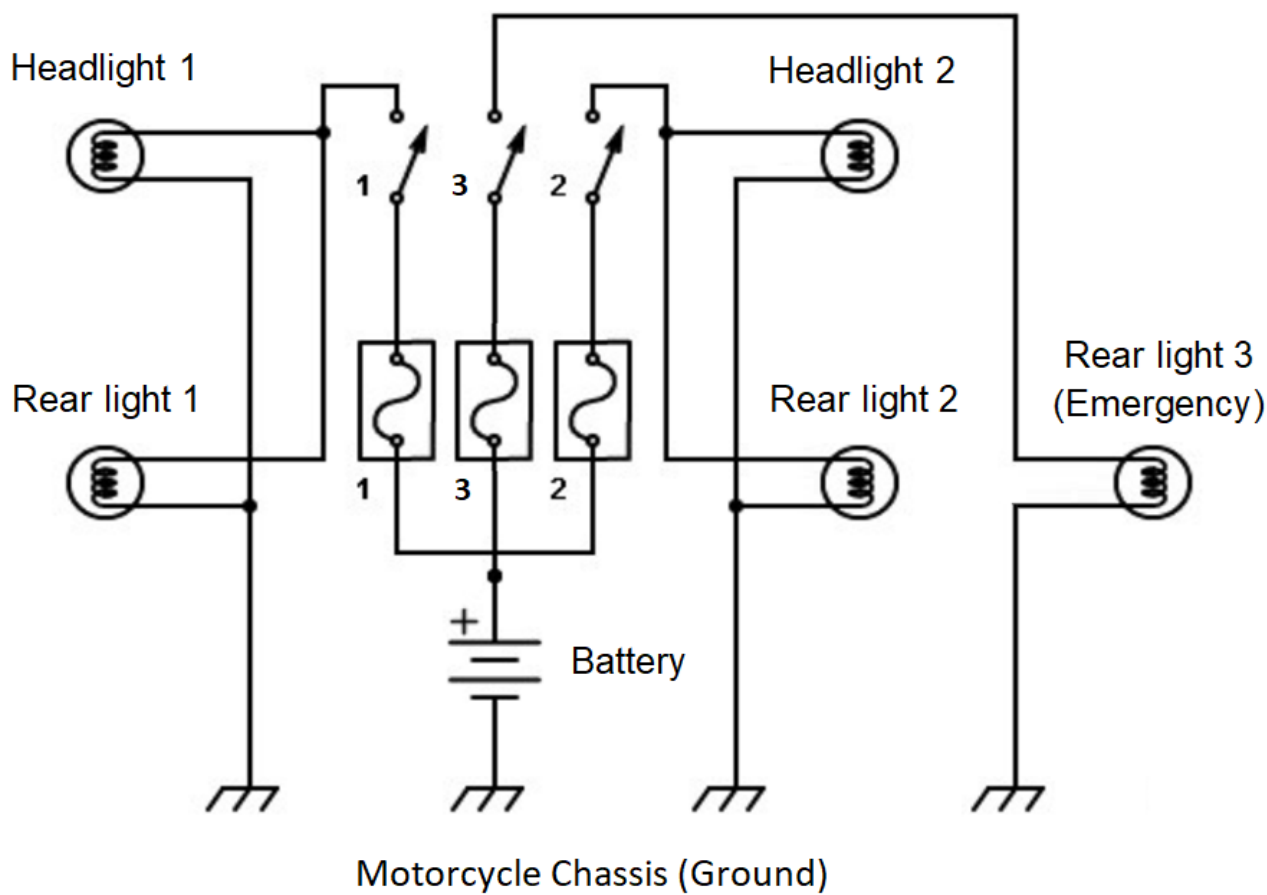
All lights (2 headlights and 2 rear lights) must be lit (“on”) with the command “engine start”, before the motorcycle is moving and the rider leaves the pitbox. When the engine is switched “off” by the rider, all lights (2 head lights and 2 rear lights) must be switched “off”.

- If a headlight or rear light is damaged after a crash, the damaged light(s) must be repaired at the next pitstop. No motorcycle may leave the pitbox with a non-functioning head light or rear light.
- The head- and rear lights must be “off” as the engine is stopped before work and/or refuelling. Only the electroluminescent numbers, the third rear “emergency” red light and the extra identification lights can remain switched on during the pitstop/ refuelling.
- Any broken lights or bulbs occurring during a rider’s session (ex. following a crash or incident), must be replaced during the next pit stop (see also: Art. 1.7.2 - Lights on).
- After a crash during the night, with only an emergency light working, the rider must follow the orders provided by the Race Direction and/or continue on the service road.

If lights are switched “on” after the motorcycle has left the pitbox/ or are switched “off” before the motorcycle arrives at the pitbox, the team will receive a penalty (ex. a stop-and-go, etc.).

**NOTE:** The electroluminescent numbers and the third rear “emergency” red light shall be working when the panel “LIGHTS ON” is shown (and during the whole duration of the procedure “LIGHTS ON”). (See also Art. 2.3.12).

Schematic guidelines for lighting installation:



2.3.12 Number Plate and Colours

The background colours and figures (numbers) of the number plates are as follows:

Class	Background	Figures
Formula EWC	Black (Ral 9005)	white electroluminescent figures
Superstock	Red (Ral 3020)	white electroluminescent figures
Experimental	Green (Ral 6002)	white electroluminescent figures

The sizes for all the numbers are:

Minimum height (for all front numbers):	140 mm
Minimum height (for all side numbers):	120 mm
Minimum width:	80 mm
Minimum stroke:	25 mm
Minimum space between the numbers:	10 mm

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

- Once on the front, either in the centre of the fairing or slightly off to one side. The top of the figures must be inclined towards the centerline. The number must be centered on the background with no advertising within 25 mm in all directions.
- Once, on each sides of the motorcycle. Alternatively, once across the top of the rear seat section with the top of the number towards the rider. The number must be centered on the background.

For light coloured bodywork, there shall be a black line of 8 mm minimum all around the perimeter of the background.

In case of a dispute concerning the legibility of numbers, the decision of the FIM Endurance Technical Director / Chief Technical Steward will be final.

### 2.3.13 Reflective area

Only for races taking place partly at night, a red reflective surface with minimum area of 60 cm<sup>2</sup> must be fixed **onto** the rear of the motorcycle seat cowling **and must remain entirely visible by following riders.**

### 2.3.14 Handprotectors

**Only** in rain conditions and/or low ambient temperatures, additional hand-protectors may be attached to the streamlining with “quick-fit” type fasteners. Hand-protectors are intended to give extra protection to the hands only and cannot exceed the handlebar width. All sharp edges must be rounded. The required clearances **between handlebars, clutch and brake lever/-protectors and these hand-protectors** must be respected when **these** are fitted to the streamlining (see Diagram A-3).

**Handprotectors must be presented to and validated by the FIM Technical Director before their installation and use.**

### 2.3.15 Refuelling

The original fuel tank cap must be replaced by maximum two openings to accommodate a “quick-fill” type (i.e. aviation type) fuel valve and must provide a closed system. Quick fill valves with concentric openings are permitted.

From 01/09/2019, the following articles apply:

1. The original fuel tank cap must be replaced by one (1) or two (2) openings to accommodate a “quick-fill” type (i.e. aviation type) fuel valve.

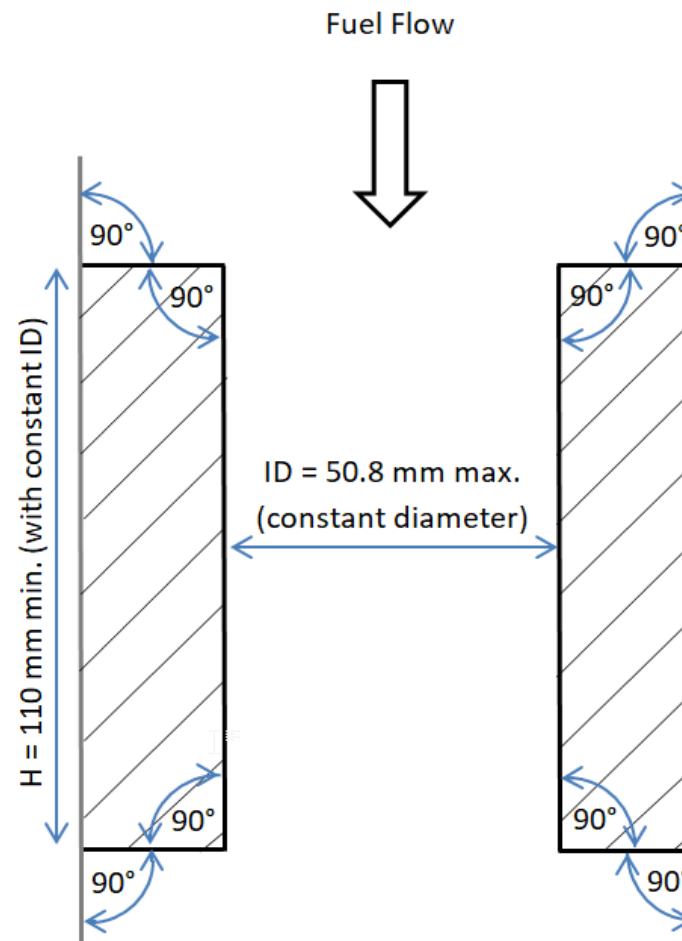
Coaxial or side-by-side quick fill type valve systems are permitted.

Whatever the system chosen by the team, the maximum internal diameter (ID) for the opening of the fuel transfer shall not exceed 2 inches (50.8 mm).

- In case a Team uses a side-by-side quick fill fuel valve system (with an ID opening larger than 2 inches), the Team will be required to install a restrictor (with an Internal constant Diameter of 2 inches (50.8 mm) maximum on a minimum height of 110 mm (as shown on the following drawing)) in the fuel supply line directly positioned above the fuel valve to balance the fuel flow. Both ends of the cylinder shaped restrictor shall be cut at an angle of 90°.

ID = Internal Diameter

H = Height



- A protective and lockable cover must be affixed on the quick-fill fuel valve(s) if no locking device is already applied to the closing system within the receptive part of the quick fill fuel valve installed in the motorcycle fuel tank.
- Any tampering with the opening or closing of the quick fuel valve system installed in the fuel tank will be considered as an infringement to the safety requirement.
- The action of opening and closing of the valves when fuel and air are transferred must take place without any leaks or fuel spillage.



2. Complete refuelling systems must be used either in the form of a “portable” fuel container or as a “fuel tower” installation fixed securely to the pit box wall.
  - Each system must have a “closed” and leak proof circuit for the transfer of fuel.
  - Each system must be fitted with a ventilation opening to equalise the pressure within the circuit with the ambient air pressure.
  - Fuel shall only be transferred by gravity feed. For safety reasons, no part of the refuelling installation may be cooled or pressurized.
  - The top of the tower-installed fuel container shall not exceed a maximum height of 2.60 m (measured from the ground).
  - Fuel type supply hoses must be reinforced or be protected by a second outer layer (or larger tube). The maximum internal diameter (ID) for fuel supply hoses tubes shall not exceed 60 mm.
  - The maximum dimension (length/height) of the portable fuel container is 100 cm. In any case, the total length/height of a portable container and quick fill fuel valve assembly shall not exceed 120 cm.
  - **Cameras or any other electrical equipment (batteries or power supply sources) cannot be mounted/affixed to this portable fuel container.**
  - Excess fuel must return to the fuel container tower or to a handheld container. Extremely thin walled hoses used for air transfer cannot be used for fuel supply or overflow. In the event that a safety issue was reported, the decision by the FIM Endurance Technical Director to accept/refuse said installation will be final.
  - All fuel shall be stored and used at ambient temperature.



3. Fuel spills are not acceptable and very dangerous. Fuel transfer is not without any risks. Every Team must be extremely careful and attentive when handling fuel during fuel stops. Any evidence of a defective system observed or reported will be sanctioned. The Team must follow all directives given by the Officials and/or by the Firefighters.
4. All personnel who are involved in the refuelling operations, including the person responsible for the fire extinguisher, must wear an overall made of fire retardant materials; hands and feet must be protected with gloves and footwear made of fire retardant materials; safety goggles and mask and a balaclava of fire-retardant quality. The use of a suitable protective helmet and eye protection is compulsory.
5. During the practices or the race, only tyre warmer systems and cordless portable electrical tools are allowed.

From the date that “FIM” homologated fuel valves are officially introduced, Teams will be given one year to be in conformity with the rules.

### 2.3.16 Markings

The frame and engine (crankcase(s)) must be marked and/or sealed before the practice sessions and before the race. **At the discretion of the FIM Technical Director, these numbers may be verified after the qualifying practice sessions and after the race.**

During the race, all defective parts may be replaced with the exception of the frame and crankcases.

### 2.3.17 Ballast

The use of ballast is allowed to stay over the minimum weight limit. The use of ballast must be declared to the FIM Endurance Technical Director/ Chief Technical Steward at the preliminary checks **and before the race**. Nevertheless, the verified weight may never fall below the required minimum weight required for each Class.

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

### 2.3.18 Timekeeping Instruments

All motorcycles must have a correctly positioned timekeeping transponder. The transponder must be supplied or approved by the official Timekeeper and fixed to the motorcycle in the longitudinal centre of the motorcycle (typically close the swing-arm pivot), on the 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.



## 2.6 FORMULA EWC TECHNICAL SPECIFICATIONS

**EVERYTHING THAT IS NOT PRESCRIBED OR SPECIFICALLY ALLOWED IN THESE RULES IS STRICTLY FORBIDDEN.**

Formula EWC motorcycles are based on road legal models with a valid FIM homologation.

Formula EWC motorcycles require an FIM Superbike Homologation. The homologated “Superbike” model must not exceed a maximum retail price of 40.000 Euro (incl. taxes).

(The FIM Homologation procedure is available on [www.fim-live.com/library](http://www.fim-live.com/library), See also the Appendix FIM Homologation procedure.)

All motorcycles entered in the Formula EWC class must comply in every respect with all the requirements for Circuit Racing as specified in these Technical Regulations, unless they are already equipped as such on the homologated model.

The appearance from both front, rear and the profile of Formula EWC motorcycles for Endurance 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; the silencer(s) must remain on the same side as homologated on the original model (From 01/01/2020).

### 2.6.1 Displacement capacities

Over 600cc up to 1000cc	4-stroke:	4 cylinders
Over 750cc up to 1000cc	4-stroke:	3 cylinders
Over 850cc up to 1200cc	4-stroke:	2 cylinders

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

### 2.6.2 Minimum Weight

**From 01/01/2021:**

**All machines: 168 kg for all races.**

**This is the absolute minimum weight (without the fuel tank and its content).**

**(“Its content” includes: fuel onboard, all fuel tank internal parts, fuel valve(s) system (+ protective cover (if any)), fuel pump, glued protective covers/rider anti-slip systems).**

**At any time during the event, the weight of the whole motorcycle (excluding the fuel tank and its content) must not be less than the minimum weight.**

**There is no tolerance on the minimum weight of the motorcycle.**

**The use of ballast is allowed to stay over the minimum weight limit and may be required due a handicap system. The use of ballast and weight handicap must be declared to the FIM Endurance Technical Director/ Chief Technical Steward at the preliminary checks and/or prior to the race.**

**During the practice and qualifying sessions, riders may be asked to submit their motorcycle to a weight control in the pit lane. The minimum weight during the QPs remains at 175 kg (including the fuel tank and its content).**

**In all cases the rider (and the team) must comply with this request for a control. Any “forcing” of the control point of the weight control will be immediately reported to the FIM EWC Stewards Panel who will take appropriate actions (see Sporting rules).**

**During the final technical inspection at the end of each race, the selected motorcycles will be weighed in the condition they finished the race (without the fuel tank and its content), and the established weight limit must be met in this condition. Nothing may be added to the motorcycle. This includes all fluids.**

**The minimum weight includes all Championship contracted devices whether fitted or not, such as Transponder and on-board TV system.**

#### **2.6.4 Fuel injection system (Injection and throttle bodies)**

**Fuel injection system (refers to the complete system, including throttle bodies and variable length intake tract devices) must remain as homologated. No modifications are allowed. See also Art. 2.6.6.18.**

## 2.6.5 Fuel

All motorcycle engines must function on normal unleaded fuel with a maximum lead content of 0.005 g/l (unleaded) and a maximum MON of 90 (see also Art. 2.10 for fuel specifications).

## 2.6.6 Motorcycle Specifications

All items not mentioned in the following articles must remain as originally produced by the manufacturers for the homologated motorcycle.

### 2.6.6.1 Main Frame Body and Rear subframe

The main frame must be the originally manufactured part produced and fitted by the manufacturer and be used on all the units produced following the homologated motorcycle model.

The main frame must have a vehicle identification number (VIN number), as issued by the manufacturer on the homologated model. Any main frame (as “**original**” or originating as “spare part”) must be identical to the original homologated part, and correspond to all the dimensions on the drawings. Such main frame must be identified by **permanent method** by a special and unique number (Example: “YEAR - TEAM - 01”).

The main frame may only be modified by the addition of gussets or tubes. No gussets or tubes may be removed, other modifications are allowed within the following section of these rules.

Holes may be drilled on the frame only to fix **authorized** components (i.e. fairing brackets, steering damper mount, **frame protectors**).

The dimensions and position of:

- Engine
- Suspension linkage mounting points on the frame must remain as homologated.

Steering angle changes are permitted by fitting inserts onto the bearing seats of the original steering head pipe. The original bearing seat diameters on steering head pipe may be increased to insert special bushings. The new fore and aft position of each bearing can be a maximum +/- 6 mm in respect to the original bearing location.

No part of these special bushings may protrude axially more than 3 mm from the original steering head pipe location. The steering head pipe can be reinforced in the area of the bearing seats. Welding and machining is allowed for the purpose of making these modifications.

Modifications to the frame at the swing arm pivot area are allowed to give a maximum of +/-5 mm of adjustment in the radial view. Welding and machining is allowed for the purpose of making this modification of the original swing arm pivot, regardless of the technology used and the dimensions of the component or section of the frame (i.e: cast, fabricated, etc.).

**Protective covers made from composite materials protecting a section of a frame are permitted and must be attached securely. Adequate space must be available to affix the FIM Technical verification sticker (on a smooth surface).**

The homologated rear sub-frame construction may be modified, but the design, purpose and assembly must remain as used by the homologated part. The material used must remain as homologated or of higher specific weight.

The material for the seat pad may be modified and/or replaced.

The material of the streamlining/seat section may be replaced, but the homologated shape/profile must remain as homologated.

The paint scheme is not restricted.

#### 2.6.6.2 Front Forks

Front fork in whole or part may be changed but must be the same type homologated (leading link, telescopic, upside down, etc.). A small support for the front wheel stand may be added (round or flat, in steel, aluminium, with max. dimensions for length x width x height **(starting horizontally from the center of the front axle shaft: maximum dimensions: 80 mm x 110 mm) with a minimum thickness of this part of 6 mm.** All edges must be rounded and face inwards.

No aftermarket or prototype electronically-controlled suspensions may be used.

An electronically-controlled suspension may only be used if already present on the production model of the homologated motorcycle.

The electronically-controlled valves must remain as homologated. The shims, spacers and fork springs not connected with these valves can be changed.

The ECU for the electronic suspension must remain as homologated.

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.

The original suspension system must work safely in the event of an electronic failure.

Electro-magnetic fluid systems which change the viscosity of the suspension fluid(s) during operation are not permitted.

The upper and lower fork clamps (triple clamp, fork bridges) can be changed or modified.

Steering damper may be added or replaced with an after market damper.

The steering damper cannot act as a steering lock limiting device.

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).

### 2.6.6.3 Swingarm

The rear **swingarm** may be altered or replaced from those fitted to the homologated motorcycle. However the type single or double sided must remain as homologated. The use of carbon fibre or Kevlar® materials is not allowed if not homologated on the original motorcycle.

**Protective covers made from composite materials to protect a section of a swingarm are permitted and must be attached securely.**

A chain guard must be fitted to the swing-arm in such a way to reduce the possibility that any part of the riders' body should become trapped between the lower chain run and the rear wheel sprocket. This lower chain guard (a.k.a. shark-fin) must cover substantially the opening where the chain meets the rear sprocket. Chain guards must be made of strong material (steel, aluminium, composites) and face inwards.

Rear wheel stand brackets may be added to the rear swingarm by welding and/or attached by bolts.

These brackets (in steel or aluminium, fitted behind or below the swingarm) must respect maximum dimensions (measured all around the swingarm) for length x height: 120 mm x 120 mm) with a minimum thickness of this part of 6 mm. All edges must be rounded and face inwards.

Fastening screws must be recessed. A small bracket to retain the chain (steel, aluminium) is permitted, securely mounted, edges must be rounded. Max dimensions: length: 40 mm; height above the swingarm: 40 mm; width/thickness: 10 mm).

#### 2.6.6.4 Rear Suspension Unit

Rear suspension unit can be changed but a similar system must be used (i.e. dual or mono).

Electronically-controlled suspension may only be used if already present on the production model of the homologated motorcycle.

The electronically-controlled valves must remain as homologated. The shims, spacers and shock absorber springs not connected with these valves can be changed.

The ECU for the electronic suspension must remain as homologated.

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.

The original electronic system must work safely in the event of an electronic failure.





Electro magnetic fluid systems which change the viscosity of the suspension fluid(s) during operation are not permitted.

The rear suspension linkage may be modified or replaced.

The original fixing points in the frame (if any) must be used to mount the shock absorber, linkage and rod assembly fulcrum (pivot points).

**2.6.6.5            Wheels**

Wheels (see Art. 2.3.5.2), and associated parts may be altered or replace from those fitted to the homologated motorcycle. Magnesium (unless homologated), carbon- or carbon composite wheels are not allowed, unless the manufacturer has equipped the homologated production model with this type of wheel.

Bearings, seals, spacers 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).

Wheel balance weights may be discarded, changed or added to.

Any inner tube (if fitted) or inflation valves may be used.

Diameter for front and rear wheel rims:            17.00 inches

Front wheel rim width:                                    3.50 inches

Rear wheel rim width:                                    6.00 inches

**2.6.6.6            Brakes**

Front master cylinder may be altered or replaced from those fitted to the homologated motorcycle.

Front brake callipers may be altered or replaced from those fitted to the homologated motorcycle.

**Front brake system cooling airducts are allowed. This duct (1) must be fitted between the front brake caliper and the front brake caliper bracket. No modifications to the front brake calipers are allowed.**

EWC

Air ducts shall be routed to cool the discs or directed onto the brake caliper bodies. Viewed from the side, the airducts opening shall not pass the vertical line drawn by the front axle shaft. Viewed from the front, the airducts must fall inside the shape drawn by the fairing (aerodynamic winglets excluded) and must be positioned as close as possible to the front fork leg/foot. For safety reasons, the airflow shall not be directed onto the brake pads.

The air-ducts may be made of composite materials. The complete assembly must be presented and validated by the FIM Technical Director in prior of its use.

Rear master cylinder may be altered or replaced from those fitted to the homologated motorcycle.

Rear brake callipers may be altered or replaced from those fitted to the homologated motorcycle.

Brake pads may be altered or replaced from those fitted to the homologated motorcycle.

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 callipers must be made above the lower fork bridge (lower triple clamp). **Brake line hose fittings (including banjo bolts) can only be Steel or Titanium. Quick couplings can remain in Aluminium.**

Brake discs may be altered or replaced from those fitted to the homologated motorcycle. Only ferrous materials are allowed for brake discs. The use of exotic alloy materials for discs and brake callipers (i.e. aluminium beryllium, etc.) is not allowed.

The Antilock Brake System (ABS) may be used only if installed in the homologated model for road use. The type of system (mechanical or electronic) and the ABS pump/pressure regulator must remain as homologated on the the homologated motorcycle. Discs, speed sensor (rotor), brake calipers, master cylinder and the software of the ABS may be modified or replaced. Only ferrous materials are allowed for brake discs. The use of exotic alloy materials for brake callipers (i.e. aluminium-beryllium, etc.) is not allowed.

If not desired for use, the Anti Lock Brake system (ABS) can be disconnected and the ABS pump/pressure regulator can be removed.

#### **2.6.6.7 Tyres**

See Art. 2.3.6.

#### **2.6.6.8 Handle Bars and Hand Controls**

Only one (1) RED engine stop switch may be located on the left or right handle bar, close to the throttle.

**Throttle controls must be self closing when not held by the hand.**

Handle bars, hand controls and associated cables may be altered or replaced from those fitted to the homologated motorcycle (see Art. 2.3.4), but all hand controls, electric starter switch and engine stop switch must remain on the handlebars (from 01.01.2020). Other switches may be changed.

**Clutch and brake lever lever may be replaced with an aftermarket model (see also Art. 2.3.4).**

It is compulsory to equip all motorcycles with a solid brake lever guard, **preventing** the brake lever from being accidentally activated in case of collision with another motorcycle.

#### **2.6.6.9 Foot Rest/Foot Controls**

Foot rest/foot controls may be relocated, but the original mounting points must be used.

Foot rests may be rigidly mounted or a folding type which must incorporate a device to return them to the normal position.

The end of the foot rest must have at least an 8 mm solid spherical radius. (see diagram A & C).

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 FIM Endurance Technical Director/Chief Technical Steward has the right to refuse any plug not satisfying this safety aim.

## 2.6.6.10 Fuel Tank

The original fuel tank may be modified or replaced with a copy to achieve the maximum capacity of 24 litres, provided that the homologated appearance and location are maintained. However the actual shape of the tank can be slightly changed to suit the rider's preference.

**The fuel tank used during practice must be of the same size (max. capacity 24L) and be fitted with the same type quick fill fuel valve system during the entire event.**

The fuel tank may be modified below the upper frame line. The extended part of the fuel tank shall remain protected by the seat sub-frame (in the event of case a crash). **It's underside must also be shielded by a protective cover.** Whatever the position of the rear wheel, it shall not touch this protective cover of the extended fuel tank (minimum clearance between the wheel and the protective cover: 10 mm). The modified fuel tank shall not extend past a vertical line drawn through the rear wheel axle.

The material used in the construction of the fuel tank may be altered from the material used of the original fuel tank fitted on the homologated motorcycle. **Other than steel, only aluminium must be used in the construction of the fuel tank. The minimum wall thickness will must be of 1.2 mm. (from 01/01/2021).** Carbon- or aramid fibres or fibreglass materials are not authorised in the construction of fuel tanks.

**Protective tank covers may be fitted on the exposed edges of tanks made of steel (highly recommended). These covers must presented and the application validated by the FIM Technical Director. (Compulsory as from 01/01/2022).**

The fuel tank must be fixed to the frame from the front and the rear with a crash-proof assembly system, **with a minimum of 3 bolts of 5 mm diameter (or more).** Bayonet style couplings can not be used, nor any fixing to any parts of the streamlining. The FIM Endurance Technical Director/Chief Technical Steward have the right to refuse a motorcycle if he is of the opinion that the fuel tank fixation method is not safe.

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.

The fuel tank filler cap must be of a “quick-fill” type and when closed, must be leak proof. Any tampering to the opening or closing of the quick fuel valve system of the fuel tank will be considered as an infraction to the safety requirement (leak proof). Additionally, the system must be secured to prevent accidental opening at any time (See also Art. 2.3.15).

#### 2.6.6.11 Fairing / Body work

- a) Fairing and body work must conform in principle to the homologated shape as originally produced by the manufacturer.
- b) Wind screen may be replaced.
- c) Original air ducts running between the fairing to the airbox may be altered or replaced from those fitted to the homologated motorcycle.
- d) 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.
- e) The lower fairing section must remain leak proof at all times. **(A hole of 25 mm is no longer required). The rear of the lower fairing must be fixed by a minimum of two brackets to the engine or to the frame to carry the lower fairing when filled with liquid.**
- f) 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.
- g) 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 metal gauze or fine mesh. Mesh must be painted to match the surrounding material.

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%.

- h) A front fender (mudguard) must be fitted. Material, shape, fixing method and position may be altered or replaced from those fitted to the homologated motorcycle.
- i) 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.
- j) Rear fender (mudguard) may be altered, added or removed.
- k) Material of construction for the fairing and the mudguards may be changed.
- l) Additional heatshield may be installed on the rear exhaust pipe section and running up and inside the rider's footrest. This heatshield must not be an aerodynamic device. The appreciation of this piece remains a decision of the FIM Technical Director.

#### **2.6.6.12      Seat**

Seat may be altered or replaced from those fitted to the homologated motorcycle.

The top portion of the rear body work around the seat may be modified to a solo seat. The solo seat then must incorporate the rear number plates. The appearance from both front rear and profile must conform in principle to the homologated shape.

The seat/rear cowl must allow for proper number display.

Holes may be drilled in the seat or rear cowl 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.

Material of construction of the seat may be altered or replaced from those fitted to the homologated motorcycle.

#### **2.6.6.13 Radiator, Cooling system and Oil cooler**

The original radiator or oil cooler may be altered or replaced from those fitted to the homologated motorcycle.

Additional radiators or oil coolers may be added. The oil cooler shall not be mounted on or above the rear mudguard.

The radiator tubes may be changed.

Radiator fan and wiring maybe removed or replaced.

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.

Thermal switches, water temperature sensor and thermostat can be removed inside the cooling system.

#### **2.6.6.14 Electric and electronic devices**

Electric cables, connectors, and switches are free.

#### **2.6.6.15 Battery**

The battery may be replaced.

#### **2.6.6.16 Air Box**

The air box must remain as originally produced by the manufacturer on homologated motorcycle but the air box drains must be sealed. The air box cover, when housing the standard ECU, may be modified to fit an after-market/kit ECU, without increasing the original airbox volume.

Air filters, internal flap type valve, sensors and vacuum fittings may be removed, modified, or replaced with aftermarket parts. The air filter element may be modified or replaced.

Any holes in the air box to the outside atmosphere resulting from the removal of components must be completely sealed from incoming air.

Ram air tubes or ducts running from the fairing to the air box may be modified, replaced or removed. If tubes/ducts are utilized, they must be attached to the original, unmodified air box inlets.

All motorcycles must have a closed breather system. All the oil breather lines must be connected and discharge in the air box.

#### **IMPORTANT:** Air Intake Restriction

If necessary, an air intake restriction system may be imposed during the season in order to rectify possible performance discrepancies.

#### **2.6.6.18 Fuel Injection system / throttle bodies**

Fuel injection systems refer to throttle bodies, fuel injectors, variable length intake tract devices, fuel pump and fuel pressure regulator.

The original homologated fuel injection system must be used without any modification.

The fuel injectors must be stock and unaltered from the original specification and manufacture.

Bell mouths, intake tract devices (velocity stacks, air funnels) may be modified or replaced, including their fixing points.

Variable intake tract devices cannot be added if they are not present on the homologated motorcycle. If present on the homologated motorcycle, variable intake tract devices must remain identical and operate in the same way as the homologated system.

Air and air/fuel mixture can go to the combustion chamber exclusively through the throttle body butterflies.

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.



The fuel injection management computer chip (EPROM) may be changed.

The use of flash memory (flash RAM) for fuel injection mapping is allowed.

#### **2.6.6.19 Fuel supply**

Fuel pump and pressure regulator may be modified.

The original fuel valve (petcock) may be altered, replaced or removed from those installed on the homologated motorcycle.

Quick connectors or dry break quick connectors may be used.

Fuel lines from the fuel tank up to the injectors (fuel hoses, delivery pipe assembly, joints, clamps, fuel canister) may be replaced, without increasing the fuel volume.

The fuel line(s) going from the fuel tank to the fuel injection instruments must be located in such a way that they are protected from possible crash damage.

A cross over line between each side of the tank is allowed (maximum inside diameter 10 mm).

Fuel vent lines may be replaced.

Fuel filters may be added.

#### **2.6.6.20 Cylinder head**

The homologated cylinder head may be modified as follows:

Homologated materials and castings for the cylinder heads must be used. Material for these parts may only be removed by machining.

The induction and exhaust system including the number of valves and or ports (intake and exhaust) must be as homologated.

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 authorised (from 01/01/2021).**

The compression ratio is free.

Valves must remain as homologated.

Valve seats must remain as homologated. Only normal maintenance interventions as prescribed by the Manufacturer in the model's Service Manual are authorized.

Valve guides must remain as homologated. Modifications to the port area are allowed.

Valve springs may be altered or replaced from those fitted to the homologated motorcycle. The material must remain as homologated.

Valve spring seats and retainers may be altered or replaced from those fitted to the homologated motorcycle. The material of the valve spring seat must remain as homologated.

Cotter valves may be altered or replaced from those fitted to the homologated motorcycle.

The cylinderhead cover must remain as homologated.

#### **2.6.6.21 Camshaft**

Camshafts may be altered or replaced from those fitted to the homologated motorcycle but the material and the method of fabrication and the drive method must remain the same as homologated. Cam profile dimensions are free.

The type of cam chain or cam belt is free. The cam chain or cam belt tensioning device(s) may be modified or replaced.

Offsetting the camshaft (from its homologated position in the cylinder head) is not allowed. The camshaft must remain in the homologated location.

#### **2.6.6.22 Cam sprockets**

Cam sprockets or cam gears may be altered or replaced to allow the degreeing of the camshafts.

#### **2.6.6.23 Crankshaft**

No modifications are allowed (including polishing and lightening).

The balance shaft must remain as homologated.

#### **2.6.6.24 Oil pumps and Oil lines**

No pump modifications are allowed.

Oil lines may be modified or replaced. Oil lines containing positive pressure, if replaced, must be of metal reinforced construction with swaged or threaded connectors.

#### **2.6.6.25 Connecting rods**

No modifications are allowed (including polishing and lightening).

##### **From 01/01/2020:**

- a) The connecting rod must be the originally fitted and homologated part with no modification allowed.
- b) Connecting rod big end nuts/bolts may be changed but must be of the same weight or heavier, same material or of higher specific weight material.
- c) The weight of the connecting rod assembly is the homologated weight (normally the weight of the middle weight rod) with a tolerance of +/-3%.

#### **2.6.6.26 Pistons**

No modifications are allowed (including polishing and lightening).

#### **2.6.6.27 Piston rings**

No modifications are allowed.

#### **2.6.6.28 Piston pins and clips**

No modifications are allowed.

## 2.6.6.29      Cylinders

No modifications are allowed.

## 2.6.6.30      Crankcase, other engine cases and covers (i.e. ignition case cover, clutch case cover)

Crankcases must remain as homologated. No modifications to the crankcases are allowed (including painting, polishing and lightening).

The oil sump may be altered or replaced.

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 must be used only as homologated.

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.

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.

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.

**FIM protective covers declared eligible for competition** will be permitted without regard of the material.

These covers must be fixed properly and securely with case cover screws (**minimum 3 fixing points**) that also mount the original covers/engine cases to the crankcases.

The Technical Director has the right to forbid any cover, if it is evident that the cover is damaged or ineffective.

### **2.6.6.31 Transmission / Gearbox**

All transmission/gearbox ratios, shafts, shift drum and selector forks may be altered or replaced.

Primary gears (and ratio) must remain as homologated.

The layout of the transmission shafts must be the same as on the homologated motorcycle and only the material and the ratios can be changed.

The layout and function of the shift drum must be the same as on the homologated motorcycle.

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.

Countershaft sprocket, rear wheel sprocket, chain pitch and size can be changed.

**The drive sprocket cover can be modified or eliminated. A crankcase protection may be added in this area (against chain damage).**

**The chain guard (swingarm mounted) may be removed or replaced.**

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 and so called “quick shifter” systems are excluded from the ban.

**Seamless shift gearboxes are not allowed unless if fitted on the homologated motorcycle.**

### **2.6.6.32 Clutch**

The original clutch assembly may be modified or replaced.

A back torque limiter (“slipper” clutch) is permitted.

Any power source (i.e. hydraulic or electric) cannot be used for clutch operation, if not installed in the homologated model for road use. Human power is excluded from the ban.

Clutch type (wet or dry) and the way of operation (by cable or hydraulic) must remain as homologated.

#### **2.6.6.33 Ignition / Engine control system**

The ignition/engine control system (ECU) and its software may be modified or changed; its position may be changed (relocated).

Spark plugs, spark plug caps and wires may be replaced.

#### **2.6.6.34 Generator, Alternator, Electric starter**

The generator, electric starter, starter crank gear and starter shaft may be altered or replaced from those fitted to the homologated motorcycle.

The electric starter must operate normally and always be able to start the engine during the event. The engine must keep running on its own power when the electric starter has stopped its procedure.

The voltage regulator (rectifier) may be changed.

#### **2.6.6.35 Lights**

Headlights must emit a WHITE light beam.

#### **2.6.6.36 Exhaust system**

The exhaust system may be modified for racing use. Catalytic converters must be removed. O<sub>2</sub> and equivalent sensors may be removed.

The number of the exhaust silencer(s) must remain as homologated. The position of the silencer(s) (left or right, up or down) is free. The silencer's end must not pass a vertical line drawn at the edge of the rear tyre. **The silencer's end cap may be made of composite materials.**

For safety reasons, the exposed edge(s) of the exhaust pipe(s) outlet(s) must be rounded (diameter: min. 1 mm), avoid any sharp edges and be kept within 5 mm of the end cap of the silencer.

The **silencer exhaust mounting/support flange may be made of composite materials; the assembly** has to be secured by means of screws and bolts. Quick “zip” ties are not allowed.

Wrapping of exhaust systems is not allowed except in the area of the riders foot or an area in contact with the fairing for protection from heat.

The maximum sound limit for Formula EWC will not exceed 105 dB/A (with maximum a 4dB/A tolerance after the race).

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

- A special “one-way” valve can be fitted to the crankcase oil filler opening (to avoid any oil spillage).
- It is recommended that motorcycles be equipped with a red light on the instrument panel. This light must flash in the event of oil pressure drop.
- Tachometer.
- Any type of lubrication, brake or suspension fluid may be used.
- Any type of tubing (i.e. air, fuel, oil or water) may be used.
- Any inner tube (if fitted) or inflation valves may be used.
- Gaskets and gasket material.
- Wheel balance weights may be discarded, changed or added to.
- Bearings (ball, roller, taper, plain, etc.) of any type or brand may be used.
- Fasteners (nuts, bolts, screws, etc.).
- External surface finishes and decals on fairing and bodywork.

### **2.6.8 The following items MAY BE removed**

- The air injection control system (valve, solenoid, tubes) may be removed. The tubes connected to the cylinder head cover may be plugged.
- Unused elements of the wiring harness.
- Instrument and instrument bracket and associated cables.
- Tachometer.
- Speedometer and associated wheel spacers.
- Chain guard.
- Bolt on accessories on a rear sub frame (seat).

### **2.6.9 The Following Items MUST BE removed**

- Turn signal indicators (when not incorporated in the fairing). The openings in the fairing must be covered by a suitable material.
- Rear-view mirrors.
- Horn.
- License plate bracket.
- Tool box.
- Helmet hooks and luggage carrier hooks.
- Passenger foot rests.
- Passenger grab rails.
- Safety bars, centre and side stands must be removed (fixed brackets must remain).



### 2.6.10 The following items **MUST BE** altered

Motorcycles must be equipped with a functional ignition kill switch or button (RED), mounted on the handlebar, capable of stopping a running engine and within reach of the hand while on the hand grips.

Throttle controls must be self closing when not held by the hand.

All drain plugs must be wired. External oil filter(s) screws and bolts that enter an oil cavity must be safety wired (i.e. on crankcases, hoses, oil radiators, etc.).

All motorcycles must have a closed circuit breather system. The oil breather line must be connected and discharge into the airbox.

Where breather or overflow pipes are fitted they must discharge via existing outlets into the airbox. The original closed system must be retained; no direct atmospheric emission is permitted.

Oil cooler must not be mounted on or above the rear mudguard.

### 2.6.11 Additional Equipment

Additional electronic hardware equipment not on the original homologated motorcycle may be added (this permission refers to: data acquisition and sensors, computers, recording equipment).

On-board cameras may only be used upon request and after the team has obtained written permission from the FIM and the Promoter. It is forbidden to use, mount or affix cameras on the rider's helmet.



The addition of a device for infra red (IR) transmission of a signal between the racing rider and his team, used exclusively for laptiming, is allowed.

The addition of a GPS unit for positioning, laptiming and/or lapscoreing purposes or legible messages via an on-board screen is allowed.

**Telemetry is not allowed (remote signals to or from the motorcycle), except for the compulsory championship devices.**

**Remote or wireless connections to the motorcycle for any data exchange or setting is not allowed whilst the engine is running or the motorcycle is moving.**

**The use of bi-directional communication is not allowed except when mentioned in the Supplementary rules or by request of the Race Direction and with the approval of the FIM Technical Director.**

**The addition of all Championship contracted devices such as Transponder and Promoter's on-board TV system is allowed. The Promoter is requested to advise the FIM Technical Director of the list of motorcycles on which their systems will be fitted in prior of the race.**

**One extra mechanic (a 5<sup>th</sup> one) will be allowed during the pitstop only to manage these TV devices following the Promoter's instructions.**



## 2.7 SUPERSTOCK TECHNICAL SPECIFICATIONS

**EVERYTHING THAT IS NOT PRESCRIBED OR SPECIFICALLY ALLOWED IN THESE RULES IS STRICTLY FORBIDDEN.**

Formula Superstock motorcycles require an FIM “Superstock” Homologation. The homologated “Superstock” model must not exceed a maximum retail price of 33.000 Euro (incl. taxes).

(The FIM Homologation procedure is available on [www.fim-live.com/library](http://www.fim-live.com/library), see Appendix FIM Homologation procedure.)

All motorcycles entered in the Formula SUPERSTOCK class must comply in every respect with all the requirements for Circuit Racing as specified in these Technical Regulations, unless they are already equipped as such on the homologated model.

The appearance from both front, rear and the profile of Formula SUPERSTOCK motorcycles for Endurance 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; the silencer(s) must remain on the same side as homologated on the original model.

### 2.7.1 Engine configurations and Displacement capacities

The following engine configurations comprise the Superstock class:

Over 750cc up to 1000cc	4-stroke:	3 & 4 cylinders
Over 850cc up to 1200cc	4-stroke:	2 cylinders

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

### 2.7.2 Minimum weight

**From 01/01/2021:**

**All machines: 168 kg for all races.**

**This is the absolute minimum weight (without the fuel tank and its content).**

**(“Its content” includes: fuel on-board, all fuel tank internal parts, fuel valve(s) system (+ protective cover (if any)), fuel pump, glued protective covers/rider anti-slip systems).**

**At any time during the event, the weight of the whole motorcycle (excluding the fuel tank and its content) must not be less than the minimum weight.**

**There is no tolerance on the minimum weight of the motorcycle.**

**The use of ballast is allowed to stay over the minimum weight limit and may be required due to a handicap system (if the motorcycle does not reach the minimum required weight). The use of ballast and weight handicap must be declared to the FIM Endurance Technical Director/ Chief Technical Steward at the preliminary checks and/or prior to the race.**

**During the practice and qualifying sessions, riders may be asked to submit their motorcycle to a weight control in the pit lane. The minimum weight during the QPs remains at 175 kg (including the fuel tank and its content).**

**In all cases the rider (and the team) must comply with this request for a control. Any “forcing” of the control point of the weight control will be immediately reported to the FIM EWC Stewards Panel who will take appropriate action (see Sporting rules).**

**During the final technical inspection at the end of each race, the selected motorcycles will be weighed in the condition they finished the race (without the fuel tank and its content), and the established weight limit must be met in this condition. Nothing may be added to the motorcycle. This includes all fluids.**

**The minimum weight includes all Championship contracted devices whether fitted or not, such as Transponder and on-board TV system.**

## **2.7.4 Carburation instruments**

**Carburation instruments (fuel injection system, etc.), must remain as homologated. No modifications are authorized.**

## 2.7.5 Fuel

All engines must function on normal unleaded fuel with a maximum lead content of 0.005 g/l (unleaded) and a maximum MON of 90 (see Art. 2.10 for full specification)

## 2.7.6 Motorcycle specifications

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

### 2.7.6.1 Main Frame body and Rear subframe

The main frame must be the originally manufactured part produced and fitted by the manufacturer and be used on all the units produced following the homologated motorcycle model.

The main frame may only be modified by the addition of gussets or tubes. No gussets or tubes may be removed, other modifications are allowed within the following section of these rules.

Holes may be drilled on the frame only to fix **authorized** components (i.e. fairing brackets, steering damper mount, sensors).

The main frame must have a vehicle identification number (VIN number), as issued by the manufacturer on the homologated model. Any other frame (i.e. originating as “spare part”) must be identical to the original homologated part, and correspond to all the dimensions on the homologation drawings. Such main frame must be identified by **permanent method** by a special and unique number (Example: “YEAR - TEAM - 01”).

Protective covers made from composite materials to protect a section of a frame are permitted and must be attached securely. Drilling holes to attach these covers is not permitted. For the Technical inspections, the motorcycles must be presented without these protective covers. The FIM Technical Director may ask the team at any time of the event to take off these covers for further verifications.

**Adequate space must be available to affix the FIM Technical verification sticker (on a smooth surface).**

**Nothing else may be added or removed from the frame body.**

All motorcycles must display a manufacturers' vehicle identification number punched on the frame body (chassis number).

Engine mounting brackets or plates must remain as originally produced by the manufacturer for the homologated motorcycle.

The homologated rear sub-frame construction may be modified, but the design, purpose and assembly must remain as used by the homologated part. The material used must remain as homologated or of higher specific weight.

The material for the seat pad may be modified and/or replaced.

The material of the streamlining/seat section may be replaced, but the homologated shape/profile must remain as homologated.

Additional seat brackets may be added but none may be removed; 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.

The paint scheme is not restricted but polishing the frame body or sub frame is not allowed.

#### **2.7.6.2 Front forks**

Forks, stanchions, stem, wheel spindle, upper and lower crown, etc., must remain as originally produced by the manufacturer for the homologated motorcycle.

Original internal parts of the homologated forks may be modified or changed. After market damper kits or valves may be installed.

No aftermarket or prototype electronically-controlled suspension parts may be used, unless such suspension is already present on the production model of the homologated motorcycle, and it must remain completely standard (all mechanical or electronic parts must remain as homologated). The original suspension system must work safely in the event of an electronic failure.

Any quality and quantity of oil can be used in the front forks.

The fork caps can be modified or replaced to allow external adjustment.

Dust seals can be modified changed or removed providing the fork remains totally oil-sealed.

The original surface finish of the fork tubes (stanchions, fork pipes) may be changed. Additional surface treatments are allowed.

The height and position of the front fork in relation to the fork crowns is free.

The upper and lower fork clamps (triple clamp, fork bridges) must remain as originally produced by the manufacturer on the homologated motorcycle.

A steering damper may be added or replaced with an after-market damper.

The steering damper cannot act as a steering lock limiting device.

### 2.7.6.3 Swing arm

Every part of the rear **swingarm** must remain as originally produced by the manufacturer for the homologated motorcycle (including rear fork pivot bolt and rear axle adjuster).

Protective covers made from composite materials to protect a section of a swingarm are permitted and must be attached securely. Drilling holes to attach these covers is not permitted. For the Technical inspections, the motorcycles must be presented without these protective covers. The FIM Technical Director may ask the team at any time of the event to take off these covers for further verifications.

A rigid chain guard must be fitted in such a way to reduce the possibility that any part of the riders' body may become trapped between the lower chain run and the rear wheel sprocket. This lower chain guard (a.k.a. shark-fin) must cover the opening where the chain meets the rear sprocket. Chain guards must be made of strong material and resist any bending (steel, aluminium, composites).

Rear **swingarm** pivot bolt must remain as originally produced by the manufacturer for the homologated motorcycle.

An anchorage system or point(s) to keep the original rear brake calliper in place may be added to the rear swingarm.

Rear wheel stand brackets may be added to the rear swingarm by welding and/or attached by bolts.

These brackets (in steel or aluminium, fitted behind or below the swingarm) must respect maximum dimensions (measured all around the swingarm) for length x height: 120 mm x 120 mm) with a minimum thickness of this part of 6 mm. All edges must be rounded and face inwards.

Fastening screws must be recessed. A small bracket to retain the chain (steel, aluminium) is permitted, securely mounted, edges must be rounded. Max dimensions: length: 40 mm; height above the swingarm: 40 mm; width/thickness: 10 mm).

#### 2.7.6.4 Rear suspension unit(s)

Rear suspension unit (shock absorber) may be modified or replaced, but the original attachments to the frame and rear **swingarm** must be as homologated.

Rear suspension unit spring(s) may be changed.

No aftermarket or prototype electronically-controlled suspension unit maybe used, unless such suspension is already present on the production model of the homologated motorcycle, and it must remain completely standard (any mechanical or electronic parts must remain as homologated). The original suspension system must work properly safely in the event of an electronic failure.

The rear suspension linkage must remain as originally produced by the manufacturer for the homologated motorcycle.



### **2.7.6.5      Wheels**

Wheels must remain as originally produced by the manufacturer for the homologated motorcycle.

The speedometer drive may be removed and replaced with a spacer.

If the original design includes a cushion drive for the rear wheel, it must remain as originally produced for the homologated motorcycle.

No modifications of the wheel-axles or any fixing and mounting points for front brake caliper are authorised. Internal and external spacers may be modified. Modifications to the wheels to keep spacers in place are permitted.

Wheel balance weights may be discarded, changed or added to.

Any inner tube (if fitted) or inflation valves may be used.

### **2.7.6.6      Brakes**

Brake discs may be replaced by aftermarket discs which comply with following requirements:

Replacement brake discs must be of ferrous materials. Internally ventilated discs are not allowed.

The outside and inner diameters of the brake disc must not be larger than the ones on the homologated disc.

The thickness of the brake disc may be increased but the disc must fit into the homologated brake caliper without any modification to the caliper.

Front brake discs can be made floating, using original rotors. The number of floaters is free.

Brake disc carriers may be changed, but must retain the same off-set and same type of mounting to the wheels.

The front brake master cylinder may be replaced. The rear brake master cylinder must remain as on the homologated motorcycle. The front and rear brake fluid reservoirs may be replaced and/or repositioned.

The air bleeder screw on the originally homologated calipers may be replaced.

The front and rear brake calliper (mount, carrier, hanger) must remain the one as originally produced by the manufacturer for the homologated motorcycle.

Front brake system cooling airducts are allowed. A (1) duct must be fitted between the front brake caliper and the front brake caliper bracket. However, no modifications to the front brake calipers are allowed.

Air ducts shall be routed to cool the discs or directed onto the brake caliper bodies. Viewed from the side, the airducts opening shall not pass the vertical line drawn by the front axle shaft. Viewed from the front, the airducts must fall inside the shape drawn by the fairing (aerodynamic winglets excluded) and must be positioned as close as possible to the front fork leg/foot. For safety reasons, the airflow shall not be directed onto the brake pads.

The air-ducts may be made of composite materials. The complete assembly must be presented and validated by the FIM Technical Director in prior of its use.

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. The use of magnets or magnetized shims is not permitted.

The rear brake caliper bracket may be mounted “fixed” on the swingarm, but the bracket must maintain the same mounting (fixing) points for the caliper as used on the homologated motorcycle. A modification of the rear caliper bracket in part is authorised. The swingarm may be modified for this reason to aid the location of the rear brake caliper bracket, by welding, drilling or by using a helicoil.

The original chain adjusters (round or square) may be drilled to keep the rear brake caliper bracket in place.

Front and rear hydraulic brake lines may be changed.

“Quick” (or “dry-brake”) connectors in the brake lines are authorised.

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 hose fittings (including banjo bolts) can only be Steel or Titanium. Quick couplings can remain in Aluminium.**

Front and rear brake pads may be changed. Brake pad locking pins may be modified for quick change type.

Additional air scoops or ducts are not allowed.

The Antilock Brake System (ABS) may be used only if installed in the homologated model for road use. The type of system (mechanical or electronic) and the ABS pump/pressure regulator must remain as homologated on the the homologated motorcycle. Discs, speed sensor (rotor), master cylinder and the software of the ABS may be modified or replaced. Only ferrous materials are allowed for brake discs.

The Anti Lock Brake system (ABS) can be disconnected and the ABS pump/pressure regulator can be deleted.

#### **2.7.6.7 Tyres**

See Art. 2.3.6.

#### **2.7.6.8 Handlebars and Hand controls**

Only one (1) RED engine stop switch may be located on the left or right handle bar or close to the throttle grip.

Throttle controls must be “self-closing” when not held by the hand.

Handlebars, hand controls and associated cables may be altered or replaced from those fitted to the homologated motorcycle (see Art. 2.3.4), but all hand controls, electric starter switch and engine stop switch must remain on the handlebars (from 01.01.2020). Other switches may be changed.

It is compulsory to **equip all** motorcycles with a **solid** brake lever guard, **protecting** the brake lever from being accidentally activated in case of collision with another motorcycle.

#### **2.7.6.9 Foot Rest / Foot controls**

Foot rest/foot controls may be relocated but brackets must be mounted to the frame in the original mounting points. Their two original points of fixture (for the footrest, foot-controls and on the shift shaft) must remain as original. Foot controls linkage may be modified. The original mounting points must remain.

Foot rests may be rigidly mounted or a folding type which must incorporate a device to return them to the normal position.

The end of the foot rest must have at least an 8 mm solid spherical radius. (see Diagram A & C).

Non folding footrests must have an end (plug) which is permanently fixed, made of plastic, Teflon® or an equivalent type material (minimum radius 8 mm). The plug surface must be designed to reach the widest possible area. The FIM Endurance Technical Director/Chief Technical Steward has the right to refuse any plug not satisfying this safety aim.

#### **2.7.6.10 Fuel tank**

The original **fuel** tank may be modified **or replaced by a copy** to achieve the maximum capacity of 24 litres, provided that the homologated appearance and location are maintained; however its actual shape can be slightly changed to suit the rider's preference.

**The fuel tank used during practice must be of the same size (capacity) during the entire event.**

The fuel tank may be modified and extended below the upper frame line. The extended part of the fuel tank shall remain **protected by the seat sub-frame** (in case of a crash) and **the underside** shielded by a **protective cover**. Whatever the position of the rear wheel, it shall not touch **this protective cover of the extended fuel tank (minimum clearance between the wheel and the protective cover: 10 mm)**. The modified fuel tank shall not extend past a vertical line drawn through the rear wheel axle.

The material used in the construction of the fuel tank may be altered from **the homologated material** fitted on the homologated motorcycle. **Other than steel, only aluminium must be used in the construction of the fuel tank. The minimum wall thickness will be 1.2 mm (from 01/01/2021).**

Carbon- or aramid fibres or fibreglass materials are not authorised in the construction of fuel tanks.

**Protective tank covers may be fitted on the exposed edges of tanks made of steel (highly recommended). These covers must be presented and the application validated by the FIM Technical Director. (Compulsory as from 01/01/2022).**

The sides of the fuel tank may be protected with a protective part made of a composite material. These protectors must fit the shape of the fuel tank. The fuel tank must be fixed to the frame from the front and the rear with a crash-proof assembly system, **with a minimum of 3 bolts of 5 mm diameter (or more)**. Bayonet style couplings can not be used, nor any fixing to any parts of the streamlining. The FIM Endurance Technical Director/Chief Technical Steward have the right to refuse a motorcycle if he is of the opinion that the fuel tank fixation method is not safe.

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.

The fuel tank filler cap must be replaced by a “quick-fill” type and when closed, must be leak proof. Any tampering to the opening or closing of the quick fuel valve system of the fuel tank will be considered as an infraction to the safety requirement (leak proof). Additionally, the system must be secured to prevent accidental opening at any time (See also Art. 2.3.15).

#### **2.7.6.11      Fairing / Body work**

- a) Fairing and body work 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 racing use (different pieces mix, attachment 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 authorized locally around holes and stressed areas.
- b) Overall size and dimensions must be the same as the original part.
- c) Wind screen may be replaced with a duplicate of transparent material. The height of the windscreen is free, within a tolerance of +/- 15 mm regarding to the vertical distance from to the upper fork bridge.
- d) Motorcycles that were not originally equipped with streamlining are not allowed to add streamlining in any form, with the exception of a lower fairing device, as described in (h). This device cannot exceed above a line drawn horizontally from wheel axle to wheel axle.
- e) The original combination instrument/fairing brackets may be replaced, but the use of titanium and carbon (or similar composite materials) is forbidden. All other fairing brackets may be altered or replaced.
- f) The original air ducts running between the fairing and the air box may be altered or replaced. Carbon fibre composites and other exotic materials are forbidden. Particle grills or “wire-meshes” originally installed in the openings for the air ducts may be taken away.

Any fixing point(s) for the front/rear wheel stand must be bolted to either, the frame, engine block or rear fork (swingarm). No element of this support can exceed any part of the fairing. Only modifications made to the fairing in order to accept this element are allowed. The maximum clearance between this device and the fairing is 5 mm.

- 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 (minimum 5 litres). The lower edge of openings in the fairing must be positioned at least 50 mm above the bottom of the fairing.

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%.

- h) The lower fairing section must remain leak proof at all times. **(A hole of 25 mm is no longer required). The rear of the lower fairing must be fixed by a minimum of two brackets to the engine or to the frame to carry the lower fairing when filled with liquid.**
- i) Front mudguards may be replaced with a cosmetic duplicate of the original part.

All the dimensions, including the mounting points must remain exactly as original. The material is free. "Flexible" mounts by "dzus" fasteners, clips, "zip" tie-raps, clamps, etc. are not permitted.

- j) Rear mudguard fixed on the swing arm may be modified, **replaced or deleted** but the original shape must be respected.
- k) Additional heatshield made from composites may be installed on the rear exhaust pipe section and running up and inside the rider's footrest. This heatshield must not be an aerodynamic device. The appreciation of this piece remains a decision of the FIM Technical Director.

### **2.7.6.12      Seat**

Seat, seat base and associated body work may be replaced with parts of similar appearance as originally produced by the manufacturer for the homologated motorcycle. The appearance from front, rear and profile must conform to the homologated shape.

The top portion of the rear body work around the seat may be modified to a solo seat.

The seat/rear cowl replacement must allow for proper number display.

The homologated seat locking system (with plates, pins, rubber pads etc.) may be removed.

### **2.7.6.13      Wiring Harness and Tachometer (rpm gauge)**

The original wire-loom may be modified, replaced or relocated.

The original tachometer must be used.

The ignition key/lock may be relocated.

### **2.7.6.14      Battery**

The battery may be replaced. If replaced, its nominal capacity (C/1) must be equal to or higher than the homologated type.

### **2.7.6.15      Radiator, Cooling system and oil coolers**

Protective meshes may be added in front of the oil and/or water radiator(s).

The radiator tubes/hoses to and from the engine may be replaced. The original heat exchanger (oil/water) may be replaced by an oil-cooler and its tubes separated from the cooling circuit. Overflow tanks may be changed but must be fixed in a secure way.

Radiator fan and wiring may be removed. Thermal switches, water temperature sensor and thermostat may be removed inside the cooling system.

Radiator cap is free.



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.

An additional oil cooling radiator may be fitted either under or behind the water radiator(s) 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.

#### **2.7.6.16 Air box**

The air box must remain as originally produced by the manufacturer on the homologated motorcycle but the air box drains must be sealed.

The air filter element may be modified or replaced.

All motorcycles must have a closed breather system. The oil breather line must be connected and discharge in the airbox.

#### **2.7.6.17 Fuel Injection system**

Fuel injection systems refer to throttle bodies, fuel injectors, variable length intake tract devices, fuel pump and fuel pressure regulator.

The original homologated fuel injection system must be used without any modification.

The fuel injectors must be stock and unaltered from the original specification and manufacture.

Bell mouths must be as originally produced by the manufacturer for the homologated motorcycle.

Throttle valves (butterfly valves) cannot be changed nor modified.

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 parts of the variable intake tract device must remain exactly as homologated.

Air and air/fuel mixture can go to the combustion chamber exclusively through the throttle body butterflies.

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.

#### **2.7.6.18 Fuel supply**

Fuel pump and pressure regulator may be modified.

The original fuel valve (petcock) may be altered, replaced or removed from those installed on the homologated motorcycle.

Quick connectors or dry break quick connectors may be used.

Fuel lines from the fuel tank up to the injectors (fuel hoses, delivery pipe assembly, joints, clamps, fuel canister) may be replaced, without increasing the fuel volume.

The fuel line(s) going from the fuel tank to the fuel injection instruments must be located in such a way that they are protected from possible crash damage.

A cross over line between each side of the tank is allowed (maximum inside diameter 10 mm).

Fuel vent lines may be replaced.

Fuel filters may be added.

#### **2.7.6.19 Cylinder head**

No modifications are allowed.

No material may be added or removed from the cylinder head.

The cylinder head gaskets may be changed.

The valves, valve seats, guides, springs, tappets, oil seals, shims, cotter valve, spring base and retainers must be as originally produced by the manufacturer for the homologated motorcycle. Only normal maintenance interventions as prescribed by the Manufacturer in the model's Service Manual are authorized.

Valve spring shims are not allowed.

#### **2.7.6.20 Camshaft**

No modifications are allowed.

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.

The camshaft "timing" (degreeing) may be modified.

#### **2.7.6.21 Cam sprockets or gears**

No dimensional modifications are allowed.

#### **2.7.6.22 Cylinders**

No modifications are allowed.

#### **2.7.6.23 Pistons**

No modifications are allowed (including polishing and lightening).

#### **2.7.6.24 Piston rings**

No modifications are allowed.

#### **2.7.6.25 Piston pins and clips**

No modifications are allowed.

#### **2.7.6.26 Connecting rods**

No modifications are allowed (including polishing and lightening).

#### **2.7.6.27 Crankshaft**

No modifications are allowed (including polishing and lightening).

### 2.7.6.28 Crankcase and all other Engine cases (Ignition case, clutch case, etc.)

Crankcases must remain as homologated. No modifications are allowed (including painting, polishing and lightening).

The oil sump must remain as homologated.

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.

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.

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.

**FIM protective covers declared eligible for competition** will be permitted without regard of material.

These covers must be fixed properly and securely with case cover screws/**bolts (minimum 3 fixing points)** that also mount the original covers/engine cases to the crankcases.

The Technical Director has the right to forbid any cover, if the evidence shows the cover is not effective.

### 2.7.6.29 Transmission / Gearbox

No modifications are allowed.

An external quick-shift system on the gear selector (including cable and potentiometer) may be added.

Other modifications to the gearbox or to the selector mechanism are not authorised.

Countershaft sprocket, rear wheel sprocket, chain pitch and size can be changed.

The drive sprocket cover can be modified or eliminated. A crankcase protection may be added in this area (against chain damage).

The chain guard (swingarm mounted) may be removed or replaced.

#### **2.7.6.30 Clutch**

No modifications are allowed.

Only friction and drive discs may be changed, but their number must remain as original.

Clutch springs may be changed.

#### **2.7.6.31 Oil Pumps and Oil lines**

No pump modifications are allowed.

Oil lines may be modified or replaced. Oil lines containing positive pressure, if replaced, must be of metal reinforced construction with swaged or threaded connectors.

#### **2.7.6.32 Electronic Control System**

From 01/01/2021:

The engine control system (including ECU and dashboard) must be either:

- The standard system as on the homologated motorcycle (STD).
- The manufacturer's official Superstock 1000 Kit system (KIT).

The location and the size of the Electronic Control Unit (ECU) must be identical to the original, homologated unit.

Whatever the Engine control system used by the team (STD or KIT), the ECU must be clearly identified by the original serial number issued by the manufacturer at the production of the ECU.

The manufacturer must declare this list of serial numbers (including ECU STD and KIT) to the FIM Technical Director before the opening of the season at [sptech@fim.ch](mailto:sptech@fim.ch).

The ECU serial number used by the team must comply with the model and the years range of the motorcycle homologated by the FIM and declared by the manufacturer.

The ECU must be set following the Manufacturer's instructions (user manual).

At all times, the FIM Technical Director (or his appointed colleague) must have access and way to connect to the ECU, for controlling purposes.

Spark plugs may be replaced.

#### **2.7.6.33 Generator, Alternator, Electric starter**

No modifications are allowed.

The electric starter must operate normally and always be able to start the engine during the event.

#### **2.7.6.34 Exhaust system**

The exhaust system may be modified for racing use. Catalytic converters must be removed. O<sub>2</sub> and equivalent sensors may be removed.

The number of the exhaust silencer(s) must remain as homologated. The position if the silencer silencer(s) (left or right, up or down) is free. The silencer's end must not pass a vertical line drawn at the edge of the rear tyre. The silencer's end cap may be made of composite materials.

For safety reasons, the exposed edge(s) of the exhaust pipe(s) outlet(s) must be rounded (diameter: min. 1 mm), avoid any sharp edges and be kept within 5 mm of the end cap of the silencer.

The silencer exhaust mounting/support flange may be made of composite materials; the assembly has to be secured by means of screws and bolts. Quick "zip" ties are not allowed.

Wrapping of exhaust systems is not allowed except in the area of the riders foot or an area in contact with the fairing for protection from heat.

The **maximum** sound limit for Superstock **will not exceed** 105 dB/A (with a 4 dB/A tolerance after the race).

#### **2.7.6.35 Lights**

Headlights must emit a YELLOW light beam.

#### **2.7.6.36 Fasteners**

Standard fasteners may be replaced with fasteners of any material and design but titanium fasteners may not be used. The strength and design must be equal to or exceed the strength of the standard fastener it is replacing.

Fasteners may be drilled for safety wire, but any intentional weight savings modifications are not allowed.

Fairing/bodywork fasteners may be changed to the quick disconnect type.

Aluminium fasteners may only be used in non-structural locations.

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

- A special one way valve can be fitted to the crankcase oil filler opening (to avoid any oil spillage).
- It is recommended that motorcycles be equipped with a red light on the instrument panel. This light must flash in the event of oil pressure drop.
- Any type of lubrication, brake or suspension fluid may be used.

- Any type of spark plug.
- Any inner tube (if fitted) or inflation valves may be used.
- Gaskets and gasket materials (with the exception of the cylinder base gasket).
- Wheel balance weights may be discarded, changed or added to.
- Instruments, instrument bracket(s) and associated cables.
- Painted external surface finishes and decals.
- Headlamp and rear lamp, only for races taking place partly at night.
- Material for brackets connecting non original parts (fairing, exhaust, etc) to the frame (or engine) cannot be made from titanium or fibre reinforced composites.
- Protective covers for engine (see also Art. 2.6.6.30 and 2.7.6.28), frame, chain, footrests, etc. can be made in other materials like fibre composite material if these parts do not replace original parts mounted on the homologated model.

### **2.7.8 The Following Items MAY BE Removed**

- Emission control items (anti-pollution) in or around the air box and engine (O2 sensors, air injection devices).
- The air injection control system (valve, solenoid, tubes) may be removed. The tubes connected to the cylinder head cover may be plugged.
- Speedometer.
- Chain guard.
- Bolt on accessories on a rear sub frame.



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

- Turn signal indicators (when not incorporated in the fairing). The openings in the fairing must be covered by suitable materials.
- Rear-view mirrors.
- Horn.
- License plate bracket.
- Tool box.
- Helmet hooks and luggage carrier hooks.
- Passenger foot rests.
- Passenger grab rails.
- Safety bars, centre and side stands must be removed (fixed brackets must remain).

### **2.7.10 The Following Items MUST BE Altered**

Motorcycles must be equipped with a functional ignition kill switch or button mounted at least on one side of the handlebar (within reach of the hand while on the hand grips) that is capable of stopping a running engine.

Throttle controls must be self closing when not held by the hand.

All drain plugs must be wired. External oil filter(s) screws and bolts that enter an oil cavity must be safety wired (i.e. on crankcases).

All motorcycles must have a closed breather system. The oil breather line must be connected and discharge in the airbox.

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.

## 2.7.11 Additional equipment

Additional electronic hardware equipment not on the original homologated motorcycle may be added (e.g. data acquisition and sensors, computers, recording equipment).

On-board cameras may only be used upon request and after the team has obtained written permission from the FIM and the Promoter. It is forbidden to use, mount or affix cameras on the rider's helmet.

The addition of a device for infra-red (IR) transmission of a signal between the racing rider and his team, used exclusively for laptiming, is allowed.

The addition of a GPS unit for positioning, laptiming and/or lapscoreing purposes or legible messages via an on-board screen is allowed.

**Telemetry is not allowed (remote signals to or from the motorcycle), except by compulsory championship devices.**

**Remote or wireless connections to the motorcycle for any data exchange or setting is not allowed whilst the engine is running or the motorcycle is moving.**

**The use of bi-directional communication is not allowed except when mentioned in the Supplementary rules or by the request of the Race Direction and with the approval of the FIM Technical Director.**

The addition of all Championship contracted devices such as Transponder and Promoter's on-board TV system is allowed. The Promoter is requested to advise the FIM Technical Director of the list of motorcycles on which their systems will be fitted in prior of the race.

**One extra mechanic (a 5<sup>th</sup> one) will be allowed during the pitstop only to manage these TV devices following the Promoter's instructions.**



2.9 EXPERIMENTAL TECHNICAL SPECIFICATIONS

EXPERIMENTAL type motorcycles may be based on road legal models with a valid FIM homologation, or be a single unit.

If presented by the Team, they must show that the FIM Homologated motorcycle contains a major change to be considered as “Experimental”. Such project must be have been validated by the CCR and the CTI prior to entering an event.

Either one of the following components: the engine, the main-frame or the suspension must be completely different in design and form from the original model to participate in the “Experimental” Class.

All motorcycles must comply in every respect with all the requirements for Circuit Racing as specified in these Technical Regulations (including the safety requirements in Art. 2.3).

Tyre limitations do not apply.

2.9.1 Displacement capacities

- 1. Internal combustion engines, naturally aspirated (fuel)

- a) Homologated Superstock engines

Changes allowed as per the Superstock regulations (more specifically regarding the preparation of the engine components, airbox and fuel injection system, please refer to Art. 2.7 for details).

Over 750cc up to 1000cc	4-stroke	4 cylinders
Over 750cc up to 1000cc	4-stroke	3 cylinders

- b) Prototype engine

Over 600cc up to 750cc	4-stroke	up to 4 cylinders
Over 750cc up to 1200cc	4-stroke	up to 3 cylinders

- 2. Hybrid system - Example: an alternative energy source in combination with Internal and naturally aspirated combustion engines: Max 400cc
- 3. Other(s): i.e. electric



## 2.9.2 Transmission / Gearbox

No limit on the number of gears.

## 2.9.3 Minimum / Maximum Weight

- The maximum weight for ELECTRIC power sources: 250 kg

### From 01/01/2021:

- For all motorcycles with internal combustion engines (ICE): 168 kg for all races.

This is the absolute minimum weight (without the fuel tank and its content).

(“Its content” includes: fuel on-board, all fuel tank internal parts, fuel valve(s) system (+ protective cover (if any)), fuel pump, glued protective covers/rider anti-slip systems).

At any time during the event, the weight of the whole motorcycle (excluding the fuel tank and its content) must not be less than the minimum weight.

There is no tolerance on the minimum weight of the motorcycle.

The use of ballast is allowed to stay over the minimum weight limit and may be required due to a handicap system. The use of ballast and weight handicap must be declared to the FIM Endurance Technical Director / Chief Technical Steward at the preliminary checks and/or prior to the race.

During the practice and qualifying sessions, riders may be asked to submit their motorcycle to a weight control in the pit lane. The minimum weight during the QPs remains at 175 kg (including the fuel tank and its content).

In all cases the rider (and the team) must comply with this request for a control. Any “forcing” of the control point of the weight control will be immediately reported to the FIM EWC Stewards Panel who will take appropriate action (see Sporting rules).

During the final technical inspection at the end of each race, the selected motorcycles will be weighed in the condition they finished the race **(without the fuel tank and its content)**, and the established weight limit must be met in this condition. Nothing may be added to the motorcycle. This includes all fluids, batteries.

**The minimum weight includes all Championship contracted devices whether fitted or not, such as Transponder and on-board TV system.**

#### **2.9.4 Safety and Construction Criteria**

At all times, safety is the primary issue. Any motorcycle must adhere to the safety requirements.

In order to provide the participant the correct information, the entrant is required to submit a file of the “Experimental” motorcycle, complete with full description, drawings and pictures of the motorcycle and of the powerplant used.

This file will be reviewed by the FIM Technical Commission and its Experts. They will provide their recommendations, if any, to the members of the Selection Committee.

#### **2.9.5 Fuel**

Motorcycles equipped with internal combustion engines must function on normal unleaded fuel with a maximum lead content of 0.005 g/l (unleaded) and a maximum MON of 90 (see also Art. 2.10 for fuel specifications).

Exceptions may be granted for alternative energies, provided that all safety measures with relation to stock, packaging and handling are taken and guaranteed at all times.

#### **2.9.6 Fuel System**

The maximum permitted relative fuel pressure is 10 Bar, at a re-circulated flow rate of 50 litres/hour.

Additional regulators may be used in conjunction with the regulator to further reduce and control fuel pressure, but no device or strategy capable of increasing fuel pressure at the injectors above 10 Bar may be used anywhere in the system.

Teams must supply a schematic diagram of their fuel system including the location of the fuel pressure regulator when requested by the Technical Director.

### **2.9.7 General requirements**

All general requirements (See Art. 2.3) with relation to numbers, light installation, bodywork (See Art. 2.8.6.11) and quick fill fuel valve systems (if applicable) must all be observed.

### **2.9.8 Lights**

Headlights must emit a YELLOW light beam.

### **2.9.9 Materials for brakes**

Carbon composite or ceramic brakes are not permitted. Only ferrous materials are permitted.

The construction materials allowed for the main body of each component are:

Calipers, Master Cylinders, Disc Mounting Hubs - Al2024, Al7075, Al6082, Al2618, Al6061 (Specifically Al-Li material is forbidden).

**Brake line hose fittings (including banjo bolts) can only be Steel or Titanium. Quick couplings can remain in Aluminium.**

### **2.9.10 Materials for fuel tanks**

**Fuel tanks must be made from metal or aluminium: follow Art. 2.6.6.10.**

Fuel tanks of all construction types must be filled with fire retardant material or be lined with a fuel cell bladder.

Fuel tanks made of non-metallic composite materials (carbon fibre, aramid fibre, glass fibre, etc.) must be fitted with a fuel cell bladder, or have passed the appropriate FIM test standards for composite material fuel tanks as described in the FIM Fuel Tank Test Procedure for fuel tank homologation.

Such composite fuel tanks without a fuel cell bladder must bear a label certifying conformity with FIM Fuel Tank Test Standards. Such labels must include the fuel tank manufacturer's name, date of tank manufacture, and name of testing laboratory.

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 (<http://www.fim-live.com/en/library/>).

Fuel cell bladders must conform to or exceed the specification FIM/FCB-2005. Full details of this standard are available from the FIM.

### 2.9.11 Exhaust system

**The exhaust system may be modified for racing use.** Exhaust pipes, catalytic converters and silencers may be altered or replaced from those fitted on a road legal motorcycle. Catalytic converters **must** be removed. **O<sub>2</sub> and equivalent sensors may be removed.**

The number of the exhaust silencer(s) must remain **is free**. The position if the silencer silencer(s) (left or right, up or down) is free. The silencer's end must not pass a vertical line drawn at the edge of the rear tyre. **The silencer's end cap may be made of composite materials.**

For safety reasons, the exposed edge(s) of the exhaust pipe(s) outlet(s) must be rounded (diameter: min. 1 mm), avoid any sharp edges and **be kept within 5 mm of the end cap of the silencer.**

**The silencer exhaust mounting/support flange may be made of composite materials;** the assembly has to be secured by means of screws and bolts. Quick "zip" ties are not allowed.

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.

The sound limit for EXPERIMENTAL motorcycles will not exceed 105 dB/A (with a 4 dB/A tolerance after the race).

#### **2.9.12 The following items MAY BE altered or replaced**

- A special “one-way” valve can be fitted to the crankcase oil filler opening (to avoid any oil spillage). Standard or other valves must be secured.
- It is recommended that motorcycles be equipped with a red light on the instrument panel. This light must flash in the event of oil pressure drop.
- Tachometer.
- Any type of lubrication, brake or suspension fluid may be used.
- Any type of tubing (i.e. air, fuel, oil or water) may be used.
- Any inner tube (if fitted) or inflation valves may be used.
- Gaskets and gasket material.
- Wheel balance weights may be discarded, changed or added to.
- Bearings (ball, roller, taper, plain, etc.) of any type or brand may be used.
- Fasteners (nuts, bolts, screws, etc.).
- External surface finishes and decals on fairing and bodywork.



### 2.9.13 The following items **MAY BE** removed

- The air injection control system (valve, solenoid, tubes) may be removed. The tubes connected to the cylinder head cover may be plugged.
- Unused elements of the wiring harness.
- Instrument and instrument bracket and associated cables.
- Tachometer.
- Speedometer and associated wheel spacers.
- Chain guard.
- Bolt on accessories on a rear sub frame (seat).

### 2.9.14 The Following Items **MUST BE** removed

- Turn signal indicators (when not incorporated in the fairing). The openings in the fairing must be covered by a suitable material.
- Rear-view mirrors.
- Horn.
- License plate bracket.
- Tool box.
- Helmet hooks and luggage carrier hooks.
- Passenger foot rests.
- Passenger grab rails.
- Safety bars, centre **stands**, side stands and **fixed brackets** must be removed.

## 2.9.15 The following items **MUST BE** altered

- Motorcycles must be equipped with a functional ignition kill switch or button (RED) mounted at least on one handlebar to stop a running engine and within reach of the hand while on the hand grips.
- Throttle controls must be self closing when not held by the hand.
- The lower fairing section must remain leak proof at all times. (A hole of 25 mm is no longer required). The rear of the lower fairing must be fixed by a minimum of two brackets to the engine or to the frame to carry the lower fairing when filled with liquid.
- It is compulsory to equip all motorcycles with a solid front brake lever guard preventing the brake lever from being accidentally activated in case of collision with another motorcycle.
- All drain plugs must be wired. External oil filter(s) screws and bolts that enter an oil cavity must be safety wired (i.e. on crankcases).
- All motorcycles must have a closed circuit breather system. The oil breather line must be connected and discharge into the airbox.
- Where breather or overflow pipes are fitted they must discharge via existing outlets into the airbox. The original closed system must be retained; no direct atmospheric emission is permitted.
- Oil cooler must not be mounted on or above the rear wheel.

## 2.9.16 Additional Equipment

Additional electronic hardware equipment not on the original homologated motorcycle may be added (e.g. data acquisition and sensors, computers, recording equipment).

On-board cameras may only be used upon request and after the team has obtained written permission from the FIM and the Promoter. It is forbidden to use, mount or affix cameras on the rider's helmet.

The addition of a device for infra- red (IR) transmission of a signal between the racing rider and his team, used exclusively for laptiming, is allowed.

The addition of a GPS unit for positioning, laptiming and/or lapscoreing purposes or legible messages via an on-board screen is allowed.

**Telemetry is not allowed (remote signals to or from the motorcycle), except by compulsory championship devices.**

**Remote or wireless connections to the motorcycle for any data exchange or setting is not allowed whilst the engine is running or the motorcycle is moving.**

**The use of bi-directional communication is not allowed except when mentioned in the Supplementary rules or by the request of the Race Direction and with the approval of the FIM Technical Director.**

The addition of all Championship contracted devices such as Transponder and Promoter's on-board TV system is allowed. The Promoter is requested to advise the FIM Technical Director of the list of motorcycles on which their systems will be fitted in prior of the race.

**One extra mechanic (a 5<sup>th</sup> one) will be allowed during the pitstop only to manage these TV devices following the Promoter's instructions.**

**From 01.01.2020:**

## **2.10 FUEL (PETROL), LUBRICANT AND COOLANTS**

All vehicles must be fuelled with:

- unleaded fuel (from public pump station or race type) OR
- a mixture of unleaded fuels OR
- a mixture of unleaded fuel(s) and lubricant in the case of 2-stroke engines.

The unleaded fuel or the mixture of unleaded fuels used must comply with the FIM specifications as set out in Art. 2.10.1.

The mixture of unleaded fuel(s) and lubricant must comply with the FIM specifications as set out in Art. 2.10.2.

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. They are also recommended to provide a certificate issued by the fuel company which certify 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. 2.10.1 and 2.10.2.

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. 2.10.1 and 2.10.2:

- in case of conformity, a certificate of conformity (including test report and tested batch number) shall be available and Art. 2.10.4 applies in case of controls for the riders/teams;
- in case the conformity is not achieved, the FMN of the organising country/the Organizer/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.



2.10.1 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	Unit	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 22854 <sup>1</sup> or EN 13132 or elemental analysis
Nitrogen	% (m/m)		0.2	ASTM D 4629 <sup>2</sup> 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
Lead	mg/L		5.0	ICP-OES or AAS
Manganese	mg/L		2.0	ICP-OES or AAS
Density at 15°C	kg/m3	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
Distillation:				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
Oxygenates:				EN ISO 22854 <sup>1</sup> 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 (E10)	% (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 presents 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 ionization detector) and/or GC-MS (gas chromatography-mass spectrometry).
- c) The total concentration of naphthene, 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+
Naphthene		5	10	10	10	10
Olefins	5	20	20	15	10	10
Aromatics			1.2	35	35	30

- d) Bicyclic and polycyclic olefins are not permitted. The fuel must contain no substances which are capable of exothermic reaction in absence of external oxygen.

**2.10.2 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/m3	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.

**2.10.3            Air**

Only ambient air may be mixed with the fuel as an oxidant.

**2.10.4            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.

**2.10.4.1        Sampling**

1. 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.
2. Riders/teams selected for fuel controls are directed to proceed with their vehicles to the area that has been designated for this purpose.

3. The FIM Technical Director/FMNR Chief Technical Steward collects the fuel from the motorcycle by using only new sample containers and pipettes/hand pumps.

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.

4. The FIM Technical Director/FMNR Chief Technical Steward fills in (in all its parts) and signs the Fuel Sample Declaration Form (see forms). The rider or a team representative also signs this Form, after verifying that all the information is correct.
5. 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 courier.

#### 2.10.4.2 Testing

1. One or more properties to be checked (following the relevant testing method as per Art. 2.10.1 and 2.10.2) are set by the FIM for each selected rider/team.
2. Sample A is the first sample to be tested by the FIM appointed laboratory.
3. 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.
4. As soon as possible after completing the testing, the FIM appointed laboratory reports the test results directly to the responsible CTI Coordinator.



5. 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. **FIM EWC Stewards Panel**, International Jury), the CTI Director, the Director and Coordinator(s) of the sporting Commission concerned.
6. 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. **FIM EWC Stewards Panel**, 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.
7. 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.
  - 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.

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. **FIM EWC Stewards Panel**, International Jury), the CTI Director, the Director and Coordinator(s) of the sporting Commission concerned.

- 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. **FIM EWC Stewards Panel**, International Jury), the CTI Director, Director and Coordinator(s) of the sporting Commission concerned.
8. The competent authority of the event concerned (e.g. **FIM EWC Stewards Panel**, International Jury) makes 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\*.

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.

9. The rider/team has the right to appeal against the decision of competent authority of the event concerned (e.g. **FIM EWC Stewards Panel**, 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.

#### 2.10.5 Fuel Storage

When the fuel is supplied by the Organizer, there must be officially designated and controlled fuel storage areas. Outside these areas, fuel may only be stored in metal containers.

A maximum of 60 litres of fuel stored in a sealable can, is allowed in the competitor's pit box. A quick-fill installation (i.e. fuel tower) for refuelling is allowed.

In all the Classes of the FIM Endurance, fuel used for refuelling must not be below the prevailing ambient temperature.

The FIM Technical Director will confirm in case of doubt.

Other than a simple removable tank cover, the use of any device or method on the motorcycle to artificially decrease the fuel temperature below ambient temperature is forbidden.

The officially designated storage and supply area must be in conformity with the building criteria. Firefighting equipment, protective devices and staff must conform to the requirements imposed by the local authorities and by-laws.

The Organizer must have fire extinguishers of a size and type approved by the local by-laws, available to each competitor in the pit area.

#### 2.10.6 Coolants

The only liquid engine coolant permitted other than lubricating oil must be water.

## 2.11 PROTECTIVE CLOTHING AND HELMETS

The rider is at all times responsible for ensuring that his own protective clothing and helmets comply with the FIM Technical Regulations.

### 2.11.1

Riders must wear a complete leather suit with additional leather padding or other protection on the principal contact points, knees, elbows, musters, 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.

### 2.11.2

Linings or undergarments must not be made of a synthetic material which might melt and cause damage to the riders' skin.

### 2.11.3

Riders must also wear leather gloves and boots, which with the suit provides complete coverage from the neck down.

### 2.11.4

Leather substitute materials may be used, providing they have been checked by the Chief Technical Steward.

### 2.11.5

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 EN1621-3 or EN 14021.


Use of a functional airbag system is strongly recommended.

2.11.6

Riders must wear a helmet which is in good condition, provides a good fit and is properly fastened.

2.11.7

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)
FRHPhe-01 (FIM)	

2.11.8

Visors must be made of a shatterproof material.

2.11.9

Disposable “tear-offs” are permitted.

2.11.10

Any question concerning the suitability or condition of the riders clothing and/or helmet shall be decided by the FIM Endurance Technical Director/ Chief Technical Steward, who may, if he so wishes, consult with the manufacturers of the product before making a final decision.

## 2.12 PROCEDURES FOR TECHNICAL CONTROL

The team is at all times responsible for its own motorcycle.

### 2.12.1

The Chief Technical Steward must be in attendance for an event at least one (1) hour before the technical verifications are due to beginning. He must inform the Clerk of the Course, the Jury President and the Endurance Technical Director of his arrival.

### 2.12.2

The Chief Technical Steward must ensure that all Technical Stewards, appointed for the event, carry out their duties in a proper manner.

### 2.12.3

The Chief Technical Steward shall appoint the Technical Stewards to individual posts for the race, practices and final control.

### 2.12.4

Technical inspections will only be carried out when the technical specification form of the motorcycle has been distributed by the Organiser (before/during the preliminary controls).

### 2.12.5

The Team, represented by the Team manager and up to 2 mechanics, must be present with the motorcycle(s) for Technical control within the time limits stated in the Supplementary Regulations. **In addition, each Rider must present his own safety equipment (helmets, leathers, boots, gloves, chest and back protector).**

### 2.12.6

The FIM Endurance Technical Director/Chief Technical Steward must inform the International Jury of the results of the Technical control. The Endurance Technical Director/Chief Technical Steward will then draw up a list of accepted motorcycles and submit this list to the Clerk of the Course.



### 2.12.7

The FIM Endurance Technical Director/Chief Technical Steward has the right to inspect any part of the motorcycle at any time of the event.

### 2.12.8

Any **Team/Rider** failing to report as required below may be disqualified from the meeting. The International Jury may forbid, any team who does not comply with the rules, or any rider who can be a danger to other participants or to spectators, to take part in the practice sessions or in the races.

### 2.12.9

The Technical control must be carried out in accordance with the procedure and times fixed in the Supplementary Regulations of the event.

### 2.12.10

The FIM Endurance Technical Director/Chief Technical Steward 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.

### 2.12.11

The **Team** or mechanic must present a clean motorcycle and in conformity to the FIM rules. He must also present a duly filled in and confirmed technical card.

### 2.12.12

An overall inspection of the motorcycle must be carried out in conformity with the FIM rules. Accepted motorcycles will be marked with paint or a sticker.

The FIM Endurance Technical Director/Chief Technical Steward has the final authority in case of a dispute on the conformity of the parts in question and for acceptance thereof.

### 2.12.13

The rider is permitted to use whichever motorcycle he chooses from the accepted motorcycles.

### 2.12.14

Before each practice the Technical Steward must confirm that the motorcycle has passed the Technical control by checking the Technical control sticker before the motorcycles go on the track.

### 2.12.15

Only accepted motorcycles may be used in a race and practice. A change of motorcycle is accepted in accordance with the prescriptions of the sporting appendix.

### 2.12.16

Under special circumstances, a team allocated garage “box” may be used for technical checks under the supervision of Technical stewards.

### 2.12.17

Approximately 30 minutes after the Technical control has been completed, the FIM Endurance Technical Director/Chief Technical Steward must submit to the International Jury list of accepted motorcycles and riders in the individual classes.

### 2.12.18

If a motorcycle is involved in an accident, the Endurance Technical Director/Chief Technical Steward must check the motorcycle, together with the helmet and clothing of the rider involved, to ensure that no defect of a serious nature has occurred.

If a motorcycle was stopped with a black flag with orange disc, the FIM Endurance Technical Director/Chief Technical Steward must check the motorcycle.

In both cases, it is the responsibility of the team to present the motorcycle (together with helmet and clothing of the fallen rider) for this re-examination in case they wish to continue.

If the helmet is clearly defective, the Chief Technical Steward must retain this helmet. The Organiser must send this helmet, together with the accident and medical report (and pictures and video, if available) to the Federation of the rider. If there are head injuries stated in the medical report, the helmet then must be sent to a neutral institute for examination.

#### 2.12.19

The rider must present his equipment. The helmet must be marked. Permanent teams may present their equipment for Technical control in their team's pit box.

#### 2.12.20

The Team may present **maximum 2** motorcycles for the initial Technical verifications.

Due to extraordinary circumstances (i.e. damaged beyond repair) a 3<sup>rd</sup> rolling chassis (assembled with wheels, suspension components and electronics) may be presented for technical checks to the FIM Endurance Technical Director.

#### 2.12.21

Motorcycle's **exhausts/silencer(s) system** sound levels should be checked at random choice during practice as well as after the race. On request of rider, team or mechanic, the silencer's sound level of their own motorcycles' may be checked at any time during the event.

#### 2.12.22

Weight should be checked at the discretion of the FIM Endurance Technical Director/Chief Technical Steward during practices as well as after the race.

The 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 FIM Endurance Technical Director/Chief Technical Steward.

On request of rider, team or mechanic, weight and sound of their own motorcycles can be checked at any time during the event.

## 2.13 VERIFICATION GUIDELINES FOR TECHNICAL STEWARDS

### 2.13.1 Verification

- 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 (time mentioned in the Supplementary Regulations).
- 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 **150 sq. metres**) or in front of the pit box of the teams (new procedure).
- A covered “**parc fermé**” (min. surface **150 sq. metres**) must be ready at any time during the race in case of suspension of the race in wet conditions declared by the Race Direction.
- Weighing apparatus must be accurate and practical. It’s certificate must be available and dated within 2 years. A set of certified master weights and their certificate must be available for the Technical checks.
- Rules regarding sound level and measurement must be respected.

All motorcycles will be required for weight and/or sound check at the pre-race technical inspection.

The scales and sound meter will be available to the teams or riders for pre-race checking in the Technical control area.

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 will be controlled at random during practices in the pit-lane, 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.

The FIM Endurance Technical Director/Chief Technical Steward reserve 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 FIM Endurance 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 FIM Endurance Technical Director/Chief Technical Steward, to re-inspect any motorcycle for compliance during the meeting.

### **2.13.2 Preparations, Procedures**

At each circuit, an area must be designated as the Technical control Area. In this area, under the control of the FIM Endurance Technical Director/Chief Technical Steward, suitable equipment will be available to conduct proper inspections.

The Technical control will be carried out in accordance with the schedule set out in the Supplementary Regulations.

Technical Stewards must be available throughout the entire event to check motorcycles and equipment as required by the FIM Endurance Technical Director/Chief Technical Steward.

Presentation of a motorcycle will be deemed as an implicit statement of conformity with the technical regulations.

The Technical Stewards must inspect the motorcycles for obvious safety omissions.

The Technical Stewards must inspect that the motorcycle conforms to all technical rules laid out in the Regulations.

During the technical inspection in the closed park the mechanics must assist with the inspections. A maximum of four (4) team members per rider is allowed in the closed park during the post-race technical inspection. Downloading of data is allowed in the closed park.

Representatives of the tyre manufacturers are allowed in the closed park.

### **Practice**

#### **- Dry Practice**

Every motorcycle used in free or official practice may be checked.

The minimum checks are weight and sound. The FIM Endurance Technical Director/Chief Technical Steward may request other checks.

#### **- Wet practice**

The FIM Endurance Technical Director/Chief Technical Steward may perform certain checks during/after a wet practice.



**Final inspection at the end of the race**

Motorcycles may be checked at least for the following compliance points:

- Weight: The weight will be checked in the condition that the motorcycle has finished the race **(without the fuel tank and its content)**. No elements can be added to the motorcycle, neither fuel, oil, water nor tyres.
- Sound: compliance with max sound limit.
- Carburettors / throttle bodies + injectors:
  - Measurement and inspection of both inlet and outlet tract and injection I homologation points.
- Engine: Engine(s), chosen may be checked internally for capacity and compliance with Art. 2.6 (Formula EWC) and Art. 2.7 (Superstock).

The FIM Endurance Technical Director/Chief Technical Steward may require a team to provide parts or samples, as he may deem necessary to confirm compliance with the rules.

**Appointment and attendance**

The Technical Stewards must be present and available during all the opening hours of the Technical control area. The FIM Endurance Technical Director/Chief Technical Steward will instruct the Technical Stewards to verify motorcycles for compliance with technical and safety rules.

**Administration day / Technical control:**

For all contracted teams: min. 6 persons

Tasks: Inspection of motorcycle safety, clothing and helmets  
(SOUND AND WEIGHT CONTROL)

For all non-contracted teams: min. 6 persons

The inspection will take place in the technical Technical control area

Task: Inspection motorcycle safety, clothing and helmets  
(SOUND AND WEIGHT CONTROL)

Administration tasks: min. 1 person



**a) Thursday / Friday:**

Technical control: free practice, qualifying and official qualifying sessions

Task: Inspection of motorcycle safety:

Sound and Weight: min. 12 persons

Inspection of crashed motorcycles and Technical controls: min. 2 persons

Administration tasks: min. 1 person

**b) Saturday / Sunday: Technical control during race day**

**Before and after the Warm-up:**

Task: Inspection of motorcycle safety: Sound and Weight: min. 12 persons

Inspection of crashed motorcycles and Technical controls: min. 2 persons

Administration tasks: min. 1 person

Before race: safety checks on start grid: min. 4 persons

During the race: random inspections: min. 8 persons

After race: Technical control sound weight and carburation instruments: min. 8 persons

Displacement checks: min. 2 persons

Administration tasks: min. 1 person

NOTE: This is the required minimum of Technical Stewards. The number may of course be higher.

All final verification points to be decided in co-operation with the International Jury President and the FIM Endurance Technical Director/ Chief Technical Steward. Post-race checks are under extreme pressure. It is important to be very well organised.

Chief Technical Steward must report to the Jury after the verifications.



### **Minimum Equipment list**

- Revolution meter
- Sound meter and calibrator
- Slide caliper
- 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 to read homologation CD-Rom

### **Documents list**

- Regulations of the CURRENT YEAR
- Supplementary Regulations
- Homologation documents
- CD-Rom with homologations
- Technical control forms
- Writing materials



**FIM ENDURANCE WORLD CHAMPIONSHIP  
MACHINE INSPECTION - DECLARATION FORM**

**General info and Section 1** must be completed by the TEAM and handed over to the Chief Technical Steward.

<b>FIM - EWC TECHNICAL CONTROL FORM</b>		IMN N°:
EVENT		PLACE :
TEAM (NAME)		CAT :
NATIONALITY		<b>N°</b>
LIC. TEAM N°		
<b>SECTION 1 - MOTORCYCLE INFORMATION</b>	<b>MOTORCYCLE 1</b>	<b>MOTORCYCLE 2 (T)</b>
MANUFACTURER		
COMMERCIAL MODEL		
YEAR		
FRAME NUMBER		
ENGINE NUMBER (FOR TECHNICAL INSPECTIONS)		
ENGINE NUMBER (FOR RACE IF ENGINE CHANGE)		
BALLAST ON-BOARD (KG) + LOCATION		
ELECTRONIC CONTROL SYSTEM - MANUFACTURER		
ECU SERIAL N° (FOR SUPERSTOCK)		
<b>SECTION 2 - ENGINE ON/OFF - LIGHTS</b>		
ENGINE CUT- OFF SWITCH (ONLY RED)		
HEADLIGHTS (2) - REAR LIGHTS (2)		
3RD REAR EMERGENCY LIGHT - SEPARATE ON/OFF SWITCH		
ELECTROLUMINESCENT NUMBER PLATES (FRONT/REAR)		
<b>SECTION 3 - SAFETY</b>		
THROTTLE GRIP/SELF CLOSING		
FREE STEERING ROTATION		
BRAKES - CORRECT WORKING <b>FR/RR + FR BRAKE LEVER PROTECTOR</b>		
HANDLEBARS + FOOTRESTS END CAPS R/L		
BOTTOM FAIRING CLOSED + <b>BRACKETS R/L</b>		

Technique



OIL DRAIN/FILLER PLUGS, OIL FILTER, ETC. WIRED		
ONLY WATER IN RADIATOR		
CRANKCASE PROTECTIVE COVER R/L (3 FIXING POINTS)		
<b>SECTION 4 - FUEL EQUIPMENT</b>		
FUEL TANK WITH FIXED MOUNTING POINTS (MIN. 3)		
QUICK FILL FUEL VALVE – <b>MANUFACTURER</b> /DIAMETER/RESTRICTOR ( <b>FIM CTI SEAL</b> )		
FUEL VALVE LOCKING SYSTEM OR PROTECTIVE COVER		
FUEL CATCH TANK		
FUEL CHARGER (LEAKPROOF, HEIGHT MAX. 120MM)		
REFUELLER(S) EQUIPMENTS (FIRE RETARDANT SUIT, GLOVES, BALACLAVA, GLASSES, HELMET, CLOSED SHOES)		
<b>SECTION 5 - SOUND/WEIGHT</b>		
SOUND LEVEL (DB)		
WEIGHT (KG)		
<b>SECTION 6 - FIM STICKER</b>		
<b>REMARKS :</b>  <p>Acceptance of a motorcycle for competition does not preclude the possibility of further controls to ensure compliance with the competition Technical rules.</p>		
<b>TECHNICAL STEWARD :</b> <b>DATE :</b>	<b>TEAM MANAGER :</b> <b>PHONE N° : +</b> <b>EMAIL :</b>	
<b>SIGNATURE :</b>	<b>SIGNATURE :</b> I hereby declare that the information given above is accurate in every respect.	



**FIM WORLD CHAMPIONSHIPS and PRIZE EVENTS**  
**Fuel Sample Declaration Form**

**Discipline:** ..... / **Venue:** .....  
..... / **Date:** .....

<b>Samples taken during/after:</b>  FP / QP / or Race N°:                      Time :	<b>Sample "A"</b>	
	Container N°	Seal N°
<b>Rider/Team's responsible name:</b>	<b>Sample "B"</b>	
	Container N°	Seal N°
<b>Rider/Team's number:</b>	<b>Sample "C"</b>	
	Container N°	Seal N°

<b>Vehicle make :</b>	<b>Model :</b>	
<b>Fuel make :</b>	<b>Type :</b>	<b>Batch N°</b>
<b>Fuel origin (public station)</b>	<b>Race fuel origin:</b>	

<b>Sample taken</b>	<b>(dd/mm/yy)</b>
---------------------	-------------------

The above listed details refer to fuel samples taken from the fuel tank of the motorcycle.

- Sample A is the first testing sample to be used by the FIM appointed laboratory.
- Sample B can be used for a second analysis if required by the FIM.
- Sample C is used if a counter-expertise is required by the rider/team.

The serial numbers of the vial seals and the accuracy of the information have been verified.

**Information:**

Rider/Team's - Telephone number/E-mail : .....

Rider/Team's Representative's Signature: .....

FIM Technical Director/ or FMNR Chief Technical Steward name:

.....

FIM Technical Director/ or FMNR Chief Technical Steward signature:

.....

Technique

## **2.14                SOUND CONTROL**

### **Sound limits in force**

Sound will be controlled to:

Max. 105 dB/A measured at a mean piston speed of 11 m/sec.

The fixed RPM specified in Art. 2.14.6 may be used.

#### **2.14.1**

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.

#### **2.14.2**

During a sound test, motorcycles not equipped with a gear box neutral must be placed on a stand.

#### **2.14.3**

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.

#### **2.14.4**

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.



2.14.5

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

2.14.6              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.

	2 cylinders	3 cylinders	4 cylinders
Up to 750 cc	5,500 RPM	6,000 RPM	7,000 RPM
Over 750 cc	6,000 RPM	6,000 RPM	6,000 RPM

2.14.7

The sound level for engines with more than one cylinder will be measured on each exhaust end.

2.14.8

A motorcycle which does not comply with the sound limits may be presented several times at pre-race control.

2.14.9

The surrounding sound should not exceed 90 dB/A within a 5 metres radius from the power source during tests.

### 2.14.10

Apparatus for sound control must be to international standard IEC 651, Preference: Type 1. As alternative, a Type 2 is permitted.

The sound level meter must be equipped with a calibrator for control and adjustment of the meter during periods of use. These instruments must have been calibrated by an approved testing Laboratory, the latest one year before the date of the event.

### 2.14.11

The “slow response” setting must always be used.

### 2.14.12      **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 of each class and/or category. At this final test, there will be a 4 dB/A tolerance.

### 2.14.13      **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 Art. 2.14.

## **2.15 GUIDELINES FOR USE OF SOUND LEVEL METERS**

### **2.15.1**

The Sound Control Officer (NCO) must arrive in sufficient time for discussions with the Technical director and other Technical Stewards in order that a suitable test site and testing policy can be agreed.

### **2.15.2**

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.

### **2.15.3**

Before testing, the NCO must calibrate the sound test equipment with a calibrator, in order check the accuracy of the official sound meter.

### **2.15.4**

Tests can take place in rain or damp conditions. Motorcycles considered excessively noisy must be individually tested if conditions allow.

### **2.15.5**

In other than moderate wind, motorcycles should face forward in the wind direction. (Mechanical sound will blow forward, away from microphone).

### **2.15.6**

“Slow” meter response must be used.



### 2.15.7

“A” weighted setting on sound level meter.

### 2.15.8

No rounding down of the meter reading: 107.9 dB/A = 107.9 dB/A.

### 2.15.9           Correction

Type 1 or 2 meter : Precision of the method: allow + 2 dB/A.

The use of a Type 1 meter is preferred. All tolerances are accumulative. Action and decisions will be taken after discussions with the FIM Endurance Technical Director/Chief Technical Steward.



ROAD/ROUTE

A

DIAGRAM 1

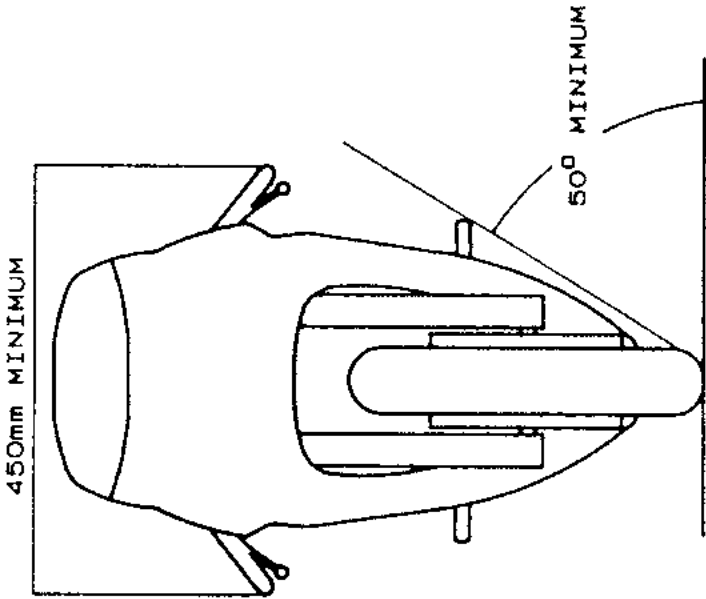


DIAGRAM 2

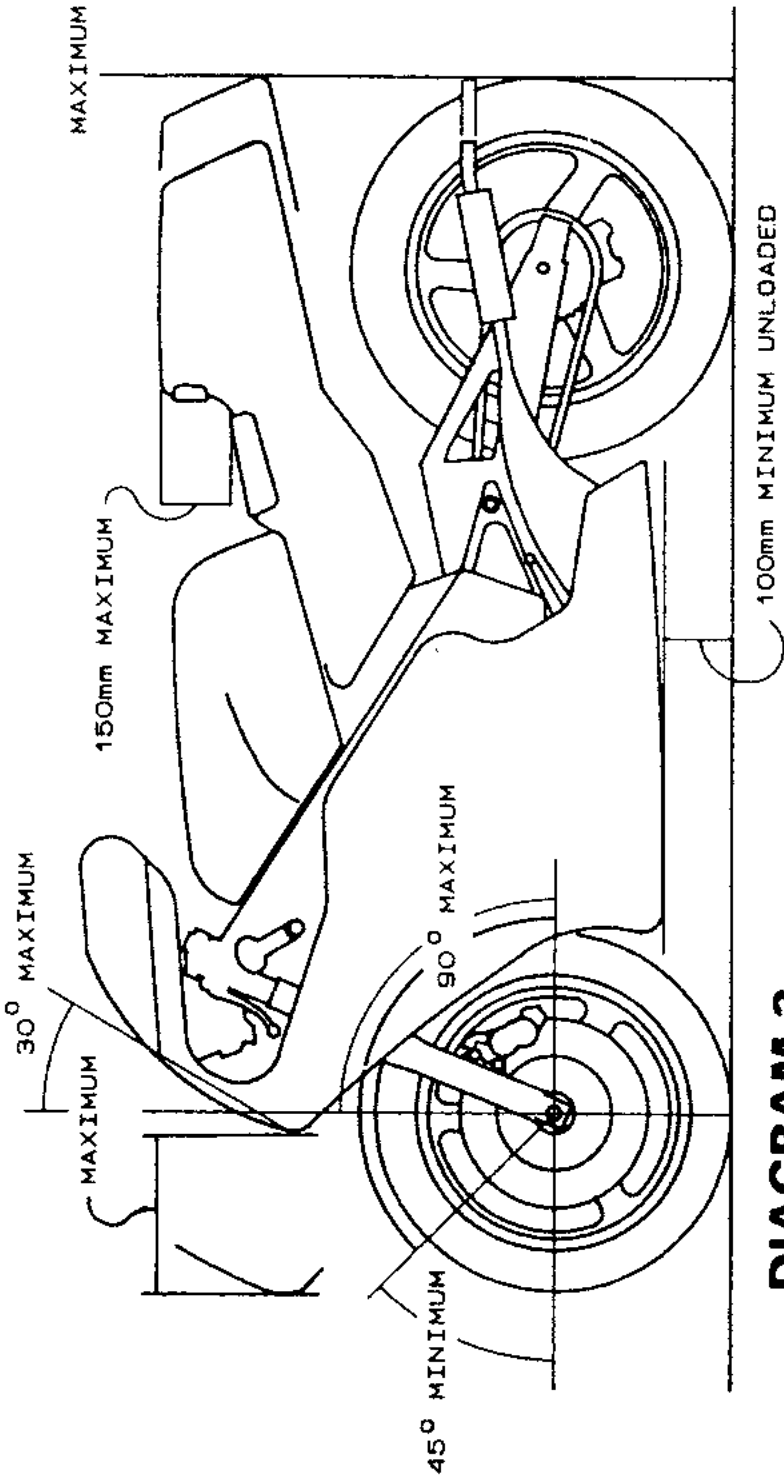
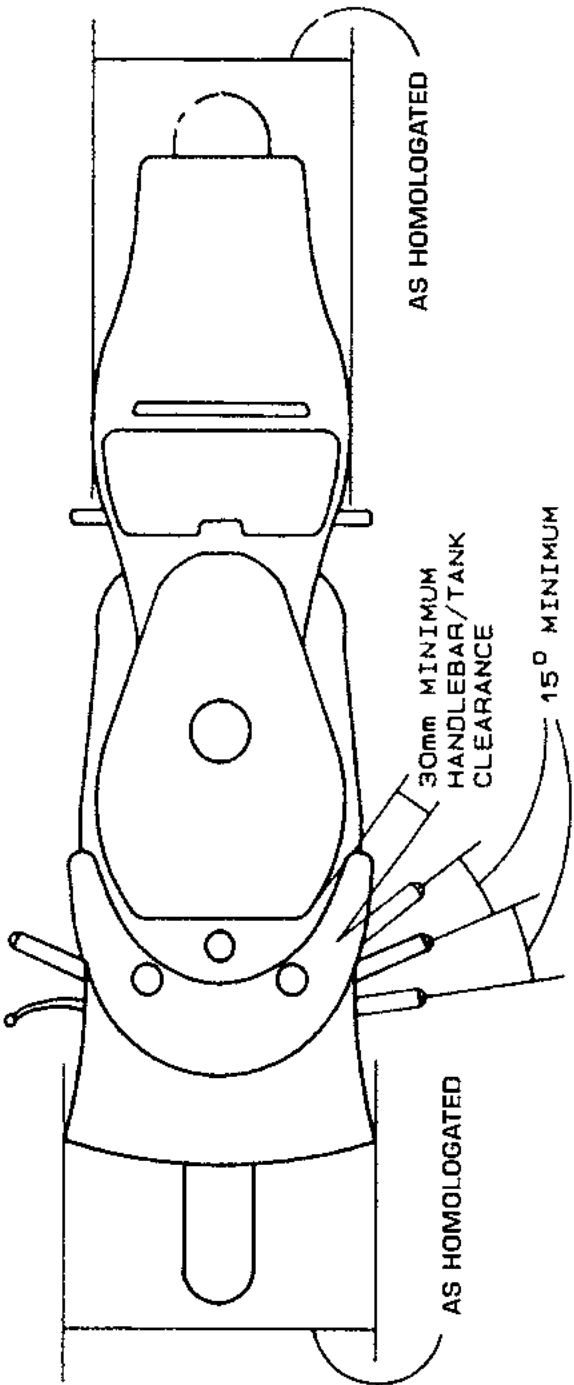
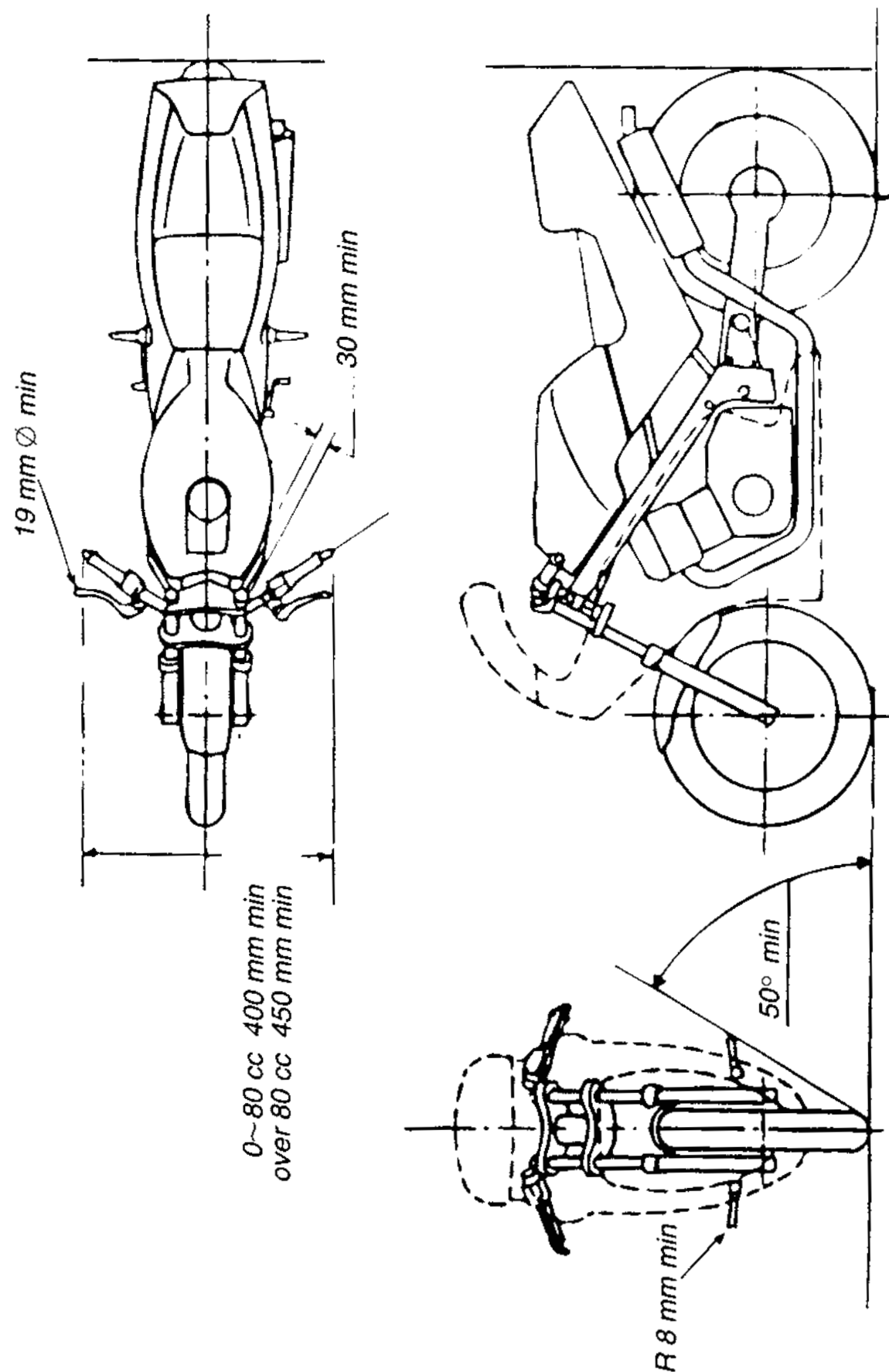


DIAGRAM 3



# SPORTS PRODUCTION

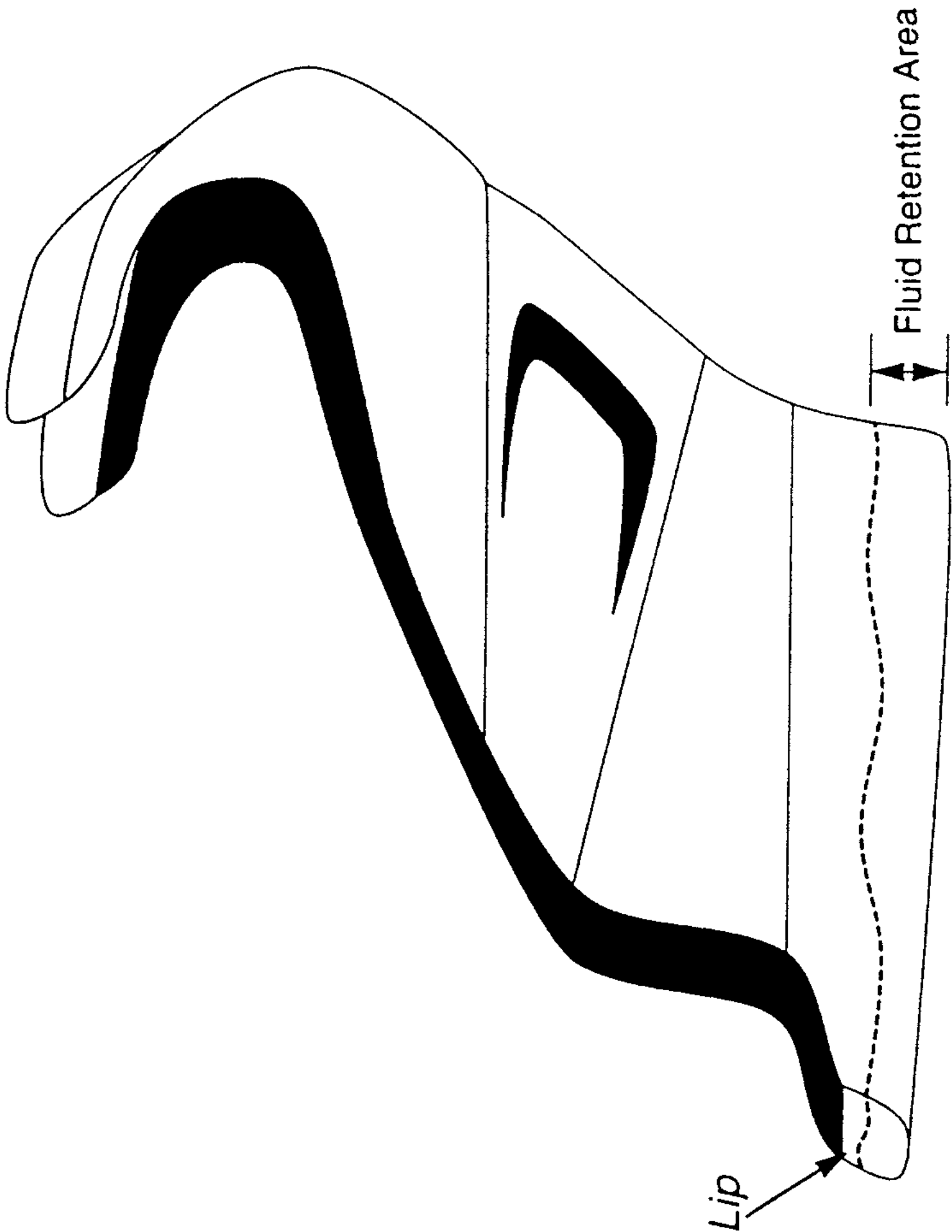
C





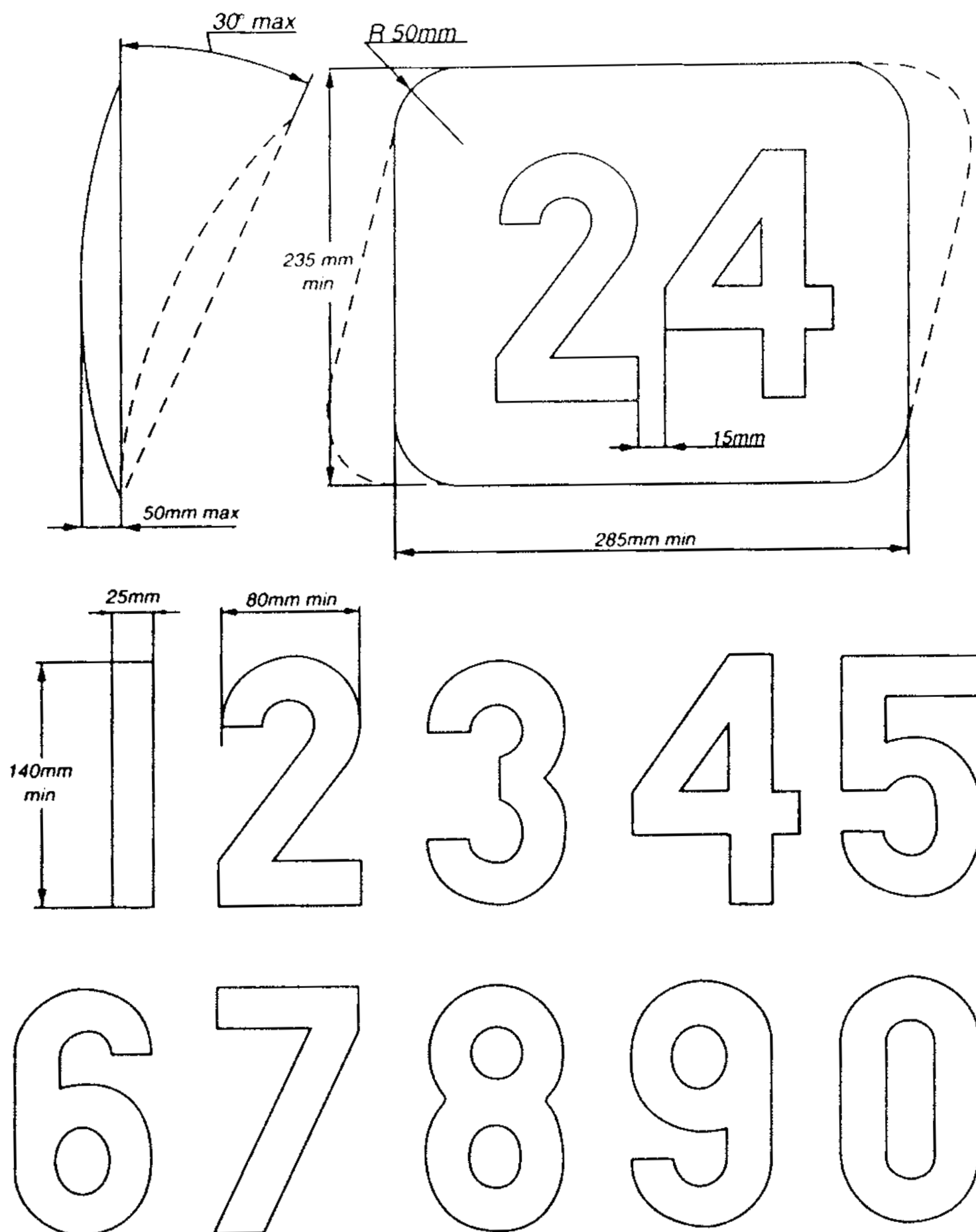
ROAD/ROUTE

C



# NUMBERS/NUMEROS

0



**Futura Heavy**

**0 1 2 3 4 5 6 7 8 9**

**Futura Heavy Italic**

***0 1 2 3 4 5 6 7 8 9***

**Univers Bold**

**0 1 2 3 4 5 6 7 8 9**

**Univers Bold Italic**

***0 1 2 3 4 5 6 7 8 9***

**Oliver Med.**

**0 1 2 3 4 5 6 7 8 9**

**Oliver Med. Italic**

***0 1 2 3 4 5 6 7 8 9***

**Franklin Gothic**

**0 1 2 3 4 5 6 7 8 9**

**Franklin Gothic Italic**

***0 1 2 3 4 5 6 7 8 9***

## **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

### **3. DISCIPLINARY AND ARBITRATION CODE**

#### **3.1 PRINCIPLES**

The obligations incumbent upon the participants, officials and organisers are set out in these 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
- Stop & Go
- 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.



- Stop & Go: 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.
- 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 EWC Stewards Panel
- The FIM Appeal Stewards
- The EWC 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 penalise automatically riders, teams' personnel, officials, promoters/organisers and all the persons involved in any capacity whatsoever in an event or in the Championship, to the FIM EWC Stewards Panel 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 EWC Stewards Panel**

##### **3.3.2.1 Constitution**

The Constitution of the FIM EWC Stewards Panel is in accordance with the requirements laid down in Article 1.7.

### **3.3.2.2 Authority and Competence**

The FIM EWC 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 EWC 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 EWC Stewards Panel:**

- a warning
- a fine
- a Stop and Go
- a time penalty
- a disqualification
- a withdrawal of Championship points
- a suspension

Furthermore, the FIM EWC Stewards Panel can refer the case to the EWC Court of Appeal in order to impose a higher penalty than the FIM EWC 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 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 EWC Stewards Panel.

The FIM Appeal Stewards may confirm or overturn a decision of the FIM EWC 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 EWC 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 List of the International Judges**

The List of the International Judges (LJI) is composed of qualified persons from which the member of the EWC Court of Appeal are nominated.

#### **3.3.4.1 Constitution**

The List of the International Judges (LJI) 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 **List of the International Judges (LJI)**, 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 EWC Court of Appeal**

#### **3.3.5.1 Appointment of the Members**

The FIM Legal Director in collaboration with the Director of the LJI will appoint, each time, the judge(s) who will constitute the EWC 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 **EWC Court of Appeal** will hear any appeals against decisions taken by the FIM Appeal Stewards.

The **EWC Court of Appeal** adjudicates upon request of the Race Direction, the **FIM EWC 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 **EWC 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 **EWC 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 (blue 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.

### **3.4.1.1 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 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 or pit exit line violation.
- a Stop & Go.
- a cancellation of the lap time concerned for a rider exceeding the track limits during practice.
- 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 EWC Stewards Panel** based on a photo finish.

### **3.4.1.2 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 EWC Stewards Panel** within 30 minutes of the publication of the results.

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.**

#### **3.4.1.3 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.**

Teams and riders contracted to compete in the Championship may submit a letter of guarantee from EEL in lieu of payment.

**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 or by the stewards on a proposal from the EWC 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.**



#### **3.4.1.4 Hearing of a protest**

After an immediate hearing, the **FIM EWC Stewards Panel** must make a decision on any protest presented. The protest has to be judged according to the provisions of the Regulations.

#### **3.4.1.5 Effect of the decision upon a protest**

The decision of the **FIM EWC 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 EWC 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 or pit exit line violation.
- a time penalty given in lieu of any penalty not subject to appeal.
- a Stop & Go.
- 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).

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 **EWC Court of Appeal**, the **decision of the FIM Appeal Stewards** is final.

## 2. To the **EWC 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 or **pit exit line violation**.
- a time penalty given in lieu of any penalty not subject to appeal.
- a Stop & Go.
- 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.**

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 EWC Stewards Panel**. 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 for speeding in the pit lane or pit exit line violation.
- a time penalty given in lieu of any penalty not subject to appeal.
- a Stop & Go.
- 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.

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 <b>FIM EWC Stewards Panel</b>   | - 1 hour |
| - against a decision of the <b>FIM Appeal Stewards</b>  | - 1 hour |
| - statement of appeal against a decision of the <b>EWC Court of Appeal</b> before the Court of Arbitration for Sports (CAS) | - 5 days |

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 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 EWC Court of Appeal**).

The correct security deposit for appeal must be paid to the **FIM EWC Stewards** (appeal before the **FIM Appeal Stewards**) or paid in to the FIM Executive Secretariat (appeal before **the EWC Court of Appeal**).

Within **24 hours** following the statement of appeal before the **EWC 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, 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.

Teams and riders contracted to compete in the Championships may submit a letter of guarantee from EEL in lieu of payment.

**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 **EWC Court of Appeal** must be convened to examine an appeal not later than **4 weeks** after the brief of appeal is received.

The **EWC 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 EWC Stewards Panel** by injunction or in its decision.

On request of the appellant, the **EWC 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 defence 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 President 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 President'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 EWC 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 **EWC 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.

## **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 and 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 LJI 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 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.





#### **4. STANDARDS FOR CIRCUITS**

Circuit standards will be defined by the “FIM Standards for Circuits”.



## **5. MEDICAL CODE**

The regulations will be defined by the “FIM MEDICAL CODE”.



## **6. ANTI-DOPING CODE**

The regulations will be defined by the “FIM ANTI-DOPING CODE”.



## **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”.



FÉDÉRATION INTERNATIONALE  
DE MOTOCYCLISME

**FIM-MOTO.com**

11, ROUTE DE SUISSE | CH - 1295 MIES  
ccr@fim.ch

6510001