

FÉDÉRATION INTERNATIONALE DE MOTOCYCLISME

Appendices / Annexes

FIM ENDURANCE WORLD CHAMPIONSHIP AND CUP REGULATIONS

2017-2018

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



Appendices

FIM Endurance World Championship and Cup Regulations



SEASON 2017-2018

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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
- DISCIPLINARY AND ARBITRATION CODE
- 4. CIRCUIT STANDARDS
- MEDICAL CODE
- 6. ANTIDOPING CODE
- 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.



ANTIDOPING 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 (1.11).



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/cm² (high), 12 kg/cm² (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:

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.

<u>Race Director:</u> 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.

<u>The Clerk of the Course</u> 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.



<u>Technical Director:</u> Responsible for ensuring that technical Regulations are correctly enforced and supervising scrutineering and protests of a technical nature.

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

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

1.4.1 THE RACE DIRECTION

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

1.4.1.1 The Race Direction will comprise the following persons:

- The FIM Race Director who will chair the meetings.
- The FIM Safety Officer
- 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.

1.4.1.2 The duties of the Race Direction are:

- a) To take decision as provided in the Regulations.
- b) To impose penalties for any infringements of the Regulations.
- c) A 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.
- e) To impose penalties on organisers for having been unable to ensure the smooth and efficient running of the event or for serious breaches of the Regulations.
- f) To adjudicate on any protest relating to infringements of the Regulations.

1.4.2 Individual Event officials

All individual Event Officials shall be appointed for each event.

They are:

A) Officials appointed by the FIM

1) The President and two members of the International Jury (with FIM Sporting Steward Superlicence), the 3rd member of the Intl Jury (with FIM Sporting Steward licence) is proposed by the FMNR.

They are responsible for ensuring that the event is conducted according to the Regulations.

B) Officials appointed by the FMNR/Organiser.

2) 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 Race Direction.
- 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.



3) 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.
- 4) Other Officials Stewards, 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.

1.4.3 INTERNATIONAL JURY

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 2nd FIM Jury Member appointed by the FIM;

The 3rd FIM Jury Member appointed by the FMNR;

The FIM Race Director;

The FIM Safety Officer;

The Delegate appointed by EEL;

The Clerk of the Course.

The FIM Chief Medical Officer;

The FIM Technical Director;

CCR Licences needed:

The Clerk of the Course, the FIM Race Director, the FIM Safety Officer the Delegate appointed by EEL, must be holder of an FIM Endurance Superlicence.)

The FIM Jury President, the 2nd FIM Jury Member, the 3rd FIM Jury Member appointed by the FMNR must be holder of an FIM International Sporting Steward licence.



1.4.3.1

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 Regulations.
- e) To report to the Race Direction 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.

1.4.3.2

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.

The quorum for a meeting of the International Jury is two persons.

If a decision needs a vote, only the Jury President, the 2^{nd} and 3^{rd} 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 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.

1.5 THE FIM STEWARDS (ONLY IN CASE OF APPEAL)

The FIM Stewards shall be appointed for each event by the FIM.

1.5.1

There will be a panel of three FIM Stewards (with FIM Sporting Stewards Superlicence) supervised by the Chief Steward who will chair the meetings.

1.5.2

The Chief Steward and the other Stewards are responsible for enforcing the Regulations.

1.5.3

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

1.5.4

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

1.5.5

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.

1.5.6

The FIM Stewards have no executive role in the running of the events.

1.5.7

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



1.5.8

The FIM Stewards are responsible for:

- a) Ensuring that the event is conducted according to the Regulations and reporting any infringement to the Race Direction.
- b) Adjudicating on any appeal against the decisions of the Race Direction.

1.5.9

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

1.6 THE CALENDAR

1.6.1

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.

1.7 MOTORCYCLES

1.7.1 Classes

- The classes for the FIM World Championship are Formula EWC and SUPERSTOCK.
- 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 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 several machines of the same class only.

1.7.2 Lighting and signalling

Two retro-reflective armbands 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 cm² in red colour, and the other also of 25 cm² 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.





1.7.3 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.

1.8 ELIGIBLE COMPETITORS

1.8.1 Licences

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

Riders must hold a valid licence.

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

1.8.2 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.

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 70 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.

1.8.3 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 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 he 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.



1.8.4 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 1st official practice session.

A compulsory briefing for all the team managers will be held the day before the beginning of the 1st 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.

1.8.5 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.

1.8.6 Contracted teams and Manufacturers

1.8.6.1

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

1.8.6.2

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.



1.8.6.3

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

1.8.7 Acceptance

The entries must be made according to the following priority:

- Before the 1st event of the Championship:
 - The contracted teams;
 - The teams having obtained points in the Championship of the previous year;
 - The teams having obtained points in the Cup of the previous year;
 - Other teams.
- After the 1st event of the Championship:
 - The contracted teams;
 - The teams having obtained points in the Championship of the current year at the closing date of entries;
 - The teams having obtained points in the Cup of the current year at the closing date of entries;
 - Other teams.

1.8.8 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 €uros.

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

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



1.8.9 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.

1.8.10 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.

1.8.11 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.

1.8.12 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.



1.9 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.

1.10 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 to Article 10.3.1.6 of 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 very powerful independent torch lights.
- The track should be marked out in an efficient manner on the corners (on the inside and outside of the corner).



1.11 SCHEDULE

1.11.1 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:

<u>1st</u> <u>day:</u> Scrutineering and administrative controls

<u>2nd day:</u>

Free practice 120 minutes

Interval: 3 hours

1st qualifying practice session rider blue 20 minutes

Interval: 10 minutes

1st qualifying practice session rider yellow 20 minutes

Interval: 10 minutes

1st qualifying practice session rider red 20 minutes

Interval: 10 minutes

1st 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.

<u>3rd Day:</u>

2nd qualifying practice session rider blue 20 minutes

Interval: 10 minutes

2nd qualifying practice session rider yellow 20 minutes

Interval: 10 minutes

2nd qualifying practice session rider red 20 minutes

Interval: 10 minutes

2nd 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.

1.11.2 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.

1.11.3 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.



1.12 TECHNICAL CONTROL-MEDICAL CONTROL-DOPING CONTROL

1.12.1

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.

1.12.2

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.

1.12.3

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, Race Direction, FIM Stewards, CDI, TIA 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.



1.13 PRACTICE SESSIONS

1.13.1 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 displayed.
- 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.

1.13.2 Night practices

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

1.13.3 Lap time

All laps of the riders will be timed.

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

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.



1.13.4 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.

1.13.5 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 110% 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.



1.14 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 changing their composition after publication of the provisional starting grid will have their position recalculated on the final grid, according to the riders' time.

1.15 RACES

1.15.1 Admission to the start

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

1.15.2 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.

1.15.3 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.

1.15.4 Penalties during a race

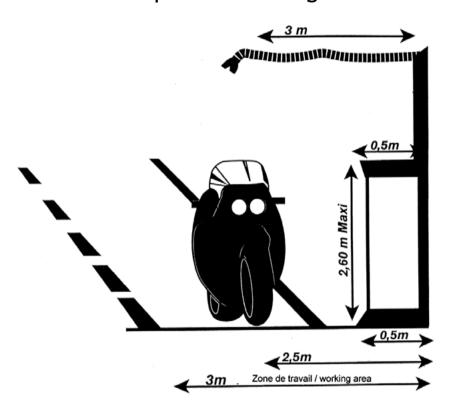
If penalties are inflicted upon a rider during a race, they must rapidly be communicated to the person responsible for the team in question.



1.15.5 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, only 4 clearly identified and accredited persons are permitted to work directly on the machine.



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 petrol is permitted in the pit.

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 driver 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.

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

1.15.6 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.

1.15.7 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.

1.15.8 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 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 10 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 \times 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.



1.16 START PROCEDURE

- 1. Under no circumstances riders may push their machine onto the grid from the pit lane.
- 2. <u>At least 45 Minutes before the Start of the Race</u> 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.

Tyre warmers may be used on the grid. Riders may use a generator to power tyre warmers on the grid.



Only one generator per machine may be used. The generator must be of the "hand carried" type and have a maximum output capacity of two kilowatts. The noise limit of the generator is 65 dB/A.

Generators should be located to the rear of the motorcycles.

6. 35 minutes before the start of the race: Evacuation of the track.

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. <u>15 minutes before the start of the race:</u> 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. <u>10 Minutes before the Start of the Race</u> Display of 5 Minute Board on the grid.
- 9. <u>8 Minutes before the Start of the Race</u> 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.

- 10. 7 Minutes before the Start of the Race National Anthem
- 11. <u>6 Minutes before the Start of the Race</u> 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. <u>30 Seconds Before the Start of the Warm-up lap</u> Display of 30 Second Board on the grid.
- 13. <u>5 minutes before the start of the Race:</u> 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 at the start of the warm-up lap, the pit lane exit light will be turned green, and any rider waiting in the pit lane will be permitted to join the warm-up lap. Thirty seconds later, the light will turn red and a marshal will display a red flag closing the pit lane exit.

On returning to the grid 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. <u>1 Minutes Before the Start of the Race</u> - Display of the 1 minute board on the grid.

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

The EWC Championship anthem is played.

15. <u>30 Seconds Before the Start of the Race</u> - Display of the 30 seconds board on the grid + red lights on (except if the national flag is used to start the race).



16. <u>Red lights out or national flag dropped</u> (to be specified in the Supplementary Regulations) <u>to start the race</u>.

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 1.17.

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 International Jury 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.

17. 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.



18. 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.

- 19. No further changes of machines are permitted unless the race is interrupted. At this point, spare motorcycles and spare engines must be taken away from the pit boxes.
- 20. 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.

1.17 "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 1.18.13), 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) 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 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 penalised with a time penalty of 1 minute.



1.18 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. 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 marshal may then assist him to re-start the machine.
- 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 converage 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 €uros.

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



- 14. The International Jury 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 Race Direction.

1.19 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.



1.19.1 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 other than rain.

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

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

Drops of rain on this section of the track.

This flag must be waved at the flag marshal post.

White Flag with diagonal red cross (stroke width of the cross: between 10 and 13 cm) + Yellow and Red Striped Flag

Rain on this section of the track.

These flags must be waved together 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. 1.22.2).

• 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.



1.19.2 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 be prepared to stop. 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.

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.

At the end of each practice session and warm-up, a red light will be switched on at the finish line.

The red flag will be presented <u>motionless</u> 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.

Any Infringement of this rule may be penalised.



1.19.3 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.

1.19.4 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.

1.19.5 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.

1.19.6 Flags Marshals posts

The location will be fixed during the circuit homologation.

1.19.7 Light signals

Lights must be used for events being run at night.



1.19.8 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 2nd 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.

1.20 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

1.21 MEDICAL CARS

The medical cars, if they are to go on the track, must 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.

1.22 FINISH OF A RACE AND RACE RESULTS

1.22.1

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

1.22.2

At the completion of the designated number of laps or the duration of the race, the leading rider will be shown the chequered flag 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^{nd} 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.



1.22.3

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.

1.22.4

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

1.22.5

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. The rider must be in contact with his machine.

1.22.6

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 Jury President to send a list of fines and results by fax or e-mail immediately after the approval of results to the FIM Executive Secretariat.

1.22.7

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



1.22.8

Both for practice and for race, the lap time is the subtraction of the time between two consecutive crossings of the finish line painted on the track.

1.23 INTERRUPTION OF A RACE

1.23.1

If the Race Direction decides to interrupt 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 and all other riders on the same lap as the leader had completed a full lap without the red flag being displayed.

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.

At the time the red flag is displayed, all teams that have not signed their official withdrawal will be allowed to take part at the restarted race.



1.23.2

If the results calculated show that less than three laps have been completed by the leader of the race and by all other teams on the same lap as the leader, then the race will be null and void and a completely new race will be run. If it is found impossible to re-start the race, then it will be declared cancelled and the race will not count for the Championship.

1.23.3

If three laps or more have been completed by the leader of the race and all other teams on the same lap as the leader, but less than two-thirds of the original race duration or distance, rounded down to the nearest whole number of laps, then the race will be re-started according to article 1.24.4. If it is found impossible to re-start the race, then the results will count and only half points will be awarded for the Championship.

1.23.4

If the results calculated show that two-thirds of the original race duration or distance rounded down to the nearest whole number of laps have been completed by the leader of the race and by all other teams on the same lap as the leader, then the race may be deemed to have been completed and full points will be awarded for the Championship or the race may be restarted.

1.24 RE-STARTING A RACE THAT HAS BEEN INTERRUPTED

1.24.1

If a race has to be re-started, then it will be done as quickly as possible, consistent with track conditions allowing. As soon as the riders have returned to the pits, the Race Direction will announce a new start time of the start procedure which, conditions permitting should not be later than 20 minutes after the initial display of the red flag.



1.24.2

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

1.24.3

The start procedure may be identical to a normal start with a sighting lap, one warm-up lap, etc. However, in case of particular conditions (weather, night, etc.), the Race Direction could, with the agreement of the Jury, decide in a resumed start procedure behind the Safety Car.

In this particular case, riders will take place behind the Safety Car according to the intermediate order in a single line. Overtaking is forbidden.

The Safety Car will make a complete lap and will leave the track before the starting line.

1.24.4

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

- A. In the case of situation described in Art. 1.23.2 (less than 3 laps completed) above:
 - a) All teams may re-start.
 - b) Motorcycles may be repaired or changed.Refuelling is permitted.
 - c) The number of laps, or the duration will be the same as the original race.
 - d) The grid positions will be as for the original race.



- B. In the case of the situation described in Art. 1.23.3 (3 laps or more and less than two-thirds completed) above:
 - a) Only teams who are on the intermediary placings may re-start.
 - b) Machines must remain in the closed park area (which must be as close as possible to the start line). All machines whether racing or in the pits for repairs or refuelling, must be directed there, with the exception of machines on which repair is too serious that they cannot be moved. Teams will be authorised to fill up their machines and change their tyres in front of their respective pits within the 5 minutes which follow the opening of the pit lane exit for the sighting lap.

The location of the park must appear in the Supplementary Regulations of the event or, failing this, the riders must be informed during the official briefing.

The organiser must inform all teams of the time of the new start which may be held, at the earliest, 20 minutes after notification. The Clerk of the Course must inform all teams of the start procedure (one group or two groups with safety cars).

- c) The number of laps or the duration of the following race will be the number of laps or duration required to complete the original race with a minimum of 5 laps.
- d) The grid position will be based on the intermediary placings established in accordance with point e) of the present article.
- e) The final result of the race will be based on the results of each team classified in each race added together. Teams who have completed an identical number of laps will be placed according to the combined time for each race. In case of a tie, the result of the last race will be decisive.



1.25 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 Race Direction.

1.26 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.

1.27 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.

1.28 PRIZES

1.28.1 Currency

All amounts are net from which no deductions are allowed. They are payable in €uros (cash).



1.28.2 Placings for obtaining prizes

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

- Teams classified;
- Non classified teams;

1.28.3 Payment

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

1.28.4 Prizes - Allowances

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

1.29 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.

1.30 EXTRA DEPOSIT FOR FUEL CONTROLS FOLLOWING A PROTEST

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

After the last control:

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



1.31 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.

1.32 CHAMPIONSHIP AND CUP POINTS; CLASSIFICATION

1.32.1

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

1.32.2

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

1.32.3

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 name of the riders with whom the team had scored points;
- 4. The total number of points;



1.32.4

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

1.32.5Scratch 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 promoted by 50%.



1.32.6

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), that are leading the race at that time will receive scratch 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.

1.32.7

To determine the World Cup ranking, the Superstock teams and riders will be taken from the general classification (races + bonus points).



1.32.8

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.

1.32.9

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 (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.

1.32.10

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.

1.32.11

The classification of the "Rider" World Championship or 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.

1.32.12

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



1.33 INSTRUCTIONS AND COMMUNICATIONS TO COMPETITORS

1.33.1

Instructions may be given by the International Jury and/or Race Direction to Teams and/or Riders by means of special circulars in accordance with the Regulations. Circulars must be posted on the official notice board. Posting at the official notice board will be deemed as proof of delivery.

1.33.2

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

1.33.3

Any communication from the International Jury or the Race Direction to a team or rider must be communicated in writing. Similarly, any communication from a team or rider to the International Jury or the Race Direction must also be made in writing.



SUPPLEMENTARY REGULATIONS (Suggestion for Organisers)

1.	ANNOUNCEMENT		
	The	on behalf of	
	will organise the	at the circuit	
	This meeting will be held on the 2017-2018 FIM Endurance		
2.	THE SECRETARIAT OF THE	ORGANISING COMMI	TTEE
	Address of the organising co	mmittee:	
	Before the:		
	After the:		
	During the meeting:		
3.	CIRCUIT		
	The length of the circuit is _		km.
	The race will be run clockwi	ise / anti-clockwise.	
	A drawing of the circuit is en		

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 Officer: Rezsö BULCSU &/or Paul DUPARC

- EEL Representative: Maurizio BARTOLOMEI

	FIM International Jury	
-	FIM Jury President:	
-	FIM Jury member:	
-	FMNR Delegate:	
-	FIM Medical Director:	Pieter Paul VERMEULEN
-	Head of organisation:	
-	Clerk of the Course:	
-	FIM Endurance Coordinator:	
-	Secretary of the meeting:	
-	Technical Director:	Charles HENNEKAM
-	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:

Thurso	day	Friday		Saturd	ay
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:

Minimum to be classified

12. PRIZES

Payment of p	orizes	(time) at	(place)
. a,) <u></u>	(εο) αε	(5,00)

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 €uros.

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.

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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	(lo	cal currency).
The organiser disclaims all responsibili	ty for damage to a m	otorcycle, 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)



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 grid positions for the next race, suspension and/or withdrawal of Championship or Cup points.

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

2.1 INTRODUCTION

2.1.1

Motorcycles for the 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 state of tuning (SUPERSTOCK, Art. 2.7) and 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, the swing arm spindles and the wheel spindles is forbidden. For wheel spindles, the use of light alloys is also forbidden. The use of titanium alloy nuts and bolts is allowed.

- 1. Titanium test to be performed on the track: Magnetic test (titanium is not magnetic).
- 2. The 3 % nitric acid test (titanium does not react. If metal is steel, the drop will leave a black spot).
- 3. Specific weight of titanium alloys is between 4.5 and 5.0 kg/dm³ vs. over 7.48 kg/dm³ of steel and can be ascertained by weighing the part and measuring its volume in a calibrated glass filled with water (intake valve, rocker, connecting rod, etc.)
- 4. In case of doubt, the test should take place at a Materials Testing Laboratory.

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.



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.

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

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

2.3.5 Wheel & rims (See Table 1)

- 1. All tyres will be measured mounted on the rim at a pressure of 1 kg cm² (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 distance between the rim walls is measured inside the flange walls in accordance with ETRTO.
- 5. Only wheels made from aluminium (or aluminium alloys) are permitted.



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 the manufacturer when producing the tyre.

The choice of a certain type of tread pattern is left entirely up to the individual rider.

The choice of slick and/or WET weather tyres (where applicable) will also be at the discretion of the rider. If conditions should become problematic however, he must take into account the recommendations of the appropriate representative of the tyre manufacturer.



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

- Tyre Restriction for the Formula EWC and Superstock is controlled by FIM tyre stickers. These tyre restriction rules will not apply for new circuit in the championship or new asphalt (resurfaced circuits). The qualification of "new" circuit is the responsibility of the Safety Officer.
- 2. With the exception of "full wet" type tyres (drawings of "full wet" type tyres need to be presented by each tyre manufacturer), every tyre used during the event must be marked with an adhesive numbered sticker allocated by the FIM Officials.
- 3. The tyre stickers will be given to each team in a sealed envelope, the day before the first QP practice. The teams will be responsible for their use.
- 4. Both stickers (for the front and the rear tyre) must be applied on the same side of the motorcycle (pitbox side). Officials will check that all EWC and Superstock motorcycles in the pit lane are fitted with tyres carrying the sticker.
- 5. The use of motorcycles without the official stickers will be immediately reported to the Race Direction who will take appropriate action (see Sporting rules).



- 6. In exceptional cases, i.e. should the sticker be damaged, up to 2 (two) extra stickers may be provided at the sole discretion of the FIM Technical Director. However, the damaged sticker must be returned to the FIM Technical Director and/or the tyre it was applied to, must be absolutely intact.
- 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 which need to be applied to the tyre sidewall (1 sticker per tyre), before the motorcycle leaves the pitlane.

Tyres of any type, specification and construction, i.e. front or rear, slick, light intermediate or, intermediate available to each Team will be controlled during the two (2) Qualifying Practice Sessions (QP) and Race.

"Full wet" type tyres will not be controlled.

1. The EWC Class, per Team:

- 24 Hour event: 45 tyre stickers

- 12 Hour event: 27 tyres stickers

- 8 Hour event: 20 tyres stickers

2. The SUPERSTOCK Class, per Team:

- 24 Hours event: 27 tyres stickers

- 12 Hours event: 18 tyres stickers

- 8 Hours event: 13 tyres stickers

Note: Tyres used by the "Reserve" rider are not required to be 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 allocation of tyres will be made by each tyre supplier to their teams or riders.

The Team is solely responsible for the application of the tyre sticker on the tyre.

2.3.7 Tyre Clearance

The minimum distance between the surface of the tyre (at its largest point) and any fixed parts of a motorcycle is shown in Table 1.

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

Starting devices are compulsory for Endurance racing.

2.3.11 Electrical equipment

Only for races taking place partly at night:

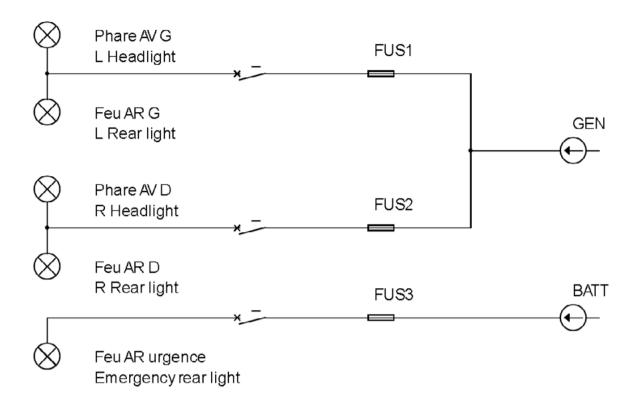
It is compulsory for all motorcycles to be equipped with complete electrical equipment in working order.

- The original headlamp(s) or (units), the internals of the headlamp(s) and the headlamp brackets may be modified or replaced. If the lens is made of glass it must be completely covered with a self-adhesive, clear plastic film to prevent shattering in an accident.
- In case of a replacement of the original headlight, the opening or the shape of the original headlight in the front of the fairing must be respected or obtained by a plexi or a metallic film, duplicating the form, and location of the headlight when homologated (tolerance +/- 10 mm).



- A motorcycle must have two separately wired light circuits. Each circuit contains one white (or yellow) head light and one non blinking red rear light (see minimum/maximum specifications). Each circuit shall be operated only by a switch on the handlebar and must not be switched on or off by the other circuit.
- The first circuit is controlled by a switch with an ON/OFF position. The
 second circuit contains a switch with the lights in an ON/OFF position.
 Both circuits must be controlled by one switch on the handlebar or
 may be integrated to the action of engine start/engine off switch.
- A third rear red light must be directly connected to a battery and controlled with fuse and extra switch.
- It is mandatory that these separate circuits work simultaneously. Broken lights or lightbulbs must be replaced during the motorcycles' first available pitstop.
- Each front light source must be at least a 55 Watts halogen bulb or, if another type is used, have at least an equivalent luminosity.
 - Formula EWC: headlights must emit a WHITE light beam
 - All other Classes: headlights must emit a YELLOW light beam
- Each rear light shall have the following power ratings:
 - for bulbs: minimum 10 Watts, maximum 15 Watts
 - for LED units: the minimum equivalent of luminosity to a bulb with ratings as above.
- A flat, red retro-reflective surface (min. 60 cm²), must be installed at the rear of the motorcycle, perpendicular in relation to the ground and slightly inclined to the rear (max 30°).
- An additional, non-blinking identification light (no red, yellow or green colours), max. power 5 W, may be added to a motorcycle, fixed to the side and not visible when viewed from the rear of the motorcycle.





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 for races taking place partly at night)
Superstock	Red (Ral 3020)	white (electroluminescent figures for races taking place partly at night)
Open	Green (Ral 6002)	white (electroluminescent figures for races taking place partly at night)



The sizes for all the front

numbers are:

Minimum height:

Minimum width:

Minimum stroke:

25 mm

Minimum stroke: 2!
Minimum space between

the numbers: 10 mm

The sizes for all the side numbers

are: Minimum height: 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 25mm 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 cm² must be fixed to the rear of the motorcycle seat cowling, completely visible in its entirety by the following rider. It is allowed to fit a holder underneath the seat to carry the red reflective surface.



2.3.14 Handprotectors

Additional hand-protectors can be attached to the streamlining with "quick-fit" type fasteners only. 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 must be respected when hand-protectors are fitted to the streamlining (see Diagram A-3).

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.

Any tampering with the opening or closing of the quick fuel valve system of the fuel tank will considered as an infraction to the safety requirement (leak proof).

A protective cover must be affixed on the quick-fill valve(s) (if no locking device is already applied).

The maximum diameter of a fuel valve opening is 76 mm (3 inches).

<u>Safety:</u> Extremely thin walled tubes used for air overflow cannot be used for fuel supply. Fuel supply tubes must be reinforced or be protected by a second enclosure.

The fuel supply tubes cannot exceed 60 mm diameter (ID).

All refuelling systems allowed must provide a closed circuit system and must remain leak proof at all times.

Fuel spills are not acceptable and very dangerous. If any evidence of a defective system occurs, the Team must follow all directives given by the Officials.

Any excess fuel must be contained or return via an overflow line back to the fuel tower or handheld fuel container.



The refuelling system can be portable or fixed to the wall of the pit-box and must be a 'closed' (circuit) system. The complete fuel tower installation must be rigid and fixed securely to the wall of the pit-box. Fuel shall only be transferred by gravity feed (for safety reasons, no part of the refuelling installation may be pressurized).

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/mask and balaclava of fire-retardant quality or a helmet for eye protection.

During the practices or the race, only tyre warmer systems and cordless portable electrical tools are allowed.

As From the 01/01/2018 the following article will apply:

 The original fuel tank cap must be replaced by maximum two openings to accommodate a 'quick-fill' type (i.e. aviation type) fuel valve. The maximum valve diameter of each tank valve or of each sleeve or pipe connecting the "fuel tower" to the tank shall not exceed 50.8 mm (2 inches).

Coaxial or concentric quick fill type valve systems are permitted. The maximum diameter for this type of quick fill fuel valve system is 78 mm. The opening for fuel transfer in a concentric type valve shall not exceed the area of a standard fuel valve opening with a maximum diameter of 2 inches (50.8 mm).

A protective and lockable cover must be affixed on the quick-fill valve(s) if no locking device is already applied to the closing system installed in the tank.

Any tampering with the opening or closing of the quick fuel valve system installed in the fuel tank will considered as an infringement to the safety requirement (the action of opening and closing the valves when the fuel and air are transferred must take place without any fuel spillage).

As From the 2018-2019 season only the FIM approved fuel valves will be permitted.



2. The refueling system can be a hand-held (portable) installation or "fuel tower" fixed securely to the pit box wall and must be a "closed" (circuit) system. Only a small air vent opening is permitted. The complete fuel tower installation must be rigid and fixed securely to the wall of the pit-box. The top of the tower-installed fuel container shall not exceed a maximum height of 2.60 m (from the ground).

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 fuel valve assembly shall not exceed 120 cm. Excess fuel must return to the fuel container.

All refuelling systems allowed must provide a leak-proof circuit system and be fitted with an 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).

All fuel shall be stored and used at ambient temperature; the maximum difference between the fuel and ambient temperature shall not exceed 15°C when stored. At no time shall the fuel temperature be below 0°C.

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 exceed 60 mm. Excess fuel must be contained or return via an overflow line back to the main fuel container tower or to a handheld container. Extremely thin walled hoses used for air transfer cannot be used for fuel supply or overflow.

- 3. Fuel spills are not acceptable and very dangerous. If any evidence of a defective system is observed, the Team must follow all directives given by the Officials.
- 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/mask and a balaclava of fire-retardant quality. The use of a suitable protective helmet and eye protection is compulsory.

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2.3.16 Markings

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

The frame and engine case must be marked and/or sealed before the race.

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.

The 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 Technical Director for his approval.

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

2.3.12 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 either the left or right side, as low as possible and avoiding being shielded by carbon bodywork.

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



2.6 FORMULA EWC TECHNICAL SPECIFICATIONS

IF A CHANGE TO A PART OR SYSTEM IS NOT SPECIFICALLY ALLOWED IN ANY OF THE FOLLOWING ARTICLES, THEN IT IS FORBIDDEN

Formula EWC motorcycles are based on road legal models with a valid FIM homologation (FIM Homologation procedure available on www.fim-live.com/library) see Appendix FIM Homologation procedure. All motorcycles 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 to the homologated shape (as originally produced by the manufacturer). The appearance of the exhaust system is excluded from this rule.

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

The minimum weight of a motorcycle will be:

For motorcycles with two, three or four cylinder engines:

- 170 kg, for races not taking place partly at night.
- 175 kg, for races taking place partly at night.

During the practice and qualifying sessions, riders may be asked to submit their motorcycle to a weight control in the pit lane. In all cases the rider must comply with this request for a control.)

At any time of the event, the weight of the whole motorcycle (including the tank) must be not be less than the minimum weight.

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



During the final technical inspection at the end of each race, the selected motorcycles will be weighed in the condition they finished the race, and the established weight limit must be met in this condition. Nothing may be added to the motorcycle. This includes all fluids.

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

The main frame must be as originally produced by the manufacturer for use on the homologated motorcycle.

The frame must have a vehicle identification number (VIN number), as issued by the manufacturer on the homologated model. Any other frame (spare part) must be of the same dimensions as the homologated frame and be identified by a special number.

The main frame may only be altered 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 approved components (i.e. fairing brackets, steering damper mount).



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. 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.).

Rear sub frame construction may be changed or altered, but the material must remain as homologated or of higher specific weight. The seat section/body work material 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.).

No aftermarket or prototype electronically-controlled suspensions maybe 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 and cannot have GPS capabilities.

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 Rear Fork (Swing-arm)

The rear fork 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.

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.

Rear wheel stand brackets may be added to the rear fork by welding or by bolts. Brackets must have rounded edges (with a large radius). Fastening screws must be recessed.



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).

No aftermarket or prototype electronically-controlled suspension unit maybe 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 shock absorber springs not connected with these valves can be changed.

The ECU for the electronic suspension must remain as homologated and cannot have GPS capabilities.

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. Carbon fibre 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.

Starting from the 2017-2018 season:

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.

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 or shoes 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 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 deleted.

2.6.6.7 Tyres

See Art. 2.3.6.

2.6.6.8 Handle Bars and Hand Controls

Handle bars, hand controls and cables may be altered or replaced from those fitted to the homologated motorcycle (see Art. 2.3.4).

It is recommended that motorcycles be equipped with brake lever protection, intended to protect the handlebar brake lever from being accidentally activated in case of collision with another motorcycle.

Engine stop switch must be located on the handle bars.

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 8mm 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 8mm). 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 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 tank may be modified below the upper frame line.

The material used in the construction of the fuel tank may be altered from the tank fitted on the homologated motorcycle. Carbon or aramid fibres or fibreglass materials are not authorised in the construction of fuel tanks.

The fuel tank must be fixed to the frame from the front and the rear with a crash-proof assembly system. 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 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 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).

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



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 must incorporate one hole of 25 mm in the bottom of the front lower area. This hole must remain closed in dry conditions and must be only opened in wet race conditions.
- 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 10 mm 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 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 rear mudguard may be changed.

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.

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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 aftermarket/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 track 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, they 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 quantity.



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 allowed.

The compression ratio is free.

The combustion chamber (shape) must remain as homologated.

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).

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 and all other Engine cases (i.e. ignition case, clutch case.)

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

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.

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 approved covers will be permitted without regard of the material.

These covers must be fixed properly and securely with case cover screws 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.

The oil-pan (sump) may be altered or replaced.

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.

A quick shift system is authorised.

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

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 shift systems are excluded from the ban.

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, starting system, electrical or manual including kick lever, pedal, 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

Exhaust pipes, catalytic converters and silencers may be altered or replaced from those fitted to the homologated motorcycle. Catalytic converters may be removed.

The number of the final exhaust silencer(s) must remain as homologated. The silencer(s) must be on the same side(s) of the homologated model.

For safety reasons, the exposed edge(s) of the exhaust pipe(s) outlet(s) must be rounded to avoid any sharp edges.

The support flange of the exhaust silencer has to be secured by means of screws and bolts. Quick ties of the "Zeus" type 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 noise limit for Formula EWC will be 105 dB/A (with a 4 dB/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 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 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.

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 lapscoring purposes or legible messages via an on-board screen is allowed.

Telemetry is not allowed.



2.7 SUPERSTOCK TECHNICAL SPECIFICATIONS

IF A CHANGE TO A PART OR SYSTEM IS NOT SPECIFICALLY ALLOWED IN ANY OF THE FOLLOWING ARTICLES, THEN IT IS FORBIDDEN

All motorcycles require an FIM homologation (FIM Homologation procedure available on www.fim-live.com/library). All motorcycles must comply in every respect with all the requirements for Circuit Racing as specified in these Regulations, unless they are already equipped as such on the homologated model.

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

2.7.1 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

The minimum weight for each model is calculated by FIM by determining the "dry weight" of the homologated motorcycle.

The dry weight of a homologated motorcycle is defined as the total weight of the empty motorcycle as produced by the manufacturer (without fuel, vehicle number plate, tools and side stand when fitted, but with oil and radiator liquid at prescribed levels. To confirm the dry weight a minimum of three (3) motorcycles are weighed and compared. The result is rounded off to the nearest digit.

The minimum weight for each model will be calculated by reducing the "dry weight" of the motorcycle by a value (see hereunder) and by rounding off the result to the lower whole number.



The minimum weight is as follows:

- For races not taking place partly at night: 'dry weight' minus 12 kg
- For races taking place partly at night: 'dry weight' minus 9 kg

In any case the minimum weight cannot be lower than 168 Kg.

At any time of the event, the weight of the whole motorcycle (including the tank and its contents) must not be lower than the minimum weight.

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

In the final inspection at the end of the race, the selected motorcycles will be weighed in the condition they were at the end of the race and the established weight limit must be met in this condition. Nothing may be added to the motorcycle. This includes all fluids.

During the practice and qualifying sessions, riders may be asked to submit their motorcycle to a weight control. In all cases the rider must comply with this request.

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

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



2.7.6.1 Frame body and Rear sub frame

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

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

The sides of the frame-body may be covered by a protective part made of a composite material. These protectors must fit the form of the frame.

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.

Rear sub frame may be changed or altered, but the type of material must remain as homologated, or of higher specific weight.

Additional seat brackets may be added but none may be removed, nonstressed protruding brackets may be removed if they do not affect the safety of the construction or assembly. Bolt-on accessories to the rear subframe may be removed.

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



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.

After market damper kits or valves may be installed.

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 Rear Fork (Swing arm)

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

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.



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

Rear wheel stand brackets may be added to the rear fork by welding or by bolts. Brackets must have rounded edges (with a large radius). Fastening screws must be recessed. An anchorage system or point(s) to keep the original rear brake calliper in place may be added to the rear swing-arm.

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 fork (swing arm) 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.

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 authorized. 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).

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 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.

If not desired for use, 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

Handle bars may be replaced.

Handle bars and hand controls may be relocated.

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

Throttle assembly and associated cables may be modified or replaced. Throttle assembly and associated cables may be modified or replaced but the connection to the throttle body and to the throttle controls must remain as homologated.



Clutch and brake lever may be replaced with an after-market model (see also Art. 2.3.4). An adjuster to the brake lever is allowed.

It is recommended that motorcycles be equipped with brake lever protection, intended to protect the handlebar brake lever from being accidentally activated in case of collision with another motorcycle.

Switches can be changed but electric starter switch and engine stop switch must be located on the handle bars.

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 tank may be modified 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 tank may be modified below the upper frame line.



The material used in the construction of the fuel tank may be altered or replaced from the tank fitted on the homologated motorcycle. Carbon, aramid fibres or fibreglass materials are not authorised in the construction of fuel tanks.

The fuel tank must be fixed to the frame from the front and the rear with a crash-proof assembly system. 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 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 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).

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 used during practice must be of the same size (capacity) during the entire event.

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 the 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 must incorporate an opening of Ø 25 mm diameter in the front lower area. This opening must remain closed in dry conditions and must be only opened in wet race conditions.
- 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 "dzeus" fasteners, clips, tie-raps, clamps, etc. are not permitted.
- j) Rear mudguard fixed on the swing arm may be modified, deleted or replaced.

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.

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 quantity.

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).

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.

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, 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 approved covers will be permitted without regard of the material.

These covers must be fixed properly and securely with case cover screws 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.

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

The sprocket cover can be modified or eliminated.

The chain guard may be removed.

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 Ignition / Engine control system

The ignition control box (ECU) may be changed. However the location and the size of the ignition/engine control unit must be identical to the original, homologated unit.

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

Exhaust pipes, and silencers, may be altered or replaced. Catalytic converters must be removed.

The number of the final exhaust silencer(s) must remain as homologated. The silencer(s) must be on the same side(s) of the homologated model.

For safety reasons, the exposed edge(s) of the exhaust pipe(s) outlet(s) must be rounded to avoid any sharp edges.

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 noise limit for Superstock will be 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.
- 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, 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.

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 lapscoring purposes or legible messages via an on-board screen is allowed.

Telemetry is not allowed.



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". Either one of the following components: the engine, the main-frame or the suspension must be completely different in design from the original model to participate in the "Experimental" Class.

All motorcycles must comply in every respect with all the requirements for Road 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 engine, 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) Modified production engine or prototype engine

Over 600cc up to 750cc 4-stroke 4 cylinders Over 750cc up to 1200cc 4-stroke 3 cylinders

- 2. Hybrid system: An alternative energy source in combination with Internal and naturally aspirated combustion engines: Max 400cc
- 3. Other: i.e. electric

2.9.2 Transmission / Gearbox

No limit on the number of gears.



2.9.3 Minimum/Maximum Weight

• The minimum weight of an EXPERIMENTAL motorcycle will be:

For all motorcycles with internal combustion engines (ICE):

- 160 kg, for races not taking place partly at night.
- 165 kg, for races taking place partly at night.
- The maximum weight for all other power sources: 200 kg (205 kg for races taking partly place at night).

During the practice and qualifying sessions, riders may be asked to submit their motorcycle to a weight control in the pit lane. In all cases the rider must comply with this request for a control.)

At any time of the event, the weight of the whole motorcycle (including the tank, batteries) must be not be less than the minimum weight.

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

During the final technical inspection at the end of each race, the selected motorcycles will be weighed in the condition they finished the race, and the established weight limit must be met in this condition. Nothing may be added to the motorcycle. This includes all fluids, batteries.

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. Ferrous materials only.

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).



2.9.10 Materials for fuel tanks

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

Exhaust pipes, catalytic converters and silencers may be altered or replaced from those fitted on a road legal motorcycle. Catalytic converters may be removed.

For safety reasons, the exposed edge(s) of the exhaust pipe(s) outlet(s) must be rounded to avoid any sharp edges.

The support flange of the exhaust silencer has to be secured by means of screws and bolts. Quick ties of the "Zeus" type 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 noise limit for EXPERIMENTAL motorcycles will be 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).
- 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 and side stands must be removed (fixed brackets must remain).



2.9.15 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 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.

2.9.16 Additional Equipment

Additional electronic hardware equipment 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 from the Promoter (EEL).

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 lapscoring purposes or legible messages via an on-board screen is allowed.

Telemetry is not allowed.



2.10 FUEL, OIL AND COOLANTS

All motorcycles must be fuelled with unleaded petrol, as this term is generally understood.

All teams must declare to the Technical Director the make and type of fuel to be used during practices and race(s), before technical control begins.

2.10.1 Physical properties for unleaded fuel

2.10.1.1

Unleaded petrol shall comply with the FIM specification.



2.10.1.2

Unleaded petrol (incl. E10) will comply with the FIM specification if:

(a) It has the following characteristics:

Property	Units	Min.	Max.	Test Method
RON		95.0	102.0	EN ISO 5164
MON		85.0	90.0	EN ISO 5163
Oxygen	% (m/m)		4.0	EN ISO 22854* or EN 13132
Nitrogen	% (m/m)		0.2	ASTM D 4629
Benzene	% (V/V)		1.0	EN ISO 22854* or EN 238
Vapour pressure (DVPE)	kPa		95.0	EN 13016-1
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	775.0	EN ISO 12185
Oxidation stability	minutes	360		EN ISO 7536
Existent gum	mg/100 ml		5.0	EN ISO 6246
Sulphur	mg/kg		10.0	EN ISO 20846 or 20884
Copper corrosion	rating		class 1	EN ISO 2160
Distillation:				EN ISO 3405
E at 70°C	% (V/V)	22.0	50.0	
E at 100°C	% (V/V)	46.0	71.0	
E at 150°C	% (V/V)	75.0		
Final Boiling Point	°C		210	
Residue	% (V/V)		2.0	
Appearance	Clear and b	right	Visual inspection	
Ethanol	% (V/V)		10	EN ISO 22854
Olefins	% (V/V)		18.0	EN ISO 22854
Aromatics	% (V/V)		35.0	EN ISO 22854
Total diolefins	% (m/m)		1.0	GCMS or HPLC



Notes:

- (1) Ethanol must be blended according to EN 15376
- (2) GCMS methods may also be applied to fully deconvolute the GC trace
- (3) The above maximum values for olefins and aromatics are corrected for fuel oxygenates content according to clause 13.2 of ASTM D 1319:1998.
- (b) The total of individual hydrocarbon components present at concentrations of less than 5% m/m shall constitute at least 30% m/m of the fuel. The test method will be gas chromatography and/or GCMS.
- (c) The total concentration of naphthenes, olefins and aromatics classified by carbon number shall not exceed the values given in the following table:

% (m/m)	C 4	C 5	C6	C7	C8	C9+
Naphthenes		5	10	10	10	10
Olefins	5	20	20	15	10	10
Aromatics			1.2	35	35	30

The total concentration of bicyclic naphthenes and bicyclic olefins may not be higher than 1% (m/m). The test method used will be gas chromatography.

(d) Only the following oxygenates are permitted:

Methanol. Ethanol. Iso-propyl alcohol. Iso-butyl alcohol. Methyl tertiary butyl ether. Ethyl tertiary butyl ether. Tertiary amyl methyl ether. Di-isopropyl ether. N-propyl alcohol. Tertiary-butyl alcohol. N-butyl alcohol. Secondary-butyl alcohol

(e) Manganese is not permitted in concentrations above 2.0 mg/L. For the present this is solely to cover possible minor contamination by other fuels.

Lead replacement petrols, although basically free of lead, are not an alternative to the use of unleaded petrol. Such petrols may contain unacceptable additives not consistent with the FIM Fuel Regulations.



2.10.1.3

When Ethanol E85 is used, it will comply with the FIM specification and will have the following characteristics:

Property	Units	Min.	Max.	Test Method
RON		95.0	110	EN ISO 5164
MON		85.0	100	EN ISO 5163
Vapour pressure (DVPE)	kPa	35.0	95.0	EN 13016-1
Lead	g/l		0.001	ICP-OES
Manganese	g/l		0.001	ICP-OES
Oxidation stability	Minutes	360		EN ISO 7536
Existent gum	mg/100 ml		5.0	EN ISO 6246
Sulphur	mg/kg		10.0	EN ISO 20846 or 20884
Copper corrosion	Rating		Class 1	EN ISO 2160
Distillation:				
Final Boiling Point	°C		210	EN ISO 3405
Residue	% (V/V)		2	EN ISO 3405
Appearance	Clear and br	right	Visual inspection	
Ethanol + higher alcohols	% (V/V)	75		EN 13132 or 14517
Higher alcohols (C3-C8)	% (V/V)		2.0	EN 13132 or 14517
Methanol	% (V/V)		1.0	EN 13132 or 14517
Ethers (5 or more C atoms)	% (V/V)		5.2	EN 13132 or 14517
Unleaded petrol as specified in 2.10.1.2	% (V/V)	14	25	
Water	% (V/V)		0.3	EN 12937
Inorganic chloride	mg/l		1	EN 15484
Acidity	% (m/m)		0.005	EN 15491
(as acetic acid)	(mg/l)		(40)	



2.10.3 Air

Only ambient air may be mixed with the fuel as an oxidant.

2.10.4 Primary tests

2.10.4.1

The FIM may require tests of fuels to be administered before, or at the time of delivery to, an event at which such fuels are to be used.

2.10.4.2

Fuel companies supplying "race" fuels (fuels other than those obtained at public fuel stations) to participating teams must submit ten litres $(2 \times 5 L)$ to the laboratory appointed by the FIM for analysis in accordance with the specification. Providing the fuel is within the specification, a certificate containing a test report number will be issued to the fuel company.

Contact for fuel analysis: fimfuels@intertek.com

2.10.5 Fuel sampling and Testing

- 1. The FIM Endurance Technical Director has the sole responsibility for the administration and supervision during the taking of fuel samples.
- 2. The preferred fuel test method is gas chromatography or GC Fingerprint method.

Gas chromatography (GC) is an analytical technique for separating compounds based primarily on their volatility and polarity. Gas chromatography provides both qualitative and quantitative information for individual compounds present in a sample. Gas chromatography is widely used for the analysis of fuels.

The GC Fingerprint is a comparison between the given reference and the fuel drawn from the competitor. With the fingerprint method any changes in composition and concentration of the fuel against the reference is detected. The separation is done with a non polar column suitable for fuel analysis. The detection of the components is done with a flame ionisation detector.

3. If other test methods are required, fuel samples will be transported to the appointed laboratory by an official courier, using the appropriate containers.

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- 4. Riders selected for fuel controls will be directed with their motorcycles to the inspection area.
- 5. Only new sample bottles will be used for the fuel samples.
- 6. The fuel to be tested will be transferred into three bottles (3 small sample containers), marked A, B and C and identified by reference to the motorcycle from which the sample was taken. The bottles will be closed, sealed and labelled by the FIM Endurance Technical Director.
- 7. The Fuel Sample Declaration form will be filled out immediately, containing all information as shown on the sample sheet, including the riders' name and race number, date and place of fuel sampling. A responsible team member will sign this declaration, after verifying that all the information is correct.
- 8. Sample A and B will be given to the appointed laboratory staff, present at the event for analysis or be sent to the appointed laboratory if no trackside laboratory is available. Sample B will be kept by the laboratory staff as a retained sample in case of a dispute. All samples will be accompanied by a copy of the Fuel Sample Declaration form. Costs for the analyses of sample A and B will be paid by FIM
- 9. Sample C will be handed over to the FIM for safeguarding in case of protests and/or requirement of a counter-expertise by the FIM appointed laboratory, accompanied by a copy of the Fuel Sample Declaration form. Costs for the analyses of sample C will be paid by the team concerned.
- 10. As soon as possible after receipt of the samples and completing the testing, the Fuel Analyst/FIM appointed laboratory will report the results of the fuel sample analyses directly to the FIM Superbike Technical Director, with a copy to the FIM CCR and CTI Secretariat (cti@fim.ch, ccr@fim.ch).



- 11. In the case of non-conformity, the FIM Endurance Technical Director must notify the results to the FIM, the International Jury / Race Direction and the rider/team representative concerned. Failure of the sample to correspond to the FIM fuel specifications will result in the disqualification of the competitor. The result of the competitor's fuel sample analysis ("A" or "B" sample) more favourable to the competitor will be taken into account.
- 12. Within 48 hours of the receipt of the notification of the results of the test of sample A and/or B, the team must notify the FIM and the FIM Endurance Technical Director if a counter-expertise is required (or not required) for sample C.
- 13. The CDI will review the case immediately when the results of this counter-expertise confirm the results of Sample A.

2.10.6 Fuel storage

When the fuel is supplied by the Organiser, 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. 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, as measured by the Technical Director.

A maximum deviation of up to 15° C below the ambient temperature will be allowed.

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. Fire fighting equipment, protective devices and staff must conform to the requirements imposed by the local authorities and bylaws.

The organiser must have fire extinguishers of a size and type approved by the local by-laws, available to each competitor in the pit area.

2.10.7 Coolants

The only liquid engine coolants permitted other than lubricating oil shall be water.



2.11 PROTECTIVE CLOTHING AND HELMETS

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 etc.

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 compulsory.

2.11.6

Riders must wear a helmet which is in good condition, provides a good fit and is properly fastened.

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2.11.7

Helmets must conform to one of the recognised international standards:

Europe ECE 22-05 (only "P" type)

Japan JIS T 8133 : 2007 (valid until 31.12.2019)

JIS T 8133 : 2015 (only "Type 2 Full face")

USA SNELL M 2010 (valid until 31.12.2019)

SNELL M 2015

Examples of labels are reported below (for Europe, the country numbers which have granted the approval are also indicated):





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

One rider, or his mechanic, must be present with the motorcycle for Technical control within the time limits stated in the Supplementary Regulations. The maximum number of persons present at the technical verification will be the rider, plus two others. In addition, the Team Manager will also be allowed.

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 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 rider 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 up to 2 motorcycles for the Technical control.

For the 2017-2018 season, for extraordinary circumstances (i.e. damaged beyond repair) a 3rd rolling chassis (assembled with wheels, suspension components and electronics) may be presented for technical checks.

2.12.21

Noise should be checked by random choice during practice as well as after the race. On request of rider, team or mechanic, noise of their own motorcycles can 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 noise 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 100 sq. metres).
- Weighing apparatus must be accurate and practical. Certified master weights and their certificate must be available for the Technical checks.
- Rules regarding noise level and measurement must be respected.

All motorcycles will be required for weight and/or noise check at the pre-race technical inspection.

The scales and noise meter will be available to the teams or riders for pre-race checking in the Technical control area.

Noise test must take place in a clear area adjacent to the Technical control at least 5 metres from any possible noise reflecting obstruction.

The riders and teams must be aware that the weight and noise will be controlled at random during practices in the pit-lane, and at the end of each race.

Claiming that the noise and weight were not officially controlled before the race will not be grounds for appeal. Conformity of the rules is the responsibility of the rider and the team (or the participants).



The FIM Endurance Technical Director/Chief Technical Steward reserve the right to spot check the weight and noise 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 noise. 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 pracice.

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. No elements can be added to the motorcycle, neither fuel, oil, water nor tyres.
- Noise: compliance with max noise 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

<u>Tasks:</u> Inspection of motorcycle safety, clothing and helmets (NOISE AND WEIGHT CONTROL)

For all non-contracted teams:

min. 3 persons

The inspection will take place in the technical Technical control area

<u>Task:</u> Inspection motorcycle safety, clothing and helmets (NOISE AND WEIGHT CONTROL)

Administration tasks:

min. 1 person

a) Thursday / Friday:

<u>Technical control: free practice, qualifying and official qualifying sessions:</u>

Task: Inspection of motorcycle safety:

Noise 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:

<u>Task:</u> Inspection of motorcycle safety:

Noise 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 noise weight

and carburation instruments: min. 8 persons

Displacement checks: min. 2 persons

<u>Administration tasks:</u> 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

All sections must be completed by the TEAM and handed over to the Chief Technical Steward.

TECHNICAL CONTROL CARD

Title of the event:	IMN N°:		
Place:	Date:		
Team (name):	Team Mananger:		
Nationality:	Date:		
Teams Licence N°:	Signature:		
Section 1	Motorcycle 1 2 nd motorcycle		
Motorcycle (Make):			
Model:			
Year:			
Category:			
EWC - Superstock (SST) - Open			
Frame No.			
Sound level dB/A			
Decoupe circuit			
Section 2			
Lights (2 separate circuits) Switches 1-2			
Front and Rear			
3 rd Rear light (connected to the battery)			



Section 3	
Weight (kg)	
Section 4	
Fuel tank with fixed points	
Quick fill system (name),	
diameter (mm)	
Fuel valve cover (name / type)	
Oil catch tank	
Section 5	
Brakes / Tyres	
Electoluminescent Number + Plates	
Fairing & Closed bottom fairing	
Throttle control - self closing	
Oil drain / Filler plugs, etc. wired	
Ground clearance	
Other / Overal condition	
Comments:	
Name of Chief Technical Steward:	
International Official's Licence N:	



Acceptance of a motorcycle for competition does not preclude the possibility of further post-race control to ensure compliance with the competition Technical rules.

The Team manager:

I hereby declare that the information given above is accurate in every respect.

Name: Signature:

Mobile phone: Country code + number:





FIM WORLD CHAMPIONSHIPS AND PRIZE EVENTS Fuel Sample Declaration Form

FUEL SAMPLES TAKEN ON / .	/ FOR LABORA	TORY ANALYSIS		
Tech inspection, practice or	Sample "A"			
recir inspection, practice of	Can Label N°	Can Seal N°		
RACE N°:				
	Sampl	Sample "B"		
TEAM:	Can Label N°	Can Seal N°		
	Sample "C"			
TEAM Nr :	Can Label N°	Can Seal N°		
MOTORCYCLE MAKE:				
TEAM:				
The above listed details refer to full motorcycle specified after the rac 30 minutes.	•			
Sample "A" and ''B''will go to the l Sample "C" will be safeguarded by tl		_		
As a responsible member of the tea	am named on this sheet,			
(print name):				
I have controlled the serial number labels and hereby certify the accurations:	acy of the listed informa			
	(Signature)			
Position in team:				
(1)	OWNER/MANAGER/MECH	ANIC)		



2.14 NOISE CONTROL Noise limits in force

Noise will be controlled to:

Max. 105 dB/A measured at a mean piston speed of 11 m/sec.

The fixed RPM specified in Art. 2.12.6 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 noise 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:

$$N = 30,000 \times cm$$
 l

in which $N =$ prescribed RPM of engine $cm =$ fixed mean piston speed in m/s $l =$ stroke in mm

2.14.6 Noise control

Due to the similarity of the piston stroke in different engine configurations within the capacity classes, the noise test will be conducted at a fixed RPM. For reference only, the mean piston speed at which the noise 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	5,500 RPM	5,500 RPM	6,000 RPM

2.14.7

The noise 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 noise limits may be presented several times at pre-race control.

2.14.9

The surrounding noise should not exceed 90 dB/A within a 5 metres radius from the power source during tests.



2.14.10

Apparatus for noise 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 Noise control after the competition

In a competition which requires a final examination of motorcycles before the results are announced, this examination must include a noise 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 Noise control during a competition

In a competition which requires noise control tests during the event, motorcycles must comply with the noise limits without the tolerance in Art. 2.14.



2.15 GUIDELINES FOR USE OF SOUND LEVEL METERS

2.15.1

The Noise 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 noise 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.

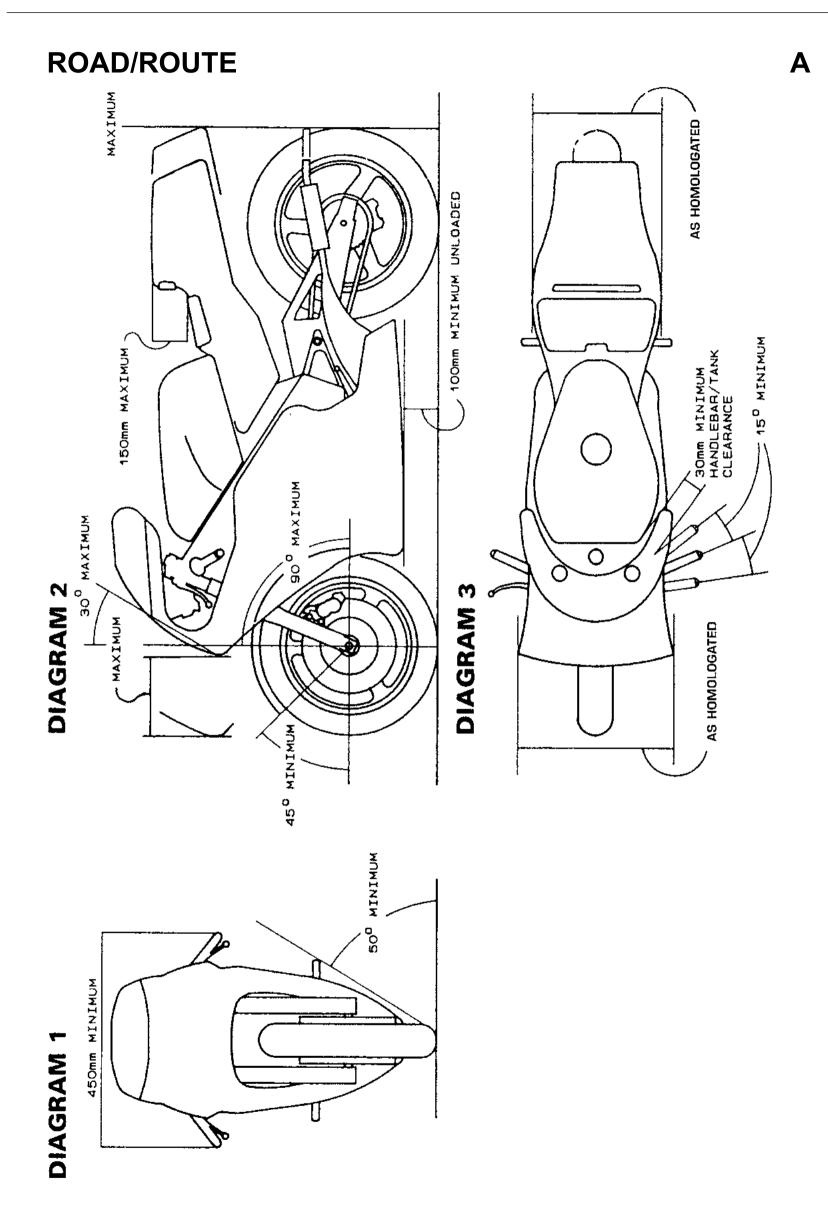


2.15.9 Correction

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.

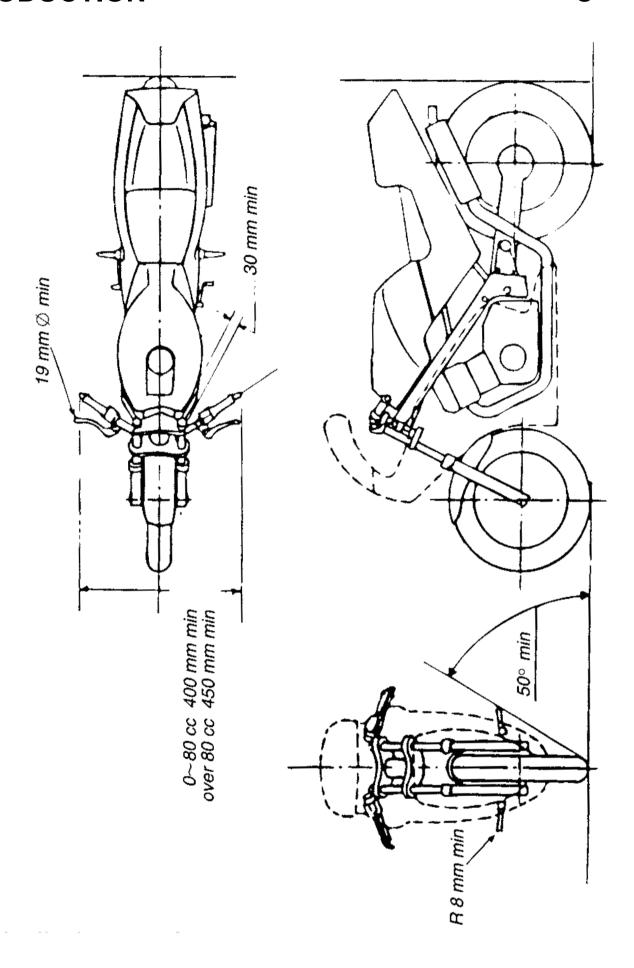






SPORTS PRODUCTION

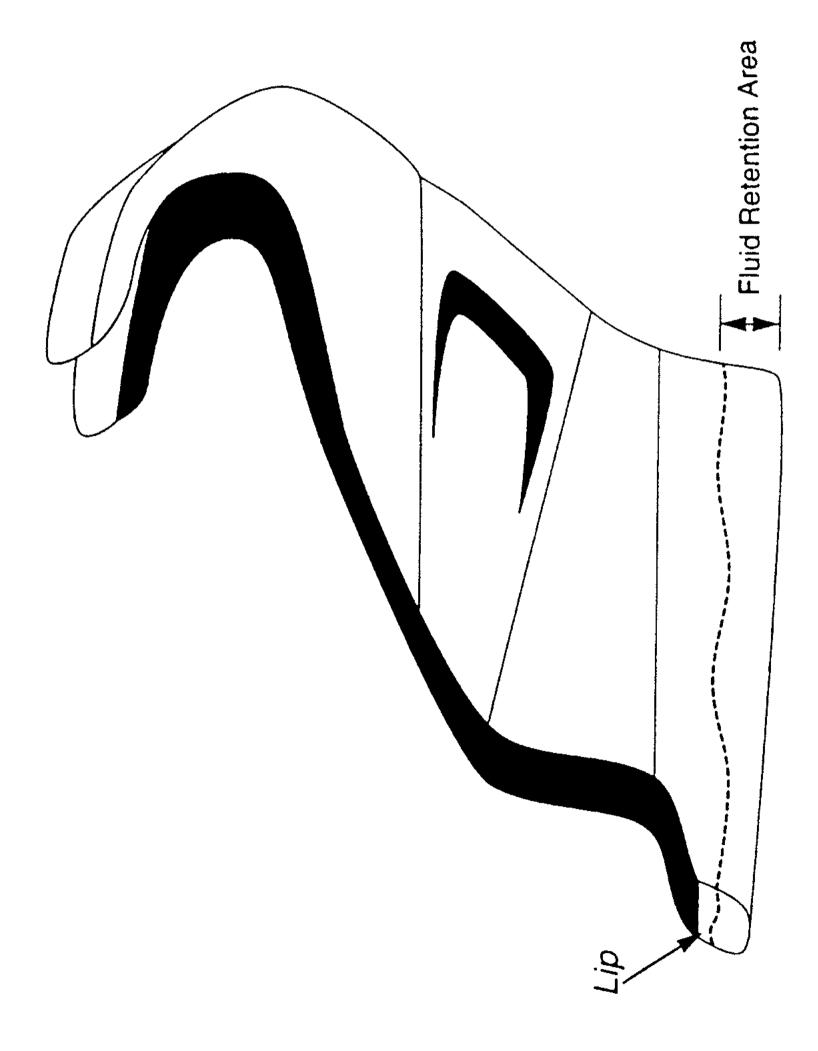
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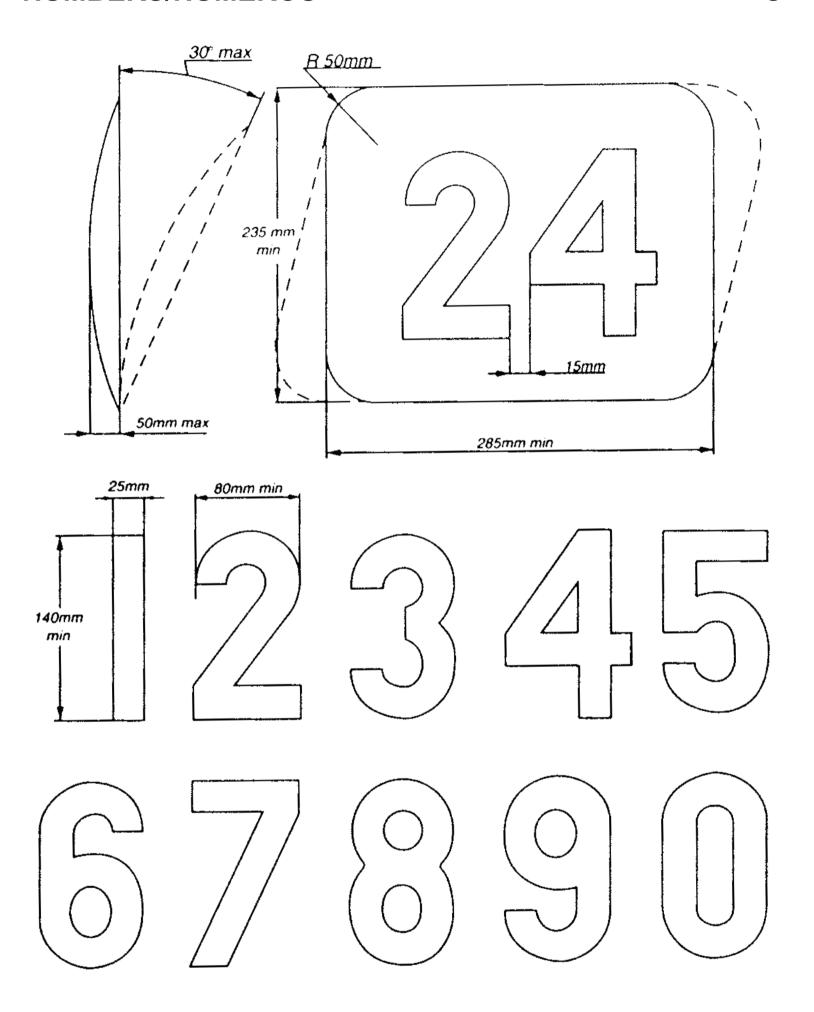
ROAD/ROUTE C





NUMBERS/NUMEROS

0





Futura Heavy

0123456789

Futura Heavy Italicy

0123456789

Univers Bold

0123456789

Univers Bold Italic

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Oliver Med.

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Oliver Med. Italic

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Franklin Gothic

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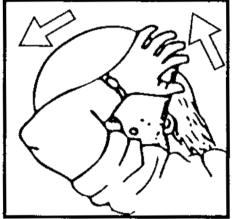


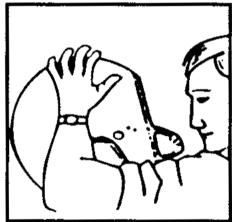
TEN FITTING TESTS FOR HELMETS DIX TESTS D'ADAPTATION POUR LES CASQUES

- Obtain correct size by measuring the crown of the head Avoir la bonne grandeur en mesurant le sommet de la tête
- 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







- 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
- Ensure that visor can be opened with one gloved hand
 S'assurer que la visière peut être ouverte avec une main gantée
- 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
- 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 €uros 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. 1.17

- Time penalties: the imposition of time affecting the rider's

actual result up to 2 minutes and the

cancellation of time.

- Disqualification: disqualification from an event, practice

sessions (black flag, black flag with orange disc), race (black flag, black flag with orange

disc) or from its results.

- Withdrawal of the loss of points from the Championship

championship points: races already run.

- Suspension: the loss of rights to participate in the

Championship may be applied to one or more

races.

- 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 DISCIPLINARY AND ARBITRATION BODIES

The disciplinary and arbitration bodies of the FIM, qualified to deal with disciplinary and arbitration matters, are:

- The Race Direction
- The FIM Stewards
- The International Disciplinary Court (CDI)

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 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.
- having been unable to ensure the smooth and efficient running of the event or for serious breaches of the Regulations.

The Race Direction is competent to adjudicate upon a protest relating to infringements of the Regulations.



3.3.1.3 Penalties that may be pronounced by the Race Direction

The following penalties may be pronounced by the Race Direction:

- a warning
- a fine
- a Stop & Go
- a time penalty
- a grid penalty
- a disqualification
- a withdrawal of Championship points
- a suspension

Furthermore, the Race Direction can refer the case to the International Disciplinary Court (CDI) in order to impose a higher penalty than the Race Direction is empowered to do.

3.3.2 The FIM Stewards Panel

3.3.2.1 Constitution

The Constitution of the FIM Stewards Panel is in accordance with the requirements laid down in Article 1.7.

3.3.2.2 Competence

The FIM Stewards Panel will hear any appeals against decisions taken by the Race Direction.

3.3.2.3 Penalties that may be pronounced by the FIM Stewards Panel only following an appeal:

- a warning
- a fine
- a time penalty
- a grid penalty
- a disqualification
- a withdrawal of Championship points
- a suspension

Furthermore, the FIM Steward Panel can refer the case to the International Disciplinary Court (CDI) in order to impose a higher penalty than the FIM Stewards Panel is empowered to do.



3.3.3 The International Judicial Panel

The International Judicial Panel (CJI) is composed of qualified persons from which the members of the CDI are nominated.

3.3.3.1 Constitution

The International Judicial Panel shall consist of members nominated by FMNs. Each FMN may nominate one or several members having the nationality of that FMN. The appointments shall be confirmed by the General Assembly for 4-year periods.

3.3.3.2 Qualifications

In order to qualify for appointment to the International Judicial Panel, a candidate must be in possession of a diploma in Law studies of University level. He must be able to express himself in at least one of the official languages of the FIM. He cannot however be an officer or a licence holder of the FIM.

3.3.4 The International Disciplinary Court (CDI)

3.3.4.1 Appointment of the Members

The President of the International Judicial Panel of the FIM will appoint, each time, the President and the members who will constitute the CDI.

3.3.4.2 Procedures

The names of the members 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, either in total or in part, within three days after having received the information. If the Executive Board of the FIM considers that a reasonable objection is made, he must appoint the necessary replacements. Otherwise he rejects the objection and fixes the date for the hearing.

The court may request the opinion of an expert or summon a witness who it considers useful.



3.3.4.3 Authority and Competences

The CDI will hear any appeals against decisions taken by the FIM Stewards.

The CDI adjudicates upon request of the Race Direction or the FIM Steward Panel.

After a meeting, the President of the FIM, the Executive Board or the Management Council may, within 5 days, refer to the CDI all matters of violation or infringement to the FIM regulations.

3.3.5 The FIM as a Party in the Legal Proceedings

3.3.5.1 Function

For all the appeals to the CDI, the FIM is entitled to assert its interests or to explain its position by means of a prosecution address.

3.3.5.2 Appointment

The Executive Board shall appoint in each case, the person who will represent the FIM.

3.3.5.3 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.

3.4 PROTESTS AND APPEALS

3.4.1 Right of protest

Any legal entity or any individual, rider, team, manufacturer, official etc. affected by a decision taken under the authority of the FIM, has the right to protest against that decision.



No protest may be lodged against a decision of the Race Direction entailing or not:

- a Stop & Go.
- a disqualification from the practice sessions or races by means of a black flag or black flag with orange disc.
- a fine for speeding in the pit lane.

No protest may be lodged against a decision of the Race Direction based on a photo finish.

3.4.2 Right of appeal

The rules concerning appeals against FIM disciplinary decisions are:

- To the FIM Stewards against a decision of the Race Direction
 No appeal may be lodged against a decision entailing or not:
 - a Stop & Go
 - a disqualification from the practice sessions or races by means of a black flag or black flag with orange disc.
 - a fine for speeding in the pit lane

No appeal may be lodged against a decision based on a photo finish.

When no appeal may be lodged the decision of the Race Direction decision is final.

2. To the CDI against a decision of the FIM Stewards. The decision of the CDI is final.

No appeal may be lodged if the FIM Stewards confirm the previous decision of the Race Direction. In this case, the decision of the FIM Stewards is final.



3. To the CAS

No appeal may be lodged against a decision entailing or not:

- a Stop & Go
- a disqualification from the practice sessions or races by means of a black flag or black flag with orange disc
- a fine for speeding in the pit lane

No appeal may be lodged against a decision based on a photo finish.

3.4.3 Procedure and time limit for protests

All protests must be submitted and signed only by the person directly concerned. Each protest must refer to a single subject only and the intention to protest must be notified to Race Direction within 30 minutes following the signature of the results by the Clerk of the Course. The protest must then be confirmed in writing or withdrawn within 1 hour at the latest after the signature of the results by the Clerk of the Course.

Protests must be handed to a responsible official (Clerk of the Course, Race Director or Secretary of the Meeting) together with the security deposit of 660 € or equivalent.

Teams and riders contracted to compete in the Championship may submit a letter of guarantee from EEL in lieu of payment.

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.

3.4.4 Hearing of a protest

After a hearing, the Race Direction must make a decision on any protest presented. The protest has to be judged according to the provisions of the Regulations.



- 5 days

3.4.5 Effect of the decision upon a protest

The decision of the Race Direction of determination of penalty is immediate.

3.4.6 Time limits for the lodging of an appeal

The time limit for lodging a statement of appeal is:

- against a decision of the Race Direction - 30 Minutes

- against a decision of the FIM Stewards - 5 days

 statement of appeal before the Court of Arbitration for Sports (CAS)

The time limits shall be taken from the date and time of receipt of the decision by the appellant.

3.4.7 Lodging of an appeal

To be admissible, the statement of appeal must be submitted by letter (appeal before the FIM Stewards) or sent by registered letter or special courier to the FIM Executive Secretariat and postmarked (appeal before the CDI).

The correct security deposit for appeal must be handed to the FIM Chief Steward (appeal before the FIM Stewards) or paid in to the FIM Executive Secretariat (appeal before the CDI), as the case may be.

Within 10 days following the statement of appeal before the CDI, the appellant assigns to the FIM Executive Secretariat a brief of appeal stating the facts.

If the appeal was not lodged and/or the security deposit for appeal not paid within the dead line specified in article 3.4.6, the appeal will be declared inadmissible without hearing.

3.4.7.1 Security deposit for appeals

The amount of the security deposit is 1'320 €uros.

Teams and riders contracted to compete in the Championships may submit a letter of guarantee from EEL in lieu of payment.



3.4.7.2 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.

3.4.7.3 Time limits to be observed for appeal hearings

The FIM Stewards must be convened to examine an appeal immediately after the brief of appeal is received.

The CDI must be convened to examine an appeal not later than 6 weeks after the brief of appeal is received.

The FIM Stewards and the CDI must in all cases pronounce a decision.

3.4.8 Effect of an appeal

On request of the appellant, the FIM Stewards Panel may decide a stay of the provisional execution adjudicated by the Race Direction by injunction or in its decision.

On request of the appellant, the International Disciplinary Court (CDI) may decide a stay of the provisional execution adjudicated by the FIM Stewards Panel 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 Race Direction or of the FIM Stewards must be notified directly at the event venue, or failing that, addressed by registered letter with acknowledgement of receipt.

All judgements of the International Disciplinary Court (CDI) must be notified, in writing, by registered letter with acknowledgement of receipt 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 30th, 1949 between the 4 organisations controlling motorised sports internationally, i.e. in addition to the FIM, namely:

- the Fédération Internationale de l'Automobile (FIA)
- the Fédération Aéronautique Internationale (FAI)
- the Union Internationale Motonautique (UIM)

penalties of suspension or exclusion may also be applied to one or another of the sports represented by the above organisations, upon request of the FIM.



3.8 LAW OF MERCY

The Management Council, after consultation with the CJI President or upon his proposal, may mitigate or completely forgive the penalty of a person or group of persons after having exhausted all the appeal procedures

3.9 ARBITRATION CLAUSE

Final decisions made by the disciplinary bodies (exception Art. 3.4.2.3) or the General Assembly of the FIM may be submitted exclusively to the Court of Arbitration for Sport by way of appeal within the time limit as laid down in article 3.4.6, 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

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