



Promoter:

Coleraine & District Motor Club Ltd



**VENUE: Portstewart, Coleraine & Portrush, Northern Ireland**

## **2023 North West 200 Supplementary & Technical Regulations**

### **PRACTICE DAYS:**

1. Tuesday 9th May  
9.15 am – 3.15 pm
2. Thursday 11th May  
9.15 am – 3.15 pm

### **RACE DAYS:**

1. Thursday 11th May  
5.00 pm – 9.00 pm
2. Saturday 13th May  
9.15 am – 9.00 pm



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# 2023 North West 200 Motor Cycle Road Race

## Supplementary Regulations

**Official Permit** issued by M.C.U.I. (U.C.) Ltd.: **001/23**

**Race Office:** NW200, 25-27 New Row, Coleraine, BT52 1AD

**Clerk of Course:** Stanleigh Murray

**Event Consultant:** Mervyn Whyte MBE

### Stewards

M.C.U.I. (U.C.) LTD: Anne Forsythe

M.C.U.I. (U.C.) LTD: Mervyn Ferris

M.C.I: Thomas Bertram

### Representing Coleraine & District Motor Club Ltd

Evan Freeman, Kevin Hegarty, William Munnis

**Technical Stewards:** Colin Hurst & MCUI (U.C) Team

**Rider Co-Ordinator:** Steve Plater

### NAME & TYPE OF EVENT

- 1) The Race is that known as the North West "200", and is promoted by Coleraine and District Motor Club Ltd., hereinafter called "the Promoters". It will be held on the Portstewart, Coleraine, Portrush Circuit, on Saturday 13th May 2023. The starting time will be approximately 10.00 am. Roads close at 9.15 am. Racing will also take place on Thursday 11th May. Roads close at 5.00 pm to 9.00 pm. ***The road closing order now allows for flexibility to move practice or race days should there be adverse weather.***

The North West 200 is a Classic event held under the F.I.M and the General Competition Rules of the Motor Cycle Union of Ireland and under permit and by virtue an order of the Department of Infrastructure Northern Ireland. The Supplementary Regulations and any bulletins and or final instructions issued by Promoters.

## THE COURSE

- 2) The Course starts on the Ballyreagh Road between Quarry Hill and Primrose Corner. Riders push on towards Portstewart, where they negotiate a hairpin bend at York Corner, along the Station Road, Cromore Road, turning left at University Corner onto the Link Road to the Ballysally Roundabout, then along the Atlantic Road maneuvering two chicanes, Mathers and Magherbuoy then to a left-hand turn at the Metropole Corner and then along the Coast Road to the finish. **Length 8.970 miles/14.436 kilometers.**

## RACES TO BE RUN

### Superbike Races

Two races for Superbike machines.  
4 stroke 3 & 4 cylinder over 850cc to 1000cc  
4 stroke 2 cylinders over 960cc to 1200cc  
1<sup>st</sup> Saturday 6 laps & Finale race 6 laps –  
see Superbike Regulations.

### Supersport Races

Two races for Supersport machines.  
Over 400cc – 636cc 4 cylinder 4 stroke machines.  
Over 500cc – 800cc 3 cylinder 4 stroke machines.  
Over 600cc – 955cc 2 cylinder 4 stroke machines. 6  
laps each race – See Supersport Regulations.

### Superstock Races

Two races for Superstock machines.  
Over 850cc up to 1000cc 4-stroke 3 & 4 cylinders  
maximum  
Over 955cc up to 1200cc 4-stroke 2 cylinders maximum  
This displacement capacities must remain at the  
homologated size. Increasing the bore size to reach class  
limits is not allowed.  
6 laps each race – See Superstock Regulations

### Supertwin Races

Two races for Supertwin machines.  
4 laps each race – See Supertwin Regulations.

Please note: Competitors using a Superstock machine for the Superstock race plus the two Superbike races must confirm at signing on that they are using a machine conforming to Superstock regulations as a dual entry in both the Superstock and Superbike classes.

**Note – Machine model must be on the FIM Homologation list for 2023**

## RIDER ELIGIBILITY

- 3) Riders: In order to be eligible to enter this event all riders must be in possession of a 2023 National Non-Championship licence for Road Racing and start permission from their FMN. MCUI riders require an 'Super A Licence'. Since the FIM is not involved in the organisation of International or EMN Meetings responsibility for the latter at all levels (Organisational, Sporting & Disciplinary) shall lay solely with the FMNR. Non-homologated motorcycles may be accepted for the Superbike and Superstock classes at the discretion of the Coleraine & District Motor Club Committee.

## 4) REFUSAL OF ENTRIES

The promoters reserve the right to refuse any entry, or the nomination of any rider without assigning any

reason for such refusal.

### **ENTRY INFORMATION**

- 5) **Applications for consideration to compete can only be made online via [www.northwest200.org/competitors](http://www.northwest200.org/competitors)**

The online application process will **close at 4pm on Friday 24th March 2023** and no entries will be accepted after this date.

Race Office - Tel: (+44) 028 7035 5800 or email: [info@northwest200.org](mailto:info@northwest200.org)

The promoters will select from the applications received, up to 60 solo entries, for each race. Unless 30 applications are received for any one race, that race may be cancelled.

A maximum of 60 riders will be allowed to start the race and allocation will be as follows: The first 25 who finished in the same class the previous year will be given automatic entry. A further remaining 20 places will be drawn from a ballot with up to 15 places going to new comers.

No entry fees are required.

***Applicants will be advised within two weeks after the closing date, whether they have been accepted or not.***

All overseas entries (including ACU/SACU) will only be permitted to start on production of Start Permission from their own FMN prior to the start of the event.

Personal accident insurance, if required, can be purchased at the North West from our Insurance Brokers, Willis Towers Watson – details over the page.

***Newcomers are only eligible to compete in a maximum of three races per day.***

***Regulars are eligible to compete in a maximum of five races per day.***

### **TRANSPONDER TIMING SYSTEMS - Transponders are compulsory.**

- 6) Each competitor must have a separate transponder fitted to each machine. Two machines used in one practice session must have separate transponders. **It is the responsibility of each competitor to provide and properly fit a fully charged transponder to his/her machine(s) at his/her own expense.** The transponder identification number (usually a seven digit number but may be eight digits) must be included on the entry form so that the database can be set up in advance of the event.

A Mylaps transponder timing system is in use. Compatible transponders are:

- Mylaps TR2 Car/Bike transponder (with red band)
- Mylaps X2 Car/Bike transponder (with red band)
- Mylaps Car/Bike Transponder (colored red)
- Mylaps TranX260

## **INSURANCE: ACCIDENT & REPATRIATION**

- 7) During the meeting and official practice, the minimum compulsory insurance cover for all drivers, including MCUI licence holders, according to the FIM Code are as follows:

In case of Permanent Disability	EUR 50,000
In case of Death	EUR 25,000
For Medical Expenses	EUR 100,000
Repatriation	EUR 4,000

The competitor must have written Start Permission from their FMN to this effect.

These insurance benefits can be effected in the Race Office at signing on.

Any enquiries should be directed to:

**Alan Carlisle – Account Director**

**Willis Towers Watson**

**Floor 3 Centrepoint Building**

**24 Ormeau Avenue**

**Belfast**

**BT2 8HS**

**Tel: 028 9089 5229 Mob: 0779 865 5944**

**Email: [alan.carlisle@willistowerswatson.com](mailto:alan.carlisle@willistowerswatson.com)**

**Web: [www.willistowerswatson.com](http://www.willistowerswatson.com)**

## **SIGNING ON / BRIEFING – Compulsory to all competitors**

8) **All competitors** must sign on at the Race Office at the following times:

**Newcomers** Monday 8<sup>th</sup> May: 1000 – 1200 hrs

**Regulars** Monday 8<sup>th</sup> May: 1100 – 1630 hrs

A declaration must be signed by each competitor, confirming that they have not sustained injury or consulted with a doctor regarding any injury or illness since the issue of their 2023 Licence. This declaration will also confirm that the competitor is fully acquainted with all regulations and instructions issued.

A rider with concussion must therefore be removed from the rest of the event and not permitted to return to competition for a minimum period stated below:

<b>Age</b>	<b>Minimum Period of Exclusion from Racing</b>
20 years and over	Excluded immediately for 48 hours, with a further minimum 7 days suspension  From competition (i.e. minimum 9 days)
18 – 19 years	12 Days

Newcomers are required to wear an orange bib throughout both practice days. The bibs are to be collected from the Race Office when signing on, at a cost of £6.00. The £6.00 will be refunded after the practice sessions if the bib is returned. There is no requirement to wear the Newcomers bib during racing on Thursday evening or Saturday.

## **TEAMS & COMPETITORS BRIEFINGS: Compulsory**

All competitors / team managers must attend a briefing prior to team/competitor being permitted to commence practice as detailed below.

**Briefing Date:** Monday 8<sup>th</sup> May

**Briefing Location:** Entertainment Marquee, Paddock

**Newcomers:** 1200hrs, followed by coach tour of the circuit with experienced instructors.

**Regulars/Team Managers:** 1600hrs.

### **Grid Access/ Paddock Passes:**

A maximum of up to 10 Grid / Paddock passes will be issued at the circuit. The number of passes issued will depend on the number of machines each team/individual has.

The Competitor will receive two passes at sign on .

No other passes will be issued during the event.

If you have a need for passes to allow sponsors or another to access the paddock these can be purchased at the Ticket Office , which is situated opposite the paddock on the Coast side.

- Passes must be properly worn in a visible place for inspection.
- Abuse of the privileges will result in the passes being withdrawn.
- It is the responsibility of the team manager to distribute passes within the team.





## COMPETITOR/TEAM COMPLIANCE

Random alcohol testing will be carried out with 0.10g/l tolerance (reading g10).

Drug testing may also be carried out.

No motorcycles may be ridden through the paddock or tunnel area. Anyone found not obeying this may be excluded from the event.

The Paddock operates a one way system and all vehicles exiting the paddock should depart through the gate below the bungalow.

## SCRUTINEERING OF RACE CLOTHING & HELMETS

All race clothing and helmets are required to be inspected at scrutineering. Any helmet that has been involved in an accident will be permanently marked and cannot be used. All helmets used in competition must be no more than five (5) years old from date of manufacture.

## CHEST & BACK PROTECTORS

**Use of a chest and back protector is compulsory** and must be clearly marked with the following norms:

- a) The back protector must comply with EN1621-2, CB (“central back”) or FB (“full back”) Level 1 or 2.
- b) The chest protector must be:
  - i) “Full chest protectors” (protector designed as a single piece ) and “Divided chest protectors” (protector designed in two separate halves) are permitted. All types of chest protectors (full or divided) must have a minimum protection (total) area of no less than 230cm<sup>2</sup>
  - ii) Only protectors and in conformity with pr EN 1621-3 (level 1 or 2) are admitted.

**BELLY PANS** for Superbike and Superstock machines are required to be removed prior to scrutineering and fitted immediately after scrutineering.

The “**EN**” stands for “**European Norm.**” You might also notice armor listed as “**CE**”. The letter “**CE**” are the abbreviation of the French phrase “**Conformite Europeene**” which literally mean “European Conformity “. The term is initially used was “**EC Mark**” and it was officially replaced by “**CE Marking**” in the Directive 93/68/EEC in 1993. “**CE Marking**” is now used in all EU official documents. All of this has to do with the European motorcycle safety standards. America has unofficially adopted these standards, but they are not required by law for street use. In contrast, to ride a motorcycle in Europe, you have to have protective apparel that meets these standards.

## TECHNICAL INSPECTION

<b>8a) NUMBER PLATES:</b>	SUPERBIKE:	White background with Black numbers
	SUPERSPORT:	White background with blue numbers
	SUPERSTOCK:	Red background with White numbers
	SUPERTWIN:	Blue background with White numbers

Each machine must display one front and two side number plates to MCUI and ACU specifications for practice and races.

## PRE-PRACTICE/RACE EXAMINATION

All machines bearing the correct number plates must pass through the scrutineering bay for inspection/approval prior to practice, during the times listed. Machines will be held in the holding bay prior to practice. Machines will not be approved if their appearance is not appropriate to the status of the event.

Please note technical inspection cards **MUST** be signed in **PRINT** form by the competitor / authorised team member and the relevant scrutineer.

### PRE-/PRACTICE/RACE EXAMINATION TIMES

Competitors must ensure that their machines are presented;

Tuesday 9th, Thursday 11th & Saturday 13th May: 0715 – 0900 hours

Scrutineering times for various classes must be adhered to. If you arrive at scrutineering outside your allocated slot you will be refused until the appropriate times.

Competitors must report to the scrutineering marquee **ONLY** between the times stated below.

#### **Tuesday 9th May 0715 – 0900**

0715 – 0730	Newcomers Only
0730 - 0755	Supersport Machines
0755 - 0820	Superbike Machines
0820 – 0840	Supertwin Machines
0840 – 0900	Superstock Machines

#### **Thursday 11th May 0730 – 0900**

0730 – 0750	Supertwin Machines
0750 – 0810	Superstock Machines
0810 – 0835	Supersport Machines
0835 – 0900	Superbike Machines

#### **Saturday 13th May 0730 – 0900**

0730 – 0755	Supersport Machines
0755 – 0820	Superbike Machines
0820 – 0840	Supertwin Machines
0840 – 0900	Superstock Machines

Scrutineering will finish 15 minutes prior to the start of practice and 30 minutes prior to racing, there will be no exceptions. Machines must be ready to race. All oil drain plugs must be lock-wired in position and oil pipes secured and wire locked to their machines. The completed pre-race examination forms must be handed over to the scrutineers.

## **POST RACE EXAMINATION**

The top 3 placed machines will be checked and a further 3 machines picked at random to have a verification check.

## **VERIFICATION OF THE MACHINES**

Every motorcycle entered must conform to the requirements of the FIM Technical Code.

The promoters reserve the right to examine any motorcycle that has started in a practice or race, and for this purpose to retain it in official custody. Any necessary dismantling of motorcycles required shall be carried out under instructions by an accredited representative of the competitor / entrant.

The Promoters may also require any motorcycle to be stripped, examined and retained for as long as is deemed necessary following an accident, in either practice or races.

Any competing motorcycle left unattended in the pit, scrutineering area or park ferme after taking part in a race may be taken charge of by the Promoters, who disclaim all responsibility for any competing motorcycle. All costs relating to the verification of machines are to be met by the competitor / entrant.

If any competitor stops at the pit lane garages during practice their machine will be checked by the official Scrutineers before exiting again on to the course

## **CHANGE OF RIDER**

The same rider shall take part in the entire race. If before the race the entrant desires to change the rider, he shall make application to the Clerk of Course in writing not less than one hour before the race is due to start. Every rider shall be fully qualified, as laid down in these Regulations. In the event of a change of rider the replacement rider will be allocated a new riding number.

## **CHANGE OF MOTORCYCLE**

An entrant wishing to change the make or type of motorcycle, after entries have closed must apply to the Race Office for approval by the Clerk of Course, not later than 1400 hours on the day preceding the race. The competitor must have qualified on the make, type and capacity of the machine to be raced.

## **BODYWORK/FAIRINGS**

For all 4 stroke machines 400cc and over the following rule will apply:

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 motorcycle, (minimum 5 litres). The inside of the lower fairing must be fitted with an oil absorbent and fire retardant material. Alternatively, a sub sump fitted between the crankcase and the lower fairing is permitted and minimum modifications with relation to the profile of the lower fairing is permitted and minimum modifications with relation to the profile of the lower fairing are allowed, only to fulfil this rule. For safety reasons it is compulsory to use a chain guard fitted in such a way as to prevent trapping between the lower chain run and the final drive sprocket at the rear wheel.

## FUEL

### Overview

Euro M-Sport has been appointed to supply the North West 200 (NW200) as the official and exclusive control race fuel provider to all classes at the event organised and managed by Coleraine & District Motor Club Ltd.

#### 9.1) Fuel Specification:

Euro M-Sport to supply an unleaded fuel to the North West 200, fully meeting the standards and specifications required and within the technical regulations of the event.

#### 9.2) Fuel Supply Format and Compliance:

- a) Euro M-Sport commits to providing a cost-effective premium service while continuing to comply with all current Health, Safety and Licensing of Environmental Legislation.
- b) Fuel will be delivered direct to the event by Euro M-Sport and made available for collection prior to the official practice day start. Fuel delivery days and collection times will be in accordance with the event timetable.
- c) Euro M-Sport will operate sales via payments in cash and debit/credit cards. There will be no need for teams and competitors to pre order fuel.
- d) Euro M-Sport will manage all sales transactions directly with NW200 participating teams and competitors.
- e) Euro M-Sport will supply petroleum products in UN approved drums which will include labels that are necessary to comply with current Health & Safety Environmental Legislation.
- f) All used and empty fuel drums should be returned to the Euro M-Sport distribution vehicle for return to the Euro M-Sport Headquarters for environmental disposal, Euro M-Sport event staff will endeavor to ensure no used and empty drums are left at the North West 200 Paddock after the event.

#### 9.3) Fuel Products:

- a) Fuel/petroleum products will be of a type and specification that is fully compliant with the Technical Regulations published by the North West 200.
- b) The products will be of quality manufacture, which is carefully monitored during the blending process. The exact type and specification will satisfy the event organisers, teams and riders' requirements in terms of performance and reliability and in accordance to current FIM regulation.
- c) The fuel will be of uniform quality throughout the duration of the event. The fuel products specified are for the following classes:

Panta MTV4t-01 - Superbike, Supersport and Supertwin.

Panta 98 Ron (RUL4T) - all other classes inc Supersport and Supertwin option.

#### 9.4) Analysis / Testing:

- a) Euro M-Sport will provide the most advanced level of trackside fuel testing available at the NW200, which will include Marker and FTIR analysis.
- b) Competitors will be tested pre or post qualifying or race sessions. Results to be made available to the Race Officials and Technical Steward.

#### 9.5) FUEL CHECKING

- a) Competitors are required to have sufficient fuel remaining in the tank at all times for testing and in order to comply with the regulations this should be 1 litre.
- b) The Stewards may only make exceptions if the appointed officials for the testing of fuel are satisfied that they have sufficient fuel to carry out the tests required by the regulations / supplementary regulations for the event.
- c) It shall be an offence to use fuel which does not comply with the fuel specification laid down in the Supplementary Regulations for the Event.
- d) Fuel that is not the control fuel and which does not comply with fuel regulations as laid down in the Technical Regulations will be penalised as in article **9.5.f** and **9.5.g**
- e) The analysis of a North West 200 officially approved testing facility in respect of the fuel sample will be taken as a finding fact.
- f) **Arising during Practice or from Post Practice Eligibility Inspection** Minimum penalty: Forfeit the practice times for that session which non-compliant fuel was used.

**g) Arising from Post Race Eligibility Inspection** Minimum penalty: Be excluded from the race.

Forfeit all start money, prize money and awards for that race.

**h)** If a fuel sample is not made available, or there is insufficient fuel for a test(s) to be carried out for a check for noncompliance, as required by the Chief Technical Officer or the Stewards or the official appointed to supply and test fuel, then the fuel will be considered as not to comply with the fuel regulations and will be reported as such to the Stewards for application of the penalties that apply to Practice Eligibility Inspection (**9.5.f**) or Racing Eligibility Inspection (**9.5.g**) non-compliance.

### REFUELLING

Refuelling during the progress of any race must be carried out at the competitors designated area. It is forbidden to open tank filler caps until the machine is stationary at its allocated pit and the engine is switched off. Penalty may be exclusion. Suitable and correct fire extinguishers to be used at all times.

### FIRE EXTINGUISHERS

All competitors' vehicles must carry a fire extinguisher with a current and valid inspection certificate. The recommended type is a 2kg extinguisher which must bear a current inspection stamp.

### FLAG LIGHT SIGNALS

- 10.** The following flag signals may be authorised by the Promoters during practice or races and must be immediately obeyed by competitors. Only authorised officials are permitted to use flags. No other flag signals of any kind are permitted. Only the Clerk of Course can authorise a race to be stopped. The Clerk of Course may exclude a competitor, who breaks the rules, from the meeting or refer the matter to the Stewards of the meeting.

**NATIONAL FLAG:** Starting Flag (In the event that start lights fail)

**RED FLAG:** The use of the RED FLAG/RED LIGHTS indicates that racing or practice has been stopped.

**OVERTAKING IS FORBIDDEN.** *Riders must slow down and may be instructed to return to the starting grid or paddock, as decided by the Clerk of Course (COC). A rider may raise his/her hand to acknowledge a red flag.*

*At the time when a red flag is displayed, competitors who are not actively competing in the race will not be classified in the results.*

**YELLOW FLAG held motionless or Steady Yellow Light.** The yellow flag held motionless or a steady yellow light is a direct instruction to the rider to **slow down. Overtaking is forbidden.** Should a rider inadvertently gain a position (i.e. A preceding rider slows at a faster rate), once it is safe to do so, he/she should return to the original position and may raise his/her hand to indicate same.

**YELLOW FLAG waved or a flashing yellow light** is a direct instruction to the rider **Slow Down and Prepare to stop, Overtaking is forbidden.** Should a rider inadvertently gain a position (i.e., A preceding rider slows at a faster rate), once it is safe to do so, he/she should return to the original position and may raise his/her hand to indicate same.

**WHITE FLAG:** Slow moving vehicle on track - no overtaking

**YELLOW FLAG with Red Stripes:** Deterioration of adhesion of the track. Warning of slippery surface.

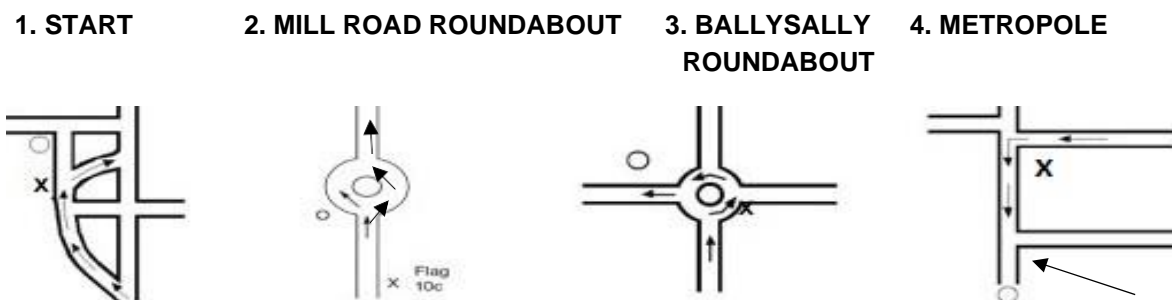
**BLACK FLAG.** Informs the rider of the motorcycle, the number on a signalling board of which is shown, **that he/she must stop with the utmost care and attention at the location where the black flag is shown. Allows the rider to return to the start because of an infringement. The rider must report to COC.**

**YELLOW FLAG WITH DIAGONAL BLACK CROSS:** Last Lap Flag.

**BLACK AND WHITE CHEQUERED FLAG:** Waved at finish line to indicate finish of race or practice session

**GREEN FLAG:** The track is clear. This flag will be shown motionless at each flag marshal post for the first lap of each practice session and sighting lap

**BLACK FLAG WITH ORANGE CIRCLE AND RIDER'S NUMBER:** will be operated at 4 points on the course. It is for mechanical issue and rider should stop safely and as soon as possible.



If you are 'black-flagged' at X, proceed to O, stop machine here, where machine will be checked. If you are allowed to proceed, you will be credited with your previous lap time.

#### 11. **OVERSHOOTING AT THE CHICANES**

If you overshoot at either Mathers, Magherabuoy or Juniper chicanes, you **MUST** proceed to the end, stop and put your foot in the stop box. Under **NO** circumstances must you turn and rejoin the course where you left it.

*Please note a **penalty of 10 seconds** will be added to your time if you do not stop and place your foot in the stop box.*

#### **PULLING INTO PITS**

If you are pulling into the pits keep to the right-hand side on the approach to the finish chicane and proceed down into the pits, stopping at the stop box before entering pit lane.

When leaving the pits proceed to the marshal at the end of the pit lane who will permit you to rejoin the course when safe to do so.

#### **OVERSHOOTING FINISH CHICANE ON LAST LAP**

If you should overshoot the entrance to the finish chicane on the **last lap**, proceed to the red flag and stop. 10 seconds will be added to your last lap time

#### 11a. **PARC FERME**

Parc Ferme is positioned on the right at the entrance to the paddock, beside the bungalow. After each race please dismount from your machine on entry to the paddock and place your machine in the Parc Ferme. All competitors are required to leave their machines in the Parc Ferme for thirty (30) minutes after each particular race. All machines must be attended for the duration and removed after the thirty (30) minutes. If any Competitor is using a particular machine in the next race, it can be used, but it may be recalled at the end of the race for eligibility checks.

**ANY COMPETITOR WHO JUMPS THE START OF THE RACE OR MOVES FORWARD FROM THE STARTING BOX WILL BE PENALISED. 10 SECONDS WILL BE ADDED TO THE RACE TIME.**

**FAILURE TO OBSERVE ANY OF THE ABOVE MAY RESULT IN EXCLUSION FROM THE RESULTS OR PRACTICE TIME**

### **WET AND DRY RACES**

- 12.** All races will be categorised as either “Wet” or “Dry”. If the race is categorised as “Wet” a wet race board will be displayed on the grid. If no board is displayed the race will automatically be classified as “Dry”. The purpose of the classification is to indicate to riders the consequences of varying climatic conditions during a race.

**“DRY” RACE:** A race classified as “Dry” will be interrupted by the Clerk of Course if he considers climatic conditions affecting the surface of the track make it likely that competitors may wish to change tyres.

**“WET” RACE:** A race classified as “Wet” usually commencing in varying or wet conditions **will not be stopped for climatic reasons, unless deemed by the Clerk of Course** and competitors who wish to change tyres must enter the pit stop area and do so during the actual race.

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

All rear red lights need to be on during a ‘wet race’.

### **OFFICIAL PRACTICE**

#### **13. GENERAL**

The practice sessions will be strictly adhered to, and only in exceptional circumstances will the Clerk of the Course consider any alteration.

The roads will be closed for official practice on TUESDAY 9th and THURSDAY 11th May 2023, from 0915 until 1515 hrs by virtue of an Order of the Department for Infrastructure.

**ALL COMPETITORS UNDER PENALTY OR EXCLUSION FROM THE RACE, MUST NOT TAKE PART IN OFFICIAL PRACTICE. UNDER NO CIRCUMSTANCES MAY A COMPETITOR MAKE USE OF A MACHINE WHICH IS NOT THE MACHINE DECLARED ON ENTRY FORM FOR THAT COMPETITOR WITHOUT FIRST OBTAINING THE SANCTION OF THE CLERK OF THE COURSE.**

**IT IS COMPULSORY FOR ALL COMPETITORS TO PRACTICE BOTH DAYS TUESDAY 10th & THURSDAY 11th May.**

**INFORMATION REGARDING RETIREMENTS DURING PRACTICE WILL BE AVAILABLE FROM THE MONITORS AT START AREA.**

### **QUALIFICATION**

- 14.** Practicing, which will be regulated and supervised by the Promoters, will take place on Tuesday 9th May and Thursday 11th May 09.15 to 1515hrs.

**PLEASE NOTE:** Each competitor will be required to complete not less than two laps of the course at a minimum average speed equal to at least 85% of the average speed attained by the fastest six riders in that class.

**IN ADDITION A COMPETITOR ENTERING FOR THE FIRST TIME IN CURRENT PRACTISING**

PERIODS **MUST COMPLETE 6 LAPS**, TWO OF WHICH MUST BE AT THE STIPULATED

**QUALIFYING SPEED BEFORE COMPETITOR SHALL BE PERMITTED TO START.**

Competitors failing to attain qualifying speeds will only be permitted to take part in the race at the discretion of the Stewards, who will consider any appeal made to them. A rider has the right to appeal to the Stewards of the meeting, through the Clerk of the Course, against any decision regarding eligibility to partake. Any driver taking part in practice on a machine other than his actual race machine must obtain permission from the Clerk of the Course. Penalty for failure to do so may be exclusion from the race.

**Please Note:** If either practice session/class are pronounced wet then qualifying will revert to selecting alternatively i.e. Tuesday Dry 1st, Thursday Wet 2nd, 3rd Dry, 4th Wet etc

**FALLEN RIDERS**

Once a rider has fallen from their machine they are not permitted to remount or continue racing or qualifying. The machine has to be checked and passed by a Scrutineer before the rider can continue in the meeting. The rider also has to be examined by the Chief Medical Officer prior to further practice or racing and present a 'fit to race' notice to the Clerk of Course.

Please note - In the event of an incident machines involved in the incident should not be ridden back to the Paddock - No exceptions. Should this happen a penalty will occur.

**RACE PROCEDURE**

15. In exceptional circumstances, the start of any race may be officially delayed, reduced in the number of laps and if necessary postponed. This may mean a change to the racing schedule.

**Any riding deemed to be aggressive, will be dealt with severely by the organisers and could mean exclusion from the event!!**

**START PRELIMINARIES**

After all riders return from their sighting lap a three minute countdown to the start of the race will begin. The start of the race is signaled by use of a start light system. No sighting lap, no race! Classes will be started in two groups at 30 second intervals. (The number of groups depends on the number of starters).

**START PROCEDURE**

All races will be clutch start. Lights will be used to start each race. Procedure as follows:

The starter after showing the 30 second board will move off the grid. As soon as the starter has exited the grid the block of five red lights will come on, within two to five seconds the block of red lights will go out. This signifies the start of the race. In case of start light failure the national flag will be used.

**PIT / GRID AREA**

**Each competitor is permitted up to three attendants and one time keeper.** Attendants must at all times obey official instructions. If an attendant fails to obey such instructions or commits any breach of regulations, his competitor may be held responsible and penalized.

**Only a maximum of three team personnel are allowed onto the grid once competitors return to the grid after their sighting lap.**

Attendants must remain in the pit allotted to them, except when their competitor is at the pit, when they both may assist and carry out replacement repairs, only using the spares previously deposited in the pit. The time keeper must only signal from the signaling bay beyond the start line on the right hand side.



Access to the signaling bay is via the rear of the grandstand situated on the coast side.

### **PIT AREA**

One attendant must remain in the pit area at all times, whilst their rider is competing, to receive messages. Footwear worn by attendants must not carry any studs, steel tips, etc.

If electrically operated equipment is required in the pit area, it must be spark proof and intrinsically safe in every respect. Spare batteries must be protected.

Smoking is strictly forbidden in the Paddock and Pit Lane areas.

All classes will have one sighting lap. It is mandatory for all competitors to complete the sighting lap.

### **PIT STOPS DURING RACING**

All competitors must stop at the entrance to the pit lane before proceeding to their pit, and must place a foot on the ground. After stopping, competitors must then proceed with caution, giving right of way to competitors leaving their pits.

### **PROTESTS**

16. Protests may be made and must be in accordance with the MCUI Code, and accompanied by a fee of £25. In addition, if it involves the dismantling of an engine, then a deposit of £250 is required. In the event of the protest being UPHeld the deposit will be returned. If the protest is unsuccessful, the deposit will be awarded to the winning party and will be the only cost claimable. For the purpose of this regulation “the time of publication of results” will be deemed to be 30 minutes after the first competitor to finish the race.

All protests must be submitted and signed only by the person directly concerned. Each protest must refer to a single subject only and must be presented within 30 minutes of the finish of the race. During a meeting, protests must be submitted according to the provisions of the Supplementary Regulations and handed to the official in charge (Clerk of Course).

### **GARLANDING CEREMONY**

17. Riders finishing first, second and third in each race will be required to take part in a short ceremony to be held at the Rostrum to acclaim and garland the winners.

### **RESULTS**

18. The Promoters shall make such public announcements of the progress of each rider during the race as may be practicable, and shall announce provisional results immediately the race has finished. A report of the final results of the Race will be published. Any protest against any irregularity or mistake occurring during the Race shall be lodged within 30 minutes of the finish of the race.

### **VIDEO RECORDING OF RACES BY RIDERS**

19. **Only competitors authorised by the Clerk of the Course will be permitted to film from on board cameras.**

*Applications must be made in writing to the Clerk of the Course where such approval is granted, the installation of the camera and associated equipment is further subject to approval of the Chief Scrutineer. A copy of insurance policy must be forwarded with entry form prior to the closing date for inspection, otherwise no onboard cameras will be allowed to be used.*

### **VEHICLE RECOVERY SERVICE**

20. A recovery service will operate on discretion of the club. Any machines collected will be returned to the bottom paddock gate (Portstewart side of the bungalow). The Promoters will not accept any responsibility for any damage to any machine.

### **MACHINES WILL NOT BE COLLECTED BETWEEN PRACTICE SESSIONS: ONLY COMPETITORS**

### **ACCEPTANCE OF RECORDS**

21. Entrants and competitors must accept the official records of the Promoters, which may be published as the Promoters see fit, and also agree not to publish, or allow to be published, on their behalf, any inaccurate, misleading or premature advertisement in connection with these races.

### **GENERAL**

22. Every entrant and every driver by being entered thereby acknowledges that he/she is bound by the I.S.C. and G.C.R. and standing regulations of the M.C.U.I. and these Supplementary Regulations, to all of which he undertakes to submit, and renounces any right to have recourse to arbitration or tribunal not provided for in the said rules or regulations.

### **INTERPRETATION OF REGULATIONS**

23. The interpretation of these regulations, and of any to be hereafter published or issued and the infliction of any penalties for breach of the same, shall rest entirely with the Stewards of the Meeting. If any dispute shall arise in connection with the said regulations, or in connection with the race, the decision of the Stewards of the Meeting shall be final and binding, except so far as is otherwise provided under the General Competition Rules of the Motor Cycle Union of Ireland.

### **BREACH OF REGULATIONS**

24. The Clerk of Course subject to confirmation by the Stewards, is empowered to levy a fine and/or impose a time penalty, where applicable, for breaches of the regulations, where no other penalty is specified

### **POSTPONEMENTS**

25. The Promoters have the right to postpone the race or practice, should any circumstances arise which, in their opinion; render such a course necessary or desirable.

### **LIABILITY FOR DAMAGE TO MOTOR CYCLE**

It is one of the conditions upon which entries for the race and/or practice will be accepted by the Promoters that the Promoters will not be responsible for any damage that may be done to or by any motorcycle entered for the race and/or practice, or for the theft of the motorcycle or any of its accessories or appurtenances during the said periods

### **LIABILITY FOR DAMAGE BY ENTRANT**

26. The entrant of any motorcycle in the race and/or practice may be held liable for any damage caused by him/her or his/her driver, servant, agent or representative during the course of or in connection with the race and/or practice.

### **INSTRUCTIONS TO COMPETITORS**

27. The Promoters may issue mandatory instructions to competitors. These instructions shall, however, amplify only, and shall not modify, these Supplementary Regulations.

An official notice board shall be displayed at the "Sign On" Area and within the Paddock. Every competitor shall be deemed to have made him/herself cognisant with any notice displayed thereof and if applicable such notices shall have the force of these regulations and shall be binding upon all competitors.

### **INDEMNIFICATION OF THE FIM, M.C.U.I. AND PROMOTERS**

28. An entrant by entering and a rider or mechanic by taking part in these races agree to save harmless and keep indemnified the FIM, M.C.U.I. and Promoters and their respective officials, servants, representatives and agents, or any person concerned with the conduct, promotion or management of the event including other entrants, riders or mechanics, from and against all actions, costs and expenses, claims and demands in respect of death, injury, loss or damage to the person or property of the entrant, rider or mechanic, as the case may be, howsoever caused or arising out of, in connection with the entrant's and/or rider's and/or mechanic's participating in this meeting, notwithstanding that the same may have been contributed to or occasioned by the negligence of the aforesaid FIM, M.C.U.I. and Promoters, their officials, servants, representatives or agents or other person concerned with the event.

### **RETAILING – Strictly forbidden**

29. Teams and Competitors **are not permitted to retail any goods or services within the Paddock area** during the North West 200 Race week; this includes merchandise of any kind. Anyone contravening this ruling will be subject to a penalty.

### **PRIVATE CARS & VEHICLE PARKING**

30. Private cars & vehicles are not permitted into any area of the Paddock other than the Teams and Competitors Car Park. This car park is situated behind the competitors paddock and can be accessed via the laneway that runs parallel with the paddock. The vehicle (s) must display a team and Competitors Car park vehicle pass to gain access to this area.

### **FIRE POINTS / HYDRANTS**

31. Fire Points / Hydrants are located within the Paddock area. All team personnel must be familiar with their location.

### **GENERATORS**

- 32.** Generators must be placed in a safe working area. All cables used for generators or the electric supply, must be covered by the proprietors cable protector at all times. The use of generator should be kept to a minimum during night time hours.

### **ELECTRICAL SUPPLY**

Under no circumstances should anyone interfere with the electric supply from the power boxes within the Paddock.

If an electric supply fails please contact the Paddock Manager, Jim Fleming on 07730957100 or [jfleming.northwest200@gmail.com](mailto:jfleming.northwest200@gmail.com) Equipment which is installed or used outside should be of suitable weatherproof construction and needs to be protected from mechanical damage e.g., cables which are likely to be driven over by vehicles. A minimum standard of at least IP55 is required.

### **RUBBISH REMOVAL**

- 34.** All Competitors and Teams are responsible for removal of rubbish, old tyres etc. Bins are provided for disposal of bin bags.

### **PADDOCK TRAFFIC**

- 35.** A one-way traffic system will be in operation within the Paddock. All vehicles exiting paddock should depart through the gate at the bungalow.

It has been designed for the smooth and safe transition of all vehicle movements. A 5mph speed limit exists at all times. At no time should any vehicle block an entrance or exit.

No race machinery to be ridden through the paddock.

Anyone found not obeying these rules may be excluded or have their rider excluded from the event.

Signed for and on behalf of by order of Coleraine & District Motor Club Ltd:

Clerk of Course - NW200

Mr. Stanleigh Murray

25-27 New Row

Coleraine

Co. L/Derry

BT52 1AD

Telephone: 028 7035 5800

Email: [smurray.northwest200@gmail.com](mailto:smurray.northwest200@gmail.com)

## Provisional Race Programme for 9<sup>th</sup>, 11<sup>th</sup> & 13<sup>th</sup> May

### Practice Times

9.30am Circuit Inspection by Stewards

#### Tuesday 9<sup>th</sup> May – Roads Close 9.15am – 3.15pm

1 <sup>st</sup> Session	Newcomers only	09.45 to 10.15 hrs (approximate times)
2 <sup>nd</sup> Session	Supersport	10.30 to 11.15 hrs
3 <sup>rd</sup> Session	Superbike	11.30 to 12.15 hrs
4 <sup>th</sup> Session	Supertwin	12.30 to 13.15 hrs
5 <sup>th</sup> Session	Superstock	13.30 to 14.30 hrs

#### Thursday 11<sup>th</sup> May – Roads Close 9.15am – 3.15pm

1 <sup>st</sup> Session	Supertwin	09.45 to 10.30hrs (approximate times)
2 <sup>nd</sup> Session	Superstock	10.45 to 11.30hrs
3 <sup>rd</sup> Session	Supersport	11.45 to 12.30hrs
4 <sup>th</sup> Session	Superbike	12.45 to 13.30hrs

### Race Schedule

#### Thursday 11<sup>th</sup> May – Roads Close 9.15am – 3.15pm & 5pm – 9pm

<b><u>Race 1</u></b>	Supersport (6 laps)	17.45 hrs (approximate times)
<b><u>Race 2</u></b>	Superstock (6 laps)	18.30 hrs
<b><u>Race 3</u></b>	Superstwin (4 laps)	19.15 hrs

#### Saturday 13<sup>th</sup> May – Roads Close 9.15am – 9pm

<b><u>Race 1</u></b>	Supersport Race (6 laps)	10.00 hrs (approximate times)
<b><u>Race 2</u></b>	Superbike Race (6 laps)	
<b><u>Race 3</u></b>	Supertwin Race (4 laps)	
<b><u>Race 4</u></b>	Superstock Race (6 laps)	
<b><u>Race 5</u></b>	NW200 Superbike Race (6 laps)	

*Any amendments to the road closing schedule will be notified in due course.*

## **Supertwin Technical Regulations**

All items not mentioned in the following articles must remain as originally produced by the Manufacturer for the approved machine. Everything that is not authorised and prescribed in these rules is strictly forbidden. All motorcycles must comply in every respect with all the requirements for racing as specified in the Technical Regulations, unless it is equipped as such on the approved machine.

Any four stroke twin cylinder motorcycle available for purchase to the general public for road use with a water-cooled engine up to 700cc may be used provided it adheres to the following regulations. Capacity can be increased to 700cc on older models by increase bore and/or stroke but must not exceed 700cc. Eligible machines must be, or have been available for sale to the general public and be homologated / Type approved for road use in the UK this class is for serial production machines only. One off or prototype machines are not permitted. Older models may be updated with genuine parts found on a newer version of the same model and newer models may use parts from older machines.

### **Approved Manufacturers/chassis**

Kawasaki ER650/Z650

Suzuki SV650

Paton S1-R

Yamaha 07/ R7

Aprilia RS660

Other manufacturers/chassis will be approved at the discretion of the MCUI Technical committee and update bulletins issued during the season once approved by road race/Short circuit commission.

### **HANDLE BAR LEVERS:**

**Motorcycles must be equipped with a brake lever protection, intended to protect the handlebar brake lever from being accidentally activated in case of collision with another motorcycle.**

#### **1. Frame and Swing Arm:**

- Frame must be made by the manufacture from the homologated machine. Swinging arm can be changed or modified to a different model from the same manufacturer. Rear subframe can be made detachable from the main frame by means of repositioned lugs mounting brackets. Sub frame material can be steel alloy construction but not composite carbon fiber.

#### **2. Suspension:**

- Forks may be changed, modified or replaced. Fork yokes/triple clamp may be changed. Original internal parts of the fork may be modified or replaced. Aftermarket damper kits or valves may be installed. Fork springs may be replaced. Fork caps may be modified or replaced beyond the approved standard to allow external adjustments. Steering damper may be added or changed.
- Rear suspension unit can be changed or modified, but the original attachment to the frame and swing arm must remain as approved.

### **3. Brakes:**

- Front and rear brake discs may be changed. Only ferrous materials are allowed for brake discs.
- Front and rear brake calipers may be changed or modified. Front and rear brake pads may be changed.
- Front and rear master cylinders may be changed.
- Front and rear hydraulic brake lines may be changed. The split of the front brake lines for both front brake calipers must be made above the lower fork bridge (bottom yoke).

### **4. Wheels and Tyres:**

- Wheels may be replaced. Carbon fibre or composite wheels are not permitted.
- Wheel rim diameter and width are free
- Slick or molded tyres may be used.
- Tyres - After consultation with the MCUI Technical Committee regarding the 2020 tyre regulations for race classes that call for a treaded tyre that state. Michelin Tyre PLC are in agreement with the MCUI that while the Power Supermoto tyres are clearly a treaded tyre, and are not a cut slick, they do not comply with the FIM stated definition of treaded dry weather tyres which reads: *“ Tyres V or Z rating must be used. Only tyres on general sale to the public as road legal fitments will be permitted. The depth of the tyre tread must be at least 2.5 mm, over the whole tyre tread (pattern) width, at pre-race control. The tyre must have an “E” mark and/or DOT (American Department of Transportation) approval and the DOT number must appear on the tyre sidewall.”*

### **5. Controls:**

- Footrest and foot controls may be replaced or relocated but brackets must be mounted to the frame at the original mounting points.
- Handlebars, hand controls and cables may be altered or replaced. Engine starter switch and kill switch must be located on the handlebars and must be operational at technical checks.

### **6. Bodywork, tank, fairing and seat unit:**

- Fairing, mudguards and seat unit may be altered or replaced. All machines must run with a full fairing fitted.
- Windscreen, if fitted, may be replaced with transparent material only.
- The original instruments and fairing brackets may be removed, replaced or added to.
- The petrol tank capacity may be increased to no greater than 20 litres but the silhouette must look the same. The unleaded baffle in the tank may be removed and the filler replaced. Fuel tank materials may be changed, (steel / aluminum / titanium). The use of carbon composite or plastic fuel tanks are not permitted unless they are as fitted to the standard motorcycle and remain unmodified, the fuel tank breather must vent via a non-return valve into a catch tank with a minimum capacity of 250cc. This must be visible so it can be checked at Technical checks
  - The position of the tank mounting points on the frame must remain as standard. Fuel tank must contain fire retardant material (open celled mesh i.e. explososafe) 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.

### **7. Battery:**

- The size and type of the battery may be changed and relocated.

## 8. Engine:

- Bore and Stroke must remain as per the standard machine \*Does not apply to Kawasaki ER650/Z650, Suzuki SV650 as these models engine capacity can be increased to 700cc by altering bore and stroke. Original OEM cylinder head, rods, pistons, valves, cylinders may be modified, polished or lightened. Gas flow modifications normally associated with individual tuning is permitted. Compression ratio of the engine maybe changed. Valves may be modified or changed Capacity must not exceed the manufacture road model. Pistons may be replaced. Con rods may be modified or replaced but the material must be as approved and the rods must be the same weight or heavier than standard. Crankshaft may be modified or changed but be no lighter than that used on the standard machine .Camshaft timing may be changed by the slotting of cam sprockets or by pressing on at a different timing. Cam lift and dwell is free. The thermostat may be removed from the housing to aid cooling if required Throttle bodies may be changed, bored out or polished and modified. The use of multiple injectors per cylinder is allowed. The Aprilia RS660 throttle bodies and injectors must remain as homologated. No modifications are permitted with the exception of removal or fixing the position of any secondary butterflies only. The Yamaha MT-07/R7 is permitted to modify/bore out standard throttle bodies. Injectors may be changed. Dual injectors are not permitted.
- It is not allowed to add a pump used to create a vacuum in the crankcase.
- If a vacuum pump is installed on the approved motorcycle then it may only be used as approved.
- \*The Aprilia RS660 to have a RPM limit of 11,500RPM.

650cc machines	11,000 RPM
651cc to 700cc machines*	11,000 RPM
- Machines will be tested on the Dyno during practice and selected machines post-race.
- Air box may be modified or replaced.
- All machines must have a closed breather system. All oil breather lines must be connected and discharge in the air box only, the lines must discharge above the throttle bodies. They cannot discharge into the inlet tract or the exhaust air inlet system. The breather line must go engine to air box direct or engine catch tank to air box. All connections must be sealed so there are no direct atmosphere emissions
- 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 material, such as aluminum alloy, stainless steel, steel, titanium or composite materials.
- Plates or crash bars made from aluminum or steel are also permitted all these covers must be fixed properly and securely

## 9. Transmission:

- Gearbox may be changed or modified
- Additions to the gearbox or selector mechanism, such as quick shift systems are permitted.
- Clutch springs, friction and drive plates may be replaced.
- The use of slipper clutches is permitted.
- Front and rear external drive sprockets, chain pitch, width and length can be changed.
- Secondary covers are required to be fitted over the crank cases.

## 10. Electrics:

- The alternator may be modified or changed.
- The engine must start using the standard onboard electric start.
- The original wiring harness may be modified.

## 11. Exhaust System:

- Exhaust pipe and silencers may be altered or replaced from those fitted to the approved motorcycle.

The number of final exit(s) to the exhaust may be altered from that of the approved machine. Wrapping of the exhaust systems is permitted.



**12. Fasteners:**

- Standard fasteners may be replaced with fasteners of any material and design. The strength and design must be equal to or exceed the strength of the standard fastener it is replacing for structural applications. The use of titanium in 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. Aluminum fasteners may only be used in non- structural locations.

**13. The following items MUST BE Removed:**

- Headlamp, rear lamp and turn signal indicators. Rear view mirrors, horn, license plate bracket, tool box, helmet hooks, luggage carrier hooks, passenger foot rests, passenger grab rails, safety bars, center and side stands must be removed

**14. The following items MAY BE Removed:**

- Instruments, instrument brackets and associated cables, horn, license plate brackets, tool kits, tachometer, speedometer and wheel spacers, radiator fan and wiring, passenger foot rests, passenger grab rails and upper chain guard.

**15. Chain Guards:**

- A guard must be fitted in such a way as to prevent trapping between the lower drive chain run and the final drive sprocket at the rear wheel.

**16. Fuel:**

- Only control fuel is permitted as supplied by Euro M- Sport Fuels at the event. Fuel details are contained in Pages 10 & 11 of the Supplementary Regulations.

**17. Radiator and Oil Cooler:**

- The original radiator and oil cooler may be replaced. An oil cooler can be added if not fitted. The use of coolants is prohibited, water only to be used.

**18. Minimum Weight :**

At any time during the event, the weight of the whole machine (including the fuel tank and its contents) must not be less than the minimum weight.

Weight limit for all machines in the Supertwin class is 150kg

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

**REAR SAFETY LIGHT:**

**All motorcycles must have a Functioning Red Light mounted at the rear of the seat to be used during wet races or in low visibility conditions as declared by Clerk of Course.**

**The rear safety light must comply with the following;**

- a) The lighting direction must be parallel to the centre line of the motorcycle (running direction) and must be clearly visible from the rear, at least 15 degrees to both the right and left sides of the centre line of the motorcycle.
- b) It must be safely mounted on the very end of the seat/rear bodywork and approximately on the centre line of the motorcycle. In case of dispute over the mounting position or visibility of the Rear Safety Light, the decision of the Technical Steward or Scrutineer will be final.
- c) The power output/luminosity must be equivalent to approximately 10-15W (incandescent) or 3- 5W (led).
- d) The light must be able to be switched on and off.

# **SUPERSPORT TECHNICAL RULES**

## **SUPERSPORT TECHNICAL REGULATIONS**

Machines competing in Supersport at an MCUI sanctioned event must comply with the MCUI SUPERSPORT REGULATIONS. These are as follows and are correct as of the printing of these regulations but which are subject to any amendments made by the MCUI which will be issued by means of an MCUI Technical Bulletin.

All items not mentioned in the following articles must remain as originally produced by the Manufacturer for the homologated machine. Everything that is not authorised and prescribed in these rules is strictly forbidden.

### **1. Machine Homologation**

- **All motorcycles must comply in every respect with all the requirements for racing as specified in the** Technical Regulations, unless it is equipped as such on the homologated machine. The appearance from both front, rear and the profile of motorcycles must (except when otherwise stated) conform in principle to the homologated shape (as originally produced by the manufacturer). The appearance of the exhaust system is excluded from this rule. The displacement capacities must remain at the homologated size. Modifying the bore and stroke to reach class limits is not allowed. Engine and chassis must be from the same homologated make/model and use wiring, ecu and injection/fuelling system for the specific homologated engine

### **2. Balancing various motorcycle concepts**

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

Authorised parts and restrictions will be documented in the MCUI Authorised Parts list.

The authorised parts list supersedes all the following regulations.

### **3. Displacement Capacities:**

Over 400cc up to 600cc 4 Stroke 4 cylinders

Over 600cc up to 636cc 4 Stroke 4 cylinders

Over 500cc up to 800cc 4 Stroke 3 cylinders

Over 700cc up to 955cc 4 Stroke 2 cylinders

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

Machines outside of these classifications will be considered upon application to the MCUI, if approved these machines will be known as Supersport Next Generation Machines. They must be equipped with a Ride by Wire throttle system (OEM or as part of a compulsory kit). If approved these machines will be known as Supersport Next Generation Machines. Manufacturers may resubmit currently homologated machines as Supersport Next Generation.

The Specification of these machines will follow the FIM Supersport World Championship regulations unless superseded by the MCUI Authorised Parts list.

### **4. Minimum Weights:**

The minimum weights will be: 600 cc four cylinders 161 kg

The minimum weights will be: 636 cc four cylinders 161 kg

The minimum weights will be: 675 cc three cylinders 161 kg

The minimum weights will be: 750 cc two cylinders 161 kg (ICC December 2019)

The minimum weight will apply to the motorcycle only.

There will be no weight limits with regard to the rider or combined machine / rider for Supersport

Ducati Panigale V2*	166 kg
Honda CBR600RR	161kg
Kawasaki ZX-6R	161kg
Kawasaki ZX-636R**	161kg
MV Agusta F3	161kg
MV Agusta F3 800*	161kg
MV Agusta F3 Superveloce*	161kg
Suzuki GSX-R600	161kg
Triumph 675R	161kg
Triumph ST765RS*	161kg
Yamaha YZF-R6	161kg

\*Next Generation

\*\*Supersport Dispensation

At any time during the event, the weight of the whole machine (including the fuel tank and its contents) must not be less 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 checked machines will be weighed in the condition they were at the end of the race.

The established weight limit must be met in the condition the machine finished the race. Nothing can be added to the machine including water, oil, fuel or tyres.

During any qualifying session every rider may be asked to submit his motorcycle to a weight control in any case the rider and team must comply with this request.

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

#### **5. Induction Tract Restriction:**

- Carburation instruments must remain as homologated.

#### **6. Frame Body and Rear sub-frame:**

- Frame must remain as originally produced by the manufacturer for the homologated machine.
- Holes may be drilled on the frame only to fix approved components (i.e. fairing brackets, steering damper mount).
- 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 can be added or removed from the frame body.
- All motorcycles must display a vehicle identification number on the frame body (chassis number).
- Engine mounting brackets or plates must remain as originally produced by the manufacturer for the homologated machine.
- 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, non-stressed protruding brackets may be removed if they do not affect the safety of the construction or assembly. Bolt-on accessories to the rear sub-

frame may be removed.

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

### **7. Front Forks:**

- Forks must remain as originally produced by the manufacturer for the homologated machine.
- Standard original internal parts of the forks may be modified or changed. No aftermarket or prototype electronic ally-controlled suspensions can be used. If original electronic suspensions are used, they must be completely standard (any mechanical or electronic part must remain as homologated). The original electronic system must work properly in the event of an electric/electronic failure otherwise it cannot be homologated for FIM/MCUI competitions.
- After market damper kits or valves may be installed. Fork springs may be modified or replaced.
- Fork caps may be modified or replaced to allow external adjustment. They may extend the clamping area of the fork leg a maximum of 18mm above the standard fork tube. The fork 'drop' must never be set allowing the fork to be submerged in the top yoke/clamp. The full clamping area of the top yoke/clamp must be used.
- Dust seal can be modified, changed or removed if the fork is totally oil-sealed.
- The original surface finish of the fork tubes (stanchions, fork pipes) may be changed. Additional surface treatments are allowed.
- The upper and lower fork clamps (triple clamp, fork bridges) must remain as originally produced by the manufacturer on the homologated machine.
- Steering damper may be added or replaced with an aftermarket damper.
- The steering damper cannot act as a steering lock limiting device.

### **8. Rear Fork (Swing arm)**

- The rear fork must remain as originally produced by the manufacturer for the homologated machine. A chain guard must be fitted in such a way to reduce the possibility that any part of the riders' body must 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 machine.
- Rear axle chain adjuster can be modified or changed.
- 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.

### **9. Rear Suspension Unit:**

- Rear suspension unit can be changed or modified. The original attachments of the frame and rear fork must be as homologated.
- Rear suspension unit spring(s) may be changed. No aftermarket or prototype electronic ally-controlled suspensions can be used. If original electronic suspensions are used, they must be completely standard (any mechanical or electronic part must remain as homologated).

- The original electronic system must work properly in the event of an electric/electronic failure otherwise it cannot be homologated for FIM/MCRCB competitions.
- Rear suspension linkage must remain as originally produced by the manufacturer for the homologated machine.

#### **10. Wheels:**

- Wheels must remain as originally produced by the manufacturer at the time of sale into the dealer/distributor network for the homologated machine. Carbon wheels are not permitted
- Any inner tube (if fitted) or inflation valves may be used.
- Wheel balance weights may be discarded, changed or added.
- The speedometer drive may be removed and replaced with a spacer.
- If the original design included a cushion drive for the rear wheel, it must remain as originally produced for the homologated machine.
- Front and rear wheel axles must remain as originally produced by the manufacturer for the homologated machine.
- Wheel diameter and rim width must remain as originally homologated.

#### **11. Brakes:**

- Front and rear brake discs may be changed but must fit the original calliper and mounting. The ventilation system must remain as originally produced by the manufacturer for the homologated machine. Internally ventilated discs are not allowed if not homologated in the original machine.
- The brake disc carriers may be changed, but must retain the same off set and same type of mounting to the wheels.
- Replacement brake discs must be of ferrous material.
- Front and rear brake callipers as well as all the mounting points and mounting hardware (mount, carrier, hanger) must remain as originally produced by the manufacturer for the homologated machine.

The front brake master cylinder can be the originally fitted and homologated part with no

- modification allowed, or may be replaced with a suitable aftermarket unit.

The rear brake master cylinder can be the originally fitted and homologated part with no

- modification allowed, or may be replaced with a suitable aftermarket unit.
- The use of thumb or hand brakes is allowed in addition to or instead of the foot operated system. An adaptor may be fitted to the reservoir input of the OEM master cylinder to facilitate this.
- Front and rear hydraulic brake lines may be changed. The brake fluid reservoir may be replaced and/or repositioned. Quick connectors may be used. The split of the front brake lines for both front brake callipers must be made above the lower 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 ducts are not allowed.
- In order to reduce the transfer of heat to the hydraulic fluid it is permitted to add metallic shims to the calipers, between the pads and the calipers, and/or to replace light alloy pistons with steel pistons made by the same manufacturer of the caliper.
- Motorcycles must be equipped with brake lever protection, intended to protect the handlebar brake lever from being accidentally activated in case of collision with another motorcycle.

**12. Tyres:**

- Slick tyres or molded tyres may be used.

**13. Foot Rest/Foot Controls:**

- Foot rest/foot controls may be relocated but brackets must be mounted to the frame at the original mounting points.
- Foot rests may be rigidly mounted or a folding type which must incorporate a device to return them to the normal position.
- The end of the foot rest must have at least an 8 mm solid spherical radius. (see diagram A & C).
- Non folding footrests must have an end (plug) which is permanently fixed, made of aluminium, plastic, Teflon® or an equivalent type material (minimum radius 8mm). The plug surface must be designed to reach the widest possible area. The Technical Director has the right to refuse any plug not satisfying this safety aim

**14. Handle Bars and Hand Controls:**

- Handle bars, throttle assembly and associated cables, hand controls and levers may be replaced (does not include brake master cylinder).
- Handle bars and hand controls may be relocated.
- Electric starter switch and engine stop switch must be located on the handle bars.
- Throttle controls must be self-closing when not held by hand. Cable operated throttles (grip assembly) must be equipped with both an opening and a closing cable including when actuating a remote drive by wire grip/demand sensor.

**15. Fairing/Body Work:**

- Fairing, front mudguards and body work must appear to be as originally produced by the manufacturer for the homologated machine.
- Fairing and body work may be replaced with cosmetic duplicates of the original parts. The material may be changed. The use of carbon fiber or Kevlar® materials is not allowed.
- Size and dimensions must be the same as the original parts without any addition or subtractions of design elements.
- Wind screen may be replaced with transparent material only.
- The original combination instrument/fairing brackets may be replaced. All other fairing brackets may be altered or replaced.
- The original air ducts running between the fairing and the air box may be altered or replaced.
- The original air ducts into the airbox may be altered or replaced.
- For Supersport Next Generation: The original air ducts running between the fairing and the airbox may only be replaced by exact cosmetic replicas of the original parts.
- 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.
- Minimal changes are allowed to permit the use of an elevator (stand) for wheel changes and to add a small plastic protective cone to the frame or engine.
- Front mudguard must appear as originally supplied by the manufacturer for the homologated machine.
- Front mudguard may be replaced with cosmetic duplicates of the original parts.

- Front mudguard may be spaced upward for increased tyre clearance.
- Rear mudguard fixed on the swing-arm may be replaced with cosmetic duplicates of the original parts.
- Rear mudguards fixed on the swing-arm that incorporate the chain guard can be modified to accommodate larger diameter rear sprockets.
- The existing rear mudguard under the seat may be removed. A mudguard may be fitted directly onto the swing-arm (it may not cover more than 120 degrees of the wheel).

#### **16. Fuel Tank:**

- It is permitted to modify the standard manufacturers tank provided a silhouette of the tank remains as homologated and the capacity does not exceed 24 litres.
- Fuel tanks with tank breather pipes must be fitted with non-return valves that discharge into a catch tank with a minimum volume of 250 cc made of a suitable material. Fuel caps may be changed. Fuel caps when closed, must be leak proof. Additionally, they must be securely locked to prevent accidental opening at any time.

#### **17. 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 machine.
- The top portion of the rear body work around the seat may be modified to a solo seat.
- Holes may be drilled in the seat or rear cowl to allow additional cooling. Holes which are bigger than 10mm must be covered with metal gauze or fine mesh. Mesh must be painted to match the surrounding material.
- The appearance from both front rear and profile must conform in principle to the homologated shape.
- All exposed edges must be rounded.

#### **19. Wiring Harness**

- The wiring harness may be altered or replaced. Additional wiring harnesses may be added. Cutting of the wiring harness is allowed.

#### **19. Battery:**

- The size and type of battery may be changed and relocated. Additional batteries may be added.

#### **20. Radiator and Oil Coolers (including Supersport NG):**

- The radiator may be changed only if it fits in the standard location and does not require any modifications to the main frame or to the fairings' outer appearance.
- Modifications to the existing oil cooler are allowed only if it does not require any modifications to the main frame or to the fairings' outer appearance. A heat exchange (oil/water) can be exchanged by oil cooler.
- Radiator fan and wiring may be changed, modified or removed.
- Additional oil coolers are not allowed.
- Oil cooler must not be mounted on or above the rear mudguard.

#### **21. Air Box (including Supersport NG):**

- The air box must remain as originally produced by the manufacturer on homologated machine.

- The air filter element may be removed or replaced.
- The air box drains must be sealed.
- All motorcycles must have a closed breather system. The oil breather line must be connected and discharge in the airbox.
- The original air ducts running from the fairing to the air box may be altered or replaced.
- The original air ducts to the airbox may be altered or replaced.

## **22. Fuel Injection System:**

- Fuel injection systems refer to throttle bodies, fuel injectors, variable length intake tract devices, fuel pump and fuel pressure regulator.
- Throttle bodies must be standard units as on the homologated model. Throttle bodies intake insulators may be modified. Homologated model in section 22 refers to engine and not chassis for clarification
- The fuel injectors must be standard units as on the homologated motorcycle. Bell mouths may be altered or replaced from those fitted by the manufacturer on the homologated machine.
- Butterfly cannot be changed or modified.
- Fuel pump and fuel pressure regulator must remain as homologated.
- The fuel injection management computer chip (EPROM) may be changed. The use of flash memory ("flash RAM") for fuel injection mapping is allowed.
- Secondary throttle butterflies, valves and shafts may be removed or fixed in the open position and the electronics may be disconnected or removed.

## **23. Fuel Supply (including Supersport NG):**

- Fuel pump and fuel pressure regulator must remain the same as on the homologated motorcycle.
- The fuel pressure must be as homologated.
- Fuel lines from the fuel tank up to the injectors (fuel hoses, delivery pipe assembly, joints, clamps, fuel canister) may be replaced.
- The fuel line(s) going from the fuel tank to the fuel injection system must be located in such a way that they are protected from possible crash damage.
- Fuel level sensors may be removed or fixed in position.
- Quick connectors or dry brake quick connectors may be used. Fuel vent lines may be replaced. Fuel filters may be added.

## **24. Cylinder Head:**

**For Supersport Next Generation: No modifications may be made to the engine unless noted in the text or in the MCUJ Authorised Parts List.**

- Cylinder head must be as homologated. The following modifications are allowed.
- Grinding of the cylinder head surface on the side of the gasket.
- Modifications of the inlet and exhaust ports by taking off or adding material (welding is forbidden).
- Original homologated valves guides may be cut or modified, but only on the intake or exhaust



port side.

- Polishing of the combustion chamber.
- Original valve seats must be used, but modifications are allowed to the shape.
- Compression ratio is free, but the combustion chamber can be modified only by taking material off. It is forbidden to add any material to the cylinder head unless as described above.
- The compression ratio is free. The combustion chamber may be modified.
- Rocker arms (if any) must remain as homologated (material and dimensions).
- Valves may be altered or replaced and the material can be changed, but maximum diameters and minimum weights must remain as homologated. The use of titanium valves is permitted only if the homologated machines are equipped with such kind of valves. Valve springs can be changed. Valve spring retainers may be replaced or modified, but their weight must be the same or higher than the original ones.

#### **25. Camshaft:**

- The method of drive must remain as homologated.
- The duration is free but the lift must remain as homologated.
- The cam chain or cam belt tensioning device(s) are free.
- 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.

#### **26. Cam Sprockets:**

- Cam sprockets can be modified or replaced to allow the degreeding of camshafts.

#### **27. Crankshaft:**

- Crankshaft must remain as homologated without modification.
- Polishing and lightening is not allowed.
- Modifications of the flywheels are not allowed.

#### **28. Oil Pumps, Water Pumps and Oil Lines including Supersport NG:**

Oil Pump (Supersport only) modifications are allowed but oil pump housing, mounting points and oil feed points must remain as found on the homologated machine.

Supersport NG: Oil pump must remain as found on the homologated machine.

No modifications are allowed.

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

Water pumps no modification are allowed.

#### **29. Connecting Rods:**

- Connecting rods must remain as homologated. Polishing and lightening is not allowed.

#### **30. Pistons:**

- Pistons must remain as homologated. Polishing and lightening is not allowed.

#### **31. Piston Rings:**

- Piston rings must remain as homologated. No modifications are allowed.

**32. Piston Pins and Clips:**

- Piston pins and clips must remain as homologated. No modifications are allowed.

**33. Cylinders:**

- Cylinders must remain as homologated. Only the following modifications to the cylinders are allowed. Cylinder head gasket surface may be machined to allow the adjustment of compression ratio or resurfacing to repair a warped cylinder surface deck.
- Homologated materials and castings for cylinders must be used.
- The surface finish of the cylinder bore must remain as homologated.
- Cylinder capacity must remain at the homologated size.

**34. Crankcase and all other Engine Cases: (i.e. ignition case, clutch case).**

- 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.
- Other engine cases must be made of the homologated material.
- 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 composite materials, type carbon or Kevlar®, aluminium or steel plates and/or bars are also permitted. All these devices must be designed to be resistant against sudden shocks and must be fixed properly and securely.
- Holes may be added in dry clutch covers to allow additional cooling.
- Engine case guards in the form of strengthened engine side covers may be installed. These covers must be no lighter in weight than the standard part.
- The countershaft cover may be removed.
- The addition of a crankcase protector at the countershaft is allowed.

**35. Transmission/Gearbox (including Supersport NG):**

- The gearbox must be as produced by the original manufacturer for the homologated machine with the homologated ratios, but the first gear ratio may be changed. The gears may have strengthening, under cutting and super finishing. The number of gears must remain as homologated.
- Primary gears must remain as homologated.
- Quick-shift systems are allowed.
- Countershaft sprocket, rear wheel sprocket, chain pitch and size can be changed.

**36. Clutch (including Supersport NG):**

- Clutch type (wet or dry) and the way of operation (by cable or hydraulic) must remain as homologated.
- An aftermarket slipper clutch may be used but the type (Wet or Dry) and the operating method (Cable or Hydraulic) must remain as homologated.

- Friction and drive discs may be changed. Clutch springs may be changed.
- The clutch basket (outer) may be reinforced.
- The use of electro-mechanical or electro-hydraulic actuating systems are not allowed.

### **37. Electrics and Electronics**

The complete electronics system must be either:

**i. For ‘Supersport’ Machines See art (A) below (may include World Supersport Control ECU)**

**ii. For ‘Supersport Next Generation’ Machines see art (B) below**

#### **(A) Supersport Electrics and Electronics:**

Spark plugs and plug caps and wires may be replaced.

No additional electronics forming control systems will be allowed (i.e. external ignition/fuel cut traction control systems, engine throttle blipper servo motors or ignition expanders are allowed).

The only systems allowed are manufacturers “kit ECU”, Standard ECU with fuelling module only or the series option ECU which is Motec M130 with control software/firmware provided by (Motec/MSVR).

No traction control is allowed, any ECU with this capability must have the functionality disabled.

If the manufacturers “kit ECU” is used or Series Option ECU (Motec M130) a maximum rev limit will be prescribed by MCRCB/MSVR whose decision is final, this may be checked at any time during an event.

Supersport manufacturers kit ECU authorised by the MCRCB/MSVR is subject to the manufacturer providing the organiser checking tools and other means of verification for compliance.

#### **Additional Equipment**

- Additional electronic hardware equipment not on the original homologated motorcycle may be added (e.g. data acquisition, one rear wheel speed sensor for data logging ONLY, computers, recording equipment).
- Note: No front wheel speed sensor is permitted in any circumstances for supersport machines, **Supersport Next Generation may use a front wheel speed sensor.**
- The addition of a device for infra red (IR) transmission of a signal between the racing rider and his team, used exclusively for lap timing, is allowed. The addition of a GPS unit for lap timing/scoring purposes is allowed.
- Telemetry is not allowed.
- Connectors and switches are free.

#### **(B) Supersport Next Generation Electrics and Electronics:**

The ECU and Dashboard must be the Supersport control units as documented in the MCRCB Authorised parts list. The sole official supplier of the Control Electronic System is Solo Engineering. [www.soloengineering.com](http://www.soloengineering.com), [sales@soloengineering.com](mailto:sales@soloengineering.com). Those parts are the WSS600\_A (MKE7) ECU and DAS-SOLOWSS3-D1 (ADU5).

- The firmware and manufacturer (engine) map must be declared eligible by the championship and from the Authorised parts list.
- The ECU must have the ‘FIM Settings’ section up to date at all times – it is the team’s responsibility to ensure that this is done.
- External quickshift modules/sensors may be fitted but may only provide a signal to the Control Supersport ECU

- No other external modules may be fitted except:
  - a. Part of a quickshifter where the module may only provide a signal to the control ECU.
  - b. Championship mandated devices (e.g. 2 way RF system).
  - c. Datalogger.
- 2 CAN connections must be made available for Championship devices. They must be located in the rear of the seat unit of the motorcycle. They must be connected to the ECU CAN bus and the TPMS system (if fitted) must be connected to the same bus. 12v power should be available switched by the main switch (not switched by the ignition switch). The devices may be championship mandated or nominated by the Chief Technical Officer
- Connector spec: JST 04R-JWPF-VSLE-S
  1. Ground
  2. CAN Lo
  3. CAN Hi
  4. 12v Main Switch
- The rain light must be powered by the ECU (as detailed in the harness schematics).
- The ECU may be freely located but must be fitted securely, in a damped mounting without vibration.
- During an event the Chief Technical Officer has the right to ask a team to substitute their ECU. The change has to be done before Sunday warm up.
- During an event the Technical Director or his appointed deputy has the right to read and save the teams calibration file, it will not be shared except for conformity checks with control electronics system partners, but may be used in Dyno tests.
- The following sensors must be connected directly to the ECU only and must be the original OEM sensors unless stated:
  - 1) Throttle position (multiple allowed)
  - 2) Map sensor, Map Sync (pressure sensor on the intake port used to synchronize the engine during the start)
  - 3) Airbox Pressure
  - 4) Engine pick-ups (Cam, crank)
  - 5) Twist grip position
  - 6) Front Speed (add only if not available OEM)\*
  - 7) Rear Speed (add only if not available OEM)\*
  - 8) Gearbox output shaft speed (if on OEM machine)
  - 9) Gear position
  - 10) Air pressure
  - 11) Water temperature
  - 12) Air temperature
  - 13) Tip-Over Switch (No lean angle – except from ECU) (all ECU's feature crash detection (by IMU).
- The following can be added (and not OEM sensors):
  1. Gear shift load cell / switch (Non-OEM parts must be from the Eligible Parts for Competition List (Shift controlled by ECU only)
  2. Lambda - Bosch LSU4.9 only (one sensor only).
  3. Fork position
  4. Shock position
  5. Front brake pressure
  6. Rear brake pressure

7. Fuel pressure (not temperature)
8. Oil pressure
9. Oil temperature
10. Switches (Left and right)
11. Rear TPMS Monitor (Temperature and Pressure, must be CAN)\*\*
12. Front TPMS Monitor (Temperature and Pressure, must be CAN)\*\*

\* The OEM phonic/speed sensor rings must be used (ZX636 for ZX6).

\*\* Must be from the Authorised parts list.

- The characteristics of eligible data logging systems must meet the following:
  1. The Data Logger unit must be available for sale to the public.
  2. The data logger may ONLY be connected to the CAN bus and to those sensors listed in section 5.2.8.9.3.II.
  
- Only the following may be connected directly to the logging system:
  - 1) GPS Unit (Lap timing and track position)
  - 2) Transponder / Lap time signal
  - 3) Rear tyre temperature (Infra-Red)(External)(Maximum 3)
  - 4) Any exceptions noted in MCRCB Authorised Parts List.
  - 5) Telemetry is not allowed.
  - 6) No remote or wireless connection to the motorcycle for any data exchange or setting is allowed whilst the engine is running or the motorcycle is moving.
  - 7) All shift lights must be only 'White'.
  - 8) If handlebar switches are replaced from those supplied in the kit then they must meet the specification documented on [www.soloengineering.com](http://www.soloengineering.com) their basic layout, switch function, position and colour must follow those supplied in the kit.
  - 9) Plug caps and coils must remain as homologated.
  - 10) Electric cables, harness, connectors, battery and switches are free but the harness must comply with the wiring schematic that is available from [www.soloengineering.com](http://www.soloengineering.com).
  - 11) Spark plugs and wires may be replaced.

### **38. Generator, Alternator, Electric Starter:**

Generator, alternator, electric starter. No alterations are allowed.

The electric starter must operate normally and always be able to start the engine during the practices and race.

### **39. Exhaust System (including Supersport NG):**

- Exhaust pipes and silencers may be modified or changed. Catalytic converters must be removed.
- The number of 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 Supersport will be 105 dB/A.
- Supersport Next Generation machines will have limitations on the exhaust specification defined

at the time of the balance test and specified in the Eligible Parts list for Competition. If an exhaust system manufacturer wishes to make eligible a system that does not match the Manufacturers defined specification (or point b) then they may pay to have the (Phase 2) balancing test performed with their system. Once approved the system and its map ID will be added the MCUI Authorised Parts List.

#### **40. Fasteners:**

- Standard fasteners may be replaced with fasteners of any material and design.
- Aluminium fasteners may only be used in non-structural locations.
- Titanium fasteners may be used in structural locations, but the strength and design must be equal to or exceed the strength of the standard fastener it is replacing.
- Special steel fasteners may be used in structural locations, but the strength and design must be equal to or exceed the strength of the standard fastener it is replacing.
- Fasteners may be drilled for safety wire, but intentional weight-saving modifications are not allowed.
- Fairing/bodywork fasteners may be changed to the quick disconnect type.

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

- Any type of lubrication, brake or suspension fluid may be used.
- Any type of spark plug and plug cap may be used.
- Bearings (ball, roller, taper, plain, etc.) of any type or brand may be used.
- Gaskets and gasket materials. For Supersport Next Generation Head and Base Gaskets will be specified in the Authorised Parts List.
- Painted external surface finishes and decals.

#### **42. The following items MAY BE removed:**

- Instrument and instrument bracket and associated cables.
- Emission control items (anti-pollution) in or around the air box (O2 sensors, air injection devices).
- Tachometer.
- Speedometer and related wheel spacers.
- Chain guard as long as it is not incorporated in the rear fender.
- Bolt on accessories on a rear sub frame.

#### **43. The Following Items MUST BE removed:**

- Headlamp, rear lamp and turn signal indicators (when not incorporated in the fairing). Openings 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).

#### **44. 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, oil lines, oil coolers, etc.)
- 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.
- Oil cooler must not be mounted on or above the rear mudguard.
- It is recommended that machines be equipped with a red light on the instrument panel. This light must flash in the event of oil pressure drop.

#### **45. Additional Equipment:**

- Additional electronic hardware equipment not on the original homologated motorcycle may be added (e.g. data acquisition, computers, recording equipment). The addition of a device for infra-red (IR) transmission of a signal between the racing rider and his team, used exclusively for lap timing, is allowed. The addition of a GPS unit for lap timing/scoring purposes is allowed. Telemetry is not allowed.

#### **46. Replacement and Repairs:**

- Where necessary, parts from an older or newer version of the same model maybe used.

#### **47. Chain Guards:**

- A guard must be fitted in such a way as to prevent trapping between the lower drive chain run and the final drive sprocket at the rear wheel.

#### **48. Fuel:**

- Fuel as per Technical Fuel regulations as per Chapter 12 within MCUI GCR's. (ICC December 2019)

### **ALL MACHINES MUST HAVE**

#### **51. Rear Safety Light:**

- All motorcycles must have a functioning red light mounted at the rear of the seat to be used during wet practice/races or in low visibility conditions as declared by the Clerk of the Course.
- The lighting direction must be parallel to the centre line of the motorcycle (running direction) and it must be clearly visible from the rear, at least 15 degrees to both the left and right sides of the centre line of the motorcycle.
- It must be safely mounted on the very end of seat/rear bodywork and approximately on the centre line of the motorcycle.
- The power output/luminosity must be equivalent to approximately 10-15W (incandescent) or 3-5W (led).
- The light must be able to be switched on and off.

#### **52. Handlebar Lever Protection**

- All motorcycles must be equipped with a brake lever protector

## **SUPERSTOCK TECHNICAL RULES**

**Everything that is not authorised and prescribed in this rule is strictly forbidden.**

- As the name Superstock implies, the machines used are allowed limited modifications. Most modifications that are allowed are only allowed for safety reasons.
- All machines must be homologated by the FIM for the 2022 Superstock homologated list.
- All machines must comply with all requirements of Road Racing as specified in the FIM regulations.
- The appearance from 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.

### **HANDLE BAR LEVERS:**

**Motorcycles must be equipped with a brake lever protection, intended to protect the handlebar brake lever from being accidentally activated in case of collision with another motorcycle.**

#### **1. Classes:**

- Over 750cc up to 1000cc 4-stroke 3 & 4 cylinders maximum
- Over 850cc up to 1200cc 4-stroke 2 cylinders maximum
- The displacement capacities must remain at the homologated size. Increasing the bore size to reach class limits is not allowed.

#### **2. Minimum Weight:**

- The FIM decides the minimum weight value for a homologated model as sold to the public by determining its dry weight. The dry weight of a homologated motorcycle is defined as the total weight of the empty motorcycle as produced by the manufacturer (after removal of fuel, vehicle number plate, tools and the main stand when fitted but with oil and radiator liquid at prescribed levels). To confirm the dry weight a minimum of three motorcycles are weighed and compared.
- The result is rounded off to the nearest digit.
- The minimum weight value is determined by the dry weight value (in Kg.) minus 8% but in any case the minimum weight cannot be less than **170kg**
- In the final inspection at the end of the race, the checked machines will be weighed in the condition they were at the end of the race
- At the time of the event, the weight of the whole machine (including the tank) must be not less than the minimum weight.
- During the practice and qualifying sessions every rider may be asked to submit his motorcycle to a weight control in the pit lane. (This will be done in such a way to disturb the rider or team as little as possible, but in any case the rider and team must comply with these checks).

#### **3. Number and Background Colours:**

- The number and background, including the number and the colours must conform to the MCRCB General Technical Regulations.

#### **4. Fuel:**

- Only control fuel is permitted as supplied by Euro M-Sport at the event. Fuel details are



contained in Pages 10 & 11 of the Supplementary Regulations.

#### **5. Machine Specifications:**

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

#### **6. Frame Body and Rear Sub Frame:**

- Frame must remain as originally produced by the manufacturer for the homologated machine. The sides of the frame-body may be covered by a protective part made of composite material.
- These protectors must fit the form of the frame.
- Nothing can be added by welding or removed by machining from the frame body.
- All motorcycles must display the manufacturers' vehicle identification number on the frame body
- (Chassis number).
- Engine mounting brackets or plates must remain as originally produced by the manufacturer for the homologated machine.
- Rear sub frame may be changed or altered but the type of material must be as homologated or be of a higher specific weight..
- Additional seat brackets may be added but none may be removed.
- Bolt on accessories to the rear sub-frame may be removed.
- The paint scheme is not restricted but polishing the frame body or the sub frame is not allowed.

#### **7. Front Forks:**

- Forks structure (spindle, stanchions, bridges, stem, etc.) must remain as originally produced by the manufacturer for the homologated machine.
- Standard original internal parts of the forks may be modified. After market damper kits or valves may be installed.
- No aftermarket or prototype electronically-controlled suspension parts may be used. If original electronic suspensions are used, they must be completely standard (any mechanical or electronic part must remain as homologated).
- The original electronic system must work properly in the event of an electric/ electronic failure otherwise it may not be homologated for FIM competitions.
- Electronic forks may have their complete internal parts removed and be replaced with a conventional damping system and then will be considered as a mechanical fork
- Fork caps that have been modified or replaced to form extensions to the fork stanchion tubes for the purpose of extending their length, are not allowed.
- Dust seals may be modified, changed or removed providing the fork remains totally oil-sealed.
- Any quality and quantity of oil may be used in the front forks.
- 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 machine.
- Steering damper may be added or replaced with an aftermarket damper. The steering damper cannot act as a steering lock limiting device.

#### **8. Rear Fork (Swing arm):**

- Every part of the rear fork must remain as originally produced by the manufacturer for the homologated machine (including rear fork pivot bolt). You must use aftermarket rear chain adjusters.
- Rear wheel stand brackets may be added to the rear forks. Brackets must have

rounded edges (with a mushroom shape). Fastening screws must be recessed.

- For safety reasons, it is compulsory to use a chain guard fitted in such a way as to prevent trapping between the lower chain run and the final driven sprocket at the rear wheel.

#### **9. Rear Suspension Unit:**

- Rear suspension unit (shock absorber) may be modified or replaced but the original attachments to the frame and rear fork (swing arm) must be used and the rear suspension linkage must remain as originally produced by the manufacturer for the homologated machine.
- Rear suspension unit spring may be changed.
- No aftermarket or prototype electronically controlled suspensions can be used. If original electronic suspensions are used, they must be completely standard (any mechanical or electronic part must remain as homologated). The original electronic system must work properly in the event of an electric/electronic failure otherwise it cannot be homologated for FIM competitions.

#### **10. Wheels:**

- Wheels must remain as originally produced by the manufacturer at the time of sale into the dealer/distributor network for the homologated machine.
- No Carbon fibre composite wheels are allowed, only aluminum alloys wheels are permitted to be used.
- The speedometer drive may be removed and replaced with a spacer.
- If the original design included a cushion drive for the rear wheel, it must remain as originally produced for the homologated Machine.
- No modifications of the wheel-axles or any fixing and mounting points for front and rear brake caliper are authorised.
- Spacers can be modified. Modifications to keep spacers in place are permitted.
- Wheel diameter and rim width must remain as originally homologated.

#### **11. Brakes:**

- Brake disks can be replaced by aftermarket discs which comply to following rules :
- Brake discs and carrier must retain the same material as the homologated disc and carrier. The outside and inner diameter of the brake disc must not be larger than the same on the homologated disc.
- The thickness of the brake disc may be increased and it must fit into the homologated brake caliper without any modification. The number of floaters is free.
- The fixing of the carrier on the wheel must remain the same like on the homologated disc. Anti-lock system (ABS) can be disconnected and its ECU can be dismantled.
- The ABS rotor wheel can be deleted, modified or replaced.
- The front and rear brake caliper (mount, carrier, hanger) must remain as originally produced by the manufacturer for the homologated machine.
- The rear brake caliper bracket may be mounted 'fixed' on the swing-arm, but the bracket must maintain the same mounting (fixing) points for the caliper as used on the homologated machine.
- A modification of these parts is authorised. The swing-arm 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 front and rear master cylinder must remain as originally produced by the manufacturer for the homologated machine. Front and rear brake fluid reservoir may be changed with an aftermarket product
- Front and rear hydraulic brake lines may be changed.
- The split of the front brake lines for both front brake calipers must be made above the lower fork bridge (lower triple clamp).
- “Quick” (or “dry-brake”) connectors in the brake lines are authorised.
- Front and rear brake pads may be changed. Brake pad locking pins may be modified. Additional air scoops or ducts are not allowed.

#### **12. Tyres:**

- Slick or molded tyres may be used.
- The use of full wet tyres is allowed only when a race or practice has been declared “wet”, the use of a special tyre, commonly known as a “full wet” tyre, is allowed. These tyres do not need to carry the “E” or “DOT” mark. Hand-cut slicks are not allowed.
- The use of tyre warmers is allowed.

#### **13. Footrest/Foot Controls:**

- Footrests/foot controls may be relocated but brackets must be mounted to the frame at the original mounting points. Their two original mounting points of fixture (on foot controls and on the shift shaft) must be maintained.
- Footrest may be rigidly mounted or a folding type which must incorporate a device to return them to the normal position.
- The end of the footrest must have an 8mm solid spherical radius.
- Non-folding metallic footrests must have an end (plug) which is permanently fixed, made of plastic, Teflon® or an equivalent type material (minimum radius 8mm).

#### **14. Handlebars and Hand Controls:**

- Handle bars may be replaced (does not include brake master cylinder). 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 but the connection to the throttle body and to the throttle controls must remain as homologated.
- Clutch and brake lever may be exchanged by an after-market model. An adjuster to the brake lever is allowed.
- Switches may be changed but electric starter switch the engine stop switch must be mounted on the right hand handle bar and be RED

#### **15. Fairing/Body Work:**

- 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 machine, 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.
- Overall size and dimensions must be the same as the original part.
- Wind screen may be replaced with the TT type, but must be made with transparent material only.
- 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 liters). The lower edge of openings in the fairing must be positioned at least 50 mm above the bottom of the fairing.

- Wings and Aerodynamic aids Wings and other aerodynamic aids will only be considered legal originally fitted to be homologated road specification machine in all of Europe, Japan and North America. For Race use the wings must follow the dimensions, profiles and positions of the homologated shapes exactly (+-1mm). For copies of the OEM parts the leading edges (including end plates) must have a minimum circumference of 4mm and must have a rounded end 8mm radius) or be enclosed/integrated into the fairing. The OEM parts may be used (as is) with the exception that the wing root and 10mm from the end face may be modified to allow mounting to the ( race) fairing. This may not be in form of an extension and the size of the wing will be measured with reference to the face of the wing route. The wing must be fitted in the same relevant position (excepting the tolerance allowed for the fairing and the angle of attack must be within +/-4 degrees of the original angle of attack relevant to the chassis. For active or dynamic aerodynamic parts ONLY the standard homologated mechanism may be used. The range of movement must be the same as that used in the homologated road machine in normal use- not the mechanical maximin.
- 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 must act as an oil contain that can hold at least half the total oil and coolant capacity. This device cannot exceed above a line drawn horizontally from wheel axle to wheel axle.
- 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.
- 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.
- Front mudguard may be replaced with a cosmetic duplicate and may be spaced up. Rear mudguard fixed on to the swing arm may be altered, changed or removed.

## **16. Fuel Tank**

- The unleaded filter baffle may be removed from the fuel tank.
- It is permitted to modify the standard manufacturers tank provided a silhouette of the tank remains as homologated and the capacity does not exceed 24 litres.
- Fuel tank filler cap may be changed and be leak proof, additionally they must be securely locked to prevent accidental opening at any time. Fuel tank must contain fire retardant material (open celled mesh i.e. explososafe)
- Fuel tanks with a tank breather pipes must be fitted with non-return valves that discharge into a catch tank with a minimum volume of 250cc made of a suitable material.

## **17. 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 machine.
- The top portion of the rear bodywork around the seat may be modified to a solo seat.
- The appearance from both front rear and profile must conform to the homologated shape.
- All exposed edges must be rounded.

## **18. Wiring Harness**

- The original wire-loom may be modified as indicated here after:
- The wiring loom may be replaced by the ‘kit’ wire harness loom, as supplied for
- The ECU Kit model, produced or approved by the Manufacturer of the motorcycle. The wiring loom and the key/ignition lock may be relocated or replaced.

- Cutting of the wiring harness is not allowed

**19. Battery**

- The battery may be replaced. If replaced, its nominal capacity must be equal to or higher than the homologated type.

**20. Radiator, cooling system and oil coolers**

- Protective meshes may be added in front of the oil and/or water radiator(s).
- The radiator tubes to and from the engine may be changed, but the system must be maintained. 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.

**21. Air Box**

- The air box must remain as originally produced by the manufacturer for the homologated machine but the air box drains must be sealed.
- The air filter element may be removed or replaced.
- All motorcycles must have a closed breather system. The oil breather line must be connected and discharge in the air box.
- No heat protection may be attached to the airbox

**22. 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.
- Air Funnels must remain as originally produced by the manufacturer for the homologated motorcycle.
- Butterfly valves cannot be changed or 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 only be 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.

**23. Fuel Supply**

- Fuel lines may be replaced but the fuel petcock must remain as originally produced by the manufacturer.
- Quick connectors or dry break quick connectors may be used.
- Fuel vent lines may be replaced.
- Fuel filters may be added.

**24. 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, rocker arms, tappets, springs and retainers must be as originally produced by the manufacturer for the homologated machine.
- Valve springs shims are not allowed.

**25. Camshaft**

- No modifications are allowed.

**26. Cam Sprockets**

- Sprockets may be slotting to allowed the adjustment of cam timing

**27. Crankshaft**

- No modifications are allowed (including polishing and lightening).

**28. 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.

**29. Connecting Rods**

- No modifications are allowed (including polishing and lightening).

**30. Pistons**

- No modifications are allowed (including polishing and lightening).

**31. Piston Rings**

- No modifications are allowed.

**32. Piston Pins and Clips**

- No modifications are allowed.

**33. Cylinders**

- No modifications are allowed.

**34. Crankcase and all other Engine Cases (i.e. ignition case, clutch case)**

- The original covers may be modified without modification to the position and dimensions of the covered parts.
- The crankcase/gearbox casing, ignition, clutch and generator covers may be protected by additional means i.e. protective covers made of stainless steel or carbon Kevlar composites.
- Engine case guards in the form of strengthened engine side covers may be installed. These covers must be constructed of the same material and be no lighter in weight than the standard material.<sup>29</sup>
- 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 of composite material, type injection moulded long glass fibre nylon, carbon or Kevlar approved by the FIM or MCRCB, aluminum or steel plates and / or bars are also permitted. All these devices must be designed to be resistant against sudden shocks and fixed properly and securely and cover a minimum of one third of the original cover.

**35. Transmission/Gearbox**

- An external quick-shift system on the gear selector (including wire and potentiometer) may be added.
- Other modifications to gearbox or selector mechanism are not allowed. Countershaft sprocket, rear wheel sprocket, chain pitch and size may be changed.
- The sprocket cover may be modified or eliminated.

### **36. Clutch**

- No modifications are allowed.
- Only friction and drive discs may be changed but their numbers must remain as original.
- Clutch springs may be changed.

### **37. Ignition / Engine Control System**

- The engine control unit (ECU) must be either :
- As Homologated and inner software may be changed.
- Or the ECU kit model (produced and/or approved by the machine Manufacturer) may be used. A special connector may be used to connect ECU and the original wire loom. The retail price of the full system (software included) must not be more than 1.5 times higher than the price of the original system.
- In addition to option a) mentioned above, external ignition and/or injection module/s may be added to the standard production ECU, but their total retail price cannot be higher than the complete ECU kit.
- Central unit (ECU) may be relocated.
- Spark plugs may be replaced.

### **38. Generators**

- No modifications are allowed.
- The electric starter must operate normally at pre and post race inspections. The engine must start and run when the electric starter has stopped its procedure.

### **39. Exhaust System**

- Exhaust pipes and silencers may be changed or modified from those fitted to the homologated machines.
- The noise limit for Superstock machines will be 107 dB/A with a tolerance of +3dB/A after the race.
- The location, appearance and profile of the silencer(s) must remain as original.
- Wrapping of the exhaust system is not allowed.

### **40. 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, but intentional weight saving modifications are not allowed.
- Fairing/body work fasteners may be changed to the quick disconnect type.
- Aluminum fasteners may only be used in non-structural locations.

### **41. 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 oil spillage).
- Any type of lubrication, brake or suspension fluid may be used.
- Any type of spark plug may be used.

- Any inner tube (if fitted) or inflation valves may be used.
- Wheel balance weights may be discarded, changed or added to.
- Gasket and gasket materials (with the exception of the cylinder base gasket).
- Painted external surface finishes and decals.

#### **42. The Following Items May Be Removed**

- Instrument and instrument bracket and associated cables.
- Tachometer.
- Speedometer.
- Radiator fan and wiring.
- Chain guard as long as it is not incorporated in the rear fender.
- Bolt on accessories on a rear sub frame.

#### **43. The Following Items Must Be Altered**

- Motorcycles must be equipped with a functional ignition kill switch or button mounted on either 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.
- 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.
- All motorcycles must have a closed breather system. The oil breather line must be connected and discharge in the airbox.

#### **44. Additional Equipment**

- Additional equipment not on the original homologated motorcycle may not be added.
- ECU DATA BUS channels be logged but this must be “listen only” other than messages/data found on the stock machine, no messages data may be presented on any ECU DATA BUS
- Additional electronic hardware equipment not on the original homologated motorcycle may be added for the recording of data, these explicit are limited five channels as follows, front suspension, rear suspension, Lamba, Front brake pressure and rear brake pressure.
- Use of a GPS or infra-red lap timer is allowed.
- Any form of telemetry is not allowed unless is in the form of an infra- red signal for the purpose of the timing beacon only.
- The following items must be removed: - Headlamp and rear lamp
- Turn signal indicators (when not incorporated into the fairing) - Rear view mirrors
- Horn
- Licence plate bracket - Tool box
- Helmet hooks and luggage carrier hooks
- Passenger foot rests
- Passenger grab rails
- Safety bars, centre and side stands

#### **REAR SAFETY LIGHT:**

**All motorcycles must have a Functioning Red Light mounted at the rear of the seat to be used during wet races or in low visibility conditions as declared by Clerk of Course.**



**The rear safety light must comply with the following;**

- a) The lighting direction must be parallel to the centre line of the motor cycle (running direction) and must be clearly visible from the rear, at least 15 degrees to both the right and left sides of the centre line of the motorcycle.
- b) It must be safely mounted on the very end of the seat/rear bodywork and approximately on the centre line of the motorcycle. In case of dispute over the mounting position of or visibility of the Rear Safety Light, the decision of the Technical Steward or Scrutineer will be final.
- c) The power output/luminosity must be equivalent to approximately 10-15W (incandescent) or 3-5W (led).
- d) The light must be able to be switched on and off.

## **SUPERBIKE TECHNICAL RULES**

Rules are intended to give freedom to modify or replace some parts in the interest of safety.

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

Superbike motorcycles require an FIM homologation (see Art. 5.2.9). All motorcycles must comply in every respect with all the requirements for road racing as specified in the Technical Regulations, unless it is equipped as such on the homologated machine. The appearance from both front, rear and the profile of Superbike motorcycles must (except when otherwise stated) conform in principle to the homologated shape (as originally produced by the manufacturer). The appearance of the exhaust system is excluded from this rule.

#### **1. Engine configurations and displacement capacities**

The following Engine configurations compose the Superbike class.

Over 850cc and up to 1000cc 3cylinder and 4 cylinder four stroke machines  
and over 900cc and up to 1200cc 2 cylinder four stroke machine

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

### **Minimum Weights**

The minimum weight will be:

1000cc 3 & 1000CC 4 Cylinder	168kg
1200cc 2 Cylinders	168kg

- During the final inspection at the end of each race, the machines chosen will be weighed in the condition they finished the race.
- The established weight limit must be met in the condition the machine has finished the race; nothing can be added to the machine. This includes water, oil, or fuel.
- 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.
- At any time of the event, the weight of the whole machine (including the tank and its contents) must not be less than the minimum weight.

#### **HANDLE BAR LEVERS**

Motorcycles must be equipped with a brake lever protection, intended to protect the handlebar **brake lever from being accidentally activated in case of collision with another motorcycle**

#### **2. Fuel**

- Only control fuel is permitted as supplied by WP Fuels at the event. Fuel details are contained in Pages 10 & 11 of the Supplementary Regulations.

#### **3. Frame and Body**

- The use of titanium in the construction of the front forks, the handlebars and the

swing arm spindle is forbidden.

#### **4. Frame Body and Rear Sub-Frame**

- The main frame must remain as originally produced by the manufacturer for use on the homologated machine.
- The main frame may only be altered the addition of gussets or tubes. No gussets or tubes may be removed.
- Holes may be drilled on the frame only to fix approved components (i.e. fairing brackets, steering damper mount).
- The homologated dimensions and position of bearing seats in the steering head column, and the engine, swing arm, rear shock, and suspension linkage.
- Mounting points must remain as original.
- Steering angle changes are permitted by fitting inserts onto the bearing seat of the original steering head, but no part of the insert must protrude axially more than 3 mm. from the original steering head.
- All motorcycles must display a vehicle identification number on the main frame body (chassis number).
- Rear sub frame may be changed or altered, but the material must remain as homologated. The paint scheme is not restricted.

#### **5. Front Forks**

- Front fork in whole or part may be changed but must be the same type homologated (leading link, telescopic, etc ).
- NB – Upside down is a type of telescopic.
- No aftermarket or prototype electronically controlled suspensions can be used. If original electronic suspensions are used, they must be completely standard (any mechanical or electronic part must remain as homologated). The original electronic system must work properly in the event of an electric / electronic failure otherwise it cannot be homologated for FIM competitions
- The upper and lower fork clamps (triple clamp, fork bridges) can be changed or modified.
- Steering damper may be added or replaced with an aftermarket damper. The steering damper cannot act as a steering lock limiting device.

#### **6. Rear Fork (swing-arm)**

- The rear fork may be altered or replaced from those fitted to the homologated motorcycle. The use of carbon fibre or Kevlar materials is not allowed if not homologated on the original machine.
- A chain guard must be fitted in such a way to reduce the possibility that any part of the riders' body must 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.

## **7. 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 suspensions can be used. If original electronic suspensions are used, they must be completely standard (any mechanical or electronic part must remain as homologated). The original electronic system must work properly in the event of an electric / electronic failure otherwise it cannot be homologated for FIM competitions.
- The rear suspension linkage may be modified or replaced.
- The original fixing points on the frame (if any) must be used to mount the shock absorber, linkage and rod assembly fulcrum (pivot points)

## **8. Wheels**

- Wheels may be replaced and associated part may be altered or replace from those fitted to the homologated motorcycle.
- Aftermarket wheels must be made from aluminum alloy.
- No Carbon fibre composite wheels are allowed, only aluminum alloys wheels are permitted to be used.
- Dimension's front and rear maximum diameter 17inch
- Front Wheel rim width 3.5 inch
- Rear Wheel max 6 inch
- Titanium or alloys are not permitted for the axels

## **9. Handle Bars and Hand Controls**

- Handle bars, hand controls and cables may be altered or replaced from those fitted to the homologated motorcycle.
- Engine stop switch must be located on the handle bars and be **RED**

## **10. Fairing/Body Work**

- Fairing, mudguards and body work must conform in principle to the homologated shape as originally produced by the manufacturer.
- Wind screen may be replaced.
- Original air ducts running between the fairing to the airbox may be altered or replaced from those fitted to the homologated motorcycle.
- 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.
- 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.
- Holes may be drilled or cut in the fairing or bodywork to allow additional increased intake air to the oil cooler. Holes bigger than 10mm must be covered with a particle grill or fine wire mesh. Grill/mesh must be painted to match the surrounding material.

- 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.
- Wings and Aerodynamic aids Wings and other aerodynamic aids will only be considered legal originally fitted to be homologated road specification machine in all of Europe, Japan and North America. For Race use the wings must follow the dimensions, profiles and positions of the homologated shapes exactly (+-1mm). For copies of the OEM parts the leading edges (including end plates) must have a minimum circumference of 4mm and must have a rounded end 8mm radius) or be enclosed/integrated into the fairing. The OEM parts may be used (as is) with the exception that the wing root and 10mm from the end face may be modified to allow mounting to the ( race) fairing. This may not be in form of an extension and the size of the wing will be measured with reference to the face of the wing route. The wing must be fitted in the same relevant position (excepting the tolerance allowed for the fairing and the angle of attack must be within +/-4 degrees of the original angle of attack relevant to the chassis. For active or dynamic aerodynamic parts ONLY the standard homologated mechanism may be used. The range of movement must be the same as that used in the homologated road machine in normal use- not the mechanical maximin.
- Front mudguard must conform in principle to the homologated shape originally produced by the manufacturer.
- Holes may be drilled in the front mudguard to allow additional cooling. Holes bigger than 10mm must be covered with metal gauze or fine mesh. Mesh must be painted to match the surrounding material.
- Rear mudguard may be added or removed.
- Material of construction of the front mudguard, rear mudguard and fairing may be altered or replaced from those fitted to the homologated motorcycle.

## 11. Fuel Tank

- Material of construction of the fuel tank may be altered or replaced from those fitted to the homologated motorcycle.
- All fuel tanks must be filled with fire retardant material, or be fitted with a fuel cell bladder. Fuel tanks made of composite materials (carbon fibre, aramid fibre, glass fibre, etc.) must have
- passed the FIM Fuel Tank Test Standards, or be lined with a fuel cell bladder.
- Fuel tanks without a fuel cell bladder must bear the 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 (See 'Fuel Tank Test Standards' below).
- Fuel cell bladders must conform to or exceed the specification FIM/FCB- 2005. Full details of this standard are available from the FIM.

- The fuel tank must be fixed to the frame from the front and the rear with a crash proof assembly system. Bayonet style couplings cannot be used, nor may the tank be fixed to any parts of the streamlining (fairing) or any plastic part. The Chief Technical Officer has the right to refuse a motorcycle if he is of the opinion that the fuel tank fixation is not safe.
- The original tank may be modified to achieve the maximum capacity of 24 litres, provided the original profile is as homologated.
- The material of the fuel tank may be altered from the one of the tank fitted to the homologated model.
- A cross over line between each side of the tank is allowed (maximum inside diameter 10 mm). 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.
- Fuel tank filler caps may be altered or replaced from those fitted to the homologated motorcycle, and when closed, must be leak proof. Additionally, they must be secured to prevent accidental opening at any time.
- The same size fuel tank used in practice must be used during the entire event.

## **12. Fuel tank homologation**

- Any fuel tanks, made of nonferrous materials (with the exception of aluminum) must be tested according to the test procedure prescribed by the FIM.
- Each manufacturer is responsible for testing its own fuel tank and will clarify the tank exceeds the FIM test standard, if it has passed the FIM test procedure for fuel tanks.
- Each manufacturer must affix a quality and test label on each fuel tank type that is produced for competition use. This quality and test label will be the recognition of a fuel tank model which has passed the FIM test procedure.
- All fuel tanks that are made to the same design, dimensions, number of fibre layers, grade of fibre, percentage of resin, etc, must be identified with the same quality and test label.
- The quality and test label will include the following information on each label affixed to each fuel tank: name of the fuel tank manufacturer, date of fabrication, code or part number, name of testing laboratory, fuel capacity.<sup>37</sup>
- Each manufacturer is requested to inform the FIM/CCR Secretariat of its fuel tank model(s) which have passed the FIM test procedure, with a copy of the quality and test label, according to point 5.
- Only fuel tanks that have passed the FIM test procedure will be accepted.

## **13. 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 appearance from both front rear and profile must conform in principle to the homologated shape.
- Holes may be drilled in the seat or rear cowl to allow additional cooling. Holes which are bigger than 10 mm must be covered with metal gauze or fine mesh. Mesh must be painted to match the surrounding material.
- Material of construction of the seat may be altered or replaced from those fitted to the homologated motorcycle.

## **14. Radiator/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.
- Radiator fan and wiring may be changed, modified or removed. Oil cooler must not be mounted on or above the rear mudguard.
- The internal parts of the water pump may be changed or modified. The drive ratio may be changed. The external appearance must remain as homologated.

### **15. Air Box**

- The air box must remain as originally produced by the manufacturer on the homologated motorcycle.
- Air filters, internal flap type valve, sensors and vacuum fittings may be removed, modified, or replaced with aftermarket parts.
- 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.

### **16. Fuel injection systems**

- “Fuel injection systems” refers 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
- Air funnels may be altered or replaced
- Primary throttle valves cannot be changed or modified.
- Secondary throttle valves and shafts may be removed or fixed in the open position and the electronics may be disconnected or removed.
- 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 (excepting the air funnels)
- Air and air/fuel mixture must go to the combustion chamber exclusively through the throttle body valves.
- Electronically controlled throttle valves, known as “ride-by-wire”, may be only used if the homologated model is equipped with the same system

### **17. Fuel Supply**

- The engine control unit (ECU) may be modified or changed.

- The fuel pump and pressure regulator must remain the same as on the homologated model.
- The pressure tolerance at the technical control is +0.5 bar in respect to the maximum pressure of the homologated engine declared to the FIM by the Manufacturer.
- All motorcycles must have a standard device on the fuel line for fuel pressure checks according with FIM specifications.
- Fuel lines from fuel tank up to the injectors (fuel hoses, delivery pipe assembly, joints, clamps, fuel canister) may be replaced.
- The fuel line(s) going from the fuel tank to the carburetion instruments must be located in such a way that they are protected from possible crash damage.
- Fuel vent lines may be replaced. Fuel filters may be added.

### **18. Engine**

- The following engine specifications and components may not be altered from the homologated motorcycle except as noted
- The homologated engine design model cannot be changed.
- Homologated materials and castings for the crankcase, cylinder, cylinder head and gear-box housing must be used.
- The method of cam drive must remain as homologated.
- The method of valve retention must remain as the homologated model. No pneumatic valve retention devices are allowed unless fitted to the homologated model.
- The sequence in which the cylinders are ignited (i.e. 1-2-4-3), must remain as originally designed on the homologated model. Simultaneous firing of 2 cylinders is also forbidden if not adopted on the homologated motorcycle. Up to 5 degrees firing difference in 2 cylinders is regarded as “simultaneous” firing.

### **19. Cylinder Head**

- The homologated cylinder head may be modified as follows:
- The cylinder head must begin as a finished production part using homologated materials and castings. Material may only be added by epoxy or removed by machining. No machining or modification is allowed in the cam box / valve mechanism area.
- 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. Epoxy may be used to shape the ports.
- The compression ratio is free.
- The combustion chamber may be modified.
- Valves must remain as homologated.

#### **Continued Cylinder Head**

- Valve seats can be modified or replaced for repair. The material must remain as homologated.
- Valve guides must remain as homologated. Modifications in the port area are allowed by machining.
- Valve springs may be altered or replaced, their material must remain as homologated. An additional spring may be added or the spring may be removed.
- Valve spring retainers, collets, spring seats may be altered or replaced.
- Valves must remain in the homologated location and at the same angle as the



homologated valves.

- Rocker arms (if any) must remain as homologated.
- The exhaust air bleed system must be blocked and the external fittings on the cam cover(s) may be replaced by plates.
- The shim buckets / tappets may be replaced but must be the same height, diameter, material type, surface finish and shim to top surface dimension as the homologated part. The weight must be equal to or greater than the homologated part
- The homologated cylinder head / cam cover may be replaced by a cosmetic replica of higher specific weight material (i.e. replace magnesium part with aluminum)

## **20. Camshaft**

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

## **21. Cam Sprockets or Gears**

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

## **22. Crankshaft**

- The following modifications are allowed to the homologated crankshaft:
- Bearing surfaces may be polished or a surface treatment may be applied.
- Balancing is allowed but only by the same method as the homologated crankshaft. (For example heavy metal i.e. Mallory metal inserts are not permitted unless they are originally specified in the homologated crankshaft.)
- The addition of reduction and weight of the crankshaft in order to reach a racing balance can be no greater than 3% of the homologated weight excluding any tolerance shown in the homologated documents of the crank shaft
- Balance shaft. Must remain as homologated

## **23. Oil Pumps and Oil Lines**

- The original fitted oil pump must be used but may be modified. Modifications may include, Blue printing, Changing the pressure relief spring, and reducing gear and housing thickness the external appearance must remain as homologated.
- After market oil sumps and the associated pump, pick up will be 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 connection.

## **24. Connecting Rods**

- Connecting rod may be altered or replaced from those fitted to the homologated motorcycle. The weight must be the same or greater than the original homologated part. The weight of the connecting rod assembly is the homologated weight (of the weight, of the middle weight rod) with a tolerance of +/-3%
- The material must be the same type as the homologated item (i.e. steel, titanium, alloy)
- If the original connecting rod is fitted with a little end insert then the replacement connecting rods may also have an insert of the same material as fitted in the original homologated connecting rod.
- The centre to centre (little end to big end) length of the rod must be the same as the original homologated item.
- Connecting rod bolts are free.

## **25. Pistons**

- No modifications are allowed

**26. Piston Rings**

- No modifications are allowed

**27. Piston Pins and Clips**

- Piston pins no modifications are allowed

**28. Cylinders**

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

**29. Crankcase/Gearbox housing and lateral covers**

- Homologated materials and castings for crankcase and gearbox housing must be used. Material for crankcase and gearbox housing may only be added by welding or removed by machining.
- Oil-pan (sump) may be altered or replaced.

**30. Crankcase/Gearbox housing and lateral covers continued**

- Vacuum pumps are not allowed if not installed on the homologated motorcycle Lateral (side) covers may be altered, modified or replaced. 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, and must have the same resistance to impact as the original.
- 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 composite materials, type carbon or Kevlar®.
- Plates and/or bars from aluminum or steel are also permitted. All these devices must be designed to be resistant against sudden shocks and fixed properly and securely.

**31. Transmission/Gearbox**

- All transmission/gearbox ratios, shafts, drums, selector forks are free.
- 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.
- Primary gear ratios must be as homologated.
- The number of gears must remain as homologated.
- The gear change shift pattern may be changed.
- An external neutral mechanism may be fitted.
- Seamless shift gear boxes are not allowed unless the homologated base model is originally fitted with one, then the complete homologated gear box assembly may be used with no modifications allowed excepting surface finish.
- Additions to gearbox or selector mechanism, such as quick shift systems, are allowed.
- Countershaft sprocket, rear wheel sprocket, chain pitch and size can be changed.
- Any power source (i.e. hydraulic or electric) cannot 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.

### **32. Crankcase/Gearbox housing and lateral covers**

- Homologated materials and castings for crankcase and gearbox housing must be used. Material for crankcase and gearbox housing may only be added by welding or removed by machining.
- Oil-pan (sump) may be altered or replaced.
- Vacuum pumps are not allowed if not installed on the homologated motorcycle
- Lateral (side) covers may be altered, modified or replaced. 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, and must have the same resistance to impact as the original.
- 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 composite materials, type carbon or Kevlar®. Plates and/or bars from aluminum or steel are also permitted. All these devices must be designed to be resistant against sudden shocks and fixed properly and securely and cover a minimum of one third of the original cover

### **33. Clutch**

- Aftermarket or modified clutches are permitted. Back torque limiter 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 system (wet or dry type) and method of operation (cable/hydraulic) must remain as homologated.

### **34. Ignition/Engine Control System**

- Ignition/engine control system (ECU) may be modified or changed.
- Spark plugs and plug caps and wires may be replaced.

### **35. Generator, alternator, electric starter**

- Generators must be fitted and working
- The electric starter must operate normally and be able to start the engine at any point during the event.

### **36. Exhaust System**

- Exhaust pipes, catalytic converters and silencers may be altered or replaced from those fitted to the homologated motorcycle.
- 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 riders' foot or an

area in contact with the fairing for protection from heat.

- The noise limit for Superbikes will be 107 dB/A (with a 3dB/A tolerance after the race). There is also an equipment tolerance of 2dB/A, the maximum reading before race or practice is 109 dB/A and after race or Practice 112dB/A

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

- Any type of lubrication, brake or suspension fluid may be used.
- Gaskets and gasket material.
- Bearings (ball, roller, taper, plain, etc.) of any type or brand may be used.
- Fasteners (nuts, bolts, screws, etc.),
- External surface finishes and decals.

**38. The Following items MAY BE removed**

- Instrument and instrument bracket and associated cables.
- Speedometer and associated wheel spacers.
- Chain guard

**39. The Following Items MUST BE Removed**

- Headlamp, rear lamp and turn signal indicators (when not incorporating in the fairing).
- Openings must be covered by suitable materials.
- Rear-view mirrors.
- Horn.
- License plate bracket.
- Tool box.
- Helmet hooks and luggage hooks
- Passenger foot rests.
- Passenger grab rails.
- Safety bars, centre and side stands must be removed (fixed brackets must remain).

**40. 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 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, oil lines, oil coolers, etc.)

**41. Additional Equipment**

- Additional electronic hardware equipment not on the original homologated motorcycle may be added (e.g. data acquisition, computers, recording equipment).
- The addition of a device for infra-red (IR) transmission of a signal between the racing rider and his team, used exclusively for lap timing, is allowed. The addition of a GPS unit for lap-timing/scoring purposes is allowed.
- Telemetry is not allowed.

**REAR SAFETY LIGHT**

**All motorcycles must have a Functioning Red Light mounted at the rear of the seat to be used during wet races or in low visibility conditions as declared by Clerk of Course.**

**The rear safety light must comply with the following;**

- a) The lighting direction must be parallel to the centre line of the motor cycle (running direction) and must be clearly visible from the rear, at least 15 degrees to both the right and left sides of the centre line of the motorcycle.
- b) It must be safely mounted on the very end of the seat/rear bodywork and approximately on the centre line of the motorcycle. In case of dispute over the mounting position of or visibility of the Rear Safety Light, the decision of the Technical Steward or Scrutineer will be final.
- c) The power output/luminosity must be equivalent to approximately 10-15W (incandescent) or 3- 5W (led).
- d) The light must be able to be switched on and off.