## APPENDIX C – Superbike Regulations (Road)

This class allows for New Zealand distributors of sports production machinery an opportunity to showcase their machines in a competitive environment, with some freedom for machine setup but within the confines of rules to suit New Zealand market conditions.

Superbike Motorcycles require an MNZ homologation.

The appearance from both front, rear and the profile of Superbike motorcycles must (except when otherwise stated) conform to the homologated shape (as originally produced by the manufacturer).

All parts and functions must remain as per Original Equipment Manufacturer (OEM) specifications unless stated otherwise.

1.0 Superbike Classes:

800 – 1300cc 4 Stroke, 2 – 3 cylinders maximum

750 – 1000cc 4 Stroke, 4 cylinders maximum

At least 5 production machines of that make and model must have been imported into New Zealand by the manufacturer or the distributor representing the manufacturer.

Number Plate Colours:

Refer to rule 10.2a MNZ Manual of Motorcycle Sport (MoMS).

Number Plate Placement:

Refer to rule 10.2a MNZ Manual of Motorcycle Sport (MoMS).

Fuel:

Refer to rule 10.13 MNZ Manual of Motorcycle Sport (MoMS).

- 2.0 Subject to the required and permitted alterations set out below, Superbike machines must:
  - a) Be fitted with V.I.N. compliance plates for that particular machine.
  - b) Be of a make and model lawfully sold in New Zealand.
  - c) Be as constructed by the manufacturer.
- 2.1 Tyre brand, type and quantity will be specified in Supplementary Regulations. Tyre warmers may be used.
- 2.2 Machine weight without rider, empty of fuel but with all other fluids at optimum levels, must weigh no less than:
  - a) 168kg for all four cylinder machines.
  - b) 172kg for all two and three cylinder machines.
  - A 1% tolerance at post race control will be allowed.

- 2.3 The following must be removed:
  - a) Head lamp.
  - b) Tail lamp.
  - c) Reflectors.
  - d) Horn.
  - e) Traffic indicators.
  - f) Mirrors.
  - q) Centre and side stands.
  - h) Registration plate / bracket and label holder.
- 2.4 Engine and gearbox breathing hoses and tubes, and the radiator overflow bottle vent must exhaust into the airbox to the rear of the intakes.

  The lower airbox breather tube must be blocked.
- 2.5 The following may be removed:
  - a) Passenger handholds and footrest assemblies.
  - b) Chain guard.
  - c) Rear fender.
  - d) Instruments and associated cables including key start ignition barrel.
  - e) Air injection pollution control system.
  - f) Carburettor anti-icing device.
  - g) Air filter element.
  - h) Steering damper.
  - The Anti-Lock Brake System (ABS) can be disconnected, and the following may be removed: ABS control unit, ABS wheel rotors and sensors.
- 2.6 The following may be added:
  - a) Steering damper.
  - b) Fuel / Ignition Control Unit (power commander 'piggy-back' type unit) must be used with the stock ECU. It is permitted to be used where the fuel metering device plugs into the original electrical connectors with no modification to the wiring harness. ECU functions must remain as per OEM functions (for example: traction control or launch control cannot be used if not OEM).
  - c) Frame protective sliders.
  - d) Electronic gear shifters.
  - e) Lap timers.
  - f) Ride height adjuster.
  - g) Data logging equipment, provided no interface exists between logging equipment and management of engine systems.
- 2.7 The following may be replaced with parts not manufactured by machine manufacturer:
  - a) Fairings, screens, rear bodywork and rear seat so as to provide for the mounting of a rear number plate, rider's seat, mudguards, air intake lids in bodywork, airbox intake tubes, tank covers and side covers, but replacements must be similar in shape and appearance as the original. Screen profile to be open.

- b) Mounting brackets for fairings and screens but the replacements must be mounted on the frame at the original mounting points.
- c) External gearing and chain. 520 chain pitch conversion is permitted.
- d) Brake pads, linings, brake hoses, and brake discs. Front and rear brake discs may be replaced with aftermarket brake discs that must fit the original caliper and wheel mounting. The outside diameter, material, and the ventilation system must remain the same as OEM for the model.
- e) Exhaust system.
- g) Front suspension, springs, damping parts and fork top caps may be replaced or modified, but the external appearance of the forks must not be modified or changed.
- h) Rear suspension damping units and springs.
- i) Handlebars, handlebar mounted levers, master cylinders and controls, including throttle assembly and cables.
- j) Footrests and foot controls, but the replacements must be mounted at the original mounting points.
- k) Brake and clutch levers but these must be of similar shape and materials to that of the OEM levers.
- I) Rear sub-frame, providing the replacement is of the same material (or aluminium), shape and appearance as the original.
- m) Cylinder Head Gasket.
- ruel tank filler cap assembly providing there is no modification required to fuel tank.
- o) Fasteners.
- p) Air filter element.
- q) Instruments.
- r) Wiring loom, plug in fuel injection control units and the manufacturer nominated race kit ECU and OEM ECU may be reprogrammed.
- s) Spark plugs and high tension leads.
- t) Clutch plates and springs.
- u) External gearing, chain and chain pitch.
- v) Radiator expansion tank.
- 2.8 The following OEM parts may be modified:
  - a) Engine cam wheels may be slotted or replaced to alter valve timing.
  - b) Cylinder head and cylinder block mating surfaces may be machined.
  - c) Gearbox drive dogs may be undercut.
  - d) Cylinder head valve seats may be re-cut.
  - e) OEM ECU may be re-flashed.
  - f) Carburettor slides
- A chain guard or shark fin made of suitable material MUST be fitted in such a way to prevent trapping between the lower chain run and the final drive sprocket at the rear wheel. The leading edge of this guard must be a minimum thickness of 3 mm and have a rounded edge to avoid this causing any injury in the event of a fall. Machines where swingarm shape or positioning prevents fitment are exempted (for example Yamaha R1).

4.0 All exposed lateral engine cases containing water or oil must be guarded from contact with the road surface in the event of a crash. The guard may be of a second cover made from suitable materials such as Carbon/Kevlar or suitable plastics or with heavy duty end cases or crash bars made from aluminium, steel or nylon.

A frame mounted crash knob or a similar effective protector can be fitted as an alternative.

All of these devices must be designed to be resistant against sudden shocks, abrasions and crash damage.

5.0 For machines homologated with lower fairing, must be fitted with an integral lower fairing dam (Belly Pan) or separate catch tray which must be constructed and fitted to trap and hold engine oil and coolant with a capacity of not less than, four strokes =3.5 litres or two strokes =2.5 litres with no less than 2x25mm holes (1 front 1 rear) which will be fitted with rubber grommets that may be removed in wet conditions.