TECHNICAL REGULATIONS FOR THE RALLY

A. CATEGORY 1 – MODERN SALOON CARS

A.1. Cars which have been homologated must be prepared in accordance with the homologation papers. A TWE Vehicle Identification Form (VIF) will also be required.

A.2. Cars which have not been homologated but are otherwise eligible under TWE Regulations must have a TWE Vehicle Identification Form (VIF) confirming compliance with the permitted modifications allowed for group N cars by the FIA. The VIF must be available for inspection at Scrutineering and throughout the event.

A.3. The preparation of the cars must be to the FIA Group N regulations.

A.4. The following (A.5.) summarises the minimum modifications required. This is intended as a guide - for the full text of requirements and further permitted modifications refer to FIA Appendix J, Articles 253, 254.

A.5. You MUST have:

A.5.1. FIA homologated roll cage with fireproof padding.

A.5.2. FIA homologated seats.

A.5.3. FIA homologated seat belts.

A.5.4. FIA homologated plumbed in fire extinguishers covering engine and passenger compartments.

A.5.5. Hand-held fire extinguishers with a total minimum capacity of 2.4 litre AFFF or 2kg dry powder.

A.5.6. Fireproof casing or bulkhead between the fuel tank and passenger compartment.

A.5.7. Fireproof bulkhead between the engine and passenger compartment.

A.5.8. Battery isolator switches.

A.5.9. Any pipes carrying flammable liquid through the passenger compartment metal covered and protected.

A.5.10. An external spring on each throttle spindle.

A.6. If the original manufacturer fitted fuel tank is changed, the replacement must be an FT3 homologated fuel tank not more than 5 years old (+ 2 years if re-certified) as at the end of the event. Fuel tank size is free up to a maximum capacity of 120 litres.

A.7. Rear seats may be removed for the purpose of carrying additional wheels and tyres, which must be securely fixed.

For further details on Group N regulations visit the FIA website at www.fia.com or contact Rally Office.

B. CATEGORIES 2 & 3 - CLASSIC VEHICLES

References to the *"Date"* in the following shall mean:
For category 2 – 1 January 1971
For category 3 – 1 January 1978

B.1. Cars can be any 4wheel passenger vehicle including estate car derivatives with not more than 6 seats complying with the manufacturer's specification for the model as manufactured before the "*Date*". Commercial vehicles, motorised caravans and 4WD vehicles are NOT permitted.

B.2. The mechanical specification of the vehicle is free subject to the restrictions hereinafter.

B.3. Where "homologated" or "period evidence" is mentioned below, the onus is on the competitor to provide same when requested.

B.4. Safety Requirements

B.4.1. Vehicles must be fitted with a roll cage. This must comply with minimum requirements (see B.4.2.). A cage complying with FIA Appendix J specifications for rally cars is recommended. Any part of the roll cage that could contact the crew in the event of an accident, must be protected with fireproof padding.

B.4.2. Roll Cage tube material specification: Minimum Material Cold Drawn Seamless Carbon Steel; Minimum Yield Strength 350 N/mm^2; Minimum

Dimensions 38mm dia x 2.5mm thick or 40mm dia x 2.0 thick. Note: These figures represent minimums. In selecting the steel, attention must be paid to obtaining good elongation properties and adequate weldability. The tubing must be bent by a cold working process and the centreline bend radius must be at least three times the tube diameter. If the tubing is ovalised during bending, the ratio of minor to major diameter must be 0.9 or greater.

B.4.3. Vehicles must be fitted with a FIA homologated plumbed-in fire extinguisher system for discharge into the engine and passenger compartments. There must be two operating switches/pull cables; one mounted in the passenger compartment and accessible to both driver and co-driver when normally seated with seat belts on, the other mounted externally just forward of the windscreen. Both switches/pull cords must be clearly labelled. All cars must also carry one or two hand-held extinguishers with a total minimum capacity of 2.4 litre AFFF or 2kg dry powder. All extinguishers must have a visual method of checking the charge either by gauge or certified label.

B.4.4. Vehicles must be fitted with rubber bladder fuel tank(s) to FIA specification FT3 or FT3 1999 with a total maximum fuel tank capacity of 120 litres. The FIA homologation and date label on the tank(s) must be visible and the certificate available at all times. The tanks must not be more than 5 years old (or 7 years if re-certified) as at the end of the event. A tank filled with safety foam in conformity with American Military Specification MIL-B-83054 (Baffle material) will also be permitted subject to approval by the Scrutineer.

B.4.5. Vehicles must have a protective bulkhead of non-flammable material between the engine and crew compartment capable of preventing the passage of fluid and flame. Gaps must be sealed with GRP, intumescent putty or non-flammable flexible sealer. Magnesium is prohibited for bulkheads. All vehicles must have a bulkhead between any fuel tank and the crew compartment capable of preventing the passage of flame and fluid. When a fuel tank constitutes part of the bulkhead between the crew and the luggage compartment an additional bulkhead must be fitted.

B.4.6. As an alternative to a fireproof bulkhead between the fuel tank and the crew compartment the fuel cell, pumps, fuel line connections and filler pipe must be enclosed within a liquid proof metal container. A fuel cell alloy box is acceptable provided that is can be made liquid proof (by use of grommets and sealer) where any pipe or cable passes through the alloy box. The fuel filler pipe must be enclosed within a secondary liquid proof metal tube. Fuel pipes of metal braided hose are acceptable provided that they have no joints within the car interior. Any breather or overflow pipe outside of the alloy box must be metal, metal covered or metal braided.

B.4.7. A sealed metal container must enclose any oil tank or expansion tank/bottle located within the crew compartment. Windscreen washer reservoirs are exempt from this requirement.

B.4.8. Additional metal fuel containers are permitted provided they are not carried in the passenger compartment and are securely fixed. These containers must be in position at scrutineering.

B.4.9. Any pipes carrying flammable or hot liquid (whether under pressure or not) and passing through the passenger compartment must be of metal, metal covered or internally or externally metal braided. These pipes must be grounded to the vehicle's body to prevent build up of static and must have no joints within the passenger compartment. Pipes containing hot water must be coloured RED. Brake fluid reservoirs are not permitted in the passenger compartment.

B.4.10. All vehicles must be fitted with a circuit breaker, which must be capable of isolating all electrical circuits (with the exception of electrically operated fire extinguishers) and stopping the engine. There must be two operating switches - one mounted inside the crew compartment and accessible to both driver and co-driver when normally seated, and the other mounted externally just forward of the windscreen adjacent to the fire extinguisher switch/pull cable. Both switches must be clearly labelled.

B.4.11. Seats for the driver and co-driver must be competition seats to the current FIA standard carrying a valid FIA homologation label.

B.4.12. Vehicles must be fitted with full harness seat belts to the current FIA standard carrying valid FIA homologation labels.

B.5. Body Modifications

B.5.1. The original bodywork shape and materials can not be changed other than the use of lightweight panels for doors, bonnets, wings and boot lid provided they were homologated or had period use before the *"Date".* Easing of the original wheel arch to accommodate the permitted wheel/tyre size and type is permitted.

B.5.2. Roof air vents are permitted.

B.5.3. Vehicles must be fitted with mudflaps behind all 4 wheels extending to a minimum of 3.8 cms each side of the tyre tread and a maximum of 7.6 cms above the ground.

B.5.4. Vehicles must be fitted with a windscreen of laminated type glass. All windows other than the windscreen may be of glass or plastic but must be at least 4mm thick.

B.6. Mechanical Modifications

B.6.1. The engine must be that originally specified for the car by the manufacturer or an engine homologated as an option before the "Date". Camshafts must remain in original location and number.

B.6.2. Engine capacity is restricted to the manufacturer's specifications for cars produced prior to the *"Date"* or a homologated option prior to the *"Date".* Engine overbores are not permitted beyond 60 thousandths of an inch over the manufacturer's original specification. Such overbores will not affect class eligibility.

B.6.3. Turbo chargers and superchargers are not permitted.

B.6.4. Dry sump systems are permitted.

B.6.5. Cylinder heads must be the original specified head but any work may be carried out to it.

B.6.6. Carburettors and manifolds are free - any may be fitted.

B.6.7. Each individual carburettor, throttle spindle or slide must be fitted with an external spring acting directly and capable of closing the individual carburettor, throttle spindle or slide in the event of cable or linkage failure.

B.6.8. Fuel injection can not be fitted unless it was the manufacturer's original specification or available as an option before the *"Date".* Electronic fuel injection is not permitted.

B.6.9. The mechanical method of coil discharge triggering within the distributor, i.e. points and condenser, may be converted to an electronic method, provided that any such conversion fits within the original distributor type and configuration. The distributor must retain its original function and location. The amplifier unit must be mounted externally within the engine compartment and be clearly visible to the Scrutineers. Electronic ignition conversions that are "Programmed", "MAP-ed", "Managed" and/or use sensors external to the distributor as a means of triggering are not permitted.

B.6.10. The gearbox casing and number of gears must be that specified and fitted to the vehicle prior to the *"Date"* or which has been homologated for competition use prior to the *"Date".* Gearbox ratios and gear types are free.

B.6.11. Axles and ratio's are free - any may be fitted (including limited slip differentials).

B.6.12. Brakes are free - any may be fitted including disk brakes but carbon fibre brake discs are forbidden.

B.6.13. Exhaust systems are free but must comply with the noise requirements of all the countries through which the event passes.

B.6.14. Wheels must be of the same dimensions as specified by the vehicle manufacturer but an optional additional one-inch in rim width is permitted. Wheel design must be in keeping with the period. Vehicles originally specified with 13 inch and 14 inch wheels may be fitted with wheels of 15-inch diameter.

B.7. Restrictions on Specific Vehicles for **Category 2 only**

B.7.1. Ford Escort: permitted engines - 1100 to1800cc pushrod, 1558 to 1600cc Lotus twincam, 1601 to 1800cc BDA. Not permitted are any aluminium block, twin-cam engines of greater than 1600cc, BDA engines of greater than 1800cc or SOHC "Pinto" engines. Permitted gearboxes - ZF 5-speed, Standard Ford gearbox or optional gearbox # 7003.

B.7.2. Porsche 911: permitted engines - 1991, 2195, 2341cc. Not permitted are engines of 2687 or 2992cc. The gearbox type 915 is permitted with either the aluminium or magnesium casing. Cars may use only the standard trans-axle gearbox unit fitted as standard in 1970 or the trans-axle which was homologated under evolution in 1972 (Model 915) with either the magnesium or aluminium casing.

B.7.3. Porsche 914 and 914/6: Not permitted - engines greater than 1991cc and wheels greater than 6.5 inches in rim width.

B.7.4. Datsun 1600 / 1800 and 240Z: The later model Datsun 5-speed gearbox (260Z) may be fitted to the vehicles as an option to the original specification.

B.7.5. Volvo 142, 144, 145 and P1800: The M45/M46 gearbox from the later model 244 may be fitted as an option.

B.7.6. BMW 2002: The gearbox casing from the E21 model may be used.