

Appendix III

With effect from 1st January 2008

SAFETY IN RALLIES

The application of following regulations is compulsory (but need not be included in the Supplementary Regulations of the rally).

Each organiser is encouraged to introduce additional measures in order to improve safety.

The Organiser's attention is drawn to the requirements of Appendix H of the International Sporting Code, in particular those contained in Article 9.2.

1. GENERAL SAFETY

1.1 Safety Plan

A safety plan must be drawn up and include:

- 1.1.1 The location of the Rally Headquarters (Rally Control);
- 1.1.2 The names of the various people in charge;
 - Clerk of the course
 - Deputy Clerks of the course
 - Chief medical officer
 - Chief safety officer
 - Safety officers in-charge of the safety of each special stage
- 1.1.3 The addresses and telephone numbers of the various Safety services in the areas where each special stage will be run:
 - Police
 - Hospitals
 - Emergency medical services
 - Fire fighting services
 - Breakdown services
 - Red Cross (Or Equivalent)
- 1.1.4 The full itinerary with detailed road sections;
- 1.1.5 The safety plan for each special stage, which must detail:
 - a. The Exact Location of all marshal posts, emergency vehicles and radio points by means of an accurate map. All GPS references used in the event must be exposed in the form of Degrees, Minutes and Decimals of Minutes, e.g. 139° 36.379'.
 - b. Zones, which are considered by the organisers as open to the public, all other areas being considered prohibited to the public.
 - c. Measures to be taken for the safety of the crews.
 - d. Measures to be taken for the safety of the officials of the event.

- e. The procedure for tracking competitor vehicles.
- f. Actions to be taken in the event of a missing crew.

- 1.1.6 The safety plan must specifically address issues in each of the following areas:
- a) Safety of the public
 - b) Safety of the competing crews
 - c) Safety of the officials of the event

1.2 Chief Safety Officer

- 1.2.1 A Chief safety officer will be designated in the regulations of the rally. He will belong to the organising committee and will take part in the devising of the safety plan.
- 1.2.2 During the rally he will be in permanent communication with rally control, the chief medical officer and the start of each special stage (by telephone or radio).
- 1.2.3 He will be responsible for the implementation and enforcement of the safety plan.

1.3 Special Stage Safety Officer

- 1.3.1 Each special stage will have a safety officer who will assist the chief safety officer.
- 1.3.2 The special stage safety officer must inspect the special stage and certify its conformity with the safety plan prior to the passage of the 0 car.

1.4 Control

- 1.4.1 The clerk of course shall be ultimately responsible for ensuring compliance with the safety plan.
- 1.4.2 In MAI Championship rallies the observer(s) will pay special attention to all safety procedures.

2. SAFETY OF THE PUBLIC

A major priority of the safety plan is to ensure the safety of the general public including spectators.

The following non-exhaustive measures, which complement the provisions of Appendix H of the International Sporting Code, are obligatory for all rallies, except for Section 2.1.

2.1 Educational film (recommended for all events)

- 2.1.1 In the form of a commercial spot,
- 2.1.2 30-second duration.

- 2.1.3 With commentary by a leading driver or drivers, in one or more language(s) applicable to the area of the event.
- 2.1.4 Should not show accidents.
- 2.1.5 Should be broadcast several times.

2.2 Special Stage recommendations

- 2.2.1 The design of each event should take into account spectator considerations unique to the area in which the event is taking place.
- 2.2.2 Special stages should be situated and scheduled to discourage movement of spectators between them.
- 2.2.3 Reconnaissance by crews is considered a safety factor.
- 2.2.4 Should a special stage be delayed or cancelled for safety reasons this will not be penalized in the observers' report (unless due to problems created by, or not properly anticipated by, the Organisers).
- 2.2.5 Cars (referred to as course information cars) equipped with public address systems must traverse each stage approximately one hour before the road closure cars (zero cars) to warn spectators and ensure that any who are in prohibited areas are removed from those areas. This operation may be repeated several times if necessary.

2.3 Control of Spectators

- 2.3.1 The Organisers, with the assistance where necessary of the public order authorities must use their reasonable endeavours to limit access of the public to clearly defined zones, all other areas being regarded as prohibited to the public.
- 2.3.2 The public must be prevented from moving along the road of the special stage whilst the stage is open for competition (after the 0 car and before the last car).
- 2.3.3 Safety instructions must be distributed to the public at all access points.
- 2.3.4 Marshals or public order authorities (police, military etc.) must be present in sufficient numbers to ensure public safety during the special stage.

Marshals must have received adequate training for the task they are asked to perform and wear a clearly identifiable jacket.

2.4 Refuelling and Servicing

Where the public is permitted access to areas where refuelling or servicing will take place, the Organisers must ensure that adequate

precautions are taken to keep the public at a suitable distance from potentially dangerous activities.

2.5 Accident Reporting

If a driver taking part in a rally is involved in an accident in which a member of the public sustains physical injury, the driver concerned must report this to the next radio point as specified in the road book and signposted on the route according to Article 3.3.3 below. If he fails to observe this rule, the Stewards may impose on the crew responsible, a penalty which may go as far as exclusion. The laws of the country must also be complied with in relation to procedures at accidents. (this rule must be included in the regulations of the event

2.6 Accident investigations

Any accident involving a fatality or serious injury must be the subject of a report to the MAI Rally Commission. This report is to be prepared by a committee consisting of the Organiser/Club appointed Steward of the event, the Chief Scrutineer, the Chief Safety Officer, the Chief Medical Officer and, where possible, a representative of the police or similar authority. The report should reach the MAI no more than 30 days after the conclusion of the event except where legal or other protocols prohibit.

2.7 Course Cars

- 2.7.1 Each Organiser must use at least two course cars numbered 00 and 0 (“Zero cars”).
- 2.7.2 Each car must have a panel 36 cm x 50 cm on the bonnet and the two front doors bearing the word **SAFETY** with the numbers 00 or 0, and be equipped with warning roof lights and a siren. The 0 car may be equipped with a video camera to record the condition on every Special stage during the passage of this car.
- 2.7.3 The drivers and co-drivers of the zero cars must have considerable rally experience, **be fully conversant with all relevant regulations and the safety plan and must keep the clerk of the course fully informed at all times** concerning the conditions along the route. No driver who has retired from the rally may drive a course car. The clerk of the course should take note of the recommendations of the zero car drivers in order to ensure that a special stage is cancelled if dangerous conditions exist. Zero cars should also check time clocks and have time cards correctly completed.

2.7.4 “Course Information Cars” equipped with public address systems must traverse all special stages approximately 45 minutes to 1 hour before the start of the first car to warn spectators and ensure that any who are in dangerous places are removed from those areas. The operation may be repeated several times if necessary.

2.7.5 Each Organiser must use a course-opening car (Sweeper Car) to pass through each special stage after the last competitor. These cars must carry a panel as detailed in Article 2.7.2 showing a chequered flag.

2.8 Safety on Road Sections

The itinerary and time schedule must take traffic problems and the crossing of built-up areas into consideration.

2.9 Information

Information addressed mainly to the public will be issued by different means;

- written, spoken and televised media
- posters
- distribution of leaflets
- passage on the route of a vehicle (course information car) equipped with loudspeaker to inform the spectators (45 minutes to 1 hour before the start of the first car).

3. SAFETY OF THE COMPETING CREWS

3.1 Safety Services

3.1.1 At the start of each special stage:

In compliance with FIA Appendix H 9.2 and 9.4 and with any vehicles having unimpeded access to the stage:

- 1 medical first intervention vehicle
- 1 doctor qualified in resuscitation;
- 1 paramedic;
- 2 4-kg fire extinguishers with a trained operator;
- suitable communications equipment to maintain contact with HQ;

3.1.2.1 **At the intermediary points on the route for long stages (>15 km):** where the average speed of the fastest competitor (based on the rally average of the previous year) is less than 75 kph, the deployment of these vehicles should be revised and their number

and/or positioning modified if necessary so as to obtain intervention times comparable to those of the fastest special stages.

Furthermore, if the nature of the ground, climatic conditions or special circumstances require it, this distance may be modified on the joint proposal of the Chief Medical Officer and the Safety Officer, when the Safety Plan is approved. These provisions are recommended for all rallies.

Such safety points shall involve:

- 1 medical intervention vehicle;
- 1 doctor qualified in resuscitation or possibly 1 paramedic specialized in resuscitation;
- suitable communications equipment to maintain contact with HQ;

3.1.2.2 At the intermediary points on the route for medium stages (>10 km but < then 15 km): where the average speed of the fastest competitor (based on the rally average of the previous year) is less than 75 kmph, the deployment of these vehicles should be revised and their number and/or positioning modified if necessary so as to obtain intervention times comparable to those of the fastest special stages.

Furthermore, if the nature of the ground, climatic conditions or special circumstances require it, this distance may be modified on the joint proposal of the Chief Medical Officer and the Safety Officer, when the Safety Plan is approved. These provisions are recommended for all rallies.

Such safety points shall involve:

- 1 First intervention vehicle;
- 1 doctor qualified in resuscitation or possibly 1 paramedic specialized in resuscitation;
- suitable communications equipment to maintain contact with HQ;

3.1.3 At the stop point of each special stage: 2 (minimum) 4 kg fire extinguishers.

3.1.4 Either,

a) in the service park or a central location less than 15 km by road from the special stages concerned

OR

b) at the start of the special stage:

- 1 standardized ambulance equipped for resuscitation (see Appendix H 9.4).
- 1 breakdown vehicle.
- Suitable communications equipment to maintain contact with HQ.

If the location is the service park, then two of each of the specified vehicles, so that if one is called into service the other will remain on standby.

- 3.1.5 It is recommended that a rescue ambulance helicopter when the time required for transferring a casualty by road between the furthestmost point of the special stage and the hospital is greater than 1 hour and 30 minutes (Appendix H 9.2) should be considered.
- 3.1.6 The first intervention vehicle shall be capable of proceeding into the stage quickly and shall be equipped as a minimum as follows:
- a) the medical team as specified in Appendix H 9.2,
 - b) the medical equipment as specified in Appendix H 9.2,
 - c) a kit of basic rescue equipment specified by the chief medical officer in collaboration with the chief Scrutineer (Refer "MANDATORY EQUIPMENT ON BOARD)
 - d) 2 4-kg fire extinguishers with trained operator,
 - e) suitable communications equipment to maintain contact with Rally HQ,
 - f) a warning siren,
 - g) suitable identification.

Note: Where the terrain so requires, the first intervention vehicle may be replaced by two vehicles:

- 1 medical intervention vehicle (a + b + e + g)
- 1 technical intervention vehicle (b + c + d + e)

First Intervention Vehicle

DUTIES

1. To reach the site of the accident in the least possible time
2. Assess the accident and report back to rally control
3. Extrication or Fire fighting if required.
4. Assess injuries and provide preliminary first aid.
5. Facilitate evacuation of the injured to the ambulance. (Only to be done if Doctor decides that it is safe to transport the injured in the FIV. If the

Doctor decides otherwise the Ambulance should be moved to the accident site for evacuation of the injured to a hospital)

6. If evacuation to a hospital is required then the Doctor on board the FIV should accompany the injured in the Ambulance

CREW ON BOARD

An experienced driver

A Doctor skilled in resuscitation

A helper to assist in Fire fighting and or extrication.

MANDATORY EQUIPMENT ON BOARD

1. A Radio transmitter/receiver
2. Two 5 Kg fire extinguishers (dry chemical powder type)
3. Tow chain/ Thick Nylon rope (20 feet)
4. One Crowbar
5. One large Hammer
6. One Metal cutting shears
7. One Cutting pliers
8. One Spanner for battery terminal
9. Water
10. Chisel
11. First Aid Kit
 - a. Stethoscope
 - b. Gauze
 - c. Band Aid
 - d. Tincture Iodine
 - e. Disposable syringes and needles
 - f. Hydrogen Peroxide
 - g. Cotton
 - h. Anti Allergic drugs- Avil, Decadrom
 - i. Xylocaine injection
 - j. Suturing Kit

3.2 Preventative Measures (Signaling and road markings)

3.2.1 Roads and access roads leading to stages must be closed to traffic. This must be done in the following manner:

- (a) major or through roads, or any road along which traffic could be expected, must be blocked and manned by a marshal, police or other authority
- (b) short no-through roads (e.g. to farms etc) must be blocked or taped, with a notice that may be affixed to the barrier or tape advising of the conduct of the event and the danger of entry.

- 3.2.2 it shall be the responsibility of the zero cars to check that the appropriate closure method is in place and to immediately advise the rally HQ (rally control) of any omissions, which must be rectified prior to the commencement of the special stage.
- 3.2.3 Marshals' posts will be positioned along the course so as to:
- keep the public outside prohibited areas by means of boards, barriers or ropes, whistles and loudspeakers
 - as far as possible, warn crews of any obstructions in the special stage, through the use of yellow flags
- 3.2.4** Should the use of yellow flags be required, the following procedure is to be adopted;
- 3.2.4.1 A yellow flag must be available at each stage radio point (situated at approximately 5 km intervals)
- 3.2.4.2 The yellow flag will be displayed to crews only on the instructions of the clerk of the course. The flags may only be displayed by a marshal wearing a distinctive yellow jacket on which is marked the radio point symbol. The time of deployment of the flag will be recorded and notified to the stewards by the clerk of the course.
- 3.2.4.3 On passing a displayed yellow flag the driver must immediately reduce speed and follow the instructions of any marshals or safety car drivers he/she encounters. Flags will be displayed at all radio points preceding the incident. Failure to comply with this rule will entail a penalty at the discretion of the Stewards.
- 3.2.4.4 A crew which has been shown the yellow flag will be given notional time for the stage according to the procedures laid down in Article 19.16.
- 3.2.4.5 No flag other than the yellow flag may be deployed at any point in a special stage.
- 3.2.4.6 Different signaling systems (e.g. Flashing lights) may be used in super special stages. Full details must be included in supplementary regulations.
- 3.3 Supervision**
- 3.3.1 A radio network (set up approximately every 5 km) unique to each special stage must be established to allow the vehicles to be tracked and the running of the rally to be supervised.
- 3.3.2 Each radio point shall be identified in the road book and by a sign at least 55 cm. in diameter, bearing the radio point symbol. The radio point sign symbol must be in black on a blue background.
- 3.3.2 In addition there should be a warning sign 100 m prior to the SOS radio point.

- 3.3.4 Any ambulance within a stage should be located at a radio point. An additional sign (green or red cross) should be located beneath the radio point sign at this point.
- 3.3.5 The tracking of vehicles must be carried out either at rally headquarters (rally control) or by the special stage safety officer on the special stage. Some form of tracking chart must be used either on the special stage by the special stage safety officer or at rally headquarters. Each organiser must draw up, and show in the safety plan, this procedure for tracking vehicles and must also list the procedure to be followed in the event of a missing competitor.

3.4 Road book

- 3.4.1 Each road book shall contain, as the rear cover in A4 size (folded), a red “SOS” sign and on the reverse a green “OK” sign. In the event of an accident where no injuries are sustained requiring immediate medical intervention, the green “OK” sign must be clearly shown by a crew member to the next 3 following vehicles and to any helicopter attempting to intervene.
- 3.4.2 Each road book shall contain a separate page preceding the itinerary page in which the accident procedure will be set down. (Refer to example sheet)
- 3.4.3 All competitors are obliged without exception to comply with the requirement of General Prescriptions Article 19.19 Competitor Safety.
- 3.4.4 All competitors are to be reminded of this regulation by the issuing of a written notice to each crew member at documentation.
- 3.4.5 Any crew which is able to, but fails to comply with this rule may be penalized by the Stewards in accordance with the International Sporting Code.

EXAMPLE

Accident and Safety Procedure

1. All competitors must be conversant with MAI General Prescriptions Article 19.19 Competitor Safety and Appendix III Article 3.4 Road Book
2. When a red “SOS” is displayed it is **MANDATORY** to stop and assist the crew requiring help. You are responsible to help the injured and make sure that safety services are mobilized as quickly as possible.

3. The first crew to arrive at the scene of an accident must stop and inform the next car of all the details.
4. The next car must take the following information to NEXT radio post which may be the finish control:
 - Competition number of the crew involved
 - If and how many crew members or spectators are injured
 - If any crew member or spectator are trapped in or outside the car
 - Location of the accident, i.e. the closest road book junction or kilometer post
 - Any other vital information, i.e. fire, water.
5. The following cars must stop if the red “SOS” is displayed.
6. All competitors stopped in a stage must place their red triangle at least 50 meters before where the car is stopped even if the car is clear of the road.
7. The event emergency telephone number is:..... (organiser to detail)
8. If you retire you must inform the organisers:
Telephone number (organiser to detail).
9. All competitors retiring from the event are obliged to hand in their time card to the nearest control points as soon as possible.

This page to be inserted in road book

3.5 Evacuation

- 3.5.1 Evacuation routes must be planned for each special stage. They must be clearly shown in the safety plan (by a map or diagram).
- 3.5.2 Emergency services of all hospitals near the route must be on standby.

4. SAFETY OF THE OFFICIALS

- 4.1 Whilst the primary responsibility of the Organisers is to ensure the safety of the public and the competing crews, the safety of officials is also very important.
- 4.2 Organisers must ensure that in performing their duties officials are not required to place themselves in danger.
- 4.3 It is the Organiser’s responsibility to ensure that officials are adequately trained in this regard.

5. MEDICAL INTERVENTION VEHICLES (Ambulances)

For all disciplines on track and road and for cross-country, their purpose is to transport a doctor qualified in resuscitation to the site of an accident within as short a time as possible. They may have a single medical use (best solution for circuits) or a mixed medical use equipped for extrication, disincarceration and/or firefighting. Above all, the vehicle must be adapted to the terrain and to the type of competition. All Medical intervention vehicles must be fitted with an efficient communications system, able to transmit and receive messages, and with the following equipment on board (this list is not restrictive):

i) Airway:

- portable suction machine (300mm Hg vacuum),
- a full selection of suction catheters & 1 Yankauer sucker,
- a self-inflating bag with O₂ reservoir and facemask,
- Portable O₂ cylinder with reducing valve & appropriate connections,
- Guedel airways size 3 (x 2), size 4 (x2),
- nasopharyngeal airways size 7 (x2),
- adult laryngoscope & spare batteries/bulbs,
- endotracheal cuffed oral tubes size 7 (x2) size 8 (x2), with appropriate connectors and cuff inflating device,
- mini-tracheotomy device x2.

ii) Cervical spine:

- adult rigid cervical collar x 2,
- a spinal immobiliser device of a type recommended by the FIA (if no extrication team present).

iii) Circulatory support:

- IV necessary sets for drip x 4,
- IV giving sets x 4,
- IV cannulae - size 14 x 3/size 16 x 3,
- colloid - 2 litres (e.g. Hemacell),
- crystalloid/Drip solution - 2 litres (Ringer lactate),
- defibrillator: optional,
- tensiometer & stethoscope.

iv) Dressings:

- selection of dressings, including 10 large field dressings,
- burns dressing (e.g. Water Gel pack).

v) Drugs:

- resuscitation drugs used in the country concerned.

As an indication, the following substances are recommended:

- drugs for respiratory problems,
- drugs for cardio-vascular problems,
- analgesic or spasmolytic drugs,
- sedative and anti-epileptic drugs,
- steroids,
- drugs for intubation and anaesthesia.

This list is not restrictive and is left to the individual's discretion. For example:

IV drugs:

- atropine,
- midazolam,
- hypnomidate,
- ketamine,
- succinylcholine,
- metoclopramide,
- prednisone,
- epinephrine,
- tramadole,
- diazepam,

Atomiser:

- terbutalin,
- nitroglycerine,

IV fluids:

- ringer-Lactate.

vi) Miscellaneous:

- scissors, or other implement, to cut through harnesses and overalls,
- survival cover,
- piece of black "photographer's" type material to permit correct intubation in bright light (recommended),
- sterile and non-sterile gloves.
- for cross-country rallies, a casualty immobiliser (beanbag) and various splints.