



**RENAULT  
SPORT**

**FORMULA  
RENAULT 2.0**  
*Northern European Cup*

## **General Tender for Circuit Series Automotive Sports**

### **Northern European Cup Formula Renault 2.0**

DMSB approval number: 607/09  
(Status: 18 December 2008)

Renault Deutschland AG is tendering the following racing series for 2009:

### **Northern European Cup Formula Renault 2.0**

(hereinafter referred to as NEC)

#### **FOREWORD**

The Northern European Cup Formula Renault 2.0 (NEC) will be hosted according to globally valid technical rules and the given sporting conditions of the respective country and its motor sport authorities.

Many years of experience, the strict application of the rules and their supplements, cooperation and continual involvement with well-known partners and sponsors have contributed to the success of RENAULT brand cups for more than 30 years. The worldwide exchange of information among the countries active in Renault sports activities will ensure the continued success of our series.

Operating vehicles of an equivalent standard, young talents learn to make their mark in terms of sportsmanship and driving skills, while giving consideration to weaker drivers and measuring their own sports skills against stronger competitors. Strict compliance with sporting and technical rules ensures fair conditions for all participants.

At the end of the year, there will be a champion in the Formula Renault Cup after the official point valuation.

**Organisation:** Renault Deutschland AG  
Motor Sports Division  
Renault Nissan Strasse 6-10  
50321 Brühl, Germany

and

MdH Consultants AG  
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## 1. General

### 1.1 Organisation

Renault Deutschland AG (hereinafter referred to as RD) and MdH Consultants AG (hereinafter referred to as MdH) tender the following series for 2009:

## Northern European Cup Formula Renault 2.0

(hereinafter referred to as NEC)

The competitions are open to all participants, regardless of nationality, who have an international license.

This cup offers interested participants the opportunity to compete in motor sports for a reasonable price and with the best competition materials.

The driving skills will be the deciding factor, not financial strength.

The companies operating this cup want to bring in, in particular, young talents and to encourage their participation in motor sports.

Experience has shown that this type of cup is feasible only with strict compliance to execution and technical rules.

For this reason, it is extremely important that all participants comply with all sporting and technical rules.

Any change to the rules will be published on the following site: [www.renault-sport.de/fahrerlager/2009/FormelRenault/Reglement](http://www.renault-sport.de/fahrerlager/2009/FormelRenault/Reglement)

Copies and excerpts of this document require written approval from Renault Deutschland AG, 50321 BRÜHL, Germany.

### 1.2 Legal foundations of the series

This series is subject to the following regulations:

- FIA International Sporting Code (ISC) and appendices
- DMSB event rules
- DMSB race track rules
- DMSB legal and procedural guidelines (RuVO)
- DMSB resolutions and regulations
- DMSB environmental guidelines
- Anti-doping policies from the National Anti-Doping Agency (NADA code)
- Sporting and technical rules for this series with the changes and supplements (bulletins) approved by DMSB
- Event tenders with possible changes and supplements (according to DMSB approval)

### 1.3 Status of the events

The status of the event is specified in the respective event tender.

## 2. Series Calendar

RD reserves the right to cancel events without substitution, replace events or add additional events.

The official calendar is located at [www.renault-sport.de](http://www.renault-sport.de).

## 3. Sporting Rules (Execution Rules)

### 3.1 Participants

Eligible participants are:

Drivers who have a valid international driving license for 2009, regardless of nationality, and who have registered with RD. This registration must be confirmed by RD in writing.

The participant is assigned a permanent start number for the entire season.

RD must have a photocopy of the driving license.

Note: Renault Deutschland AG reserves the right to reject registrations.

One double start in the same event is permitted, whereby NEC always takes priority.

### 3.2 Entrants

Companies, teams or clubs with an entrant licence can register as entrants with a maximum of four starting places per event.

Each entrant can register only one driver per event for each issued starting place, which is valid for the entire season.

As a prerequisite, the respective driver must submit to RD a completed registration form on time, along with the signed liability disclaimer and entry fees.

The entrant must submit the names of registered drivers to the RD Motor Sports Division **no later than 14 days** prior to the respective event (see Section 3.6).

RD reserves the right to refuse drivers/entrants.

### 3.3 Guest drivers

RD is entitled to authorise guest drivers to participate in the individual events.

### 3.4 Age regulations

Drivers must be at least 16 years of age in 2009.

### 3.5 Registrations

The registration forms must be requested from RD. These forms (one per participant) must be filled out using a computer or typewriter, or in block letters, and dated and personally signed (by participants and/or entrants).

The original registration must be sent to the address below:

## **RENAULT DEUTSCHLAND AG**

**MotorSport Division**

**Renault Nissan Str. 6 - 10**

**50321 Brühl, Germany**

Each participant must transfer an entry fee of **€ 15,500 plus taxes** (to participate in all events) to the following account:

#### **MdH Consultants AG**

**Bank: UBS AG**  
**Baarerstrasse 14 a**  
**6300 Zug**  
**Switzerland**

**IBAN: CH74 00273273 2772 7175W**

**BIC: USBWCHZH80A**

Use "NEC 2009" as the reference.

Participants who register before 1 March, 2009, and who have paid the registration fee in full will receive a credit note of € 1,000.

Entry fees will not be reimbursed, regardless of the circumstances.

Registrations will be processed only after receipt of entry fees.

### 3.6 Participation obligation

- a) Entry for the individual races is submitted to the respective organiser by RD using the entry form. All participants registered before the deadline are entered in the respective event (one driver per vehicle).  
Entry by the entrant or driver directly with the organiser is not possible.  
The original entry form must be fully completed, signed and submitted to RD MotorSport Division no later than 14 days prior to the first event.
- b) Registration/entry form for events:  
If unable to participate in an event, the driver/entrant must deregister by submitting a written notice to RD MotorSport Division at least 14 days prior to the event.
- c) The entry fee for a single event is € 2,500 and must be submitted along with the registration.
- d) The tender for each event can be found on the Internet at [www.renault-sport.de/fahrerlager](http://www.renault-sport.de/fahrerlager).
- e) Each participant can enter only one vehicle per event.  
Only one vehicle can be submitted by the driver for technical approval and used for the event.  
An event consists of the following stages: test and tune runs, qualifying, qualification races and races.  
The exception here is damage to the monocoque during the test and tune runs for the event.  
The technical commissioner makes the decision.
- f) In the last NEC event, new registrations cannot be made and guest starts are not permitted; this means that participants must have participated in at least one prior event.
- g) Any change relating to the entry form and driver information must be submitted immediately to RD in writing.

### 3.8 Permitted vehicles

a) Formula Renault 2.0, 2000-2006 models

The competition vehicles, Formula Renault 2.0 built after 2000, must comply with all aspects of the 2006 technical rules, the 2006 nomenclature and the relevant technical grades. These grades are numbered consecutively and are accessible on the Internet at [www.renault-sport.de/fahrerlager/2006/Formel/Reglement](http://www.renault-sport.de/fahrerlager/2006/Formel/Reglement).

b) Formula Renault 2.0, 2000-2009 models

The competition vehicles, Formula Renault 2.0 built after 2000, must comply with all aspects of the current technical rules, the current nomenclature and the relevant technical grades. These grades are numbered consecutively and are accessible on the Internet at [www.renault-sport.de/fahrerlager/2009/Formel/Reglement](http://www.renault-sport.de/fahrerlager/2009/Formel/Reglement).

### 3.9 Repairs, seals and identification of vehicle parts

See technical rules

### 3.10 Document acceptance

The following documents must be submitted by the driver/entrant:

- Entrant/sponsor licence
- Driving licence
- If applicable, A.S.N. confirmation
- If applicable, foreign starting permission

### 3.11 Technical acceptance/technical checks

For technical acceptance, the drivers or persons appointed by them must appear with the competition vehicle and the prescribed driver safety equipment. The vehicle must be presented in the condition it will be in for the competition and must meet the valid technical rules.

A vehicle pass issued by A.S.N. must be shown to the technical commissioner prior to using the vehicle.

This vehicle pass remains with the entrant/driver and must be presented at each technical acceptance.

The rules of the International Sporting Code and of the DMSB apply.

Participants' vehicles can be subject to technical inspections performed by the technical commissioner and employees of ORECA (F-Magny- Cours) at any time during an event that is part of the NEC.

Each driver or entrant expressly agrees that these inspections can be performed at a location determined by RD. Transportation costs will not be reimbursed.

Vehicles are selected by the sports commissioners at the proposal of the responsible technical commissioner or RD representative.

The result from a thorough parts inspection performed by the technical commissioners is given to the sports commissioners.

The entrant or a representative of the entrant is entitled to label the removed parts. Rejected parts are to be clearly labelled so as to avoid confusion and can be retained by RD. Parts that comply with the rules are returned to the owner as quickly as possible.

**There can be no objection to the place of origin of removed parts.**

The drivers or their representatives have the right to be present when their parts are checked.

**Reassembly is the responsibility of the participants.** There is no compensation for checking the engine on the power testing station.

For the sake of fairness, Renault Deutschland AG MotorSport Division employees are not to perform any work on the participant's vehicle with the exception of measurement work for the purpose of verifying that the vehicle conforms to the rules.

### **3.12 Driver equipment**

See technical rules, Section 4.4

### **3.13 Advertising on driver equipment**

1. General advertising regulations of DMSB (see DMSB manual, blue section) and the International Sporting Code apply.
2. Mandatory advertising on competing vehicles is accurately defined in the RENAULT adhesion instructions and must be followed at all times during the event.
3. Mandatory advertising on drivers' overalls is accurately defined in the RENAULT patch instructions and must be followed at all times during the event.
4. On the rear of the team truck, the team must attach two flag poles extending four metres above the roof of the truck, flying at least one RENAULT flag (provided by RD) during the entire duration of the event. The second flag pole can be used for team advertising.
5. Each team will receive two NEC stickers for the truck at the start of the season. These are to be attached on the right and left sides of the truck.

Adhesion instructions, photos and attachment stipulations are part of these rules. Participants can be excluded from the event in the event of infringement.

All surfaces that – according to the adhesion instructions – are not covered by the companies mentioned above or used for attaching the start numbers are free for other use.

The distance between the start numbers and the mandatory advertising must be at least 10 cm.

Advertising on the vehicle or drivers' clothing for competing brands or products of the mentioned companies is not permitted.

**RD has the right at all times to reject inappropriate advertising on vehicles, on driver clothing and in the driver's area assigned by Renault, without providing a reason.**

It is important to RD that the vehicles do not damage the image of automotive sports, and RD reserves the right to deny technical acceptance of vehicles that do not comply.

By submitting the registration, the entrants and participants acknowledge that both RD and series sponsors reserve all rights to commercial exploitation of the sports successes in terms of words and images – without having to pay additional fees.

### **3.14 Advertising and start numbers on the vehicle**

See Section 4.10

### **3.15 Execution of the competitions**

The competitions will be conducted in accordance with DMSB event rules and race track rules, unless otherwise stipulated in the following or in the tender of the respective organiser.

#### **3.15.1 Test ban**

NEC teams and drivers are obligated to **refrain** from testing on NEC tracks from **01 April 2009** until after the last race.

Testing on NEC tracks is permitted only after the final scheduled race.

Each team must submit with their registration the test track they will be using during the season. Switching test tracks during the season is not permitted. If, for whatever reason, a team or driver fails to submit a test track, the test ban applies to all championship tracks. The test track stated on the registration is binding for the driver and team. The team may test only with the registered driver, and the driver only with the team stated on the entry. Drivers who switch teams during the season forfeit their test track.

The sports commissioners will move drivers who are in violation of these rules back five places in the starting positions at the respective event(s).

Drivers are not permitted to test on any tracks 14 days prior to a NEC event (even if the track is registered as a test track).

### **3.16/17 Training/qualification**

Official testing days

The NEC FR 2.0 organisation announces the official testing days. These rules apply on such testing days. Persons who fail to comply with these rules may be excluded from participating in the testing days.

Qualifying should take 30 minutes. There should be at least four hours between training and the race. There should be at least six hours between the two races. The official results from qualifying determine the starting position for the first race. The results from the first race determine the starting position for the second race. The first eight participants to complete the first race are placed in reverse order in the starting position for the second race. All participants must qualify in the training in accordance with the stipulations in the tender.

The number of vehicles permitted to race is determined by the race track's acceptance protocol. The race organisers always have the decision on the final starting positions.

### **3.18 Start types**

The races will be started as follows:

- standing start with staggered starting position (GP start)

### 3.19 Races

The NEC consists of several races that are listed in the event calendar.

**As a rule, each race should last at least 25 minutes.**

The finish line applies both on the track and in the pit lane.

### 3.20 Points/point allocation

The winner of a race is the participant who crosses the finish line first.

All vehicles are ranked according to the number of completed laps and those who have completed the same number of laps in the order in which they cross the finish line.

All completed races are used for the points score.

Points are allocated as follows:

1st place:	30 points	11th place:	10 points
2nd place:	24 points	12th place:	9 points
3rd place:	20 points	13th place:	8 points
4th place:	17 points	14th place:	7 points
5th place:	16 points	15th place:	6 points
6th place:	15 points	16th place:	5 points
7th place:	14 points	17th place:	4 points
8th place:	13 points	18th place:	3 points
9th place:	12 points	19th place:	2 points
10th place:	11 points	20th place:	1 point

A separate valuation (challenge) can be used for 2006 models.

### 3.21 Prize money

Not applicable.

### 3.22 Title

The NEC champion is the participant with the highest score following all completed races taking into account 2 disqualifications. The races include:

1	tbc
2	tbc
3	tbc
4	tbc
5	tbc
6	tbc
7	tbc
8	tbc

The winner will receive the:

## **NORTHERN EUROPEAN CUP.**

In the event of a tie (ex aequo), the participant with largest number of first, then second and, if necessary, further placements in all completed competitions will be the champion.

### 3.23 Special conditions

#### **a) Role of RD and the National Sporting Authorities (A.S.N.)**

The technical guidelines relating to NEC vehicles are published in agreement with the A.S.N.

**b) Publication dates for changes**

All changes to these rules are announced by RD, with approval from the responsible A.S.N., and will be posted at the following event and on the Internet ([www.renault-sport.de](http://www.renault-sport.de)).

**3.24 Protests and appeals**

In the event of protests and appeals, the FIA International Sporting Code applies, and for non-international series, the DMSB rights and procedural guidelines.

**3.25 Barring of legal proceedings and liability limitation**

(1) Legal proceedings are barred for all decisions relating to the FIA, DMSB, their jurisdiction, the sports commissioners, the series' tendering party or the organiser as the adjudicator according to § 661 of the German Civil Code [Bürgerliches Gesetzbuch – "BGB"].

(2) No claims for damages of any kind are permitted that result from measures or decisions made by the DMSB and/or its sports jurisdiction as well as officers of the DMSB and the series tendering party, with exception of damages arising from intentional or negligent breach of duty.

**3.26 Liability disclaimer**

With submission of their registration, entrants and drivers declare that they waive all rights and claims for damages of any kind associated with the event, specifically involving:

- FIA, DMSB, member organisations of the DMSB, Deutsche Motor Sport Wirtschaftsdienst GmbH, its presidents, bodies, CEOs, general secretaries,
- ADAC chapters, promoters/series organisers,
- organisers, stewards, and track owners,
- authorities, racing services and all other persons associated with the organisation of the event,
- road builders insofar as damage caused by the roads, and accessories to be used for the event, and
- agents or representatives of above-mentioned persons and bodies,

with the exception of damages resulting from death, from personal injury or to health that are caused by intentional or negligent breach of duty – also in the case of a legal representative or an agent of the liability-disclaimed circle of people – and with the exception of other damage that is caused by intentional or negligent breach of duty – also in the case of a legal representative or an agent of the liability-disclaimed circle of people;

vis-à-vis:

- other participants (entrants, drivers, co-drivers) their assistants, the owners and holders of other vehicles,
- particular entrants, particular drivers, co-drivers (contrary special agreements between entrant, driver, co-driver take precedence) and particular assistants waive all rights and claims of any kind associated with the races (untimed, timed training, warm-up, race) arising from the slalom in conjunction with training and events/races,

with the exception of damages resulting from death, from personal injury or to health that are caused by intentional or negligent breach of duty – also in the case of a legal representative or an agent of the liability-disclaimed circle of people – and with the exception of other damage that is caused by intentional or negligent breach of duty – also in the case of a legal representative or an agent of the liability-disclaimed circle of people.

The liability disclaimer becomes effective vis-à-vis all parties involved upon submission of the registration.

The liability disclaimer applies to claims for any legal reason, in particular both for damages claims resulting from contractual and non-contractual liability and for claims resulting from non-permitted actions. Silent liability disclaimers remain unaffected by the preceding liability disclaimer clause.

### **3.27 Indemnity against liability vis-à-vis the vehicle owner**

- (1) Insofar as entrants or drivers are not themselves the owners of the vehicles being used, they must ensure that the vehicle owner signs the liability disclaimer printed on the registration form.
- (2) In the event that the declaration is – contrary to this obligation - not signed by the vehicle owner, the entrants and drivers will release all persons and bodies listed in Section 32 from all claims vis-à-vis the vehicle owner, with the exception of damages resulting from death, from personal injury or to health that are caused by intentional or negligent breach of duty – also in the case of a legal representative or an agent of the liability-disclaimed circle of people – and apart from other damage that is caused by intentional or negligent breach of duty – also in the case of a legal representative or an agent of the liability-disclaimed circle of people.
- (3) This indemnity declaration relates to claims against the other participants (entrants, drivers, co-drivers), their assistants, the owners, holders of the other vehicles, the particular entrants, the particular drivers, co-drivers (contrary special agreements between entrants, drivers, co-drivers take precedence) and particular assistants for all rights and claims associated with the races (untimed, timed training, warm-up, race) and for claims against other persons and bodies for damages associated with the event as a whole. Silent liability disclaimers remain unaffected.

### **3.28 Responsibility, changes to the tender, cancellation of the event**

- (1) The participants (entrants, drivers, co-drivers, vehicle owners and holders) take part in the event at their own risk. They assume sole civil and criminal responsibility for all damage caused by them or the vehicle they use, insofar as there is no indemnity against liability in accordance with this tender.
- (2) The series' tendering party reserves the right to make changes to the tender as deemed necessary as a result of force majeure or for safety reasons or instigated by the authorities, or to cancel the event, or individual races, without replacement if extraordinary circumstances prescribe this without assuming damage obligations, exempting intention and gross negligence. Furthermore, the organiser is only liable insofar as no indemnity against liability is agreed by the tender and registration.

### **3.29 Decisive rules text**

The rules are being translated into English, however, only the German text approved by DMSB is binding.

### **3.30 Recognition of the rules**

By submitting a registration, all entrants and participants in the NEC confirm their acceptance of these rules, the supplements/changes, the tender of the respective organiser, the rules of the International Sporting Code and DMSB regulations.

### **3.31 Legal venue**

In the event that one of the participants – despite the agreed general liability disclaimer in the rules – intends to sue for damages, the exclusive legal venue, insofar as this is legally permissible and the claimant believes that RD should be involved in this lawsuit, is Brühl.

### **3.32 TV rights/advertising and broadcasting rights**

All copyright and image rights remain with RD and MdH, including those taken from television transmissions.

All broadcasting rights, both for terrestrial transmission and cable and satellite transmission, all video rights and usufructuary rights using all electronic media, including the Internet, remain with RD and MdH.

All forms of recording, airing, repetition and reproduction for commercial purposes are prohibited without the written approval of RD and MdH.

## 4. Technical Requirements/Rules

### 4.1 Overview of the tendered groups/classes

Not applicable.

### 4.2 Basis for technical rules

The stipulations of International Sporting Code and the DMSB apply.

All changes to the existing rules must be in writing.

Vehicles can be subject to technical inspections at any time during an event that forms part of the NEC (see also Section 3.11).

### 4.3 General/preamble

#### Everything not expressly permitted by

- these technical rules,
- the 2006 nomenclature and the current nomenclature,
- the repair manual and
- bulletins (technical grades)

**IS PROHIBITED.**

### 4.4 Driver equipment

The following driver equipment is required:

1. Overalls, undergarments (with long arms and legs), socks, shoes and balaclava hoods in accordance with FIA Standard 8856-2000 are mandatory.
2. Gloves in accordance with FIA Standard 8856-2000.
3. HANS-compatible helmet in accordance with current FIA standards.
4. FIA homologated head restraint system (such as HANS).

### 4.5 General rules

#### Permitted changes and installations

The technical rules for all parts that form to make Formula RENAULT are summarised in the nomenclature. The vehicle parts are grouped into the following three categories according to the degree of permissible change:

- Category A: No changes are permitted to these original parts. The parts must remain in their original position and function as originally intended.
- Category B: Only the changes permitted in the nomenclature or the technical rules (including bulletins) are allowed on these parts.
- Category C: These parts are approved under the express condition that the original function is not circumvented, no function is added and that the part is installed in the same position as the original part.

Any change to the original parts is prohibited, if not expressly permitted in the nomenclature. All dimensions of new parts must be checked before installation.

Work may be performed that is part of the vehicle's normal maintenance or the replacement of parts damaged by wear or accidents.

Parts damaged by wear or accidents must be replaced only with identical original parts.

### **Screws**

With the exception of screws for the engine, axle, suspension and steering, all other screws are exempt on the condition that the function (additional functions prohibited), original diameter and the original thread pitch are retained.

## **4.6 Vehicle minimum weights and ballast**

### **4.6.1 Minimum weight**

The minimum weight of **Formula Renault 2.0 2000-2007 models** must be no less than **490 kg**.

The minimum weight of **Formula Renault 2.0 2000-2006 models** must be no less than **492 kg**.

RD reserves the right to adjust the weight (even during the season) relative to the situation by making a bulletin announcement.

### **4.6.2 Racing weight**

The minimum racing weight of **Formula Renault 2.0 2000-2007 models** must be no less than **565 kg**, including the driver and equipment (according to Section 4.4).

This weight refers to the condition of the vehicle during test and tune runs, qualifying and races. This includes residual fuel. Any change to the vehicle including addition of material is prohibited.

The minimum racing weight of **Formula Renault 2.0 2000-2006 models** must be no less than **567 kg**, including the driver and equipment (according to Section 4.4).

This weight refers to the condition of the vehicle during test and tune runs, qualifying and races. This includes residual fuel. Any change to the vehicle including addition of material is prohibited.

### **4.6.3 Ballast**

Vehicle ballast is permitted, on the condition that it is attached in the intended position and can be removed only by using tools. There must be the possibility of applying seals to it.

If the vehicle is equipped with a ballast to meet the stipulated weight, this must be reported to the technical commissioners responsible for the NEC and sealed by them.

A ballast that is not sealed properly is against the rules and will be deemed non-existent. Maintenance of the intact seals is the responsibility of the driver.

### **4.6.4 Adding weight during an event**

Adding liquids, materials or replacing parts with others made from heavier material is prohibited during the event (according to definition in Section 4.13.2).

### **4.6.5 Checking the minimum racing weight**

The minimum racing weight must be adhered to at all times during the event.

## **4.7 Engine size factor for charged engines**

Not applicable.

## **4.8 Emissions stipulations**

Only the catalytic converter in accordance with DMSB homologation no. ROSI 50181 may be used. The catalytic converter must always be functional. Protest against the conversion rate is not allowed.

## **4.9 Noise stipulations**

Only the use of the original exhaust system is allowed. In accordance with the DMSB pass-by method (see DMSB manual, blue section), the threshold values of 132 dB(A), according to the  $L_{WA}$  principle and 100 dB(A) according to the  $L_P$  principle, must be adhered to.

The silencer from RENAULT England must be used for events in Zandvoort.

## **4.10 Advertising regulations and start numbers on the vehicle**

DMSB regulations apply for start numbers and the DMSB manual (blue section) applies for advertising. Regulations for advertising on driver equipment according to Section 3.13 are to be complied with.

#### **4.11 Safety equipment**

The vehicles must comply with Section 277 in Appendix J of the ISC.

##### **4.11.1 Roll bar height**

The rear roll bar must be high enough to ensure a visual line to the front bar that is 5 cm above the driver's helmet when the driver is strapped into the vehicle and wearing the helmet.

##### **4.11.2 Fire extinguisher system**

The original fire extinguisher system from RENAULT must be used.

###### **4.11.2.1 Test plate**

The following data must be clearly visible on the fire extinguisher test plate:

- Capacity
- Product
- Weight or volume of the product
- Test date for the fire extinguisher. This date must not be older than two years following filling or the last test.

###### **4.11.2.2 Housing attachment**

The fire extinguisher container must be adequately protected. The container must be located at the place designated by the manufacturer.

In all cases, extinguisher mounts must be able to withstand a force of 25 g on all sides.

###### **4.11.2.3 Operation**

The driver must be able to manually discharge the extinguisher while strapped into the normal position in the vehicle with the steering wheel installed. There must also be an external release device next to or integrated into the circuit breaker. This must be marked by a red "E" in a white circle with a red border of 10 cm Ø.

###### **4.11.2.4 System layout (ISC, Appendix J, Section 253, 7.2.5)**

The outlets must be positioned so that the extinguishing agent does not discharge directly onto the driver.

###### **4.11.2.5 Special note**

The fire extinguisher system must function in all vehicle positions, even when the vehicle is flipped over.

##### **4.11.3 Circuit breaker**

Only the original circuit breaker may be used.

Strapped in and sitting in the normal position with steering wheel installed, the driver must be able to break all circuits for the ignition, fuel pumps and taillight by means of a spark-proof circuit breaker.

The switch must be positioned on the dashboard and marked with a red light in a blue triangle with a white border of at least 10 cm.

There must also be an external circuit breaker with a horizontal handle that can be activated from a distance using a hook. This circuit breaker must be positioned at the foot of the main roll bar fixture on the right side.

##### **4.11.4 Rear-view mirrors**

Only the original rear-view mirrors may be used.

All vehicles must be equipped with two rear-view mirrors to ensure drivers can see what is behind them on both sides of the vehicle.

##### **4.11.5 Safety harness (ISC, Appendix J, Section 253, 6.1)**

The original safety harnesses (FIA homologated) must be used. The safety harnesses must be replaced following an accident.

#### **4.11.6 Taillight**

The original taillight must be used.

#### **4.12 Fuel and uniform fuel**

The fuel tank of each vehicle must be emptied prior to the start of each event.

When the fuel pump in the tank is used to empty the fuel tank, residual fuel remains in the tank. The tank must be completely emptied to ensure the result of a fuel test is not falsified.

Ensure maximum safety when emptying the tank using the external fuel pump.

The participant may use only unleaded fuel from a supplier appointed by the NEC.

A different supplier can be appointed for each race (filling station, filling truck, or similar).

Fuel samples are taken from the respective supplier prior to the start of the event.

RD is entitled to take fuel samples from participating vehicles at any time during the event.

The participant must ensure that, at all times during the event until the end of the protest period, at least 3 litres of fuel can be taken from the tank.

Filling and emptying the fuel tank during qualifying and racing is prohibited (Section 5.11.3.1).

Refuelling the competition vehicles between the starting position and the departure from the vehicle storage area (park fermé) is prohibited during qualifying and the race.

Testing of the fuel is done using a conformity test with fuel from a specific filling station for the event announced in the bulletin.

#### **4.12.1 Combustion additives**

The only permissible combustion additive is air.

#### **4.13 Definitions**

The definitions of the "General Requirements, Definitions and Clarifications of Technical Rules" in the DMSB manual (blue section) and the definitions according to Section 251 of Appendix J (ISC) apply. The following definitions also apply:

##### **4.13.1 Formula RENAULT**

Automobile manufactured for speed races on circular tracks or closed circuits.

##### **4.13.2 Event**

An event consists of all event sections specified in the schedule (e.g. open training, test and tune runs, qualifying, races, etc.).

##### **4.13.3 Bodywork**

See Section 251, Appendix J, ISC (International Sporting Code)

##### **4.13.4 Wheels**

**Wheel:** Hub and rims

**Complete wheel:** Hub, rims and tyres

**Vertical wheel axis:** The vertical axis of the wheel is the line which is perpendicular to the vehicle base on each side of adjacent levels in the middle of the tyre's rolling surface.

##### **4.13.5 Cockpit**

Space where the driver sits.

##### **4.13.6 Survival cell**

Continuous structure that houses the fuel tank and the cockpit.

##### **4.13.7 Telemetry**

Any type of wireless transfer of real-time technical data between the vehicle and someone in contact with the vehicle (in the pits).



## **5. Special Technical Stipulations**

### **5.1 General**

Aside from the technical rules in Section 4 of this tender, the following special technical stipulations apply.

Everything not expressly permitted in these rules is prohibited.

Permitted changes must not result in impermissible changes or infringements to the rules.

### **5.2 Engine**

RENAULT SPORT Type F4R FRS

Engine capacity: 1998 cm<sup>3</sup>

#### **5.2.3 Maintenance of the RENAULT F4R FRS engine/ required engine test**

The F4R FRS engine for Formula RENAULT is delivered by RD sealed.

Preparation, maintenance, and repairs of the engine may be performed only by Oreca, Magny-Cours (F).

Engines without seals or engines from a different origin are not allowed to be used in the NEC.

The engine must be tested on an engine testing station by Oreca in Magny-Cours (F) before the season begins. The certificate issued by Oreca is to be submitted with the technical acceptance.

The technical commissioner gives ORECA the right to randomly test the engines/control unit at any time.

### **5.3 Power transmission**

#### **5.3.1 Transmissions and gearboxes**

Only the original RENAULT SPORT transmission for the NEC may be used.

Only gearboxes listed in the technical requirements for the NEC are allowed.

#### **5.3.2 Reverse gear**

All vehicles must have a reverse gear, which can be engaged at any time during the event when the engine is running and the driver is seated in the vehicle.

#### **5.3.3 Traction control**

A system for automatic traction control is prohibited.

#### **5.3.4 Transmission maintenance**

The transmission may only be maintained in accordance with valid NEC standards.

### **5.4 Brakes**

Only the original brake system may be used.

The brake pad material is unrestricted, but the friction surface of the pad on the rotor disc must be the same size as the original.

#### **5.4.1 Ventilation**

The use of any air cooling system for ventilating the front and rear brakes is prohibited (hoses, scoops, ducts, extractors fitted to the wheels, etc.).

### **5.5 Steering**

Only the original steering may be used.

#### **5.5.1 Steering wheel and steering wheel hub**

The following is mandatory:

- a steering wheel, irrespective of shape and design, with closed steering wheel rim,
- original, removable steering wheel hub.

### **5.6 Wheel suspension**

All wheels with contact to the ground and the axle must be suspended in relation to the to the chassis/bodywork unit. This means that the axles may not be directly connected to the chassis/bodywork unit. Accordingly, the axle stubs and hubs must have free spring deflexion.

### 5.6.1 Active suspension

Active wheel suspensions are prohibited.

### 5.6.2 Chrome-plating of suspension parts

Chrome-plating of any wheel suspension parts is prohibited.

### 5.6.3 Suspension

Only original parts may be used.

## 5.7 Wheels (hub + rims) and tyres

**Only tyres from Deutsche Michelin Reifenwerke KgaA, or a commissioned service, with the side inscription "NEC" may be used.**

### 5.7.1 Wheel dimensions

- Width at front : 8 inches
- Width at rear : 10 inches
- Diameter : 13 inches

Aerodynamic alterations or installation of extractors is prohibited.

### 5.7.2 Tyres

	Dimensions:	Type:	
Front:	16 x 53 x 13	Slick:	FR2.0
Rear:	23 x 57 x 13	Wet:	P220

### 5.7.2 Tyre treatment

Use of tyre warmers or insulating covers or any other materials to modify or maintain tyre temperature is prohibited throughout the entire duration of the event.

All modifications to tyres including recutting, retreading or surface treatment (including chemical) are prohibited.

### 5.7.3 Restrictions on use of slick tyres

The following slick tyres may be used per vehicle (start number) for the duration of the event (qualifying and races 1 and 2):

- 4 front, marked with start number.
- 4 rear, marked with start number.

Only one set of new and two sets of used slick tyres marked by RD for this event may be used per day for the official RD test and tune runs. The driver is responsible for marking the tyres. During the initial test and tune runs (kick-off event), two sets of new slick tyres (NEC) and one set of used tyres can be used.

### 5.7.4 Marking and checking tyres

Tyres for the respective vehicle must be inspected for technical acceptance before the event.

The commissioners/assistants mark the outside of the tyre or, at the request of the participant, the inside as well. Marking includes the start number and a special symbol for the respective event.

Only these tyres marked with start numbers may be used during the entire event (according to the definition in Section 4.13.4).

Each participant is personally responsible for mounting tyres on the vehicle; these tyres are marked legibly on the outside for the event. These tyres must be designed to ensure safety during the entire event. In the event that tyres are found unsafe, the driver can be banned from starting or re-starting the track.

### 5.7.5 Allocation of slick tyres

Prior to each event, participants appointed by RD must submit their new slick tyres the night before training to a location specified by RD.

These tyres are then mixed up and, in the presence of a technical commissioner or an assistant, issued to the participants. These tyres are mounted by Michelin technicians and then marked as described in Section 5.7.4.

The participants are issued four wheels (2 front, 2 rear) before time training and the first race. All six wheels are issued to the participant for the second race.

#### **5.7.6 Restrictions on use of wet tyres**

The race director decides whether it is justified to use wet tyres on the track. The decision must be announced to the participants promptly.

After the "WET RACE/WET PRACTICE" board is displayed, the participant has the choice of which tyres to use in observance of this section. The participant must assume that the race director will not interrupt the training or race.

The decision to change tyres can apply only for the complete set of tyres; a mixture of wet and slick tyres is not permitted.

#### **5.7.8 Joker tyres (not applicable)**

#### **5.7.9 Tyre pressure control valves**

Use of tyre pressure control valves is prohibited.

### **5.8 Bodywork and dimensions**

#### **a) External bodywork**

##### **5.8.1 Overhang and vertical axis**

To measure the overhang, the vertical axis is determined as follows:

The vertical axis of the wheel is the line which is perpendicular to the vehicle base on each side of adjacent levels in the middle of the tyre's rolling surface. This is determined by projecting vertically to the ground the foremost and rearmost points of the complete wheel at the median plane of the rolling surface. The two determined points are connected with each other on the right and left side. The middle of these two points is the vertical axis.

##### **5.8.2 Height measurements**

All height measurements are performed on the race-ready vehicle with the driver in normal driving position.

##### **5.8.3 Overall height (not applicable)**

##### **5.8.4 Front bodywork height**

No part of the bodywork forward of the rearmost part of the complete front wheels and more than 30 cm from the longitudinal axis of the vehicle may be located closer than 50 mm to the reference plane or higher than the front wheel rims.

##### **5.8.5 Reference planes/vehicle underbody**

Reference plane: located between the rear edge of the complete front wheels and the forward edge of the complete rear wheels symmetrical to the longitudinal axis of the vehicle.

Stepped plane: all suspended vehicle parts that are visible from below and are not in the reference plane must be located 50 mm above the reference plane.

##### **5.8.6 Overhangs**

###### **2000-2006 models**

No part of the vehicle may protrude more than 50 cm beyond the centre line of the rear wheels and more than 100 cm beyond the centre line of the front wheels.

###### **2000-2009 models**

No part of the vehicle may protrude more than 55 cm beyond the centre line of the rear wheels and more than 110.5 cm beyond the centre line of the front wheels.

### **5.8.7 Aerodynamic influence**

Only wing profiles supplied by RENAULT may be used.  
Adding parts which exert an aerodynamic effect is prohibited.

### **5.8.8 Wheel base and tracks**

The tracks (front and rear) must remain original.

### **5.8.9 Aerodynamic aids**

#### **Rear wing profiles**

Only original wing profiles from Renault may be used for the NEC.  
Max. permissible wing height from the ground: 900 mm

### **5.8.10 Transponder**

The transponder must be secured on the left side behind the front pivot point of the suspension arm.

## **b) Cockpit**

### **Dashboard**

Only the original RENAULT dashboard may be used.

## **c) Additional equipment**

### **Padding in the cockpit**

Parts within the cockpit that are only used to improve the comfort and safety of the driver.  
These parts must be able to be removed quickly without tools.

## **5.10 Electrical equipment**

### **5.10.1 Starter**

Only the original starter may be used. It works with the on-board electrical source and must be operated by the driver in normal driving position.

### **5.10.2 External starting devices**

The engine can be started in the pit or at the starting position using an additional battery that is temporarily connected. This plug must be installed behind the rear axle.

### **5.10.3 Battery**

Only the original battery supplied by RENAULT or an Odyssey, type PC 680 or DEKA Power Sport, type ETX20L may be used.

Location: Original

Mounting bracket: Original

The positive pole must be shielded.

## **5.11 Fuel circuit**

### **5.11.1 Fuel tank**

Only the original fuel tank may be used.

The approved fuel tank must have a code printed on it with the manufacturer's name and technical specifications stating how the tank was manufactured and clearly displaying the manufacturing date.

Fuel tanks may not be used longer than five years after the manufacturing date, unless they are inspected and approved for another two years by the manufacturer.

### **5.11.2 Lines and their connecting parts**

Only original lines and connectors may be used for the NEC.

**5.11.2.1** No fuel lines may be fed through the cockpit.

**5.11.2.2** All lines must be installed in such a way as to ensure that no liquid enters the cockpit in the event of a leak.

**5.11.2.3** No part containing fuel may be positioned more than 55 cm from the longitudinal axis of the vehicle.

### **5.11.3 Refuelling**

**5.11.3.1** Fuelling and emptying the fuel tank during qualifying and racing is prohibited.

**5.11.3.2** Refuelling upon entering the starting position is prohibited.

## **5.12 Lubrication system**

### **5.12.1 Location of the oil tank**

Only the original tank located in the clutch bell housing may be used.

### **5.12.2 Oil catch tank**

The vehicle's lubrication system has an open housing breather. This breather must vent into the catch tank.

### **5.12.3 Oil replenishment**

Oil replenishment is not allowed during a race.

### **5.12.4 Oil lines**

Only the original lines for the NEC are permitted.

## **5.13 Data transmission/telemetric equipment**

The following is prohibited during test and tune runs, qualifying and races:

- all telemetric systems (see definition in Section 4.13.7) and accompanying electrical equipment,
- systems for voice radio links between driver and pit or vice versa are permitted. The operator is responsible for the system.

Only the on-board data recording system approved by RD is permitted.

## **6. Appendices/Figures**

### **Appendix for the execution rules**

1. Registration/entry form
2. Change notifications/bulletins

### **Appendix for the technical rules**

1. Nomenclature (2006 and 2009)
2. Repair manual
3. Replacement parts manual
4. Technical grades