



EFRA ANNUAL GENERAL MEETING
HOTEL Holiday Inn, Brussels
Belgium
6-7th of November 2010

MINUTES ELECTRIC SECTIONS – GENERAL. Sat. 6.11.10.

1. CHAIRMAN'S WELCOME Mr. Heiner Martin & Mr. Frank Mostrey

The Electric Offroad Chairman opened the meeting at 13.30

2. APOLOGIES FOR ABSENCE – ELECTRIC GENERAL

Apologies have been received from: Greece, Ireland, Russia, Estonia, Hungary and Slovakia

Member Countries presents. Section subscription.

COUNTRY	PRESENT	SECTION SUBSCR
AUSTRIA	F Klemm . M Vrana	
BELGIUM	K Bultinck . W Heremans h	
BULGARIA		
CROATIA		
CYPRUS		
CZECH REP.	V Strupec	
DENMARK		
ESTONIA		
FINLAND	J Loupajarvh	
FRANCE	JP Caillaud	
GEORGIA		
GERMANY	J Dragani	
GREAT BRITAIN	J Spencer . R Grosgrave	
GREECE		
HOLLAND	F Heinsbroekh	
HUNGARY		
IRELAND		
ITALY	A Brianza	
LITHUANIA		
LUXEMBOURG	S Hengenh	
MONACO		
NORWAY	A Hagesaeter	
POLAND		
PORTUGAL	A Noe	
ROMANIA		
RUSSIA		
SLOVAK REP.		
SLOVENIA		
SPAIN	J Llobregat	
SWEDEN		
SWITZERLAND	I Peter - A Frattaroli	
TURKEY		
TOTAL		

Other persons present: LRP S Kholer

3. MINUTES OF 2009 SECTION MEETING

31st. Of October and 1nd. of November 2009 . Brussels, Belgium

Matters arising from the minutes: Nothing

The minutes were checked and accepted as written at the AGM 2009. Yes

The following person was elected to check the minutes of this year: Germany

4. CORRESPONDENCE RECEIVED

No correspondence received

5. RULE PROPOSALS (Does / May affect all Electric Sections)

Note: The EFRA Committee has studied all received proposals and has come to an opinion over each one, The EFRA Section Chairman will inform the floor of such positions.

APPENDIX 3 A ELECTRIC CARS GENERAL

THE RULE IS NEW:

1.3.

Existing Rule: Specific track requirements for 1/10 Off Road class tracks

Proposal: Add new rule 1.3.3
If two Classes (2WD & 4WD) are to be held on the same track, then the track should be significantly different for the two Classes. Reverse operation is acceptable.

Remarks: It is normal to find that some competitors only enter the 'second' Class. If the track is not changed, they are at a disadvantage to those competitors that competed in the first Class.

Proposed by EFRA

Moved to 1/10 Offroad

THE RULE SHOULD BE AMENDED TO READ:

2.4.

Existing Rule: ~~SPEC~~BRUSHLESS MOTORS (17.5T, 13.5T and 10.5T ~~wind~~limit)
The following rules have been agreed by various International organisations.
1 Only sensored motors are allowed in the Spec. classes.
2 The motor has to be rebuildable. Ball bearings are allowed. The motor must be constructed to allow easy replacement of the; rotor, bearings and front End-Bell.
3 Sensor connection requirements:
The motor must use a six-position JST ZH connector model number ZHR-6 or equivalent connector with 6 JST part number SZH-002T-P0.5 26-28 awg. contacts or equivalent.
Wire sequence must be as follows: -
Pin #1 - Black wire ground potential
Pin #2 - Orange wire phase C
Pin #3 - White wire phase B
Pin #4 - Green wire phase A
Pin #5 - Blue wire temp control, 10 k Thermistor referenced to ground potential
Pin #6 - Red wire + 5.0 volts d.c. +/- 10%.
Compatible speed control must use the 6 position JST header part number X-6B-ZR-SMX-TF (where the X denotes the style of the header), or equivalent.
The motor power connectors have to be clearly marked A, B, C.
A for phase A. B for phase B. C for phase C
It is not mandatory that sensored Speed Controls have to be used, or that the sensor harness has to be connected.
4 The Can. (Based on '05' size specifications).
The overall dimensions of the assembled motor do not include: - solder tabs, lead wires or the original manufacturer's logo or name.
Overall maximum diameter is 36.02mm measured at whatever point yields the maximum dimension. Overall minimum diameter is 34.0 mm measured at whatever point yields the minimum dimension. Maximum length is 53.0 mm measured from the mounting face of the motor to the furthest point of the end bell. Minimum length is 50.0 mm measured from the mounting face of the motor to the furthest point of the end bell. Motor mounting holes must be on nominal 25.0/25.4 mm centres.

5 The Stack/Stator: Slot-less stators are not allowed. The stator must be continuous laminations having the same overall shape, being one after the other without anything in between. The laminations must be of one homogeneous material without cut-outs, holes or hollow sections other than for the three slots of copper coil wires and the three grooves for the screws used to hold the entire assembly together. Stator minimum length 19.3 mm, maximum 21.0 mm. The thickness of the stator laminations is 0.35 +/- 0.05 mm. The Inside diameter of the stator must accept a plug gauge of 14.50 mm +/- .005 diameter, clearing the stator, plus its windings and the electrical collection ring at any end of the stator.

6 The Winding: Only three slot (phase) star wound stators are allowed. No delta wound stators allowed. Only circular (round) pure copper magnet wire permitted. The three slotted stator must be wound with: -

17.5T Class:- 17.5 turns of 2 x 20 awg. (or 0.813 mm) maximum wire dia.

13.5T Class: - 13.5 turns of 2 x 21 awg. (or 0.724 mm), & 2 x 23 awg. (or 0.574 mm) maximum wire dia.

10.5T Class: - 10.5 turns of 2 x 20 awg. (or 0.813 mm), & 2 x 22 awg. (or 0.643 mm) maximum wire dia. Dimensions are before lacquer coating

7 The Rotor: Shaft diameter must be 3.175mm where the pinion gear locates. Only one piece, two pole Neodymium bonded or sintered, or Ferrite (ceramic) magnetic rotors are permitted. Magnet length will be 25.00 +/- 1.00mm, not including any non-magnetic balancing aids. Magnet outside diameter will be 12.20/12.51mm (min./max. with no further tolerance) for the entire length of the magnet. The shaft outside diameter where the magnet is mounted will be 7.25mm +/- 0.15mm, with this diameter extending beyond the magnet to facilitate measurement.

8 All motors must have the original manufacturer's logo or name moulded/engraved into the end bell/plate. A unique marking or feature that is difficult to remove must be incorporated into the assembled motor to identify the motor is either a 17.5T, 13.5T or 10.5T Spec. Class motor.

Proposal:

Add to (8) last para. :-

Motors introduced from 2011 onwards must have the 'wind' # etched/engraved onto the outer surface of the motor on a part of the motor that cannot easily be separated from the stator windings.

Remarks:

Makes it easier for Tech. Inspection.

Some motors use colour coding, but various manufacturers use different colours for the different winds which can be confusing.

Proposed by EFRA

Seconded by: Holland

The proposal: o Passed Unanimously

THE RULE SHOULD BE AMENDED TO READ:

3.1.2.

Existing Rule:

Lithium Based (LiPo/LiFe) Batteries can be approved, but must conform to the following :-

1. Lithium Based (LiPo/LiFe) battery packs must have a hard, protective case that completely envelopes the cell(s). The case should be made from ABS or a similar material. The two halves of the case must be factory sealed in a way that any attempt to open the case will destroy the case. The only opening in the case that is allowed, is for the exit of wires.:

The maximum case sizes are as follows:

2S Batteries:

Length: 139.0 mm.

Width: 47.0 mm. (The max. width includes any side exit wires).

Height: 25.10 mm. (Chassis location features additional to this dimension are allowed)

Saddle-Pack cells are allowed, but must comply with the above dimensions.

Saddle-Pack cells must have a combined dimension of 139.0mm max when placed end to end.

1S Batteries:

Length: 93.0mm.

Width: 47.0mm. (Side exit wires are allowed outside this dimension).

Height: 18.5mm. (Chassis location features additional to this dimension are allowed)

2. Individual cells used in the construction of the battery pack shall be rated at (LiPo 3.7/LiFe 3,3) volts nominal. Individual cells may be wired in parallel.

For 2S Packs, the maximum connection "In Series" is two, to give a Final pack voltage of (LiPo 7.4v/LiFe 6.6v) nominal.

For 1S Packs, cells can only be connected in parallel to give a Final pack voltage of (LiPo

3.7v/LiFe 3.3v) nominal.

3. The battery pack shall have leads extending from the case for the positive and negative electrical connections using wire of adequate size to handle discharge rates acceptable to racing applications.

Alternatively, the case shall have internal connection points for these wires clearly marked positive and negative so the user can apply the lead wires. Any type of metal connections that are incorporated in the battery pack must be substantially below the major surface of the plastic casing, to prevent any "short circuit" if placed on a conductive surface.

4. The case must have the original suppliers label intact, stating the rated voltage and the chemistry (LiPo/LiFe).. The Brand name/logo shall be easily readable.

5. All LiPo/LiFe packs must be charged with a LiPo/LiFe-capable charger using the industry standard CC/CV (Constant Current/Constant Voltage) charge profile.

6. 2S LiPo/LiFe batteries may be charged to a maximum of 8.40v (LiPo) resp. 7.40v (LiFe). 1S LiPo/LiFe batteries may be charged to a maximum of 4.20v (LiPo) resp. 3.70v (LiFe). Overcharging is a serious safety hazard and will not be tolerated.

7. Any competitor found to be charging cells using a charger that is not specifically designed for LiPo/LiFe cells, or using a charge profile other than the industry standard CC/CV, will be penalised at the event.

Any competitor found to have charged LiPo/LiFe cells to above the values detailed in rule 3.1.2 (6) above will be penalised. The different guidelines for use and homologation of LiPo/LiFe-Batteries are published on the EFRA webpage (www.EFRA.ws). A copy of the guidelines for the end-user must be included in the driver's packages for EC.

Proposal:

2S Batteries:

Length: 139.0 mm.

Width: 47.0 mm. (The max. width includes any side exit wires).

Height: 25.10 mm. (Chassis location features additional to this dimension are allowed)

Maximum Weight: 320 grams

Saddle-Pack cells are allowed, but must comply with the above dimensions.

Saddle-Pack cells must have a combined dimension of 139.0mm max when placed end to end.

Saddle-Pack cells must have a combined weight of 320 grams max.

Remarks:

Using brushless and LiPo technology has increased speed and power of the cars dramatically, putting lots of stress on the material, eg the tires which are bursting due to the high rotational speed. To limit power and speed while not stopping the positive technical development, a capacity limitation on the batteries should be established. Along with the increase in run time (see proposal for 9.4.1) this will prevent drivers from using huge battery capacities to keep today's power and speed over 7 minutes of running time. The weight limit of 320grams accommodates all batteries on the EFRA homologation lists, so no existing product has to be banned, still this limit will prevent or at least slow down the introduction of batteries with higher capacities.

Proposed by SRCCA

Not Seconded

THE RULE IS NEW:

3.1.2.

Existing Rule: Lithium Based (LiPo/LiFe) Batteries can be approved, but must conform to the following :-

1. Lithium Based (LiPo/LiFe) battery packs must have a hard, protective case that completely envelopes the cell(s). The case should be made from ABS or a similar material. The two halves of the case must be factory sealed in a way that any attempt to open the case will destroy the case. The only opening in the case that is allowed, is for the exit of wires.:

The maximum case sizes are as follows:

2S Batteries:

Length: 139.0 mm.

Width: 47.0 mm. (The max. width includes any side exit wires).

Height: 25.10 mm. (Chassis location features additional to this dimension are allowed)

Saddle-Pack cells are allowed, but must comply with the above dimensions.

Saddle-Pack cells must have a combined dimension of 139.0mm max when placed end to end.

1S Batteries:

Length: 93.0mm.

Width: 47.0mm. (Side exit wires are allowed outside this dimension).

Height: 18.5mm. (Chassis location features additional to this dimension are allowed)

2. Individual cells used in the construction of the battery pack shall be rated at (LiPo

3.7/LiFe 3,3) volts nominal. Individual cells may be wired in parallel.

For 2S Packs, the maximum connection "In Series" is two, to give a Final pack voltage of (LiPo 7.4v/LiFe 6.6v) nominal.

For 1S Packs, cells can only be connected in parallel to give a Final pack voltage of (LiPo 3.7v/LiFe 3.3v) nominal.

3. The battery pack shall have leads extending from the case for the positive and negative electrical connections using wire of adequate size to handle discharge rates acceptable to racing applications.

Alternatively, the case shall have internal connection points for these wires clearly marked positive and negative so the user can apply the lead wires. Any type of metal connections that are incorporated in the battery pack must be substantially below the major surface of the plastic casing, to prevent any "short circuit" if placed on a conductive surface.

4. The case must have the original suppliers label intact, stating the rated voltage and the chemistry (Lipo/LiFe).. The Brand name/logo shall be easily readable.

5. All LiPo/LiFe packs must be charged with a LiPo/LiFe-capable charger using the industry standard CC/CV (Constant Current/Constant Voltage) charge profile.

6. 2S LiPo/LiFe batteries may be charged to a maximum of 8.40v (LiPo) resp. 7.40v (LiFe). 1S LiPo/LiFe batteries may be charged to a maximum of 4.20v (LiPo) resp. 3.70v (LiFe). Overcharging is a serious safety hazard and will not be tolerated.

7. Any competitor found to be charging cells using a charger that is not specifically designed for LiPo/LiFe cells, or using a charge profile other than the industry standard CC/CV, will be penalised at the event.

Any competitor found to have charged LiPo/LiFe cells to above the values detailed in rule 3.1.2 (6) above will be penalised. The different guidelines for use and homologation of LiPo/LiFe-Batteries are published on the EFRA webpage (www.EFRA.ws). A copy of the guidelines for the end-user must be included in the driver's packages for EC.

Proposal:

8. LiPo/LiFe drive batteries should be charge in a 'Lipo sack' at all times. LiPo sack is defined as a receptacle designed for the purpose of charging LiPo/LiFe batteries and of a suitable construction as to contain a LiPo/LiFe fire.

Remarks:

Safety - we have seen incidents recently where LiPo fires have occurred. We need to make all efforts to minimise the risk if this happens.

Proposed by BRCA Secoded by: France

The proposal: o Passed with .10 for, .1 against and 3 abstentions.

Amended by Holland, Secoded by France

THE RULE SHOULD BE AMENDED TO READ:

3.1.2.

Existing Rule:

Lithium Based (LiPo/LiFe) Batteries can be approved, but must conform to the following :-

1. Lithium Based (LiPo/LiFe) battery packs must have a hard, protective case that completely envelopes the cell(s). The case should be made from ABS or a similar material. The two halves of the case must be factory sealed in a way that any attempt to open the case will destroy the case. The only opening in the case that is allowed, is for the exit of wires.:

The maximum case sizes are as follows:

2S Batteries:

Length: 139.0 mm.
Width: 47.0 mm. (The max. width includes any side exit wires).
Height: 25.10 mm. (Chassis location features additional to this dimension are allowed)
Saddle-Pack cells are allowed, but must comply with the above dimensions.
Saddle-Pack cells must have a combined dimension of 139.0mm max when placed end to end.

1S Batteries:

Length: 93.0mm.

Width: 47.0mm. (Side exit wires are allowed outside this dimension).

Height: 18.5mm. (Chassis location features additional to this dimension are allowed)

2. Individual cells used in the construction of the battery pack shall be rated at (LiPo

3.7/LiFe 3,3) volts nominal. Individual cells may be wired in parallel.

For 2S Packs, the maximum connection "In Series" is two, to give a Final pack voltage of (LiPo 7.4v/LiFe 6.6v) nominal.

For 1S Packs, cells can only be connected in parallel to give a Final pack voltage of (LiPo 3.7v/LiFe 3.3v) nominal.

3. The battery pack shall have leads extending from the case for the positive and negative electrical connections using wire of adequate size to handle discharge rates acceptable to racing applications.

Alternatively, the case shall have internal connection points for these wires clearly marked positive and negative so the user can apply the lead wires. Any type of metal connections that are incorporated in the battery pack must be substantially below the major surface of the plastic casing, to prevent any "short circuit" if placed on a conductive surface.

4. The case must have the original suppliers label intact, stating the rated voltage and the chemistry (Lipo/LiFe).. The Brand name/logo shall be easily readable.

5. All LiPo/LiFe packs must be charged with a LiPo/LiFe-capable charger using the industry standard CC/CV (Constant Current/Constant Voltage) charge profile.

6. 2S LiPo/LiFe batteries may be charged to a maximum of 8.40v (LiPo) resp. 7.40v (LiFe). 1S LiPo/LiFe batteries may be charged to a maximum of 4.20v (LiPo) resp. 3.70v (LiFe). Overcharging is a serious safety hazard and will not be tolerated.

7. Any competitor found to be charging cells using a charger that is not specifically designed for LiPo/LiFe cells, or using a charge profile other than the industry standard CC/CV, will be penalised at the event.

Any competitor found to have charged LiPo/LiFe cells to above the values detailed in rule 3.1.2 (6) above will be penalised. The different guidelines for use and homologation of LiPo/LiFe-Batteries are published on the EFRA webpage (www.EFRA.ws). A copy of the guidelines for the end-user must be included in the driver's packages for EC.

Proposal: Amend 3.1.2 (4) to read :-

4. The case must have the original suppliers label intact, stating:- the Part #, the rated voltage and the chemistry (Lipo/LiFe). The Brand name/logo shall be easily readable.

Remarks:

Part #'s are essential, as there are so many batteries that look similar.

Proposed by EFRA Seconded by: Austria

The proposal: Passed Unanimously

Remark from BRCA: Label must be checked with a chemical at the homologation.

THE RULE SHOULD BE AMENDED TO READ:

3.1.2.

Existing Rule:

Lithium Based (LiPo/LiFe) Batteries can be approved, but must conform to the following :-

1. Lithium Based (LiPo/LiFe) battery packs must have a hard, protective case that completely envelopes the cell(s). The case should be made from ABS or a similar material. The two halves of the case must be factory sealed in a way that any attempt to open the case will destroy the case. The only opening in the case that is allowed, is for the exit of wires.:

The maximum case sizes are as follows:

2S Batteries:

Length: 139.0 mm.

Width: 47.0 mm. (The max. width includes any side exit wires).

Height: 25.10 mm. (Chassis location features additional to this dimension are allowed)

Saddle-Pack cells are allowed, but must comply with the above dimensions.

Saddle-Pack cells must have a combined dimension of 139.0mm max when placed end to end.

1S Batteries:

Length: 93.0mm.

Width: 47.0mm. (Side exit wires are allowed outside this dimension).

Height: 18.5mm. (Chassis location features additional to this dimension are allowed)

2. Individual cells used in the construction of the battery pack shall be rated at (LiPo 3.7/LiFe 3,3) volts nominal. Individual cells may be wired in parallel. For 2S Packs, the maximum connection "In Series" is two, to give a Final pack voltage of (LiPo 7.4v/LiFe 6.6v) nominal. For 1S Packs, cells can only be connected in parallel to give a Final pack voltage of (LiPo 3.7v/LiFe 3.3v) nominal.

3. The battery pack shall have leads extending from the case for the positive and negative electrical connections using wire of adequate size to handle discharge rates acceptable to racing applications. Alternatively, the case shall have internal connection points for these wires clearly marked positive and negative so the user can apply the lead wires. Any type of metal connections that are incorporated in the battery pack must be substantially below the major surface of the plastic casing, to prevent any "short circuit" if placed on a conductive surface.

4. The case must have the original suppliers label intact, stating the rated voltage and the chemistry (Lipo/LiFe).. The Brand name/logo shall be easily readable.

5. All LiPo/LiFe packs must be charged with a LiPo/LiFe-capable charger using the industry standard CC/CV (Constant Current/Constant Voltage) charge profile.

6. 2S LiPo/LiFe batteries may be charged to a maximum of 8.40v (LiPo) resp. 7.40v (LiFe). 1S LiPo/LiFe batteries may be charged to a maximum of 4.20v (LiPo) resp. 3.70v (LiFe). Overcharging is a serious safety hazard and will not be tolerated.

7. Any competitor found to be charging cells using a charger that is not specifically designed for LiPo/LiFe cells, or using a charge profile other than the industry standard CC/CV, will be penalised at the event.

Any competitor found to have charged LiPo/LiFe cells to above the values detailed in rule 3.1.2 (6) above will be penalised. The different guidelines for use and homologation of LiPo/LiFe-Batteries are published on the EFRA webpage (www.EFRA.ws). A copy of the guidelines for the end-user must be included in the driver's packages for EC.

Proposal: Add to first para:-

Lithium Based (LiPo/LiFe) Batteries can be approved, but must conform to the following :-

1. Lithium Based (LiPo/LiFe) battery packs must have a hard, protective case that completely envelopes the cell(s). The case should be made from ABS or a similar material. The two halves of the case must be factory sealed in a way that any attempt to open the case will destroy the case. The only opening in the case that is allowed, is for the exit of wires. Batteries to comply with the weights specified on the EFRA homologation list, (maximum tolerance for manufacturers is +/- 4%).

Remarks: It is possible for manufacturers to fit different cells (in the battery case) to those contained in the samples approved. As the battery cases cannot be opened, controlling the weight will help to offset this possibility.

Proposed by EFRA Seconded by: Austria

The proposal: o Passed Unanimously

THE RULE SHOULD BE AMENDED TO READ:

3.2.2.

Existing Rule: Lithium based batteries: For 2010 approval: -
 2S Batteries -- A minimum of one individual battery has to be received by 31st. Dec. 2009.
 1S Batteries -- A minimum of one individual battery has to be received by 31st. DEC. For subsequent years, the submission date for 2S and 1S battery samples will be 1st Dec. Each individual battery must have safety test certification in accordance with UN Tests, detailed in Part 3, Sub-Section 38.3 of the UN Manual of Tests and Criteria. Subject to the Chairman being satisfied that the new cell conforms with technical specifications and commercial availability, the cell will be legal for use from the following April 1st. Cells received after the above submission dates will not be included on the EFRA approved list for the following year. Any changes to the technical specifications or visual appearance of the battery or casing after the original approval will require re-approval.

Proposal: Lithium based batteries:
 2S Batteries -- A minimum of one individual battery has to be received by 1st. Dec.
 1S Batteries -- A minimum of one individual battery has to be received by 1st. Dec.

Each individual battery sample must be supplied with :-
(a) Safety test certification in accordance with UN Tests, detailed in Part 3, Sub-Section 38.3 of the UN Manual of Tests and Criteria.
(b) Technical Spec. sheet detailing the recommended charging rate, the maximum voltage when charging, case material, thickness and method of sealing the case, the battery weight (max tolerance +/- 4%).
Subject to the Chairman being satisfied that the new cell conforms with technical specifications and commercial availability, the cell will be legal for use from the following April 1st. Cells received after the above submission dates will not be included on the EFRA approved list for the following year. Any changes to the technical specifications or visual appearance of the battery or casing after the original approval will require re-approval.

Remarks: Lithium batteries are inherently dangerous if misused.
Manufacturers data is needed to ensure we know what is acceptable for each battery.
Battery weights are needed to evaluate if the manufacture of the internal cells have been changed.
Submission dates simplified (but not altered) from 2010 text.

Proposed by EFRA Seconded by: Switzerland

The proposal: Passed Unanimously

THE RULE IS NEW:

4.

Existing Rule: ELECTRONIC DRIVING AIDS

Proposal: 'Spec' electronic speed controls: timing advance in electronic speed controls eligible for 'spec' class racing is not allowed. Furthermore no advanced motor control functions (i.e. Boost, Cheat Mode, Turbo, SuperCharge, etc). are allowed for 'spec' class racing ESC.

Remarks: although EFRA is not holding any spec class touring car races under these rules, the problem which most national federations are facing with their national or regional spec racing classes are the increased speed and performance of the spec classes compared to modified when using the latest spec racing ESCs. With the advanced timing functions as well as the advanced motor control functions such as 'Boost', no clear speed and performance limitation for spec classes is possible, the natural gap between spec class and modified is closing very fast and it is almost impossible for the national federations to find rules which are fitting to the respective spec class and are able to provide the gaps in performance between the classes. The proposal is to ban ESCs with such spec racing software from spec class racing at all, allowing the performance limitations for spec classes usually defined by motor winds to be effective again.
In addition, racers have to invest a lot of money in new ESCs and new Software to keep up with the development. Without the latest software or ESC version, chances are high not to be competitive at the next race.
If the development goes on at the actual pace, national federations will start to limit the usage of ESC in the spec categories to single brands or makes, converting the championships to brand trophy racing series, something the industry for sure can't be interested in.
Industry/EFRA partners to come up with a proposal for the technical specification of such spec racing ESCs with no advanced timing and motor control functions.

Will be valid from 1st of January 2012. The meeting agreed, that the final wording and definitions of this proposal will be done by the electric section chairmen.

Deadline 15th of Dezember for the first draft. Russ Giles, Heiner Martin, Paul Worsley and LRP. Has then to be checked with the major speed controller manufacturers.

Proposed by SRCCA

Seconded by: Great Britain

The proposal: Passed with 10 for, 1 against and 2 abstentions.

THE RULE SHOULD BE AMENDED TO READ:

7.2.6.

- Existing Rule:** a) The preceding year's European Champion will automatically be allocated a place from the EFRA allocation for the World Championships.
b) The reigning World Champion, if European, will automatically be allocated a place in the following two European Championships.
- Proposal:** Add :-
c) The reigning European Champion will automatically be allocated a place in the following European Championship.
- Remarks:** There is reference to the above addition in General Rules (3.6.7), but as (a) & (b) details the procedures for EC Champions at WC events and WC Champions at EC events, it seems sensible to include the situation for EC Champions at EC events.

Proposed by EFRA

Seconded by: Belgium

The proposal: Passed Unanimously

THE RULE SHOULD BE AMENDED TO READ:

8.1.3.

- Existing Rule:** 1/10 E off-road EUROPEAN CHAMPIONSHIP:
MONDAY: Free practice 2WD, Registration and Technical Inspection
TUESDAY: Controlled Practice and Qualifying Rounds 1-3
WEDNESDAY: Schedule permitting, one hour of unofficial practice in Heat Order of Round 4
Qualifying Rounds 4-5, Finals and Prize Ceremony
THURSDAY: Free practice 4WD, Registration and Technical Inspection
FRIDAY: Controlled Practice and Qualifying Rounds 1-3
SATURDAY: Schedule permitting, one hour of unofficial practice in Heat Order of Round 4.
Qualifying Rounds 4-5, Finals and Prize Ceremony
The Race Organiser can change the above timetable providing he does so well in advance. ALL changes to the Schedule or alterations to times of any Heats/Finals must be clearly identified to all Team managers and Officials in written form, at least one hour before such changes take place, if any procedures are being brought forward.
- Proposal:** 1/10 E off-road EUROPEAN CHAMPIONSHIP:
MONDAY: Free practice 2WD, Registration and Technical Inspection
TUESDAY: Controlled Practice and Qualifying Rounds 1-3
WEDNESDAY: Schedule permitting, one hour of unofficial practice in Heat Order of Round 4
Qualifying Rounds 4-5, Finals and Prize Ceremony
THURSDAY: Free practice 4WD, Registration and Technical Inspection
FRIDAY: Controlled Practice and Qualifying Rounds 1-3
SATURDAY: Schedule permitting, one hour of unofficial practice in Heat Order of Round 4. Qualifying Rounds 4-5, Finals and Prize Ceremony
SUNDAY: Reserve day for the 4WD finals in case earlier days are delayed because of rain. Last final must end 12:00 at latest.
The Race Organiser can change the above timetable providing he does so well in advance. ALL changes to the Schedule or alterations to times of any Heats/Finals must be clearly identified to all Team managers and Officials in written form, at least one hour before such changes take place, if any procedures are being brought forward.
- Remarks:** Adding Sunday morning as reserve day gives more options for race control to find the best possible solution in case race has been delayed earlier in the week.

Moved to the off road-Part

THE RULE SHOULD BE AMENDED TO READ:

9.4.1.

- Existing Rule:** All qualifying Heats and Finals 1/10th will be 5 minutes and the last lap plus the time to complete this last lap up to a max of 40 seconds. For 1/12th the racing times will 8 minutes.
- Proposal:** All qualifying Heats and Finals 1/10th will be 7 minutes and the last lap plus the time to complete this last lap up to a max of 40 seconds. For 1/12th the racing

times will 8 minutes.

Remarks: With change to Brushless and LiPo Batteries, speed and general performance of the touring cars have increased dramatically, to an extend, where e.g. wheels are bursting due to the rotational speed. One way to limit speed and power of the cars is to extend running time. While the actual LiPo batteries deliver more than enough run time for 5 minutes, increasing the run times to 7 minutes will lead to the usage of slower motors and shorter gear ratios which will limit to certain extend speed and power of the cars. Of course, this makes only sense if the capacity of the LiPo Batteries is capped at a certain level. As long as the LiPo capacity is left open, car power and performance will steadily increase. (pls see also proposal for chapter 3.1.2 for battery capacity limitation)

Proposed by SRCCA

Seconded by: Germany

The proposal: Rejected with 6 for, 7 against and 0 abstentions.

Amended by Great Britain, seconded by Germany

All qualifying Heats and Finals 1/10th will be of a minimum of 5 minutes and may be up to 7 minutes (has to be specified at the start of the meeting) and the last lap plus the time to complete this last lap up to a max of 40 seconds. For 1/12th the racing times will 8 minutes.

THE RULE SHOULD BE AMENDED TO READ:

9.4.7.

Existing Rule: During the first round of qualifying, heat-starting order can be determined by lottery, or by the driver's performance in controlled practice based on his 2 best consecutive laps during the last round of controlled practice. During further rounds, heat-starting order will be by the single fastest time of drivers in their heat. This will apply whether the Fastest Time Qualifying System or Round by Round System is used.

Proposal: During the first round of qualifying, heat-starting order can be determined by the driver's performance in controlled practice based on his 2 best consecutive laps during the last round of controlled practice. During further rounds, heat-starting order will be by the single fastest time of drivers in their heat. This will apply whether the Fastest Time Qualifying System or Round by Round System is used.

Remarks: no lottery please, racing a championship is all about racing so use the consecutive lap method.

Proposed by NOMAC Seconded by: .Finland

The proposal: o Passed Unanimously o Passed with 10 for, 0 against and 3 abstentions.

THE RULE SHOULD BE AMENDED TO READ:

11.1.

Existing Rule: All cars may be called for technical inspection at any time but must always be presented for scrutinizing immediately after completing their heat, qualification or final.

Proposal: As agreed agm 2009.

11.1 All cars may be called for technical inspection at any time but must always be presented for scrutinizing. (11.4 remains in force).

Remarks: The above amendment was agreed at the 2009 agm, but the 2010 Handbook was not updated. Therefore it should be included.

Proposed by EFRA Seconded by: .Holland

The proposal: Passed Unanimously

THE RULE SHOULD BE AMENDED TO READ:

11.6.1.

Existing Rule: A second chassis, prepared for wet weather racing may be submitted for technical

inspection. This chassis may only be used when the race director has called either the heat or final as being a wet raceq

Proposal: Add:
1/10 Off-Road complies with General Rule 8.7.4, therefore the above does not apply to this section.

Remarks: Clarifies the amendment made to this rule in 2009.

Proposed by EFRA Seconded by: Austria

Amended Great Britain. To move the existing rule to the Touring Car Section.

THE RULE SHOULD BE AMENDED TO READ:

12.4.

Existing Rule: All cars shall have identifying numbers in at least three positions, right, left and on front of the car.

Proposal: All cars shall have identifying numbers in at least three positions, right, left and on front of the car.
The numbers must be put on the body shell so the numbers are easy seen by the referee or race director.

Remarks: A lot of body shells have small edges and when nrs are put over these they are hard or impossible to read. Also a people like to put the nrs on shells in an angle so for instance a 1 look like a 7. With the current speed of the electric cars it is already hard enough.

Proposed by NOMAC Seconded by: Belgium

The proposal: o Passed Unanimously Passed with ..12 for, and 1 abstentions.

Amended Great Britain

General items: observation from Spain : EFRA should look for a backup-person for all the homologation procedures.

MEETING TO CONTINUE WITH ELECTRIC OFF-ROAD SECTION MEETING.