

Energy Education Australia

Vehicle Rules & Regulations

Energy Education Vehicle Rules & Regulations

Index

1. Introduction.....	
2. Administration.....	
2.1. Key dates.....	
2.2. Entry Fee.....	
2.3. Address.....	
2.4. Classes.....	
2.5. Team Structure.....	
2.6. Competitors.....	
2.7. Team Managers.....	
2.8. Event Officials.....	
2.9. Team Attire.....	
2.10. Competitor Attire.....	
3. Vehicle Technical Rules & Regulations.....	
3.1. Construction.....	
3.2. Size and Configuration.....	
3.3. Competitor and Seating.....	
3.4. Chassis and Bodywork.....	
3.5. Wheels.....	
3.6. Brakes.....	
3.7. Steering.....	
3.8. Safety Equipment.....	
3.9. Seat Belts.....	
3.10. Visibility.....	
4. Power Sources.....	
4.1. Propulsion/Power Source.....	
4.2. Electric.....	
4.3. Solar.....	
4.4. Combustion.....	
5. Event Rules & Regulations.....	
5.1. Registration.....	
5.2. Prizes.....	
5.3. Scrutineering.....	
5.4. Starting Positions.....	
5.5. Pit Stops.....	
5.6. Determination of Winners.....	
5.7. Driving Etiquette.....	
5.8. Scrutineering.....	
5.9. Vehicle Integrity and Disqualification.....	
5.10. Engine running in the Paddock.....	
5.11. Driving Rules.....	
5.12. Situational Awareness.....	
5.13. Flags.....	

- 6. Dynamic Events
 - 6.1. Acceleration Event.....
 - 6.2. Endurance Event.....
 - 6.3. Touring Event.....

- 7. Infringement / penalty policy and actions.....
 - 7.1. Purpose.....
 - 7.2. Process.....
 - 7.3. Penalty Schedule.....
 - 7.4. Disqualification.....

- 8. Forms
 - 8.1. Team Application Form.....
 - 8.2. EEA Penalty / Team Appeal Form.....
 - 8.3. EEA Penalty / Team Appeal Form Receipt.....

1. Introduction.

Energy Education Australia has devised a competition, primarily aimed at secondary school and tertiary colleges that provides a motivation for students to learn and put into practice, the application of alternative energies for propulsion of a simple vehicle. Expressions of interest to compete from members of the public and other educational institutions will be considered on a case by case basis.

The basis of the competition is for students to build a cost-effective, alternative energy-powered vehicle.

The objectives being,

- to raise awareness of alternative powered vehicles as a viable means of transport that is less dependent on fossil fuel, a non-renewable source of energy.
- to expose participants, especially students, to scientific concepts, design skills and technologies relevant to electric vehicles as well as concepts associated with renewable energy and energy efficiency.
- to encourage innovation, motivation and teamwork among participants.
- to foster cross-discipline communication in schools among the various disciplines such as Science, Physics, Design and Technology, Maths, Society and the Environment.

The types of events Energy Education Australia caters for are,

- Speed event – time taken over a set distance from a stationary position.
- Endurance event – the number of completed laps in a given period of time.
- Touring Event – an event conducted on public roads.

The speed and Endurance events are modeled upon the Australian Land Speed records.

Whilst the process will be modeled upon the Australian Land Speed record regulations, the EEA events will establish EEA records per class but not official FIA sanctioned Australian Land Speed Records.

Rule Clarifications.

Questions or interpretations of these rules can be directed to,

Energy Education Australia Inc
PO Box 361,
Oaklands Park 5046
South Australia

Or via e-mail to

rules@energy.edu.au

2. Administration.

2.1. Key Dates:

- 2.1.1. Entries Open Refer to the event supplementary regulations
- 2.1.2. Entries Close Refer to the event supplementary regulations
- 2.1.3. Scrutineering Refer to the event supplementary regulations
- 2.1.4. Event Refer to the event supplementary regulations

2.2. Entry Fee: Refer to the event supplementary regulations

2.3. Address:

Energy Education Australia Inc
 PO Box 361,
 Oaklands Park 5046
 South Australia

2.4. Classes:

2.4.1. Vehicle Types

The competition is designed for single seat vehicles powered either solely by alternative energy forms or a combination of pedal and alternative energy. At the discretion of the organizers, converted vehicles (e.g. solar bike or pedal prix vehicles) and or hybrids may be accepted into specific events. Eligible vehicles will be listed in the individual event supplementary regulations.

2.4.2. Classes

	Electric	Solar	Combustion
EEA Trike	TE	TS	TC
Plus pedal	TEP	TSP	TCP
EEA Quad	QE	QS	QC
Plus pedal	QEP	QSP	QCP

Note:

2 wheel push bikes, either upright or recumbent, propelled by pedal power only, are specifically excluded.

2.5. Team Structure

Teams will consist of,

- Competitors
- A Team Manager
- An OHS/Risk Management Officer

2.5.1. A team may have a minimum of 3 Competitors but no more than 12

2.5.2. All teams must have at least one supervising adult acting as team manager with the team at all times.

2.5.3. All teams must have at least one supervising adult acting as team OHS/ Risk Management officer with the team at all times.

2.6. Competitors

2.6.1. Competitors must be able to demonstrate a satisfactory level of driving competency to the scrutineers if required to do so.

2.6.2. All Competitors must ensure they have an understanding of the flags that will be used during the events. See 5.13

2.7. Team Managers:

Team Managers are responsible to ensure:

- Each team is registered
- Each team member has insurance and correct safety gear
- All fees are paid
- Each vehicle he/she is responsible for is scrutineered and passed 'ready' to participate
- He/she is aware of public expectations
- He/she is available for media public relation/ marketing purposes
- The event vehicle(s) is/are kept in a road worthiness condition
- His/her members have a higher priority on OHS/Risk Management practices

2.8. Event Officials:

Event officials are committed to ensure that the event is managed free from incidents and in the spirit of good will and fair play. The organisers expect that all participants, in particular team managers, lead by example being fully aware of the rules and specifications and ensure that safety is paramount in the execution of their team's participation. To ensure that each team has access to the organising committee, each manager is urged to acquaint him/herself with chief scrutineer or his/her deputy. These two officials will be introduced to all teams at scrutineering.

2.9. Team Attire

- 2.9.1. All personnel shall wear clothing that would offer protection from the sun (attire must be no less than short sleeve top and shorts).
- 2.9.2. Footwear shall consist of an enclosed shoe with full sole
- 2.9.3. High Visibility clothing/vest must be worn by all team managers and all other team officials in particular the OHS / Risk Management officer

2.10. Competitor Attire

- 2.10.1. Competitors must wear enclosed shoes.
- 2.10.2. Competitors must wear gloves (fingers enclosed) at all times while driving.
- 2.10.3. The Competitor's shall wear an Australian approved bicycle (AS/NZ 2063) or motor cycle helmet (AS/NZ 1698) Competitors must wear safety goggles/glasses. These must also be worn when and if fully enclosed helmet visors are in the up or open position.
- 2.10.4. Combustion Vehicles
 - 2.10.4.1. Competitors must wear full overalls or clothing that covers from ankle to wrist.

3. Vehicle Technical Rules & Regulations

3.1. Construction

- 3.1.1. The vehicle can be constructed from any material that will provide durability/strength and is able to sustain weight and forces of stress and varying road and weather conditions
- 3.1.2. Should the Competitor/Competitor be in recumbent position then the construction shall protect the Competitor /Competitor from roll overs/side / front impacts.
- 3.1.3. The onus of proof is on the teams to ensure compliance with all regulations and to ensure their vehicle is safe to participate in the event.
- 3.1.4. The construction shall be of a professional standard and shall be free from sharp edges, protrusions that could cause cuts abrasions, nipping/shearing points, on the inside and on the outside of the vehicle

3.2. Size and Configuration

- 3.2.1. The vehicle can be of any shape
- 3.2.2. The vehicle must not exceed 2250mm in length and 1500mm in width overall.
- 3.2.3. The overall vehicle length and width, including wheels, must be over 1500mm and 1000mm respectively.
- 3.2.4. The vehicle must have a minimum ground clearance of 40mm.
- 3.2.5. The vehicle's seat base may be no more than 250mm from the ground.

3.3. Competitor and Seating

- 3.3.1. The vehicle will have one seat only, for a Competitor who will be in the vehicle at all times whilst on the course. The seat must be securely fixed to the chassis of the vehicle but may be adjustable to aid in the change of Competitors.
- 3.3.2. The Competitor must be seated in a conventional feet forward, head to the back position. Competitors will not kneel, sit astride a seat, or lie down in any way, such that their chests and heads are forward of their waist.
- 3.3.3. The Competitor's shoulders must be a minimum of 300mm above the floor of the vehicle when in the driving position.
- 3.3.4. The Competitor must be able to demonstrate an ability to get out of the vehicle unaided.

3.4. Chassis and Bodywork

- 3.4.1. If the bodywork is in one piece and encloses the Competitor, it must be able to be quickly removed or opened by one person from the outside, and by the Competitor from the inside, via well-marked release points.
- 3.4.2. Particular attention must be paid to sharp edges in and around the vehicle. All sharp edges must be protected or removed, in particular, areas where limbs may contact in the event of rapid deceleration.
- 3.4.3. The outside of the vehicle must be free of sharp protrusions and care must be taken that the Competitor is not liable to be injured by chassis parts in the event of a collision.
- 3.4.4. Vehicles must have provision to display an A4 (portrait orientation) size event sticker/number on both sides of the vehicle in a prominent, vertical position. (stickers will be supplied)
- 3.4.5. The vehicle must have a foot-rest or floor-pan that prevents the Competitor's feet from touching the ground or any moving parts.
- 3.4.6. No part of the Competitor must be able to touch the wheels or any moving parts (chains, spokes) of the vehicle while it is in motion. Either guards must be fitted or the vehicle designed in such a way so that no contact occurs.
- 3.4.7. Vehicles that are enclosed must have roll bars offering adequate roll protection. The roll bar/s must be strong enough to support the vehicle and Competitor if inverted.
- 3.4.8. All vehicles must carry an identifying number. The number shall be no smaller than 100mm but no larger than 150mm and have a contrast colour background

3.5. Wheels

- 3.5.1. The vehicle must have at least three wheels
- 3.5.2. The tyres must be in contact with the ground at all times.
Not abiding by this regulation may result in disqualification
- 3.5.3. Wheels must have an outside diameter of more than 100mm
- 3.5.4. Wheels and tyres must be rated to take the speed and load of the fully laden vehicle.

3.6. Brakes

- 3.6.1. When Competitor is in the vehicle, with brakes applied, vehicles must demonstrate appropriate stopping force or resistance when pushed.
- 3.6.2. This test will be carried out and must be passed during scrutineering.
- 3.6.3. The Competitor shall be able to operate the braking system without removing either hand from the steering mechanism.
- 3.6.4. The brakes will have adjustment to compensate for wear
- 3.6.5. The actuating process of applying the brakes shall be a gradual/ progressive kind
- 3.6.6. The braking system should bring a vehicle under control to stop from speed of 25 km within 9 metres

3.7. Steering

- 3.7.1. Steering mechanism shall not consist of any flexible material e.g. rope / cable/ twine
- 3.7.2. Steering mechanism should not be in a position that could injure the Competitor/Competitor in case of an accident
- 3.7.3. The steering must be defined from one lock to another and the movement from one lock to another must be free from restrictions /obstructions

3.8. Safety Equipment

- 3.8.1. The vehicle must be fitted with an audible warning device that can be heard by competitors with their helmets on.
- 3.8.2. All vehicles must be fitted with 2 effective rear vision mirrors.

3.9. Seat belts

- 3.9.1. All vehicles shall have a 4 point Australian Standard harness seat belt.
- 3.9.2. The attachment of the seat belt assembly must be robust to withstand weight and stress appropriate for an EEA event.
- 3.9.3. The seat belt must be adjustable.

3.10. Visibility

- 3.10.1. EEA vehicle must have the ability to see at least 180 degrees from L to R and down in front of the vehicle no less the 3 meter

3.11. Log Book

To improve identification and competition history of the vehicle, EEA will issue a log book for each vehicle. This log book is to be presented to scrutineering.
In the case of damage being sustained at a competition, this will be noted in the log book to allow the scrutineers at the next event it competes in to review the quality of the repairs.

4. Power Sources**4.1. Propulsion/power source**

- 4.1.1. Propulsion can be a single or double or triple energy source
- 4.1.2. Propulsion can be from one power source and or from any combination, providing that each (non human) energy source shall be between 150 and 250 watts. However should an energy power source be above 250 watts, then that vehicle is to be identified by 2 signs placed so it is visible by officials and public alike. The sign must not be smaller than 50mm RED circle. These vehicles shall be classified as *experimental vehicles*.
- 4.1.3. These experimental vehicle may be able to participate in a EEA closed event or on the EEA open road event only if the vehicle is registered as per the Motor Vehicle Act 1966

4.2. Electric

- 4.2.1. The motor control circuit must have adequate electrical protection. This includes an appropriate fuse(s) (in-line fuse on the positive side of battery) and an effective isolation switch located within easy reach of the Competitor and to someone alongside the vehicle. This isolation switch must be suitable to isolate the battery in the event of an accident or a throttle being stuck in the on position.
- 4.2.2. The isolation switch will be clearly marked out by a yellow triangle measuring 150mm x 150mm x 150mm.
- 4.2.3. Should propulsion be of a fluid type battery, then the Competitor/Competitor shall be protected by an enclosure around the battery to prevent fluid spillage onto the Competitor/Competitor
- 4.2.4. Additionally for an electrical driven energy source, this vehicle must have an internal and external "on/off" switch, reachable by the Competitor and by an external person and be located adjacent to Competitors shoulder height
- 4.2.5. The vehicle is to be powered solely by electric motor/s operated by sealed batteries.
- 4.2.6. The maximum allowable battery bank voltage is 12 V.

4.3. Solar

- 4.3.1.1. Should a vehicle use a solar panel to recharge batteries or source an electrical device then the panel shall be protected from possible damage from impact, additionally the circuit shall have
- 4.3.1.2. internal and external 'on/off' switch, accessed by the Competitor or by an external person suitably located at shoulder height when seated in vehicle EEA participating vehicles shall display a team number visible to event officials and public alike.

4.4. Combustion

- 4.4.1. Should a power source be liquid fuel e.g. petrol or similar then the vehicle should have inbuilt a system for fire control to allow the Competitor/Competitor time to undertake a emergency exit from the vehicle and also have a fire extinguisher suitably located for a external person to use. Fuel tank capacity to be no more than 2.5 litres. No refueling permitted.

5. Event Rules and Regulations**5.1. Registration**

- 5.1.1. All team entrants must register for the event on the attached entry form by the specified entry closing date. Late entries may be accepted at the discretion of the organizers dependent upon the number of entries received.
- 5.1.2. The payment of the entry fee, which covers insurance, must accompany registration forms by the specified entry closing date.
- 5.1.3. Once the registration form and entry fee payment is made, disclaimer and consent forms can be accessed on the Energy Education Web site.
- 5.1.4. To ensure access to the event for new teams/vehicles – entries, subject to the number received, may be limited to 2 vehicles for each class from each school or team with any remaining places being offered after the official close of entries.
- 5.1.5. The total entries for the event will be specified in the event supplementary regulations.

5.2. Prizes

- 5.2.1. Prizes are yet to be determined.

5.3. Scrutineering:

- 5.3.1. Scrutineering for all vehicles must be completed before the event. All official applications, insurance requirements etc must be finalized before commencement of each vehicle at time of scrutineering.
- 5.3.2. No vehicle may participate in the event unless it has passed a relevant compliance check by the scrutineers.
- 5.3.3. The Clerk of Course may stop any vehicle involved in any accident during the event and subject the vehicle to further checks. The vehicle may be prevented from competing if it is deemed unsafe by the organisers.
- 5.3.4. Any vehicle which is dismantled or modified after it has been approved, and has impact on its safety, eligibility or is involved in any accident, must be re-submitted for re-scrutineering approval.

5.4. Starting Positions

- 5.4.1. Starting positions will be determined by a draw of the numbers.
- 5.4.2. The start will consist of vehicles being flagged off individually, with the starter walking back along the grid. The vehicles are to remain at walking speed and keep their grid order until they cross the start line (Approx. 100m from the starting grid).
- 5.4.3. Push-starts are permitted during Competitor change-over and at the beginning of the event. Only one person is allowed to push at any one time. For the start of the event, the pusher must be an adult (over 18yrs).
- 5.4.4. The push start is only to get the vehicle moving and the person pushing must exit the track within 5 meters.

5.5. Pit stops

- 5.5.1. Each team must conduct a minimum of pit stops specified in the event supplementary regulations.
- 5.5.2. Competitors must reduce their speed on entering pit lane to a walking pace.
- 5.5.3. Pit crew must push the vehicle to the circuit re-entry point at the end of the pit lane and await the pit marshal's signal to re-enter the circuit.

5.6. Determination of winners

- 5.6.1. The winning team is the team who complete the most number of laps in the specified time period.
- 5.6.2. The organisers reserve the right to exclude any competitor who, in the organisers opinion, does not compete in the spirit of the event

5.7. Driving etiquette

- 5.7.1. Competitors MUST comply with all marshals' instructions. Failure to do so can result in disqualification.
- 5.7.2. Competitors are to make way for faster vehicles when directed to do so by the marshals.

5.8. Scrutineering

- 5.8.1. No vehicle may take to the circuit unless it has passed scrutineering.
- 5.8.2. The Clerk of Course may stop any vehicle involved in any incident during the event and subject the vehicle to reassessment. The vehicle may be prevented from competing if it is found to be unsafe.
- 5.8.3. Any vehicle that has been dismantled or modified after it has been approved, must be re-submitted for scrutineering approval prior to the event.

5.9. Vehicle Integrity and Disqualification

During the Dynamic Events, the mechanical integrity of the vehicle must be maintained. Any vehicle condition that could compromise vehicle integrity, e.g. damaged suspension, brakes or steering components, or could compromise the track surface, e.g. fluid leaks or dragging bodywork, will be a valid reason for exclusion by the officials until the problem is rectified.

Note: If this happens during the Endurance Event, it means disqualification from the heat.

5.10. Engine Running in the Paddock

Engines may be run in the paddock provided the vehicle has passed technical inspection and the following conditions are satisfied:

The vehicle is on an adequate stand, and the drive wheels are at least 10.2 cm (4 in) off the ground, or the drive wheels have been removed.

5.11. Driving Rules

Vehicles may only be driven under power

- (a) when running in an event,
- (b) on the practice track
- (c) during brake test
- (d) during any powered vehicle movement specified and authorized by the organizers.

For all other movements vehicles must be pushed at a normal walking pace.

5.12. Situational Awareness

Competitors must maintain a high state of situational awareness at all times and be ready to respond to the track conditions and incidents. Flag signals and hand signals from course marshals and officials must be immediately obeyed.

5.13. Flags

The flag signals convey the commands described below, and shall be obeyed immediately and without question.

There are two kinds of flags for the competition: Command flags and Informational flags. Command flags are just that, flags that send a message to the competitor that the competitor must obey without question. Informational flags, on the other hand, require no action from the Competitor, but should be used as added information to help him or her to maximize performance.

Note: Not all of these flags are used at all competitions and some alternate designs are occasionally displayed. Any variations from this list will be explained at the Competitors meetings.

5.13.1. Command Flags**BLACK FLAG**

Pull into the penalty box for discussion with the Director of Operations or other official concerning an incident. A time penalty may be assessed for such incident.

BLACK FLAG With Orange Dot

Pull into the penalty box for a mechanical inspection of your vehicle, something has been observed that needs closer inspection.

BLUE FLAG

Pull into the designated passing zone to be passed by a faster competitor. Obey the corner workers hand signals at the end of the passing zone to merge into competition.

CHECKER FLAG

Your session has been completed. Exit the course at the first opportunity.

GREEN FLAG

Your session has started, enter the course under direction of the starter. (NOTE: If you stall the vehicle, please restart and await another green flag as the opening in traffic may have closed.)

RED FLAG

Come to an immediate safe controlled stop on the course. Pull to the side of the course as much as possible to keep the course open. Follow corner worker directions.

YELLOW FLAG (Stationary) - Danger,

SLOW DOWN be prepared to take evasive action, something has happened beyond the flag station. **NO PASSING** unless directed by the corner workers.

YELLOW FLAG (Waved) - Great Danger

SLOW DOWN, evasive action is most likely required, **BE PREPARED TO STOP**, something has happened beyond the flag station, **NO PASSING** unless directed by the corner workers.

5.13.2. Informational Flags**RED AND YELLOW STRIPED FLAG**

Something is on the racing surface that should not be there. Be prepared for evasive maneuvers to avoid the situation. (Corner workers may be able to point out what and where it is located, but do not expect it.)

WHITE FLAG

There is a slow moving vehicle on the course that is much slower than you are. Be prepared to approach it at a cautious rate.

6. DYNAMIC EVENTS

The maximum scores in the dynamic events are:

Acceleration	100 points
Endurance	<u>400 points</u>
<i>Total</i>	500 points

6.1. Acceleration Event – 100 points

6.1.1. Acceleration Objective.

The acceleration event evaluates the vehicle's acceleration in a straight line on a flat road.

6.1.2. Acceleration Procedure.

The vehicles will accelerate from a standing start over a prescribed distance on a flat surface. The designation of the distance will be specified in the specific event supplementary regulations. A typical distance of 75m is envisaged.

The foremost part of the vehicle will be staged at 0.30m behind the starting line. A green flag will be used to indicate the approval to begin, however, time starts only after the vehicle crosses the start line.

6.1.3. Acceleration Scoring.

The acceleration score is based upon the corrected elapsed time. Elapsed time will be measured from the time the vehicle crosses the starting line until it crosses the finish line.

Vehicles that have not run by the end of the event (determined by the organizer) will receive a Did Not Finish (DNF).

6.1.4. Acceleration Scoring

The score for the acceleration event is spread between zero and one hundred (100) based upon elapsed time. The following equation is used to determine the scores for the event:

$$\text{ACCELERATION SCORE} = 80 \times \frac{(T_{\min})}{(T_{\text{your}})} + 20$$

Where:

T_{your} is the best corrected elapsed time for the team including penalties.

T_{min} is the elapsed time of the fastest vehicle.

DNF = zero (0) points

6.2. Endurance Event. – 400 Points

6.2.1. Endurance Objective

The Endurance Event is designed to evaluate the overall performance of the vehicle and to test the vehicle's reliability and range.

No refueling/recharging will be allowed during an endurance heat.

6.2.2. Endurance General Procedure

The event will be run as a single heat of a defined time period. The period being specified in the event supplementary regulations.

Teams are not allowed to work on their vehicles during the heat. Wheel-to-wheel racing is prohibited. Passing another vehicle may only be done in an established passing zone or under control of a course marshal.

6.2.3. Endurance Vehicle Starting/ Restarting

The vehicle must be capable of starting / restarting without external assistance at all times once the vehicle has begun the heat. If a vehicle stalls out on the track, it will be allowed one (1) lap by the vehicle that is following it (approximately one (1) minute) to restart. If a vehicle has a restart problem at the end of Competitor change, it will be allowed a further two (2) minutes to restart. If restarts are not accomplished within the above times, the vehicle will be deemed disabled and scored DNF for the heat.

6.2.4. Endurance Competitor Change Procedure

Competitor changes may only be effected in the pit area.

6.2.5. Entering the Track

Vehicles will be allowed to enter the track based upon the level of traffic on the course. The number of vehicles simultaneously on the course depends on the track length and design as well as the operating conditions. In dry conditions, there are typically 5 to 7 vehicles allowed per kilometer of track. This includes vehicles in the Competitor change area.

6.2.6. Endurance Run Order

The run order for endurance will be determined by a draw.

6.2.7. Breakdowns & Stalls

If a vehicle breaks down it will be removed from the course and will not be allowed to re-enter the course. If a vehicle stalls, it will be allowed to restart and re-enter the course where it went off, but no work may be performed on the vehicle. If a vehicle stalls and cannot be restarted without external assistance, the track workers will push the vehicle clear of the track. At the discretion of event officials, two (2) team members may retrieve the vehicle under direction of the track workers.

6.2.8. Exiting the Course

Vehicles must power down after leaving the course.

6.2.9. Endurance Lap Timing

Each lap of the endurance event will be individually timed either by electronic means, or by hand.

6.2.10. Penalties for Moving Violations

The following are penalties and assessed times or disqualifications for moving violations:

- a. Failure to obey a flag: 1 minute
- b. Over Driving (After a closed black flag): 1 Minute
- c. Vehicle to Vehicle contact: DISQUALIFIED

6.2.11. Mechanical Problem

No additional penalty other than the time lost to ensure that the vehicle is safe to continue.

6.2.12. Reckless or Aggressive Driving

Any reckless or aggressive driving behavior (such as forcing another vehicle off the track, refusal to allow passing, or close driving that would cause the likelihood of vehicle contact) will result in a black flag for that Competitor. When a Competitor receives a black flag signal, he must proceed to the penalty box to listen to a reprimand for his driving behavior. The amount of time spent in the penalty box will vary from one (1) to four (4) minutes depending upon the severity of the offense.

If it is impossible to impose a penalty by a stop under a black flag, e.g. not enough laps left, the event officials may add an appropriate time penalty to the team's elapsed time.

6.2.13. Inexperienced Competitor

The Chief Marshall/Director of Operations may disqualify a Competitor if the Competitor is too slow, too aggressive, or driving in a manner that, in the sole opinion of the event officials, demonstrates an inability to properly control their vehicle resulting in a DNF.

6.2.14. Endurance Scoring

The Endurance Score is based on the total number of laps the team completes in the specified time duration for the event, compared to the fastest team. The total Endurance Score is calculated using the formula below.

The following equation is used to determine the scores for the event:

$$\text{ENDURANCE SCORE} = 350 \times \frac{(\text{Lyour})}{(\text{Lmax})} + 50$$

Where:

Lyour will be the number of complete laps of the team.

Lmax will be the highest number of laps of any team.

6.2.15. Endurance Event – Driving

During the endurance event when multiple vehicles are running on the course it is paramount that the Competitors strictly follow all of the rules and driving requirements. Aggressive driving, failing to obey signals, not yielding for passing, etc will result in a black flag and a discussion in the penalty box with course officials. The amount of time spent in the penalty box is at the discretion of the officials and is included in the run time. Penalty box time serves as a reprimand as well as informing the Competitor of what he/she did wrong. Competitors should be aware that contact between open wheel racers is especially dangerous because tires touching can throw one vehicle into the air.

Endurance is a times event in which Competitors compete only against the clock not against other vehicles. Aggressive driving is unnecessary.

6.2.16. Endurance Event – Passing

Passing during the endurance event may only be done in the designated passing zones and under the control of the track officials. Passing zones have two parallel lanes – a slow lane for the vehicles that are being passed and a fast lane for the vehicles that are making a pass. On approaching a passing zone a slower leading vehicle will be blue flagged and must shift into the slow lane and decelerate. The following faster vehicle will continue in the fast lane and make the pass. The vehicle that had been passed may reenter traffic only under the control of the passing zone exit flagman. Passing, i.e. slow, lanes may be either to the left or right of the fast lane depending on the design of the specific course.

These passing rules do not apply to vehicles that are passing disabled vehicles on the course or vehicles that have spun out and are not moving. When passing a disabled or off-track vehicle it is critical to slow down, drive cautiously and be aware of all the vehicles and track workers in the area.

Under normal driving conditions when not being passed all vehicles use the fast lane.

6.2.17. Endurance Event – Competitor's Course Walk

The endurance course will be available for walking by Competitors prior to the event. All endurance Competitors are required to walk the course before the event starts.

6.3. Touring Event.

The touring event, is an event held over an extended period on the open road, made up of a number of discreet stages. The Tour de France would be a good role model for such events but with the degree of difficulty matched to the capability of the entrants.

The selected roads are to be of secondary in nature and preferably subject to low levels of traffic.

Teams will be required to be accompanied by lead/trail vehicles with suitable signage to warn approaching motorists.

If a team withdraws from a stage, they can rejoin the vent at future stages provided they can complete that stage prior to the stage closure time.

Further regulations and stage details will be advised via the touring event supplementary regulations

7. Infringement / penalty policy and actions**7.1. Purpose**

The purpose of this policy is to ensure that:

- Each EEA team and its members including officials abide / adhere to the spirit of the event, by following the rules and guidelines
- To foster goodwill, OHS, duty and pastoral care whilst participating on public roads and private property.

7.2. Process

Only designated officials (scrutineers / marshals / event manager) are permitted to document, apply and or make recommendations for a penalty relating to a breach or infringement of EEA rules and regulations.

Where possible, the breach / infringement will be immediately communicated to the relevant team(s), stating the breach and penalty using the guidelines set out below.

Types of infringements / breaches of rules and regulations

- Competitors not adhering to marshal directions /instructions
- Competitors being aggressive toward other participants and or officials
- Deliberate bumping /obstructing
- Not following "flag" direction
- Driving in a dangerous manner
- Displaying poor sportsmanship
- Bring the event into disrepute
- Not wearing /loose seat belts
- Not wearing /or poor fitted safety head protection
- Driving a vehicle in disrepair
- Not wearing eye protection (non front shielded vehicles)
- Entering and or exiting from the pit without due care
- Excessive speed within the pit lane
- Team official/Competitor not wearing safety hi /vis vest
- Team officials and Competitors not standing behind a designated pit line

7.3. Penalty Schedule

EEA Scrutineers may apply any penalty from 1 – 4 however the scrutineer is also able to lodge to the chief scrutineer a recommendation for disqualification.

7.3.1.1. Official warning can be verbal or written

- Low risk stop and go
- Medium risk 1 to 2 minutes
- High risk 3 to 5 minutes

7.3.1.2. Disqualification from the event may occur if the behaviour or action is deemed extremely high risk and / or totally unacceptable risk and or behaviour**7.3.1.3. Time penalties will be tallied and applied to individual team's overall time. Confirmation of the times and placing's will be confirmed at end of the event****7.4. Disqualification.**

Disqualification from the event is determined by the following formal process:

- A panel made up of the Chief Scrutineer, Event Manager and reporting scrutineer meet to discuss recommendation
- An independent Team Manager is invited to contribute to the panel's discussion and decision
- Other stake-holders may also be invited to contribute
- The panel's decision will be put to the offending team

The team then has the option to lodge an appeal, within 10 minutes

- The infringement will be re heard
- The Event Manager's decision is final
- An appeal will incur a fee of \$20:00 that will be refunded if the appeal is upheld.

8. Forms

- 8.1. Team Application Form
- 8.2. EEA Penalty / Team Appeal Form
- 8.3. EEA Penalty / Team Appeal Form Receipt