



2021 Driver Safety Equipment Specification (DSES) Regulations

v2021.01 (Published)

Issued: 10th March 2021

- Note (Additions): Text highlighted in **bold, red, italics**, indicates a significant change from the previous version of these regulations.
- Note (Removals): Text in ~~grey strikethrough~~ indicates a regulation or text that is no longer applicable (with immediate effect, unless noted), and will be subsequently removed in the next major release of these regulations.

Definitions Used in These Regulations

DSES	Driver Safety Equipment Specification (these regulations)
FHR	Frontal Head Restraint (including HANS, Hutchens, Defender and similar type devices)
BORSE	British Oval Racing Safety Executive (historical body, not currently active)
Junior Drivers	Drivers aged 15 and under
Adult Drivers	Drivers aged 16 and over
Racecar	The vehicle, used by a driver in a race. Commonly this vehicle is car derived, but for the purpose of these regulations it is taken to also include karts, vans, coaches, or other specialist vehicles sanctioned by the promoter or the ORCi for a licensed event.

General Notes

- It is the driver's responsibility to ensure that they and their team comply with all DSES Regulations **at all times** (including scrutineering, practise, and racing).
- Any necessary changes to the DSES Regulations during the course of a season will be notified to drivers through the official ORCi / WatchItRaceIt website (orci.co.uk / watchitraceit.co.uk), and may additionally be notified to drivers through individual formulas' own official communication channels. Change advisories received from any other source should be checked against these official sources for authenticity and accuracy.
- Proposals for any change(s) to the DSES Regulations **MUST** be submitted in writing to the ORCi through one of the following channels:
 - Mail: ORCi Secretary, PO Box 530, Hoddesdon, EN11 1RR
 - Website: Use the online contact form at <http://www.orci.co.uk/contact>
 - Email: safety.rules@orci.co.uk
- Proposed changes will be considered by the ORCi and an official response duly made as appropriate.
- Drivers must **NOT** use items, or make modifications to existing items, that do not meet the current DSES Regulations, whether they believe they have a case for them or not. A process to request a change of the regulations to permit such items or modifications exists, and should be followed by all drivers.

900 General

900.01 All DSES Regulations apply to all drivers in all ORCi and ORCi-affiliated formulas unless otherwise stated.

- **Where the carrying of one or more authorised passengers in a racecar is sanctioned at an event, and would require the driver to wear/engage their mandated safety equipment, e.g. 2-seater ride-along demonstrations, then these regulations apply equally to the passenger(s) as they do the driver.**

900.02 All driver safety equipment must be worn/engaged at all times when on track during racing, practise, test, time-trial, exhibition, or demonstration sessions.

900.03 **The manufacturer's and homologation identification marks on all safety equipment MUST remain visible as originally produced.**

900.04 **Where an ORCi official is unable to determine the conformance of any safety equipment item to these regulations, or an item is identified as not being in conformance, the ORCi reserves the right for an official to refuse use of the item until such time as its conformance can be determined, and/or retain the item for the duration of the event.**

900.05 **It is the responsibility of the driver to maintain and care for their safety equipment in an appropriate manner, and in accordance with any instructions issued by the manufacturer(s).**

900.06 **It is the responsibility of the driver to ensure their safety equipment is fit for the intended purpose since significant damage could be sustained without this being apparent to any official.**

901 Helmets and Goggles/Visors

901.01 Helmets

901.01.01 A helmet conforming to at least one of the permitted standards detailed below MUST be worn.

901.01.02 Helmets MUST meet or exceed the MINIMUM standard as directed by the ORCi (previously undertaken by BORSE).

The current permitted helmet standards for all drivers are:

- FIA 8860-2010
- FIA 8859-2015
- FIA 8860-2018
- FIA 8860-2018 ABP
- Snell SA2010
- Snell SAH2010
- Snell SA2015
- Snell EA2016
- Snell SA2020
- SFI Foundation 31.1A
- SFI Foundation 31.2A
- SFI Foundation 31.1
- ECE R22.05

The following helmet standards are permitted for Junior drivers only in addition to those above:

- Snell CMR 2007
- Snell CMS 2007
- Snell CMR 2016
- Snell CMS 2016
- SFI 24.1

901.01.03 The helmet MUST fit the driver correctly, referencing the manufacturer's sizing/fitting guidelines.

901.01.04 All helmets MUST display the green "ORCi 20 Approved" serial-numbered helmet sticker, as per Illustration 01 below. Older green 2019, blue 2015, and red 2010 stickers are NOT valid (Illustrations 02, 03 and 04).

- **A dated ORCi sticker indicates only that a helmet was manufactured and homologated to one of the permitted standards listed above.**
- **Where a helmet is presented for a pre-meeting safety check without the appropriate ORCi dated sticker, it will be inspected by a scrutineer or appropriate official, and, if homologated to one of the permitted standards above, it will either be:**
 - (a) Stickered with the current ORCi dated sticker and accepted for use (subject to basic checks for obvious signs of significant damage), or,**
 - (b) Temporarily accepted for use (subject to basic checks for obvious signs of significant damage) pending the application of an ORCi dated sticker at a later date by an appropriate official.**



Illustration 01
Valid



Illustration 02
Not Valid



Illustration 03
Not Valid



Illustration 04
Not Valid

901.02 Goggles/Visors

901.02.01 Shatterproof goggles or a shatterproof visor MUST be worn with the helmet at all times.

902 Clothing

902.01 Race-Suits/Overalls

902.01.01 A flame resistant race-suit/overall MUST be worn.

902.01.02 Flame resistant race-suits/overalls MUST be manufactured from Proban, or material of a higher specification, e.g. Nomex.

902.01.03 Flame resistant race-suits/overalls MUST be clearly marked with the relevant SFI, FIA or equivalent standard, or the manufacturer's statement of protection.

902.01.04 Race-suits/overalls MUST be maintained in a clean and tidy condition.

902.01.05 Race-suits/overalls manufactured/certified to Karting standards, including, but not limited to, the CIK-FIA Level 1 or Level 2 standards, are NOT permitted as they do NOT provide the appropriate level of heat/flame protection.

902.02 Gloves

902.02.01 Flame resistant gloves MUST be worn.

902.02.02 Flame resistant gloves MUST be clearly marked with the relevant SFI, FIA or equivalent standard, or the manufacturer's statement of protection.

902.03 Balaclavas

902.03.01 A flame resistant balaclava MUST be worn.

902.03.02 Flame resistant balaclavas MUST be clearly marked with the relevant SFI, FIA or equivalent standard, or the manufacturer's statement of protection.

902.04 Undergarments

902.04.01 Flame resistant socks and undergarments provide a high degree of additional protection and are highly recommended to all competitors.

902.05 Wet-Weather Protection

902.05.01 Any wet-weather clothing must be worn in ADDITION to the required flame resistant race-suit/overall specified above.

903 Head/Neck Protection

903.01 All Junior Formulas

903.01.01 An FHR device or neck-brace MUST be worn.

903.01.02 If a neck-brace is used, it MUST be of the complete-circle type, i.e. it must form a complete circle around the driver's neck with no gaps.

903.01.03 The use of "U" shaped, or "horseshoe" neck-braces is NOT permitted.

903.02 All Adult Formulas

903.02.01 The use of an FHR device or neck-brace is permitted.

903.02.02 The use of an FHR device or neck-brace MUST be in accordance with any regulations issued by the governing body for each formula, e.g. ORCi, BriSCA F1/F2, NHRPA, Stoxkarts, Individual Promotions, etc.

904 Safety Harness

904.01 Usage

904.01.01 A full safety harness MUST be used in accordance with the specifications below.

904.01.02 All mandated straps MUST be used at all times.

904.02 Type And Design

904.02.01 ALL Formulas, EXCEPT Banger Type Formulas – The harness MUST comprise of a MINIMUM of 2 shoulder straps, 2 lap straps, and an anti-submarine strap (also referred to as a sub-strap, or crotch-strap) in a MINIMUM 5-point design.

904.02.02 Banger Type Formulas ONLY – The harness MUST comprise of a MINIMUM of 2 shoulder straps and 2 lap straps in a MINIMUM 4-point design.

904.02.03 ALL Formulas – The harness MUST incorporate a quick-release buckle (including rotary buckles, and NASCAR lever-latch type buckles), to which all straps MUST be connected.

904.02.04 ALL Formulas – Where a NASCAR lever-latch type buckle is used, it is permitted to fit a method of protection to prevent race-suit/overall sleeves from accidentally unhooking the buckle during racing. E.g. a small section of “Tubegrip” elasticated bandage, slid over the hooked buckle.

904.03 Harness Strap Width – ALL Adult Formulas

904.03.01 Shoulder and Lap/Pelvic Straps

Applies to: ALL Harnesses (Unless Specified Below) – The shoulder and lap/pelvic straps of ALL harnesses MUST measure at least a MINIMUM of 3in/75mm in width, unless explicitly stated below. This applies to, but is not limited to:

- ALL non-homologated harnesses
- ALL harnesses with NASCAR lever-latch type buckles
- ALL harnesses homologated to SFI standards
- ALL harnesses homologated to FIA standards that do not meet the alternate FIA criteria below

904.03.02 Anti-Submarine Strap(s)

Applies to: ALL Harnesses – The anti-submarine strap MUST measure at least a MINIMUM of 1¾in /44mm in width on ALL harnesses.

904.03.03 Shoulder Straps Exception – FHR Device Use

Applies to: ONLY 3in/75mm Width Harnesses Used WITH an FHR Device

Where an FHR device is used by a driver, it is permitted to use shoulder straps that *taper* below the minimum 3in/75mm specification, *above the adjuster ONLY*, in order to ensure the correct fitment of the harness/FHR device combination. *The lower section of the straps, between the adjuster and the tongue, must still meet the MINIMUM 3in/75mm requirement above.*

- This exception applies to the shoulder straps ONLY.
- Any such straps MUST be manufactured by a recognised industry supplier AND be specifically designed for use with an FHR device.

904.03.04 Lap/Pelvic and Shoulder Straps Exception – FIA Harnesses

Applies to: ONLY FIA Homologated Harnesses with Lap/Pelvic Straps Less Than 75mm/3in in Width

The use of lap/pelvic straps that are narrower than the generic 3in/75mm minimum width specified above is permitted on FIA homologated harnesses ONLY. The harness MUST meet ALL the following criteria:

- The lap/pelvic straps MUST measure at least a MINIMUM of 2in/50mm in width.
- The harness MUST be certified/homologated to the current FIA standards: 8853/98 or 8853-2016.
- The FIA identification/homologation/date labels MUST be intact and visible to scrutineers on ALL strap sections of the harness.
- The harness MUST be within its visibly stated validity period.
- **NO FHR Device** – If used WITHOUT an FHR device, the shoulder straps MUST measure at least a MINIMUM of 2.75in/70mm in width.
- **WITH FHR Device** – If used WITH an FHR device, the shoulder straps MUST measure at least a MINIMUM of 2in/50mm in width, and MUST be specifically designed for use with an FHR device.

904.04 Harness Strap Width – ALL Junior Formulas

904.04.01 The shoulder and lap/pelvic straps MUST measure at least a MINIMUM of 2in/50mm in width.

904.04.02 The anti-submarine strap MUST measure at least a MINIMUM of 1¾in /44mm in width.

904.05 Installation

904.05.01 The harness MUST be securely mounted to the floor, roll-cage, and/or chassis of the racecar.

904.05.02 Harness manufacturers may issue their own installation guides. Therefore, harnesses MUST be installed with reference to the manufacturer’s information, and giving consideration to the mountings, and location/placement of straps in relation to other components in the racecar.

Major manufacturers have installation information on their websites to aid drivers when fitting harnesses to their racecars. Useful websites include:

Manufacturer's Websites

- www.willans.com
- www.schrothracing.com
- www.trs-motorsport.com
- www.racequip.com

Safety Standards

- www.sfifoundation.com
- www.fia.com/homologations

(Addresses correct at time of publication)

904.05.03 Key general guidelines from manufacturers for the installation of harnesses state that:

- Strap lengths should be kept as short as possible to avoid excessive stretching under impact.
- Shoulder straps should be supported at or just below shoulder level.
- Shoulder straps should be prevented from moving sideways, such that they may drop off a driver's shoulders under severe impact/stretching.

904.06 Condition and Maintenance

904.06.01 Special attention **MUST** be paid to the condition of straps and fixings once installed.

904.06.02 The harness **MUST** be maintained in good condition, and where possible kept free of dirt, oil and grease that could degrade any materials.

905 Window Nets

905.01 Requirement

905.01.01 A quick-release fabric window net **MUST** be fitted in the driver's-side door window aperture of all saloon car formulas, with the exception of Banger type formulas.

905.02 Specification/Installation

905.02.01 The width of the netting holes must **NOT** exceed a **MAXIMUM** size of 3in/75mm wide.

905.02.02 The window net **MUST** be fitted such that it hangs down level with the steering wheel.

905.02.03 The window net **MUST** be flexible and easily removable, independent of any movement of the driver's-side door.

906 Fire Extinguishers

906.01 Requirements

906.01.01 A fire extinguisher, meeting the specifications below, **MUST** be carried in the driver's tow-vehicle/transporter at all times.

906.01.02 The fire extinguisher **MUST** be within easy reach of the driver and team members at all times, especially when re-fuelling the racecar.

906.02 Specification

906.02.01 The fire extinguisher capacity **MUST** be at least a **MINIMUM** of 2Kg.

906.02.02 The fire extinguisher **MUST** be of a dry powder or gas type.

906.02.03 Old type BCF (green) fire extinguishers are **NOT** permitted.