

2022 SEMINARIO DE VOLUNTARIOS Y OFICIALES



RALLY SAFETY

La seguridad en los Rallyes

26/02/2022

Clément Lauté

Nicolas Klinger

José Vicente Medina



2022 SEMINARIO DE VOLUNTARIOS Y OFICIALES

RALLY SAFETY GUIDELINES FAMILY



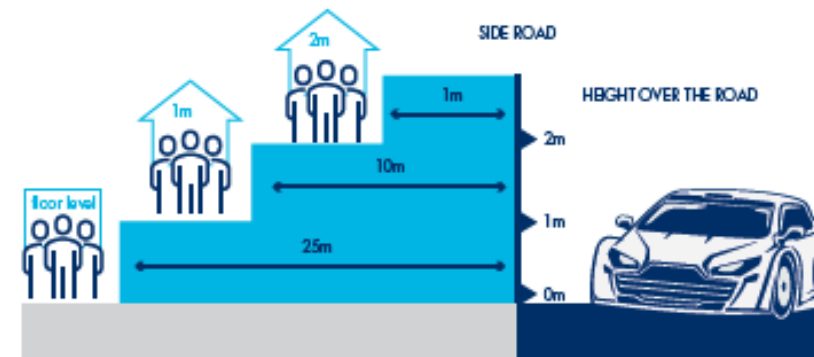
RALLY SAFETY GUIDELINES FAMILY UPDATES

- UK version is published, will be translated Q1 2022
- What's new?
 - Competitor safety reminder:
 - Safety caravan
 - Dedicated radio channel + windscreen sun strip



RALLY SAFETY GUIDELINES FAMILY UPDATES

- What's new?
 - Safety road book content clarification
 - Refueling safety information
 - Electrical safety
 - Tire Warming Zone (TWZ)
 - New set of illustrations
 - Spectator safety:
 - Safe location area
 - 30min deadline for walking on the stage



RALLY SAFETY GUIDELINES FAMILY UPDATES

- What's new:
 - Spectator safety reminder
 - Electrical safety management:
 - E-Safety concept
 - Recommended training
 - Recommended Personal protection equipment
 - FIA Safety Light
 - Safety check list



RALLY SAFETY GUIDELINES FAMILY UPDATES



2022 SEMINARIO DE VOLUNTARIOS Y OFICIALES

SMART TRACKING



SMART TRACKING PROJECT

FIA SMART Rally Tracking System Software Specification Guidance

25th January 2022
Version: 1.1

Date	Update
30/04/2021	Creation
26/01/2022	Clarify safety alert reliable transmission (§ 5.2.3)

FIA SMART RALLY TRACKING SOFTWARE SPECIFICATION GUIDANCE

1

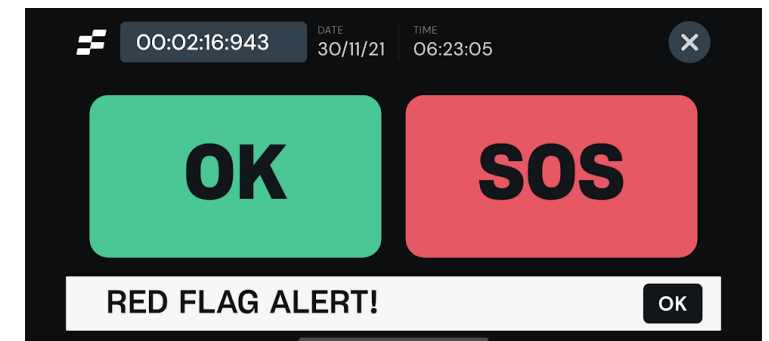
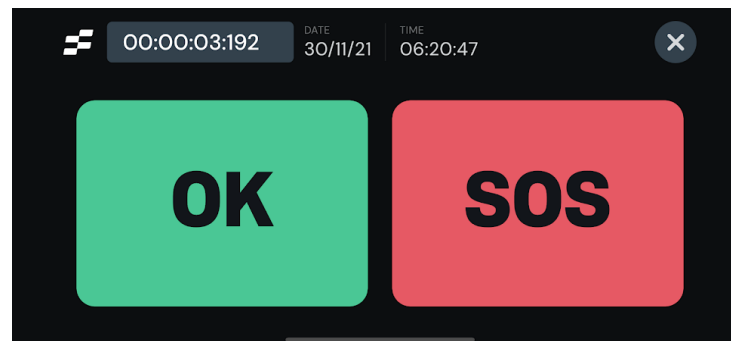
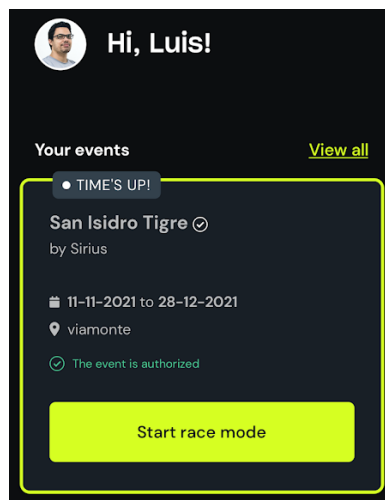
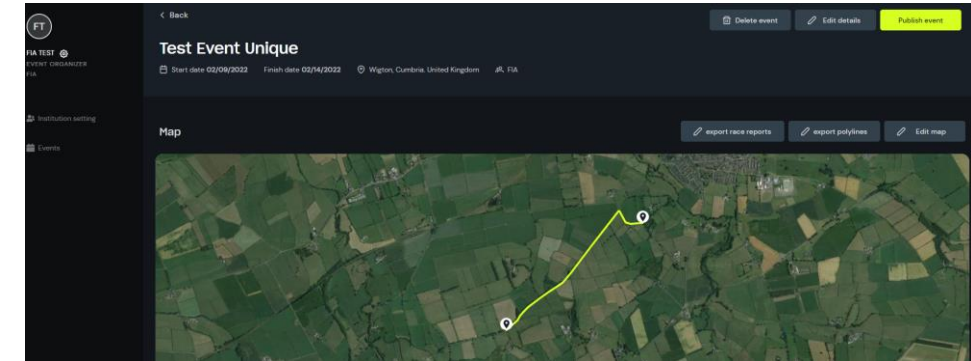
- Smartphone tracking based systems
- Framework given by the FIA according to the Software Specification Guidance
- Candidate solutions reviewed by the FIA
- Applications are still possible
- Summary matrix to be published in the upcoming FIA Rally Tracking Guidelines
- Not to be used to downgrade the level of an already used solution!

SMART TRACKING PROJECT

- Approved system:
- Spectra Technology www.spectra-tec.com info@spectra-tec.com
 - [Sirius Rally Tracker](#)

Sirius Rally Tracker is a pc/app marshalling and safety system that allows rally organizers to track, communicate with and control competitors through their mobile phones.

This affordable, reliable and user-friendly solution is an excellent alternative to complex and more expensive systems, for races where cell-phone coverage is not an issue. The app is available on [Android/Play Store](#) and [iPhone/App Store](#).



SMART TRACKING PROJECT

- Under review solutions:
 - Rally Stream <http://terzomarumura.com>
 - VDS Technology <http://www.vdsracing.com>
 - Riedel <https://www.riedel.net>
 - Grupo ÉRRE www.grupoerre.pt
 - SAS <https://rallysafe.com.au>

SMART TRACKING PROJECT



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FIA.COM/RALLY-SAFETY

- [FIA.com/rally-safety](https://www.fia.com/rally-safety) is the place to find:
 - all the Rally Safety Guidelines Family
 - Regional and SMART tracking specifications
 - Spectator Safety Campaign PDFs



RALLY SAFETY GUIDELINES

[2021 Rally Safety Guidelines](#)[2021 Lignes Directrices pour la Sécurité en Rallye](#)[2021 Directrices de Seguridad para Rallyes](#)[2021 Rallye Sicherheitsrichtlinien](#)[2021 Diretrizes de Segurança para Ralis](#)[2021 Linee Guida Per La Sicurezza Nei Rally](#)

RALLY SAFETY DELEGATE GUIDELINES

[2021 Rally Safety Delegate Guidelines](#)[2021 Le Délégué Sécurité en Rallye](#)[2021 Delegados de Seguridad de Rallyes](#)

2022 SEMINARIO DE VOLUNTARIOS Y OFICIALES

RALLY SAFETY OFFICER E-LEARNING MODULE



FIA.COM/RALLY-SAFETY



FIA E-LEARNING MODULE

RALLY CHIEF
SAFETY OFFICER

CLICK ANYWHERE TO START



FIA.COM/RALLY-SAFETY

- Video exercise:



- Video solution:



- Details to access will be given as soon as the module will be published
- To be translated into 5 languages: UK FR DE PT SP

2022 RALLY & CROSS-COUNTRY OFFICIALS SEMINAR

OPERATIONAL SAFETY



OPERATIONAL SAFETY

- How the safety caravan works:
 - Act as several layer
 - Dedicated safety radio channel between all SC + RC
 - Use of CCTV to give eyes to the RC
 - In case of FIA / ASN Safety Delegate presence, is to check, not to do
- Spectator areas management:
 - Good location selection
 - Check if there is access roads / car parks / facilities
 - Communicate to the spectators about the areas
 - Marshal the area
 - U shape netting setup

OPERATIONAL SAFETY



2022 RALLY & CROSS-COUNTRY OFFICIALS SEMINAR

CCTV SAFETY CAMERAS USE CASE



CCTV – SAFETY CAMERA

- Main purpose:
 - Live view of different cameras that allow faster and more effective decisions on Rally Control
- Please comply with your General Data Protection Regulation (GDPR)



- 3 different point of view:
 - Special Stages access controls
 - Safety cars inboard
 - Critical points in Special Stages

CCTV – SAFETY CAMERA

- Point of view 1 Special Stages access controls:

– TC

– START

– TT

– STOP



CCTV – SAFETY CAMERA

- Point of view 2 Safety cars inboard:

- 000 (The most important)
- 00
- 0
- Other cars on caravan that make sense to Rally Control
- It becomes a great advantage when we can check before SS start some points in a live way
- Public
- State of the roads
- Critical points
- Etc...



CCTV – SAFETY CAMERA

- Point of view 3: Critical points in Special Stages
 - We always have critical points in an SS that cause us some added safety concerns:
 - Public areas
 - Jump
 - Bridge
 - More danger turns
 - Very fast zone
 - Etc...



- Usually, we use it with:
 - Marshal
 - Radio
 - Several times with residents of the region, who are available to take care of the camera.

CCTV – SAFETY CAMERA

- Logistics:
 - Minimum of cameras:
 - 4 - For each SS
 - 3 – For safety cars
 - ? – Critical points:
 - Will depend criterion of organizer
 - Camera characteristics:
 - Camera name: [Reolink GO](#)
 - 4G (Check quality transmission)
 - Battery (Check battery life or provide power supply)
 - New cameras are testing
 - Dual cameras with GPS to use inside the all competing cars, will be tested soon (be careful regarding the safety of the mounting)
 - One camera to front, and the other to inside the car to see the crew



CCTV – SAFETY CAMERA

- Logistic:
 - Human and physical means for rally control
(Depends on how many cameras we are using)
 - Several TV or projectors to control all cameras
 - One or two persons to do the cameras management
 - One team on the caravan to check and solve some issues that can happen



CCTV – SAFETY CAMERA



OPERATIONAL SAFETY

- How to clear an unsafe situation before and after the 1st competing car:
 - Importance of marshal locations displayed in the safety plan
 - Use of CCTV and live TV if available
 - Importance of dedicated safety radio channel
- Tyre Warming Zone

2022 SEMINARIO DE VOLUNTARIOS Y OFICIALES

TYRE WARMING ZONE SETUP



TWZ – TYRE WARMING ZONE

- Main purposes:
 - Prevent drivers from tyre warming on public roads
 - Allow competitors to warm up before the start of a Special Stage, in a safe way



TWZ – TYRE WARMING ZONE

- Optional for the organizer
- TWZ road must be set up as a Special Stage
- Rescue cars, remain positioned after the start of the Special Stage
- The TWZ must be marked in the Road Book
- Distance between the Time Control and start of the Special Stage will be a minimum of 500 m.
- The 3-minute gap can be increased considering the length of the TWZ to allow the crew warming the tyres and to prepare for the Special Stage start

TWZ – TYRE WARMING ZONE



- The TWZ begins after the time control with the “TWZ” board and ends with the “TWZ End” board
- After “TWZ End” board crews must drive at walking speed to position on the start line
- There will be a minimum of 100 m between the “TWZ End” board and the start of the Special Stage
- Deliberate stopping in the TWZ or driving the opposite direction is strictly forbidden
- Drivers must be able to stop the car at any time in case of danger
- The adjustment of tyre pressure is permitted, before the start of the Special Stage

TWZ – TYRE WARMING ZONE



VOLUNTARY RALLY SAFETY TASK FORCE APPLICATION

- Explanation of the process:
 - We are working to strenghten the support given by the RSTF
 - Could be asked by ASN for wide scale or by an Organiser for a specific event
 - A pool of FIA Safety expert will take care of the demande and provide all necessary support
 - Free of charge
- rally.safety@fia.com



ELECTRICAL SAFETY CAMPAIGN



LOOK FOR THE GREEN LIGHT

From 2022 onwards, all cars at the top level of the FIA World Rally Championship feature hybrid **electric** powertrains.

With this comes new precautions for spectators and safety crews in the event of a crash due to the **high-voltage** electrical current they can generate.

This is why you must always look for the **green** light whenever a car is stationary before touching it, as only this means the car is **safe**.



1 Safetylights are on the windscreen and both side pillars of the cars. Following an accident, a solid green light means it is safe to touch.

2 The HY symbol shows that this is a hybrid car. From 2022 onwards, all Rally1 cars have hybrid engines.

WRC E-SAFETY GUIDE



RED LIGHT ❌

3 A flashing red light, along with an alarm sound, means the car is unsafe. No light means it is potentially unsafe. Only touch the car if there is a green light.



NO LIGHT ❌

GLOBAL SPECTATOR SAFETY CAMPAIGN



2022 SEMINARIO DE VOLUNTARIOS Y OFICIALES

SPECIFIC SAFETY MESSAGES

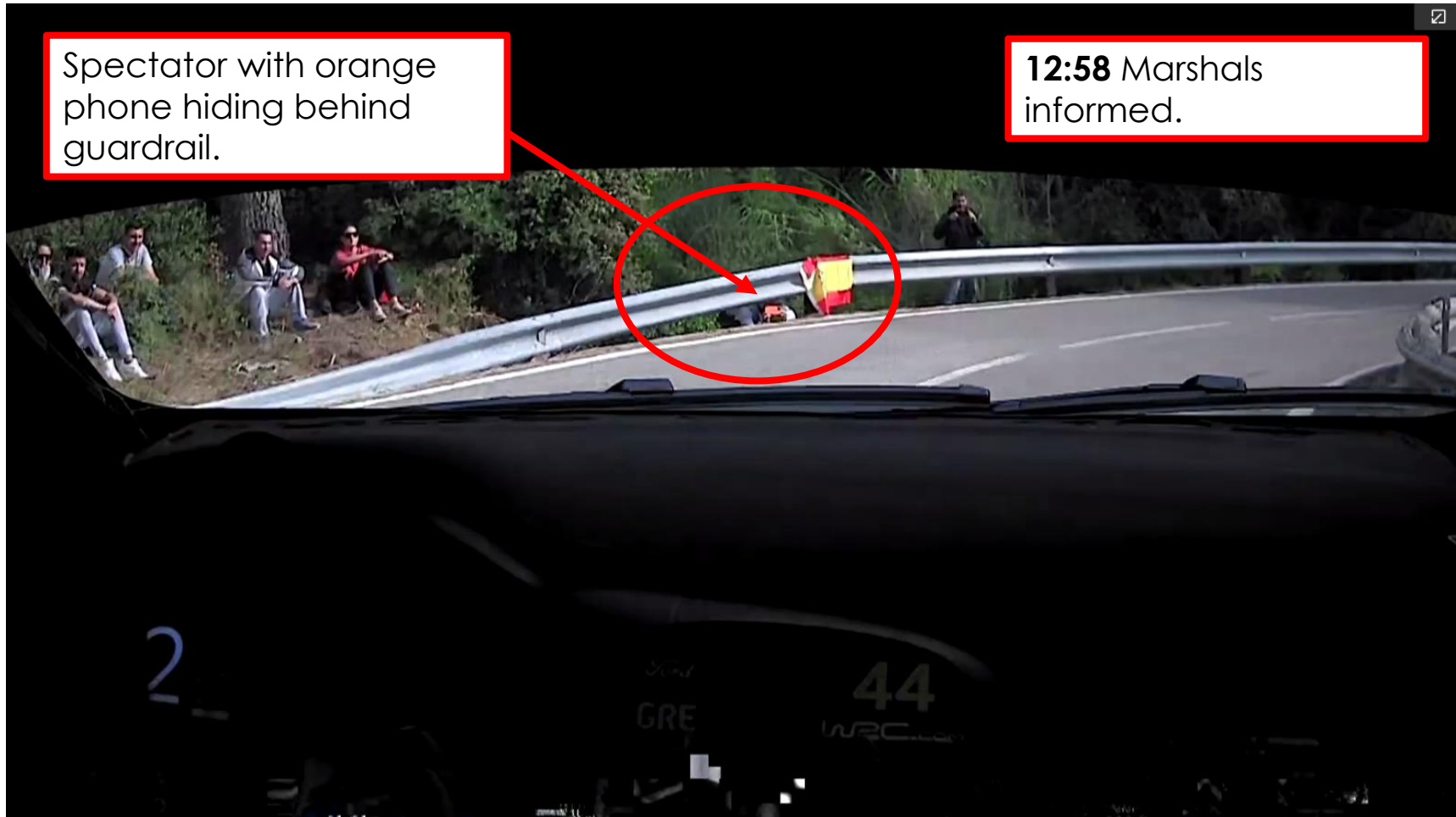


GUARDRAILS ARE NOT SAFE

WRC Deputy Safety Delegate workstation in Rally HQ



GUARDRAILS ARE NOT SAFE



GUARDRAILS ARE NOT SAFE

T+10: Neuville 13:08 



GUARDRAILS ARE NOT SAFE

T+17: Bulacia 13:15 🕒



13:15 Accident occurs.



IMPORTANCE OF MARSHAL BRIEFING



SPECIFIC MESSAGES



2022 SEMINARIO DE VOLUNTARIOS Y OFICIALES

CASE STUDIES



CASE STUDY

What is good? What is bad? What can be done?



CASE STUDY

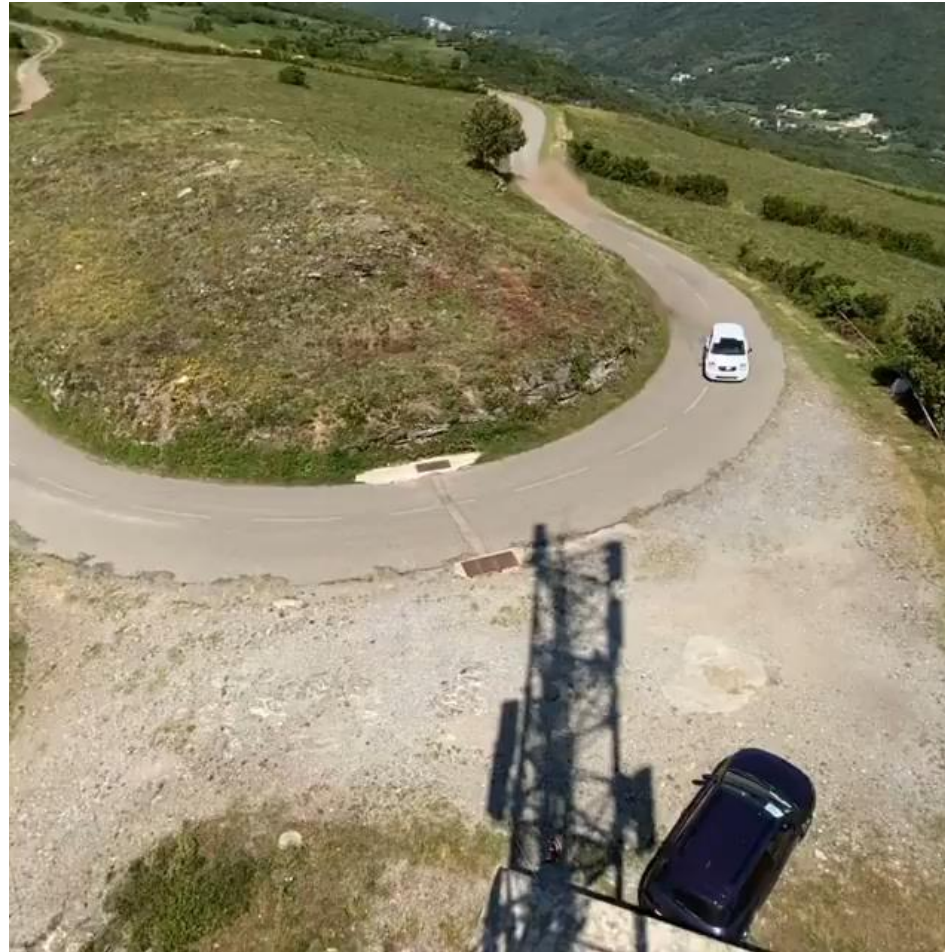
What is good? What is bad? What can be done?



 **SoundRallye**

CASE STUDY

What is good? What is bad? What can be done?



CASE STUDY

What is good? What is bad? What can be done?



CASE STUDY

What is good? What is bad? What can be done?



CASE STUDY

What is good? What is bad? What can be done?



CASE STUDY

What is good? What is bad? What can be done?



CASE STUDY

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CASE STUDY

What is good? What is bad? What can be done?



CASE STUDY

What is good? What is bad? What can be done?



CASE STUDY

What is good? What is bad? What can be done?



CASE STUDY

What is good? What is bad? What can be done?



CASE STUDY

