



# WRC FORUM ATHENS

1<sup>st</sup> December 2021

“UPDATE AND NEXT STEPS”

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FIA WRC CATEGORY MANAGER



- **Rally Pyramid**
  - ERC/WRC
  - Rally1 > Rally5
- **Rally1**
  - Sustainability
  - Safety
  - Access
- **360° Sustainability**
  - FIA 3 Star Programme
  - Road Map
- **Safety**
  - Rally Watch
  - AI Safety Camera
- **Looking Ahead**
  - FIA RallyStar
  - FIA Rally Ranking





- Introduction
- COVID Challenges = **Creates** Opportunities
- WRC proven that it is **dynamic and adaptable**.
- Incredible effort from the Promoter, the Organsiers and the Competitors **working together** to 're-start'
- 2020 saw 7 events – 3 pre-COVID and 4 in the re-start – 2 of these were 100% new. (Estonia / Monza)
- 2021 – 12 events – 4 of which were not on the original calendar (Arctic, Ypres, Greece and Monza)



- Despite the issues, WRC continues to grow.
- Simon has highlighted the ROI growth but from a Sporting perspective, **strong growth**.
- 113 drivers have registered for WRC3 in 2021, in total **131 drivers registered** in the Rally2 class.
- 8 different drivers have been on the podium in 2021, 5 winners.
- WRC1, WRC2 Teams, WRC3 and Juniors went down to the final event. WRC3 to the final stage – the champion being **decided by 3 seconds** after 6 rallies.







# RALLY PYRAMID

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# RALLY PYRAMID

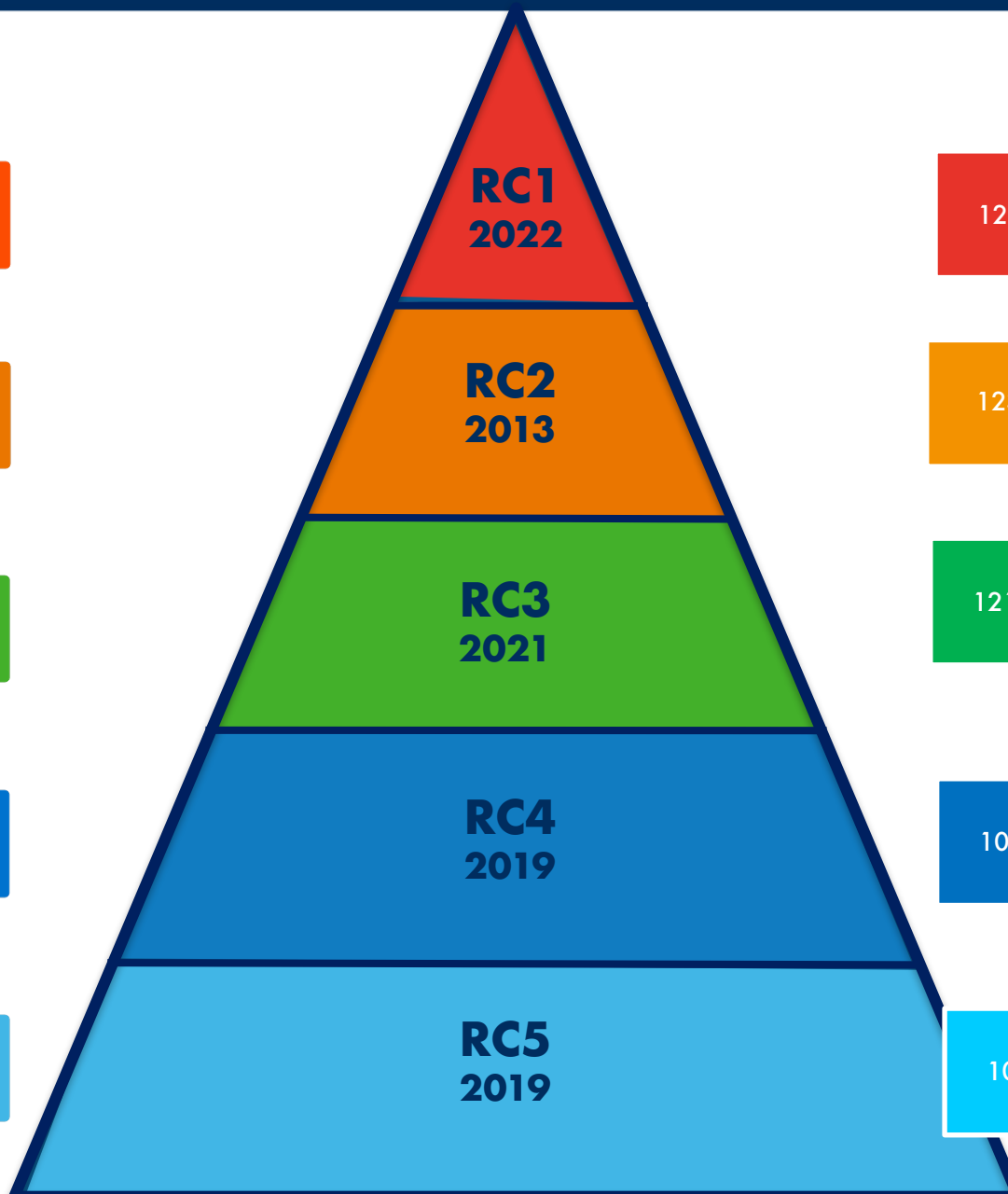
 **rally 1**

 **rally 2**

 **rally 3**

 **rally 4**

 **rally 5**







# ERC / WRC CHAMPIONSHIP SUMMARY TABLE



WRC



ERC

WRC2 Open

WRC2 Junior (-30)



ERC3

ERC3 Junior (-28)

WRC3

WRC3 Junior (-29)



ERC4

ERC4 Junior (-27)

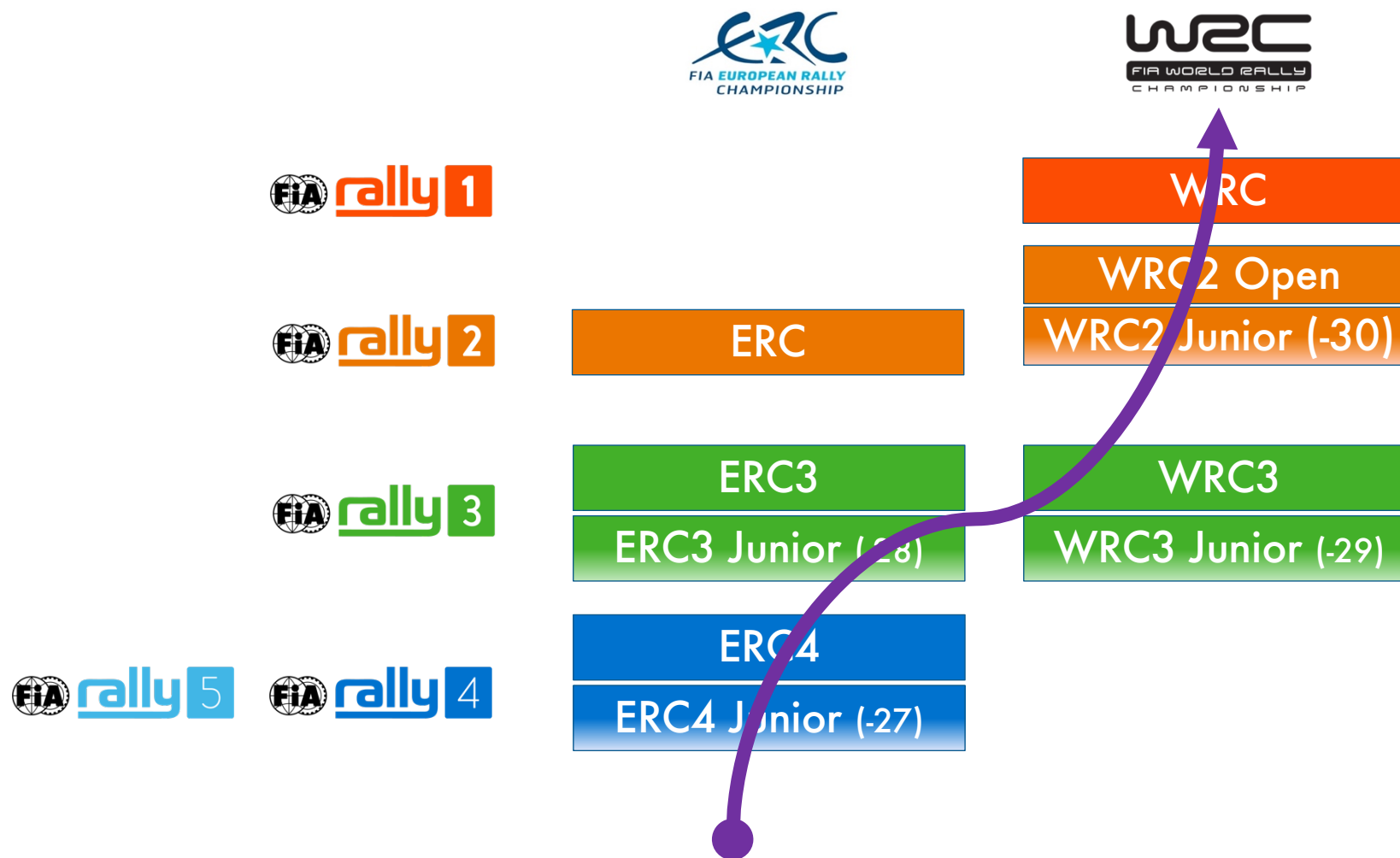
CATEGORIES ACCEPTED  
IN ALL FIA CHAMPIONSHIPS



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# ERC / WRC CHAMPIONSHIP SUMMARY TABLE







# RALLY1

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## RALLY1 KEY ELEMENTS



**1. Sustainability**

**2. Safety**

**3. Access**



**rally 1**

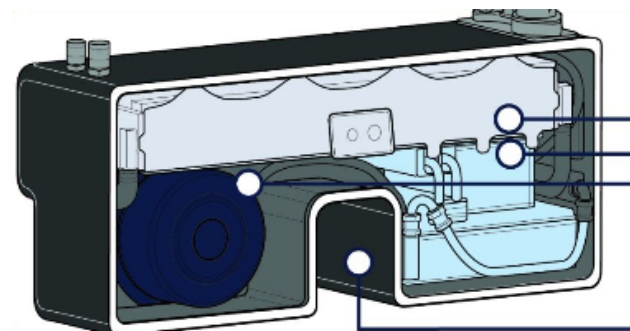
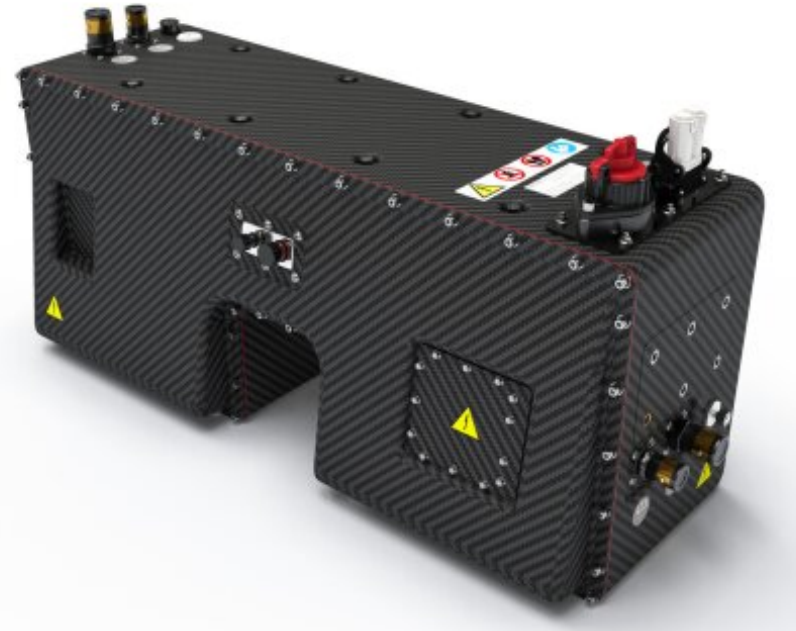
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## Plug-In Hybrid Technology;

- Based on a request from the WRC Manufacturers in 2018
- **100kw** Power Boost on Stages
- +/- **20km** Emission Free Range for use on road sections.
- Re-generation facility to harnesses power under braking.
- 3kWh energy cell can be plugged in to **re-charge in around 20 mins** in service park.

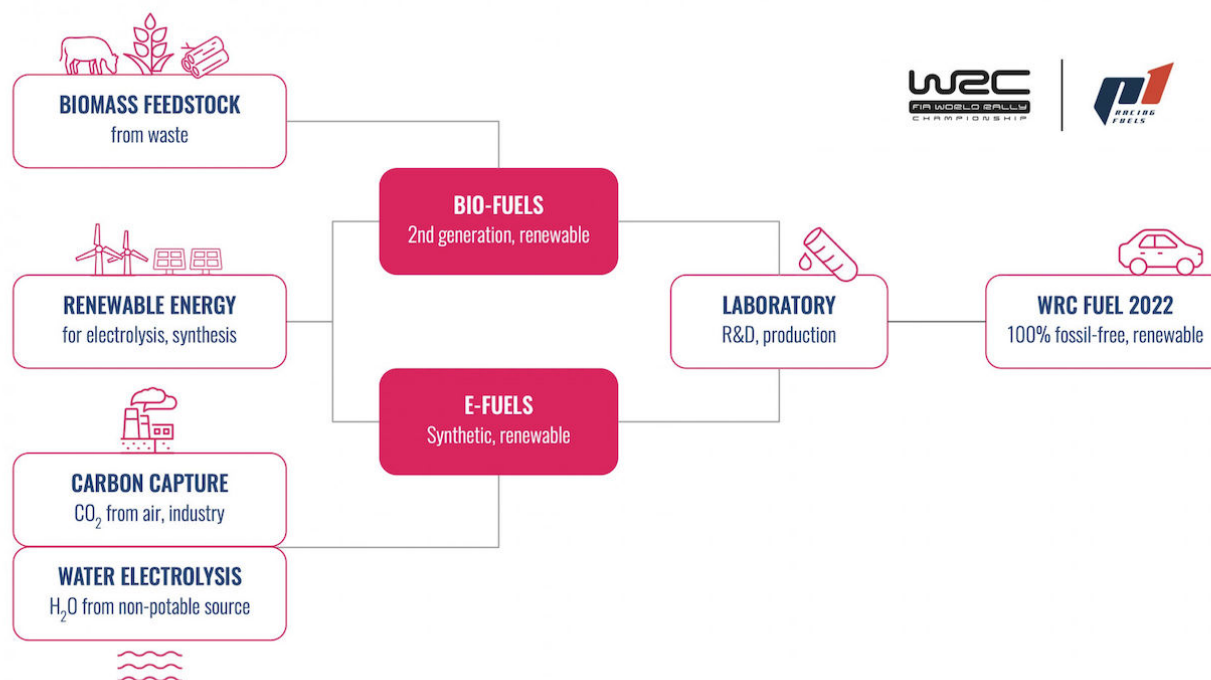
The Hybrid Unit is a collaboration with Compact Dynamics – part of the Schaeffler group. It uses electric motor technology previously used to win Le Mans combined with new battery cell technology from Kreisel all contained in a carbon fibre sealed box to make it impervious to ingress of water and designed for **70G impact**.



**HYBRID UNIT**  
 3.9 kWh battery  
 Inverter / Battery Management System  
 650V MGU (100 kW / 180 Nm)  
 Sealed carbon fibre housing

## Sustainable Energy;

- Rally1 to use WRC specification 1600cc Turbo engine with around **380hp** fuelled by sustainable fuel from a combination of **eFuel** and **2<sup>nd</sup> Gen BioFuel** sources to reduce the overall Co2 output.
- In addition the energy for the Plug-In element and the rest of the service park to be powered by sustainable sources; solar, hydrogen or bio elements.

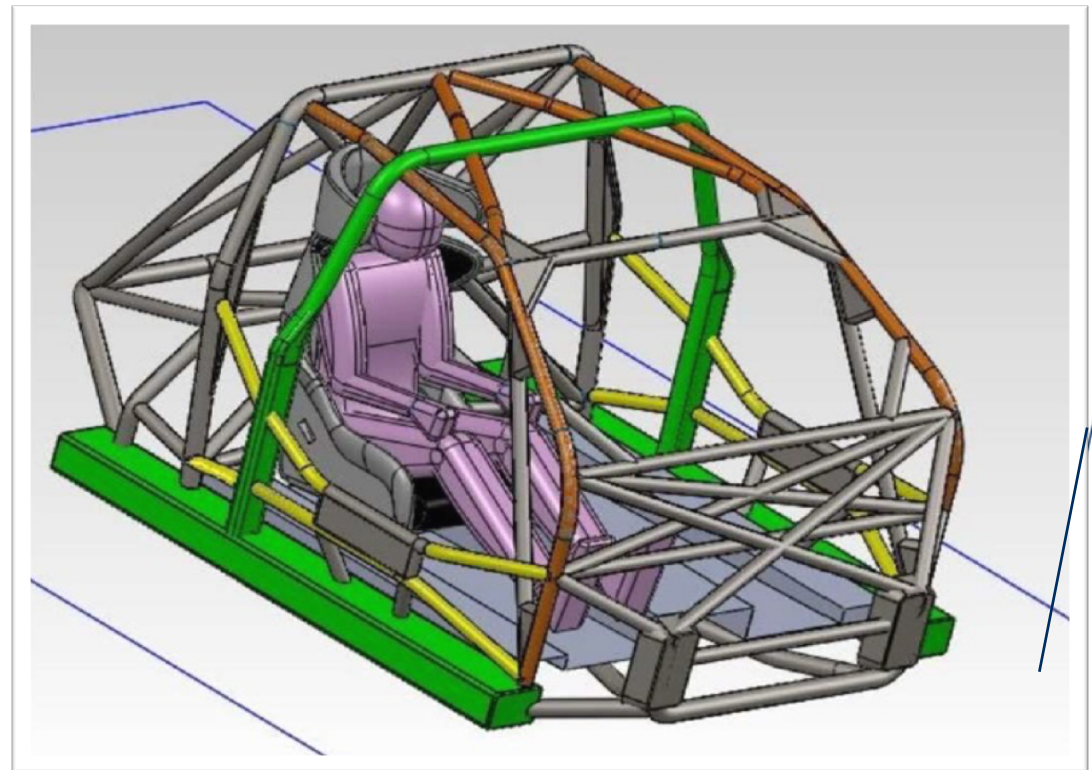




Following extensive research which involved crash testing the 2017-21 generation WRC cars and the Rally1 safety cell under controlled conditions – the FIA Technical team have made recommendations to create a safety cell around the crew which links to the key structures. This features:

- Double roll hoop.
- Revised door bar design.
- Improved roof integration.

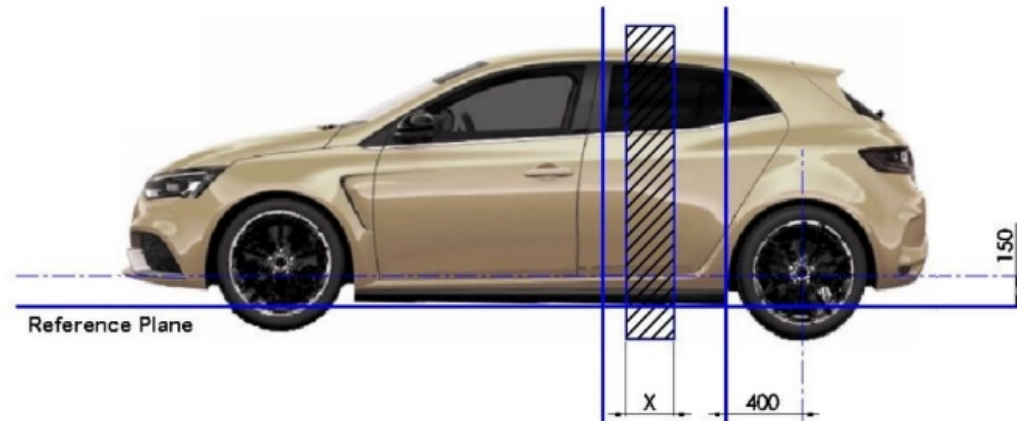
The result is between **38 and 70% reduced** intrusion in controlled crash conditions.



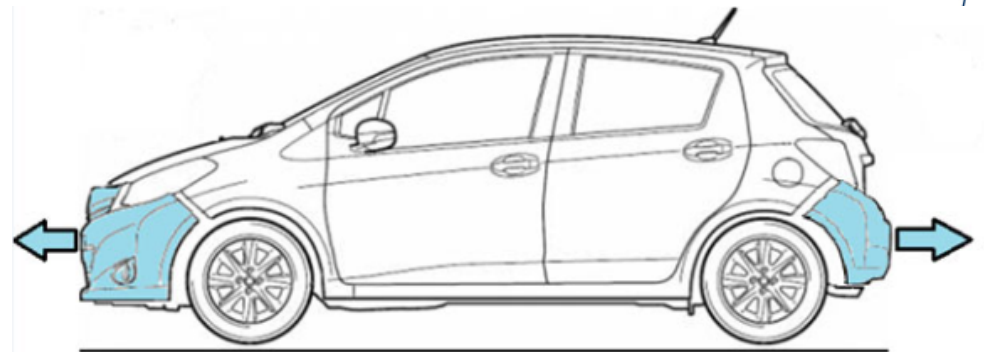
Safety Cell Concept.

In order to make Rally1 more accessible for Manufacturers, a number of measures have been taken in the regulations;

- Engine regulations frozen in July 2021 and the number of **engines reduced from 3 to 2** units/season.
- Transmission / key suspension areas to **follow Rally2 regulations**.
- Manufacturers who don't have a suitable model in their range can a) **'slice'** a section of the body or b) move front and rear bumpers to reach the target of 4200mm.
- **Aerodynamics simplified** from WRC regulations to remove the internal ducting that helps airflow.
- **Suspension travel reduced** to 250mm to limit the cost of components.



**'Slice' Option**



**Move Bumpers Option (+60mm)**



## FROM CONCEPT TO REALITY



**2021**

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## FROM CONCEPT TO REALITY







# 360° SUSTAINABILITY

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- Long term programme: **2021-2025**
- **Strategy:** make a series of small steps that can over time represent a real shift in the perception of Rally as a sport.
- **Topics addressed for 2021:**
  - WRC events have 3 Star FIA Sustainability
  - Digital noticeboard (reaction to COVID-19 challenges)
  - Reduction in tyre choice  
(16 to 8 for 2<sup>nd</sup> choice on gravel)
  - Reduction in testing – 42 days to 30
- **Topics coming for 2022:**
  - Hybrid Power in Rally1
  - Sustainable Fuel for WRC and WRC2
  - Service Park power – reduction in fossil fuels.







## FIA 3\* ACCREDITATION

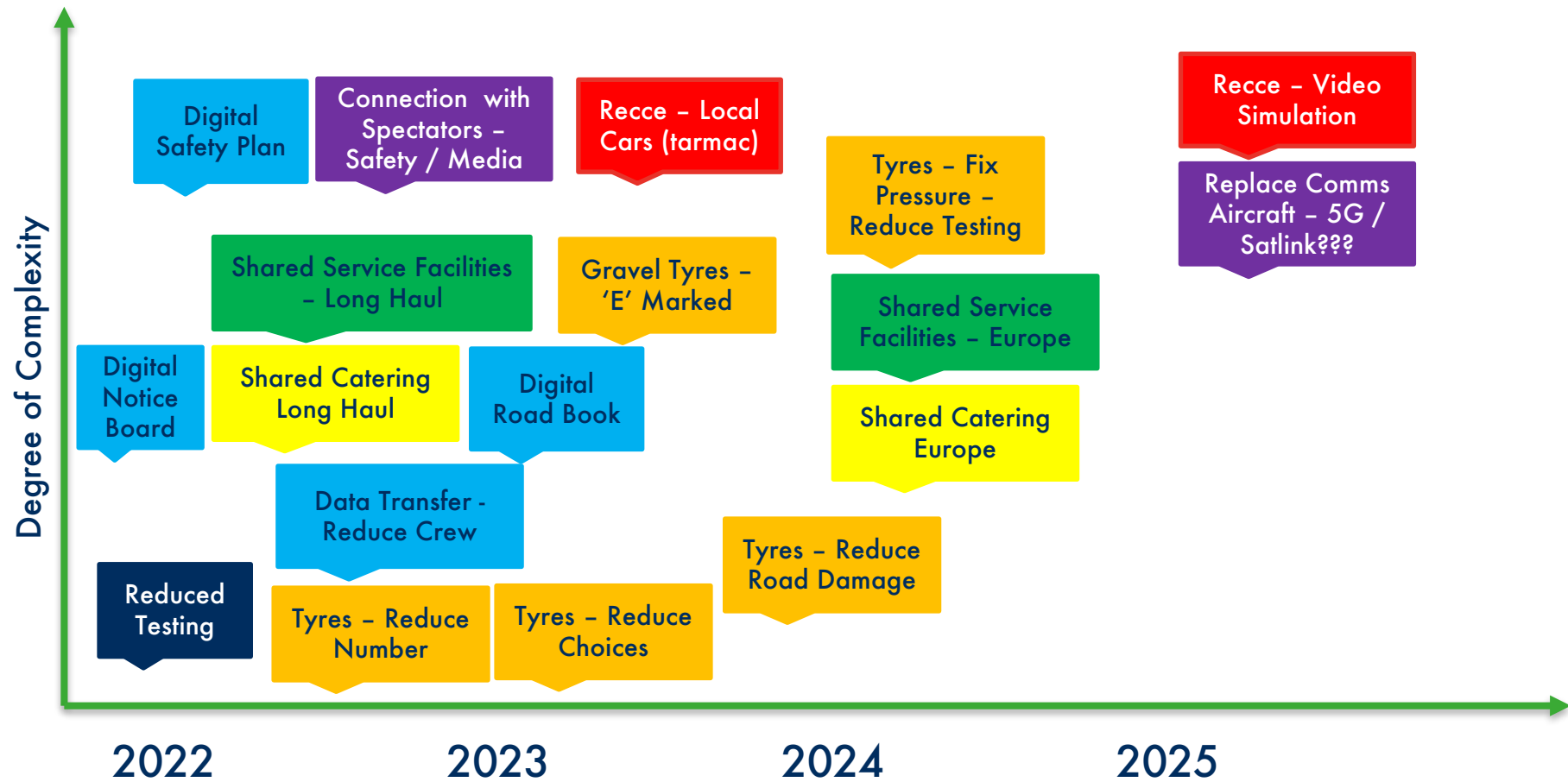
- **Three-level accreditation scheme**, to fit all FIA stakeholders and encourage gradual progression through the levels.
- Based on **international environmental certification** roadmaps/standards (incl. ISO 14001, EMAS)
- Focused approach, **tailored to the specifics** of our industry.
- Implemented by a number of stakeholders since 2013
  - **3-Star accreditation mandatory for WRC events**
  - Teams
  - Circuits
  - Promoters
  - ASNs/ACNs
- Great work in Greece like the **'In the Loop'** – giving value to plastic waste – this is a key option for the future.



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# 360° SUSTAINABILITY ROADMAP





# FIA SAFETY UPDATES

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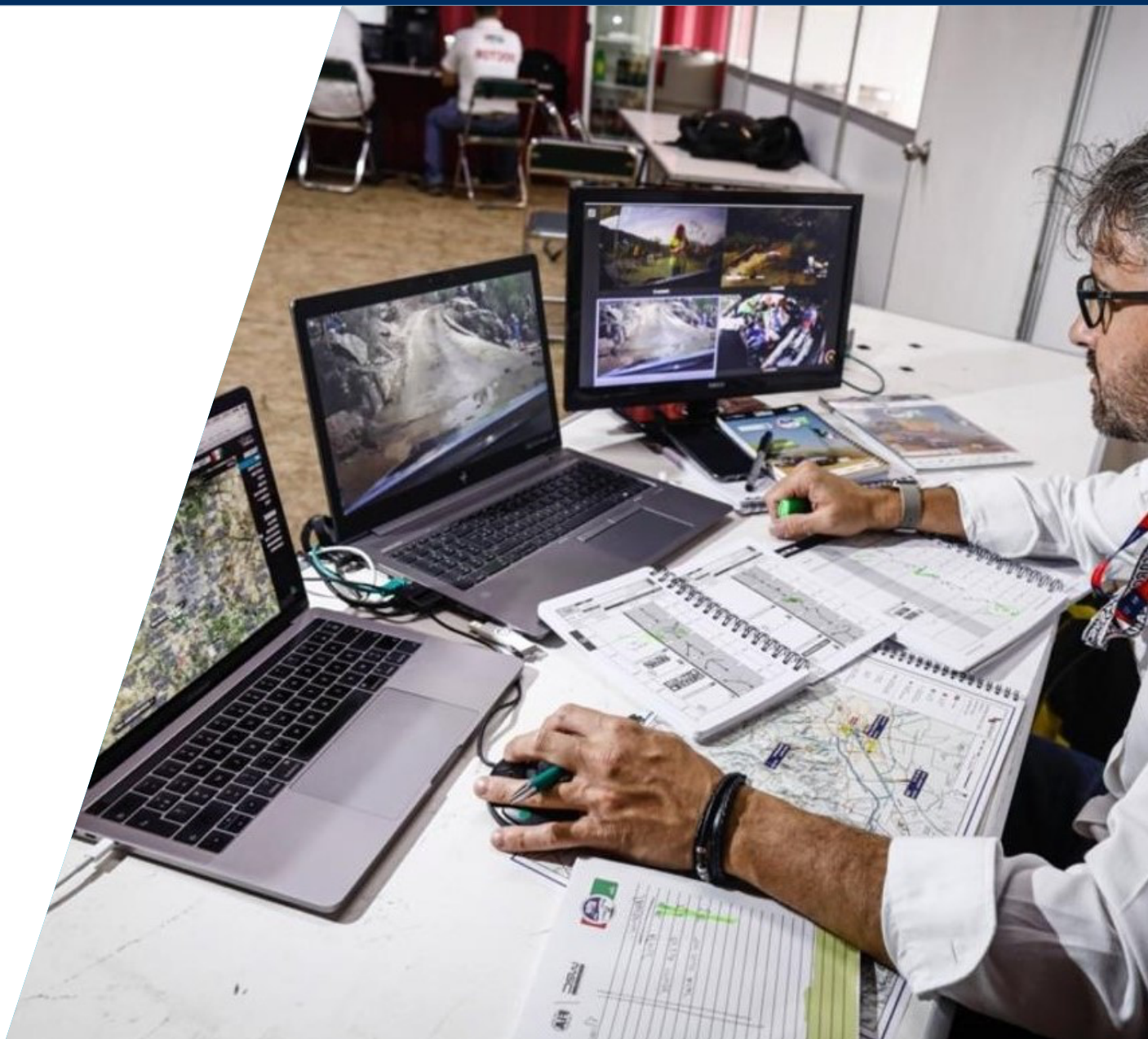
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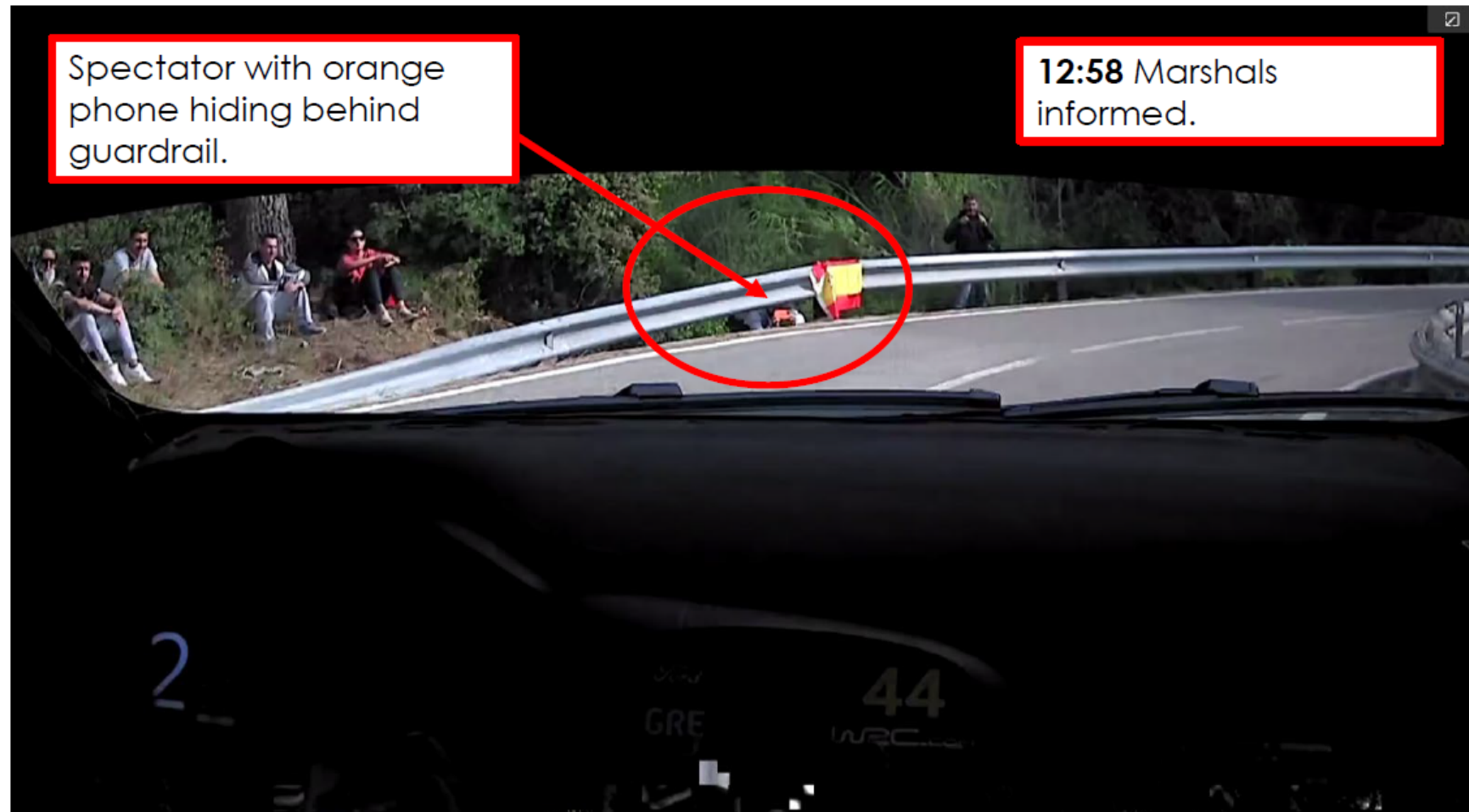




- Deputy Safety Delegate using **live onboard** feeds to monitor the spectators on the stage.
- Happens in '**real-time**'.
- Requires very **careful** monitoring of conditions.



## GREENSMITH 12:58





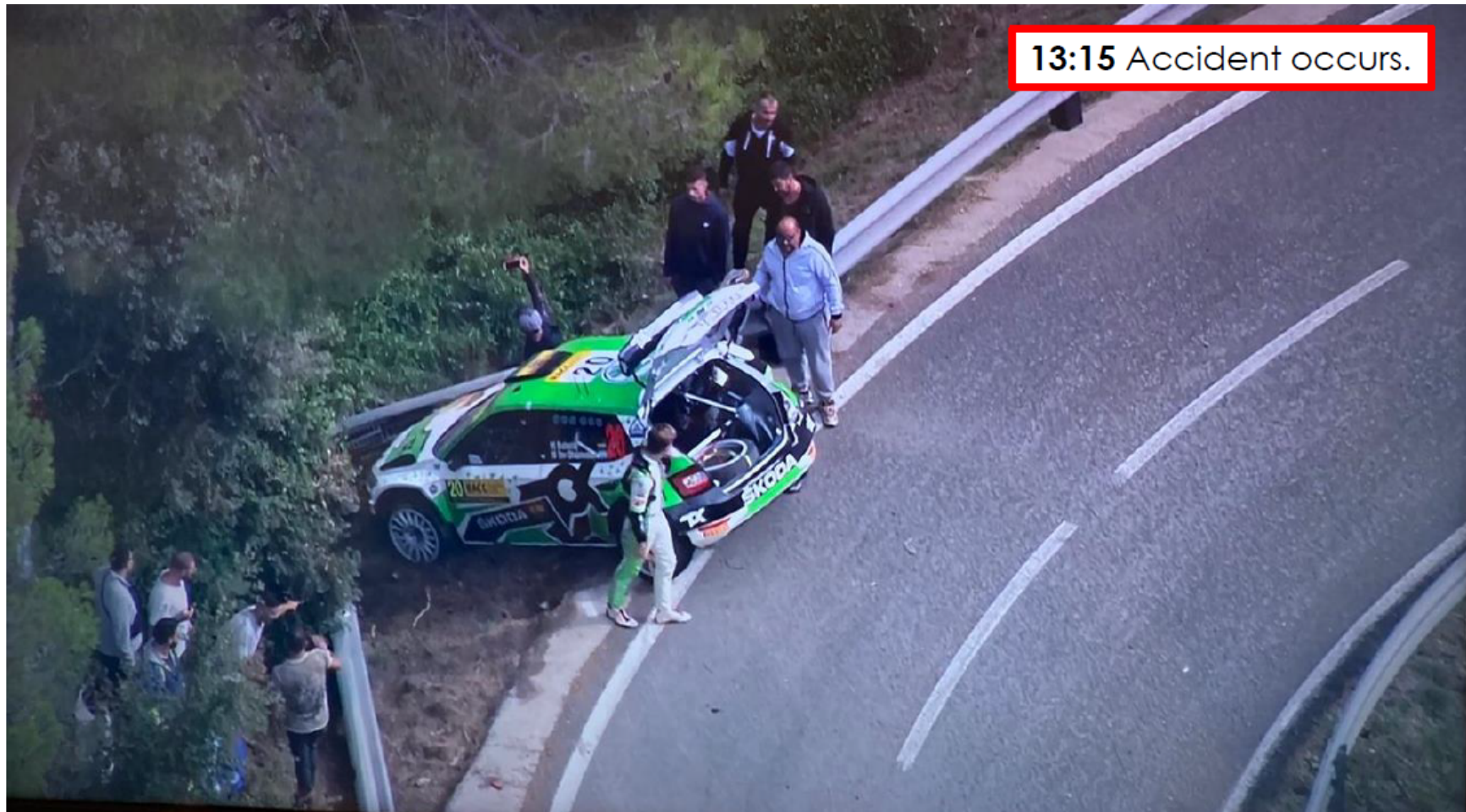
## RALLY WATCH IN ACTION – CATALUNYA 2021

NEUVILLE 13:08





BULACIA 13:15





## AI SAFETY CAMERA

- 2022 to **Artificial Intelligence** software inside each car to provide automated Spectator Detection inputs to Rally Watch.
- All Artificial Intelligence (AI) processing **onboard** vehicle
- Detections **sent via Tracking System** – connected car technology.
- Developed in 2020 / 2021
- Will be installed in **all Rally 1 cars** in WRC Monte Carlo for beta testing.
- Will use 'machine learning' to develop in 2022.







# FIA RALLYSTAR

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## STAGE 1

2021-2022

- **Mass detection** organised by ASNs
- Slalom and Digital Motorsport
- 12<sup>th</sup> December 2021 – Markopoulo Park



## STAGE 2

2022

- 6 Continental Finals organised by the FIA
- **1 winner per continent**
- 1 woman selected after a worldwide shoot-out



## STAGE 3

2023

- **Coaching, training** and testing for all 7 crews
- Minimum of 6 rallies with Rally3 cars
- 3+1 best drivers kept at the end of the season



## STAGE 4

2024 - 2025

- **Two seasons** in Junior WRC
- 3 drivers kept for the second season
- Target assigned: winning the title



## STAGE 5

2026

- WRC2 season fully funded for a Rally Star driver winning the JWRC
- **Stepping-stone** to a professional career





## CONTINENTAL FINAL – EUROPE

- Location: Estering Buxtehude (Germany)
- Date: **28-30 January 2022**
- 1 driver qualifies for 2023 training season
- 1 lady qualifies for 2022 Women Final



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# FIA RALLY RANKING

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## FIA RALLY RANKING

- Following the model of the ATP (Tennis) / PGA (Golf) bringing together WRC, Regional and National drivers and co-drivers in a **single ranking**.
- FIA Global Rally Ranking to be **updated every week** on fia.com.
- 12\* best results of each driver/co-driver **over the last 52** weeks to be taken into account.
- Points to be awarded to crews entering **FIA-homologated** cars in eligible events.
- System of **coefficients** to weight the Cars and Championships levels, as well as the number of starters.

\* Number of events on the WRC calendar

1	▶	S. Ogier (FRA)
2	▶	E. Evans (GBR)
3	▲	T. Neuville (BEL)
4	▲	K. Roivanperä (FIN)
5	▲	D. Sordo (ESP)
6	▲	T. Katsuta (JPN)
7	▲	A. Mikkelsen (NOR)
8	▼	G. Greensmith (GBR)
9	▲	A. Fourmaux (FRA)
10	▲	E. Camilli (FRA)





# FIA RALLY RANKING

## CHAMPIONSHIP COEFFICIENT

WRC = 1.0, ERC = 0.5, REGIONAL = 0.4, ERT = 0.2  
INTER = 0.15, NATIONAL = 0.10



## OVERALL POINTS

OVERALL POSITION POINTS x 10



## CLASS POINTS

CLASS POINTS x # of STARTERS (MAX 20) x 0.3 x  
CLASS COEFFICIENT  
RALLY1 = 1.0, RALLY2 = 0.7, RALLY3 = 0.4,  
RALLY4 = 0.4, RALLY5 = 0.3

- Creation of **new links and bridges** within the rally family.
- Opportunity for amateurs to be **part of the same ranking** as their WRC idols.
- Additional incentive to **step up in the FIA Championships**.
- **Fresh stories** brought to fans and media.



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