

Welcome & Thank You



Emmy Awards & eCall regulations

why we're here

ITUEvents

AI for Good Global Summit

*Accelerating progress
towards the SDGs*

**28-31 May 2019
Geneva, Switzerland**

#AIforGood

In partnership with

XPRIZE



Organized by



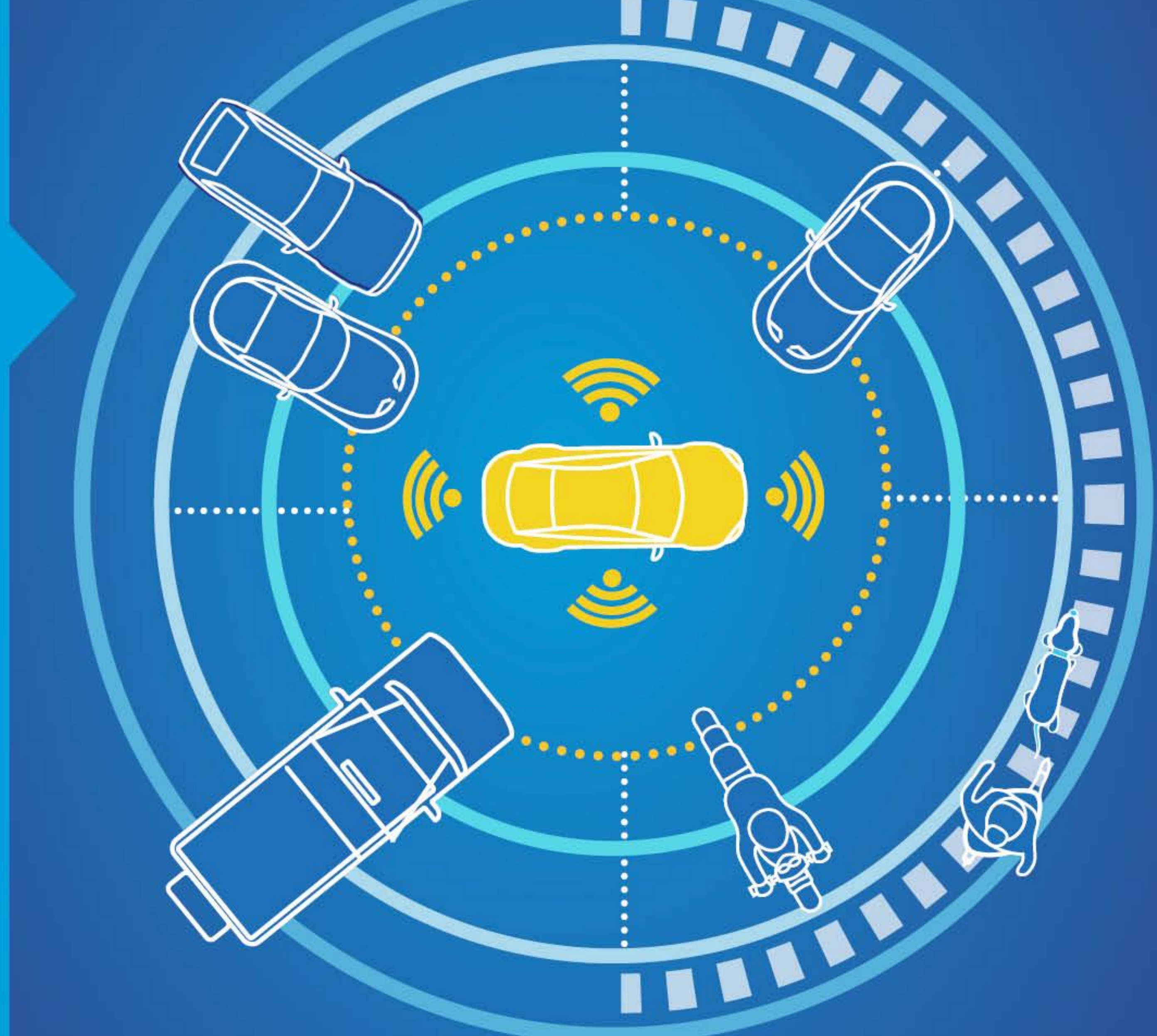
ITUEvents

One-day workshop

The Turing test for autonomous driving

*A global performance
standard for AI
on our roads*

10 September 2019
ITU Telecom World
Budapest, Hungary



Partner



AUTONOMOUS
DRIVERS
ALLIANCE

Organized by



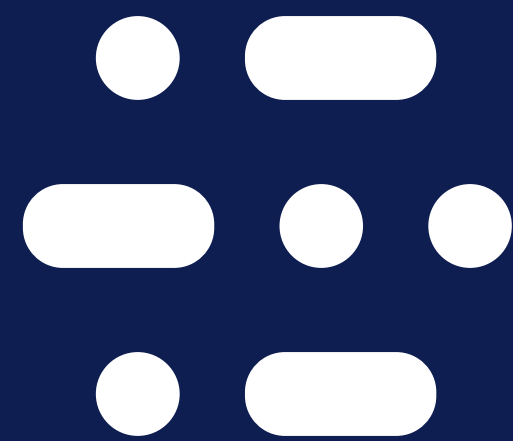
ITU Focus Group on AI for Autonomous and Assisted Driving
FG-AI4AD

ITU Workshop on Explainable AI (XAI) for Autonomous and Assisted Driving

new mobility, new decade, new perspective

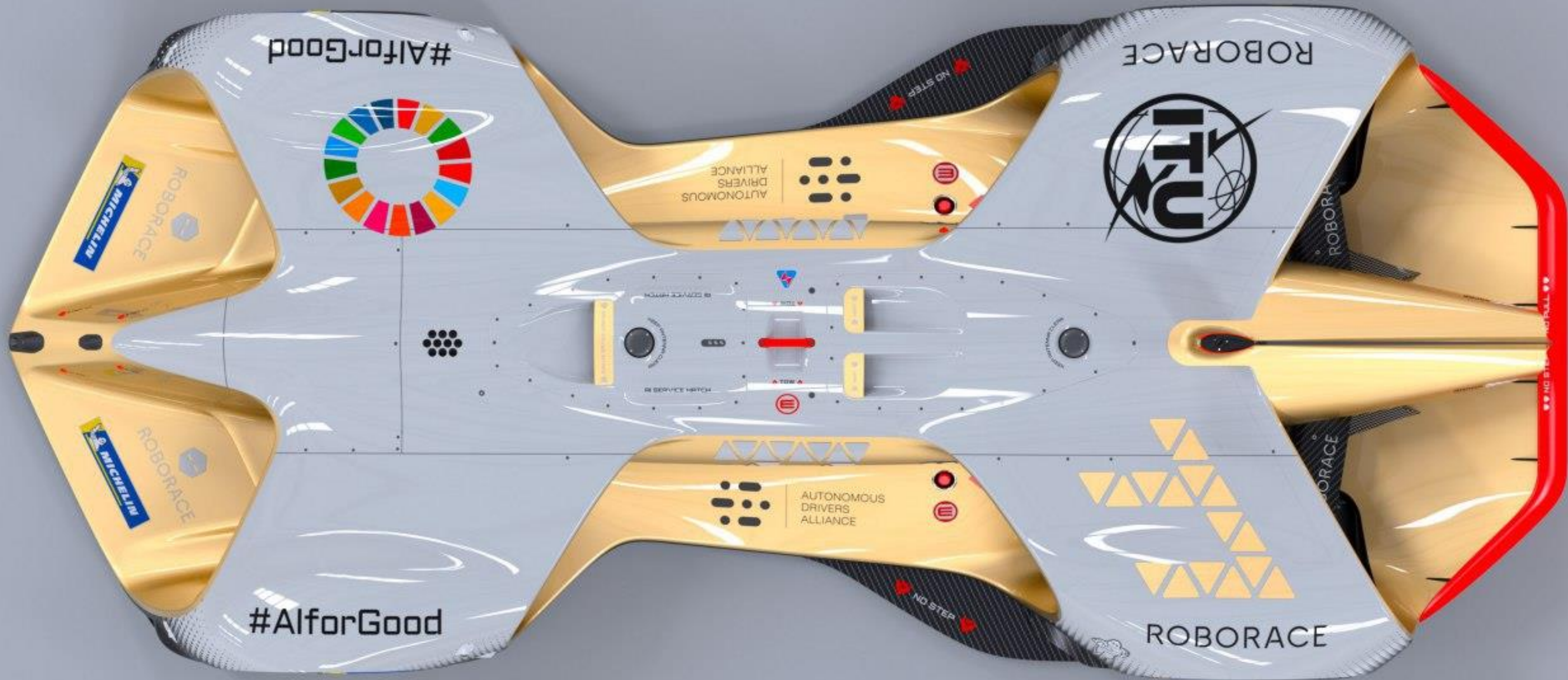
The AI & Robotics Future of Mobility

21st Century Convention on Road Traffic

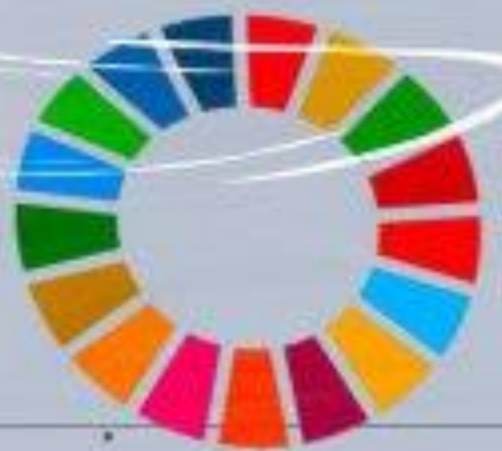


AUTONOMOUS
DRIVERS
ALLIANCE

motorsport as #AlforGood



#AlforGood



ROBORACE
& MICHELIN

AUTONOMOUS
DRIVERS
ALLIANCE

ROBORACE



RE SERVICE HATCH

RE SERVICE HATCH

ROBORACE
& MICHELIN

AUTONOMOUS
DRIVERS
ALLIANCE

#AlforGood



ROBORACE

NO STEP

NO STEP

When **AI** becomes our **driver**, **co-driver**, **guardian** & **instructor**...

...what should our **minimal performance** expectation be?

Should **AI** be held to same **legal standards** as **human** drivers?

Situational Awareness & Risk

It starts with a **universal** assumption that all drivers are;
“**aware, willing** and **able**” to avoid collisions...

..and the recognition of behavioural **intent** that may conflict with this universal “**aware, willing** and **able**” assumption

Being **drunk**, **drowsy** or **distracted** violates the **aware**, **willing** and **able** assumption so we **regulate**, **educate** and may even **modify** our own behaviour to **mitigate** the **risk**

three proofs

Prove AI Drivers never engage in **careless,
dangerous or reckless driving behavior**

In accordance to Article 7 of the Geneva Convention on Road Traffic *“not to endanger”*

Prove AI Drivers **meet, or exceed**, the performance of
a **competent and careful** human driver

In accordance with Article 10 of the Geneva Convention on Road Traffic
“**reasonable and prudent**” driving

Prove AI Drivers remain **aware, willing and able** to
avoid collisions at all times

In accordance to Article 7 of the Geneva Convention on Road Traffic “*shall avoid all behaviour that might cause damage to persons, or public or private property.*”

motorsport's real-time driver performance assessment

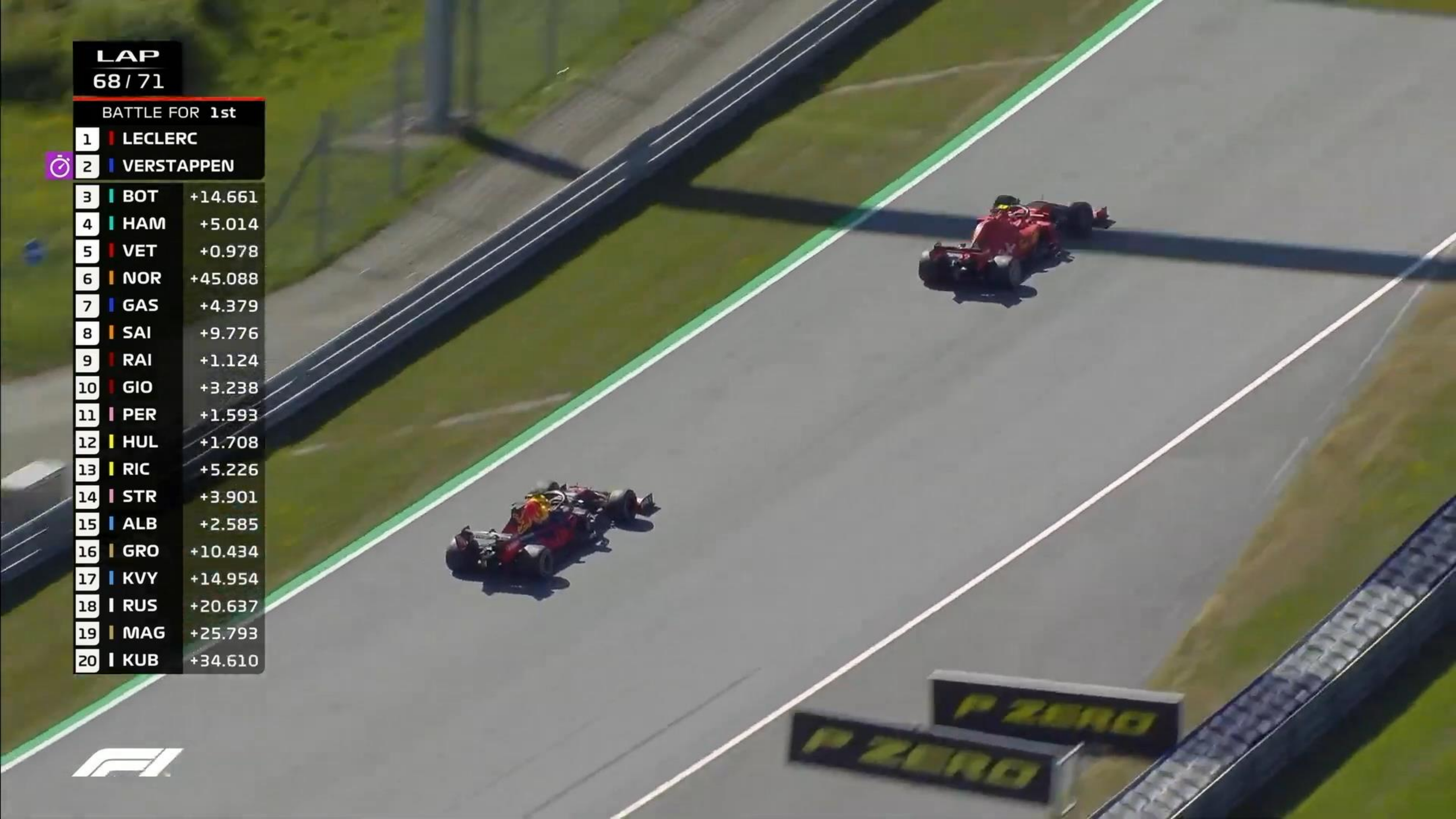


Race Control field monitoring of driver behavioural performance

LAP
68 / 71

BATTLE FOR 1st

1		LECLERC	
2		VERSTAPPEN	
3		BOT	+14.661
4		HAM	+5.014
5		VET	+0.978
6		NOR	+45.088
7		GAS	+4.379
8		SAI	+9.776
9		RAI	+1.124
10		GIO	+3.238
11		PER	+1.593
12		HUL	+1.708
13		RIC	+5.226
14		STR	+3.901
15		ALB	+2.585
16		GRO	+10.434
17		KVY	+14.954
18		RUS	+20.637
19		MAG	+25.793
20		KUB	+34.610



PIRELLI

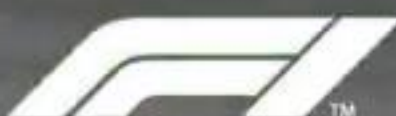
PIRE

LAP
69 / 71

	Interval
1 LEC	
2 VER	+0.334
3 BOT	+14.290
4 HAM	+4.266
5 VET	+0.960
6 NOR	+46.033
7 GAS	+5.569
8 SAI	+9.408
9 RAI	+1.018
10 GIO	+2.643
11 PER	+1.545
12 HUL	+3.946
13 RIC	+2.321
14 STR	+5.049
15 ALB	+2.052
16 GRO	+10.990
17 KVY	+15.629
18 RUS	+20.943
19 MAG	+25.196
20 KUB	+37.428



P ZERO



1 LECLERC		DRS	299 KM/H	2 TURN	2 VERSTAPPEN	DRS	320 KM/H	
-------------	--	-----	-------------	-----------	----------------	-----	-------------	--

FG-AI4AD the **behavioural evaluation** of **AI** <drivers> *at scale*

Session 1: Future of Mobility – Roadmaps and Perspectives

This session will provide a snapshot of the autonomous vehicle industry; progress, status and roadmap for the future.

Keynote

Michael Talbot, Head of Strategy, Zenzic

Session 2: Who drives in the AI & Robotics Future of Mobility?

This session will explore the role of the “driver” in the AI & Robotics future. How is “driver” being defined?

Keynote

Murray Rahn, Architect, Global Services, Nokia

Bryn Balcombe, Founder, ADA

Session 3: Reading the Road - Situational Awareness requirements for Human & AI drivers

This session will focus what unites human & AI drivers as a foundation for safety on our roads.

Keynote

Neville A. Stanton, Chair, Human Factors Engineering & Director, Human Factors Engineering Team, Transportation Research Group

Session 4: How safe is safe enough?

This session will explore the different AV industry perspectives arising from the question of how safe is safe enough when it comes to deploying automated vehicles and their testing.

Keynote

Rahul Khatri, TRL

*Niels de Boer, Programme Director, Future Mobility Solutions
(Autonomous Vehicles), Energy Research Institute/ CETRAN*

Session 5: AI Ethics and implications for future mobility

This session will consider the impact that broader regulation of Artificial Intelligence (AI) and Algorithmic Systems may have on the future mobility.

Keynote

Christoph Lütge, Professor of Business Ethics and Director, Institute for Ethics in Artificial Intelligence, Technical University of Munich

Session 6: Assurance & regulation for Robotics and Autonomous Systems (RAS) & implications for future mobility

This session will consider how regulations of the mobility sector will be influenced by the cross-domain, cross-technology and cross-application research being conducted on the assurance and regulation of Robotic & Autonomous Systems (RAS).

Keynote

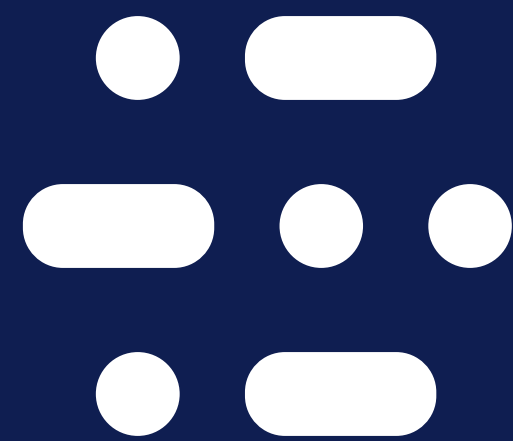
John .A. McDermid, Department of Computer Science, University of York Programme Director Assuring Autonomy & Chair of a BSI working group on safety of autonomous vehicles

Session 7: FG-AI4AD - The way ahead

This final session will review the proposed direction of FG-AI4AD in light of the day's presentations, discussions and debates.

Keynote

*Bryn Balcombe, Autonomous Drivers Alliance (ADA) : Path Planning
FG-AI4AD's activities in the global standards, regulation & policy
landscape*



AUTONOMOUS
DRIVERS
ALLIANCE

bryn@ada.ngo