



# The FIA's involvement in Connected Vehicles

A WORLD IN MOTION

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# Introduction

## The FIA

- Non-profit global organization headquartered in Paris and founded in 1904.
- International association of national Automobile and Touring Clubs and national Federations for motoring and motor sport. It brings together 237 national motoring and sporting organizations from 142 countries on five continents. Its member clubs represent 80 millions of motorists.

### SPORT

**Mission:** ensures that fair, capably regulated and above all safe events are conducted in all corners of the globe.



### MOBILITY

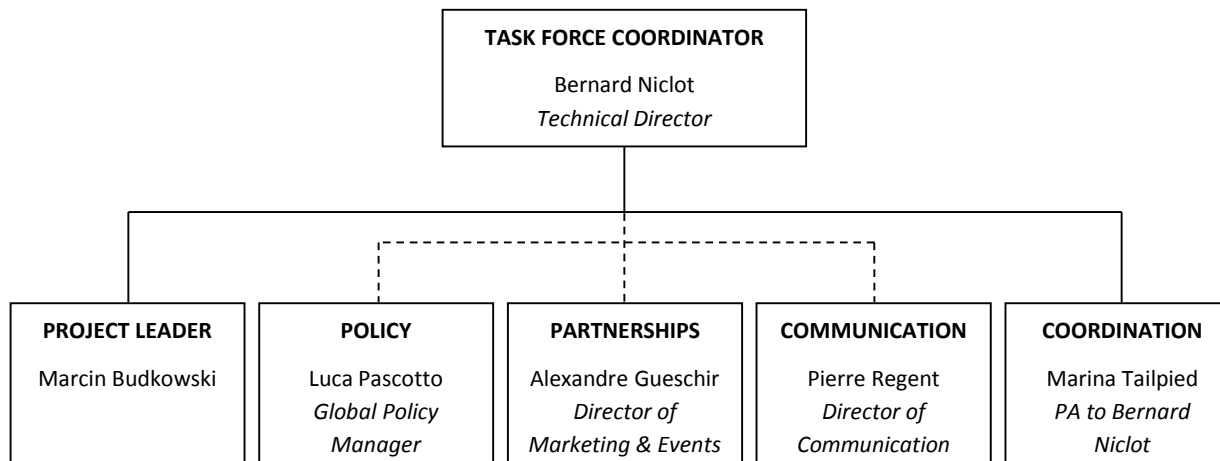
**Mission:** ensure that safe, affordable and clean systems of transport are available to all.



## Task Force on Connected Vehicles

**Objective:** Investigate if and how the Federation should get involved in the development of vehicle-to-vehicle and vehicle-to-infrastructure communications and propose a strategy.

- Overview of the current situation and state of development of connectivity in general - and collaborative intelligent transport systems in particular - in the automotive world, looking at the various technologies, stakeholders, regulations and business models, as well as in motorsport.
- Summary of expected benefits, mainly on road safety, traffic management and sustainability.
- Review of the main challenges for adoption, public acceptance, deployment but also on the technology and data fronts.





What are (and aren't) Connected Vehicles and Intelligent Transport Systems (ITS)?

- **Active safety systems**
- **eCall**
- **Infotainment and in-car internet**
- **Collaborative Intelligent Transport Systems (C-ITS)**
- **Autonomous driving**



## **Road safety**

- Collision avoidance
- Vulnerable road users
- Road hazard warnings
- Sensor fusion, automation
- Knowledge base

## **Dynamic traffic management**

- Real time traffic information
- Platooning (aka trains of vehicles)
- Congestion management

## **Sustainability**

- Environmental impact
- Road usage charging
- Multi modal mobility
- Improved mobility for the older and disabled



# Challenges

## Regulation and interoperability

- Technical regulations
- Standardization / Interoperability
- Responsibility / Liability
- Driver distraction

## Adoption

- Critical mass
- Adoption incentives
- Early adopters
- Consumerist approach
- Infrastructure investment
- A first world problem?

## Acceptability

- Technology acceptance
- Reliability
- Cost

## Data

- Ownership and access to data
- Data security
- Data privacy

## Technological and behavioral aspects

- Localization
- Development cycles
- Communications protocol
- Big data processing
- Human machine interface

## An evolving relationship to the car

- Car ownership model
- Multi-modality



## **The FIA should get actively involved**

The major impact that intelligent transport systems will have on road safety, the environment and mobility in general ties in perfectly with the FIA's objectives and values.

Connected vehicles are coming, but the FIA has levers that can impact significantly the speed and effectiveness of their deployment and ensure that the consumers' interest is safeguarded.

While not neglecting the basics of road safety, still able to bring major improvements in third world countries, connectivity is a significant aspect of the future of safe and sustainable mobility.

Clubs are instrumental in helping achieving these objectives. To have their support and active involvement, the FIA needs to assist and support them in converting what can be perceived as a threat into an opportunity.



## General approach

Strategy consistent with the FIA's main objectives: **road safety, reduction in pollutant emissions** and **consumer protection**. Not limited to direct action, as the topic is wide and requires broad expertise and vast amounts of resource, but includes partnerships, support of selected existing initiatives and communication campaigns. Takes into account the **clubs' interests** and aims at involving them in a pro-active way.

Main levers of the FIA:

- International organization with influence and lobbying potential at global level (UNO, EU, etc)
- Access to consumerist levers (NCAPs, consumer information platforms and channels, etc)
- Formula 1 and motorsport as flagship for technology and safety
- Legitimacy due to worldwide consumer representation via the clubs
- Neutrality as no direct business interest
- Visibility aided by President being a public figure

Three levels of involvement:

- **Active role**  
Key topics for development and implementation of C-ITS, where the FIA has legitimacy and can add significant added value.
- **Participatory role**  
Important topics that the FIA should monitor or participate in, notably via support of existing initiatives.
- **Passive role**  
Areas with low legitimacy or added value, or where market forces are expected to bring the solutions.





## Active role (1)

- **Regulatory push at worldwide level**
- **Lobbying for open data access and fair competition**
- **Acceptability and exposure to the general public**
- **Creation of user incentives**
- **Partnerships with cities**



## Active role (2)

- **Deployment of connected technologies in motorsport**
- **Communications campaign**
- **Development of a new business model for clubs**

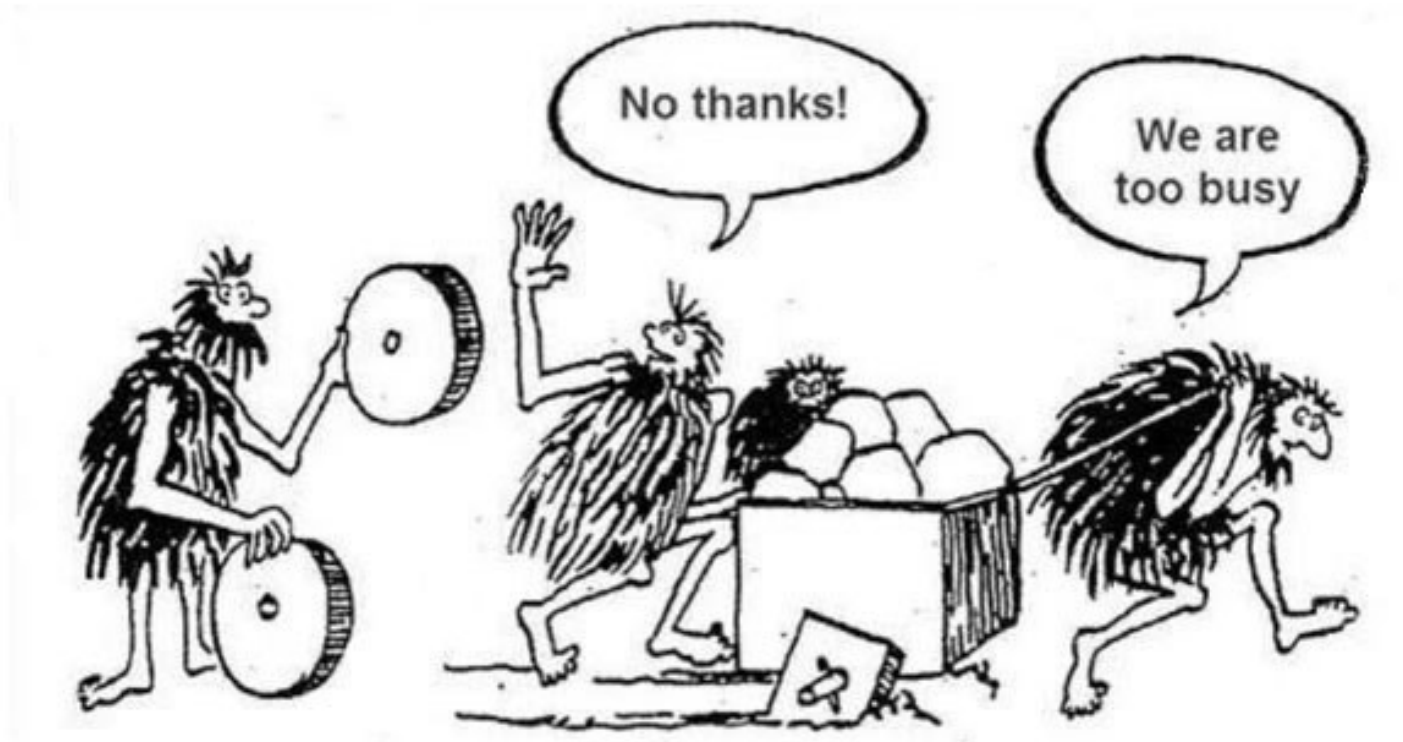


## Participatory role

- **Support consumerist approach**
- **Monitor and support selected existing collaborative initiatives**
- **Data privacy legislation**

## Passive role

- **Choice and standardization of the communications protocols**
- **Data security and systems reliability**





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