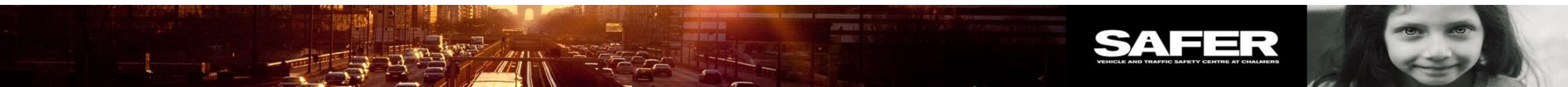


Road Safety in Europe

ERTRAC Roadmap

2019-02-07



Timeline

2021

2028

Horizon 2020

Horizon Europe



SAFER
VEHICLE AND TRAFFIC SAFETY CENTRE AT CHALMERS



Final parts of Horizon 2020 - possibilities

- 2019 - Currently a number of proposals in preparation, primarily within the following calls:
 - MG2.7 – Safety in an evolving road mobility environment
 - DT-ART-03 - Human centred design for the new driver role in highly automated vehicles
 - DT-ART-04 - Developing and testing shared, connected and cooperative automated vehicle fleets in urban areas for the mobility of all
 - ICT-13-IA - platform for sharing of closed data



Final parts of Horizon 2020 – 2020 calls

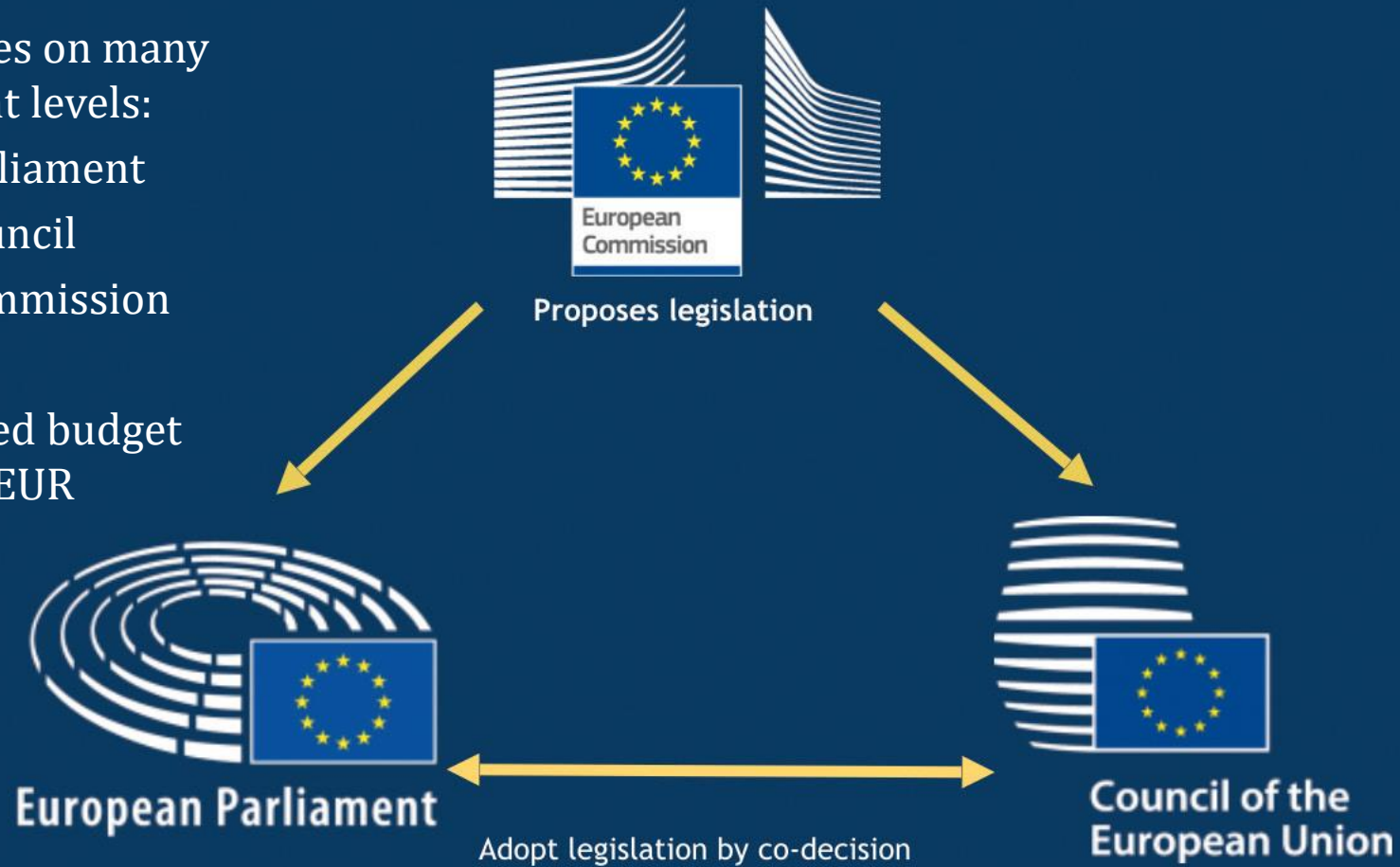
- DT-ART-05-2020: Efficient and safe connected and automated heavy-duty vehicles in real logistics operations
- DT-ART-06-2020: Large-scale, cross-border demonstration of highly automated driving functions for passenger cars
- MG-2-11-2020: Network and traffic management for future mobility
- MG-2-12-2020: Improving road safety by monitoring effectively working patterns and overall fitness of drivers
- MG-4-7-2020: Digitalisation of the transport system: data sharing
- LC-GV-06-2020 - Advanced light materials and their production processes for automotive applications
- MG-4-9-2020: The European mobility culture of tomorrow: Reinventing the wheel? (CSA)
- LC-GV-09-2020 - Setting up a common European research and innovation strategy for the future of road transport (CSA)

50 MEUR each

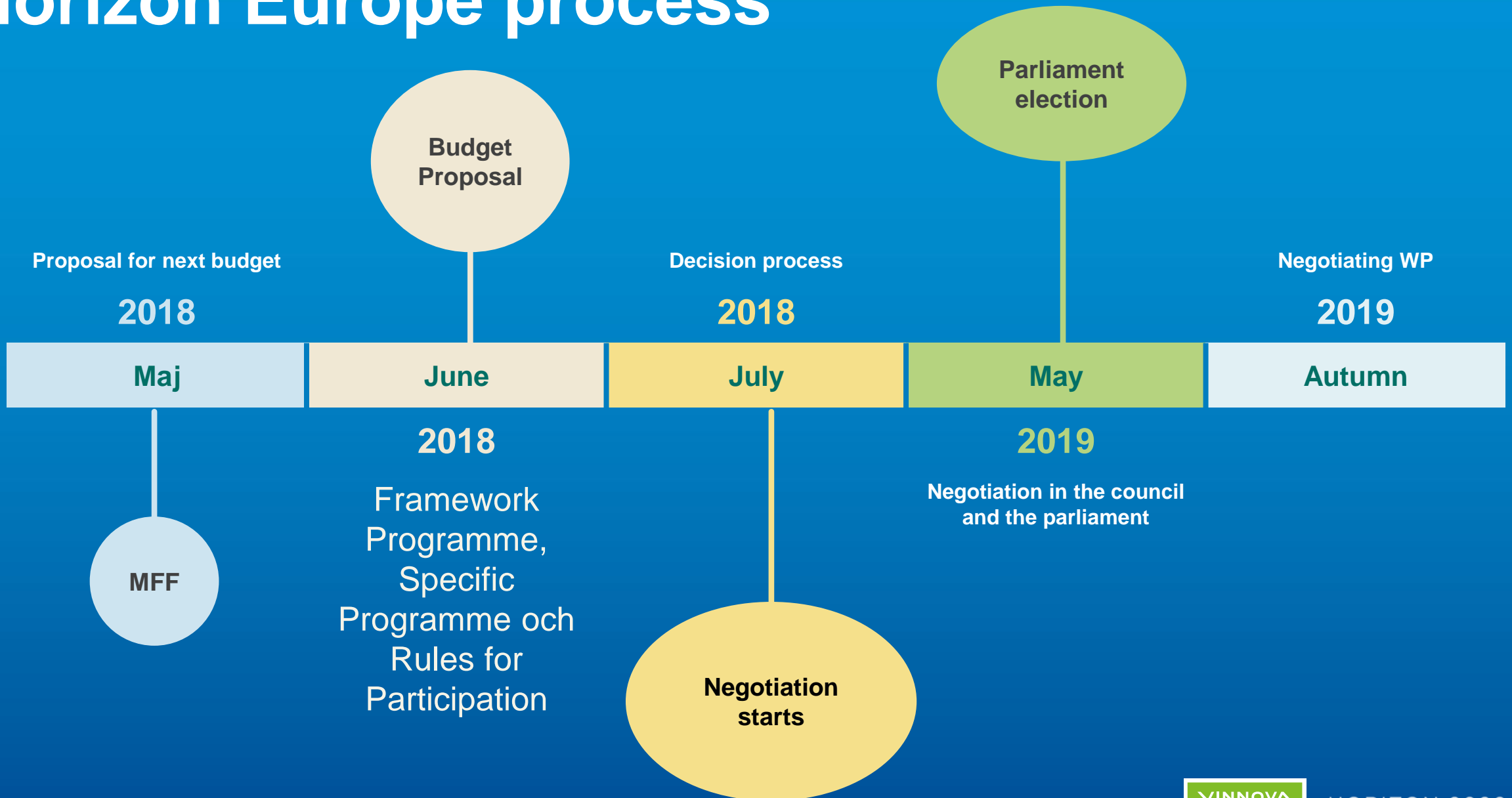


Preparing the next programme

- Activities on many different levels:
 - Parliament
 - Council
 - Commission
- Proposed budget 100 BnEUR



Horizon Europe process



Commission proposal

Updated



Pillar 1 Open Science

European Research Council

Marie Skłodowska-Curie Actions

Infrastructures



Pillar 2 Global Challenges and Industrial Competitiveness

Clusters

Health
Culture and inclusive society
Civil security for society
Digital, industry and space
Climate and Energy
Mobility
Bioeconomy, food, natural resources and env

Joint Research Centre



Pillar 3 Open Innovation

European Innovation Council

European innovation ecosystems

European Institute
of Innovation and Technology

Strengthening the European Research Area

Sharing excellence

Reforming and Enhancing the European R&I system



How about transport and specifically safety?

- Important to use different channels to influence, such as:



Vision for future road transport

- **Seamless mobility** for people and goods
- **100% renewable energy** for transport
- **Emissions free** urban mobility and negligible in rural areas
- Nearly **zero accidents** and injuries
- Europe as a **world leader** in innovation, production and services

European action is required now

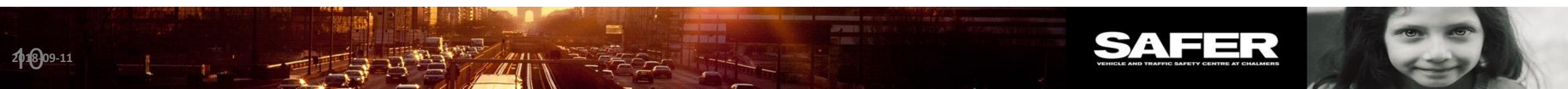


ERTRAC Safety Roadmap

- Final draft version now available
- Will be finalised by the end of February
- To be presented at EUCAR Annual Conference in the beginning of April and delivered to the commission



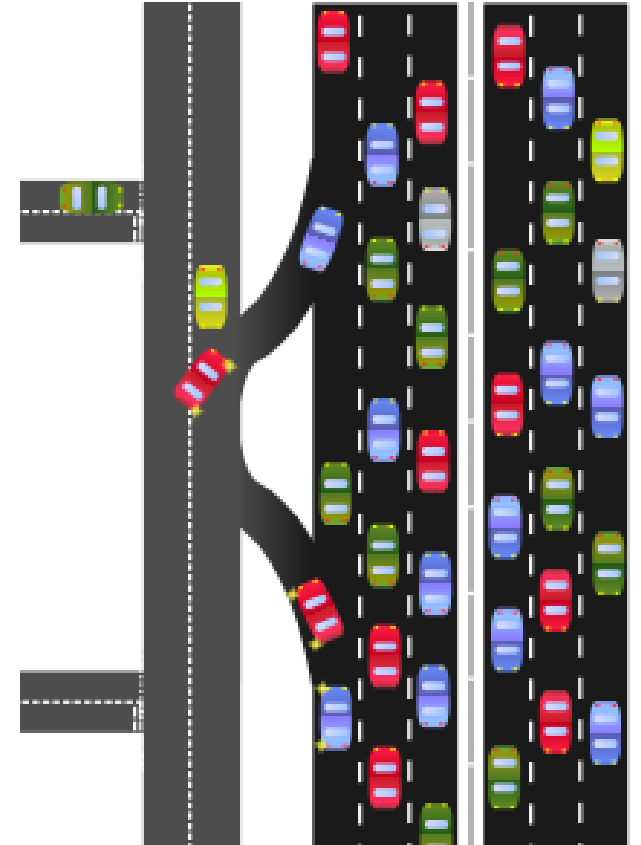
Safe Road Transport Roadmap



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VEHICLE AND TRAFFIC SAFETY CENTRE AT CHALMERS

Attributes of the future road transport system

- Nearly zero accidents and injuries due to safety functions and automated driving functions in fully connected vehicles, road users and infrastructure
- Optimised and intuitive human-machine interface following the idea of cognitive safety
- Safe and well maintained physical & digital infrastructure
- Dedicated traffic spaces for different road users where sensible
- Improved levels of in- and post-crash safety in the remaining collisions
- Secured privacy
- Continuous maintenance of software and system updates constantly improving their performance
- Systematic verification & validation of cyber physical systems

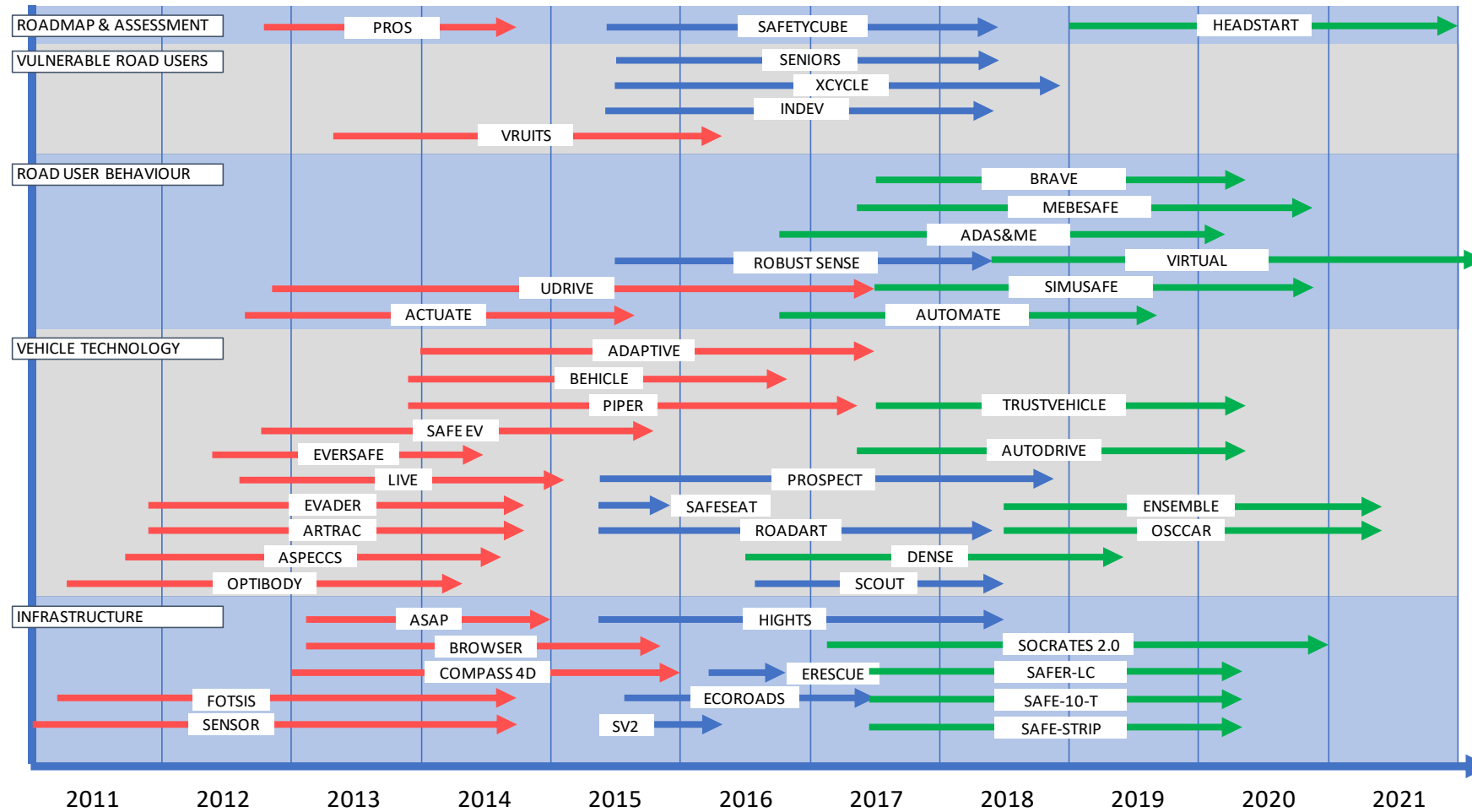


Some background facts

- Road users getting increasingly older;
- Growing cities;
- A more diverse traffic mix;
- Effects resulting from efforts to meet the carbon-dioxide emission reduction targets;
- Increased connectivity of persons and things;
- Time for penetration of new technologies into the transportation system;
- No focus on Europe only - most of the expected growth of transport volume will take place in other parts of the world, and most road fatalities occur there already today.



Project portfolio



Main topics

- Building a framework to improve traffic **safety culture** in the EU
- Safety of **unprotected** road users
- Assessment of **road user capabilities** in future scenarios of road transport
- Safe **human-technology interaction** in the digital traffic system
- Safe inclusion of **non-automated road users** into the increasingly automated traffic system
- Safety of highly and fully **automated vehicles**
- New ways of understanding and **reducing long-term injuries**
- **Care and rescue** measures to minimize long term effects
- **Infrastructure** safety
- Predictive safety **assessment and validation framework**
- Radical improvement of road safety **outside Europe and OECD countries**

