Automation, connectivity, electrification, and sharing (ACES): transforming road transport services

International Energy Agency's Workshop

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Europe on the Move: Commission completes its agenda for safe, clean and connected mobility

Europe on the move: Commission completes its agenda for safe, clean and connected mobility

Smooth transition towards a new mobility system considering:

❑ *Safe Mobility*

❑ *Clean Mobility*

❑ *Connected & Automated Mobility*

Mobility Package III

❑ *A Communication outlining a **new road safety policy** framework for 2020-2030, accompanied by two legislative initiatives on **vehicle and pedestrian safety**, and on **infrastructure safety management**;*

❑ *Legislative initiatives on **CO_2 standards for trucks**, on their aerodynamic, on tyre labelling and on a common methodology for fuels price comparison. These are accompanied by a Strategic **Action Plan for Batteries.** Those measures reaffirm the EU's objective of reducing greenhouse gas emissions from transport and meeting the Paris Agreement commitments.*

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Mobility Package III

❑ *Two legislative initiatives establishing a **digital environment for information exchange in transport***.

❑ *A legislative initiative to **streamline permitting procedures for projects on the core trans-European transport network** (TEN-T).*

❑ *A dedicated communication on **Connected and Automated Mobility** to make Europe a world leader for autonomous and safe mobility systems;*

Funding

*Supported by a **call for proposals under the Connecting Europe Facility with €450 million available** to support projects in the Member States contributing to road safety, digitisation and multimodality. (until 24 October 2018)*

*Under the **CEF Telecom programme** there will be an additional **€4 million** plus **€2 million***

for Cybersecurity for Co-operative Connected and Automated Mobility

Communication on Connected and Automated Mobility

❑ **Make Europe a world leader in the deployment of connected and automated vehicles.**

❑ **Mobility is at a cross-roads.**

❑ **The Commission favours a progressive approach based on experience gained during testing that will validate the safety of the technologies.**

❑ **The Commission will follow an integrated approach between automation and connectivity.**

Communication on Connected and Automated Mobility

The Commission:

- ❑ **encourages MS and regions to make use of the opportunities offered by EU regional policy and the European Structural and Investment Funds for co-financing investments in research, innovation and deployment.**

- ❑ **will work with MS in 2018 to draw up a priority list of transport use cases for large scale testing and take advantage of possible synergies between connectivity and automation use cases.**

- ❑ **will put in place in 2018 one single EU wide platform grouping all relevant public and private stakeholders to coordinate open road testing and making the link with pre-deployment activities.**

Communication on Connected and Automated Mobility

❑ **The Commission will continue monitoring the situation on access to in-vehicle data and resources and consider further options for an enabling framework for vehicle data sharing.**

fair competition in the provision of services in the digital single market

ensuring compliance with the legislation on the protection of personal data

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Proposal for regulation against cyber-attacks as part of the revision of the General Safety Regulation for motor vehicles

- ❑ **consider the need for specifications for access to vehicle data for public authorities' needs, in particular traffic management in 2018/2019**

- ❑ **implement a pilot on common EU-wide cybersecurity infrastructures and processes needed for secure and trustful communication between vehicles and infrastructure**

- ❑ **issue in 2018 as a first step a Recommendation on the use of pioneer spectrum for 5G large scale testing, cybersecurity and on a data governance framework that enables data sharing, in line with the initiatives of the 2018 Data Package, and with data protection and privacy legislation.**

Communication

"Towards a common European data space"

The data economy will flourish *if* different types of data are accessible & re-useable:

- across borders
- for & by different types of organisations (private, public, research)
- for & by different sectors (transport, energy, manufacturing, etc.)

The communication outlines a package of measures (2018 data package) as a key step towards the creation of **a common data space in the EU:**

a seamless digital area with the scale that will enable the development of new products and services based on data.

2018 Data Package

❑ **Proposal for a revision of the Directive on the re-use of public sector information (in full respect of GDPR and ePrivacy rules)**

❑ **Guidance on sharing private sector data in the European data economy**

❑ **Updated Recommendation on access to and preservation of scientific information**

Other elements of 2018 Data Package

- Evaluation of the Database Directive
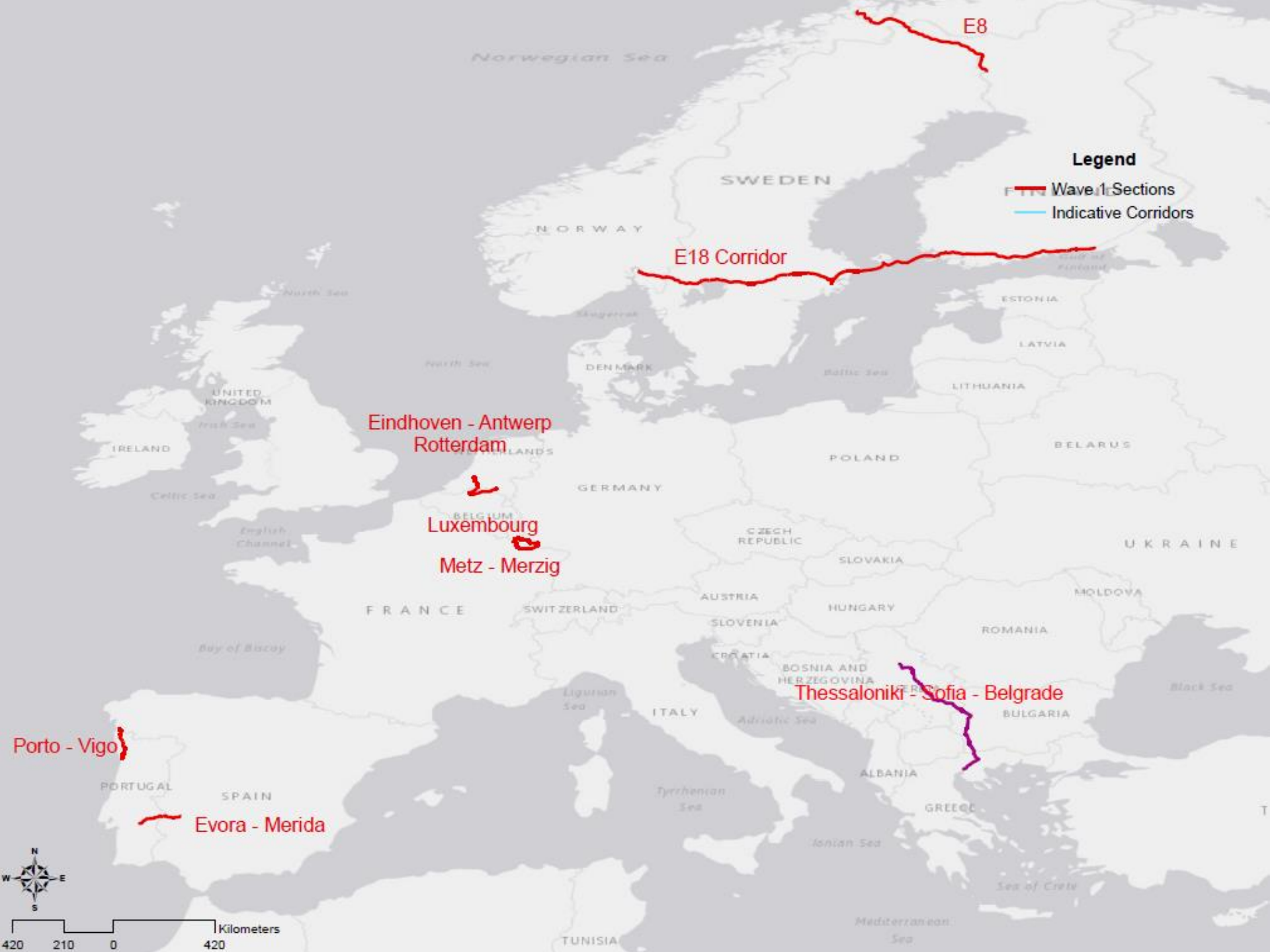- **Communication on Artificial Intelligence for Europe**

Letter of Intent

Signed by 27 Member States plus Switzerland and Norway, March 2017

Digital Cross-border Corridors

1. *FR – DE – LU*: *Metz-Merzig-Luxembourg*
2. *NL – BE*: *Rotterdam-Antwerp-Eindhoven*
3. *ES – PT*: *Porto-Vigo and Merida-Evora*
4. *FI – NO*: *the E8 "Aurora Borealis" corridor*
5. *SE – FI – NO*: *the "Nordic Way"*
6. *GR-BG-RS:* *under preparation*

Legend
Wave 1 Sections
Indicative Corridors

E8

E18 Corridor

Eindhoven - Antwerp
Rotterdam

Luxembourg

Metz - Merzig

Thessaloniki - Sofia - Belgrade

Porto - Vigo

Evora - Merida
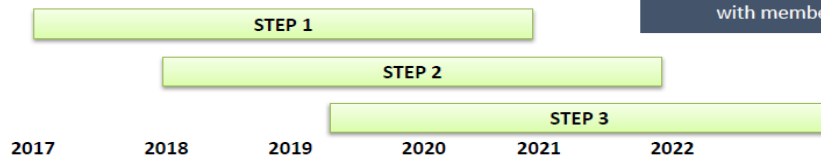
Kilometers
420   210   0   420

Roundtable

Signature of a MoU on Cellular V2X between:
1. 5G Automotive Association (5GAA) and
2. European Automotive and Telecom Alliance (EATA)

EATA Roadmap

	Use cases	Communication Technologies	Sites
STEP1	Enabling services for - Highway chauffeur (L2/3) - High density truck platooning	**Pre Deployment:** - hybrid communication : LTE, ITS G5 + LTE V, Mobile Edge Computing applications - Network slicing - LTE Broad casting: GNSS offset, hazards and HD-map updates **Studies :** business models responsibilities, safety concepts, Quality of service, Security and data protection Regulation and standardization	20..40 km tracks DE, FR,NL, ES, BE
STEP2	As step 1 + Valet parking	**Pre Deployment:** integration step 1 technologies / studies into series architectures + 5G radio + NB Iot + Evaluation relative localization	Cross border motorways networks
STEP3	As step 2 Automated driving	Deployment	Commercialisation on AD authorized motorways

Importance of dialogue and partnership with member states, C-ROADS and regions

STEP 1

STEP 2

STEP 3

2017　2018　2019　2020　2021　2022

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The 5G Action Plan

For the competitiveness of EU industries

Pooling investments of different industries for scale

Early 5G launch in selected areas

2018

Commercial launch of 5G services in at least one major city in all MS

2020

5G in all urban areas and Along main transport paths

2025

Coordinated launch throughout single market

Comprehensive with geographical and sectorial focus

5G Public Private Partnership (PPP)

Funding: 700 million € public + 3.5 billion € private

Moving towards to **phase 3**

(Horizon 2020 Work Programme 2018 - 2020)

ICT-18-2018 5G for cooperative, connected and automated mobility (CCAM) up to 50 million €

Call closed-Results are expected by the end of 2018

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2018 CEF Telecom Call: Cybersecurity

Cybersecurity **capability development** for different entities

€13 million in total

Grants:

- ✓ Co-funding up to **75% of the eligible costs** of the action
- ✓ **Pre-financing: 50%** within 30 days after signed grant agreement, balance on completion
- ✓ Funding per proposal: Various, depending on the objective, EC **(<u>expected</u>) contribution ranges from € 100,000 up to €1,000,000** per action

Indicative duration of the actions: **24 months**

Open until 22 November 2018

Whose Cybersecurity Capabilities?
Call Objectives and eligibility

For the Transport sector!

Objective	Who?	
1	National CSIRTs (Computer Security Incident Response Teams) designated by the Member States in line with the NIS Directive	National CSIRTs under Article 9 of the NIS Directive
2	**Operators of Essential Services (OES)** and Digital Service Providers (DSP) in line with the NIS Directive	Must include at least one OES or one DSP. OES must provide a letter of support from relevant authority.
3	Public and private sector entities working on **Connected and Automated Mobility**, in particular for electric vehicles	Any eligible applicant
4	National Competent Authorities (NCAs) and Single Points of Contact (SPOCs) designated in line with the NIS Directive	NCAs and SPOCs designated under Article 8 of the NIS Directive
5	Capability development for public bodies established by national or European legislation in a Member State to meet European Union Policy objectives associated with Operational Level Cyber Security	Must include at least one public body with a structured co-operation agreement with at least 8 other Member States.

OES in the NIS = Eligible Applicants

Air:

Airlines
Airports
Air Traffic Control

Water:

Shipping
Ports
Vessel Traffic
Service Operators

Rail:

Infrastructure
Managers
Railway
Undertakings

Road:

Road Authorities
Operators of
Intelligent
Transport Systems

What is being financed by the call?

**Cybersecurity
for CAM
automation levels
3 to 5
in particular
for electric vehicles**

Must → **Increasing the preparedness
of the hardware
to reduce vulnerabilities
and to withstand
cyber threats and attacks**

Must → **Enabling resilient
and secure software
applications and data flows
.**

Might → **Skills & Structural Support
.**

https://ec.europa.eu/inea/en/connecting-
europe-facility/cef-telecom/apply-
funding/2018-cef-telecom-calls-proposals

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THANK YOU!