



Il futuro del trasporto ferroviario

Alice Polo - DG MOVE C4



DELIVERING THE **EUROPEAN GREEN DEAL**

Making Europe the first climate neutral continent





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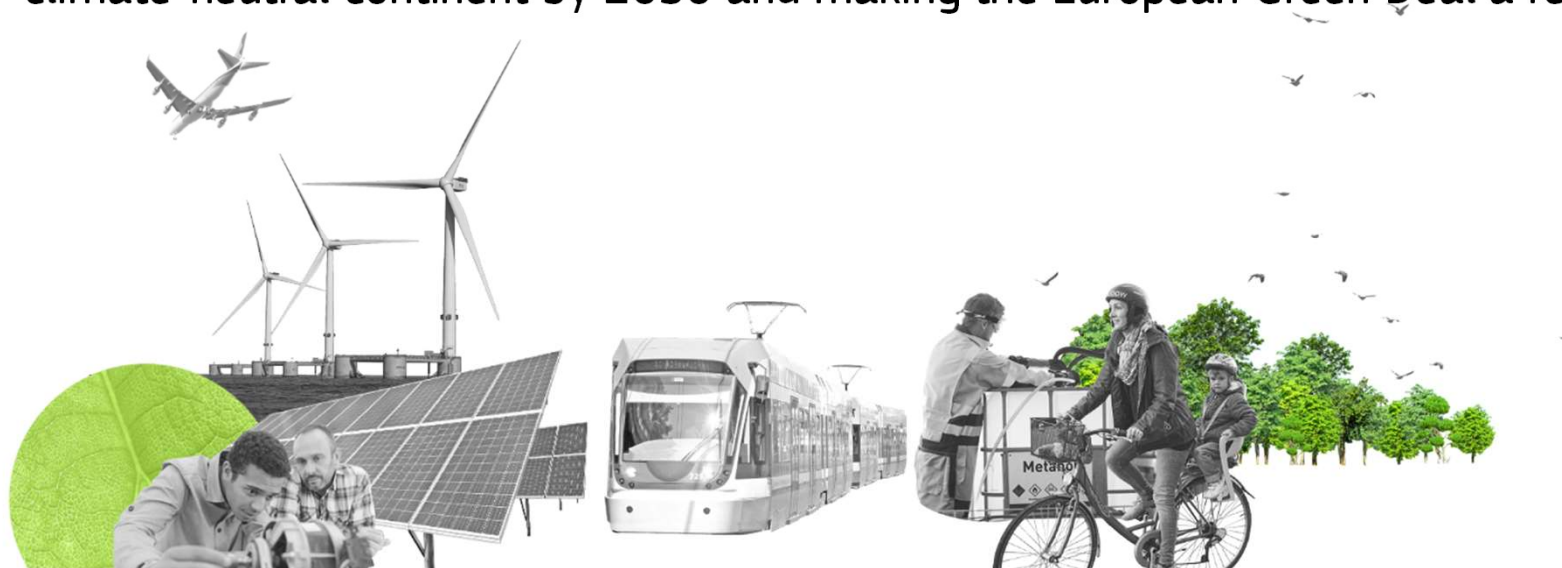
Europe was the first continent to declare to be **climate neutral in 2050**, and now we are the very first ones to put a concrete roadmap on the table. Europe walks the talk on climate policies through innovation, investment and social compensation.

Ursula von der Leyen

President of the European Commission

Transforming EU economy and society to meet climate ambitions

- On 14 July 2021, the European Commission adopted a set of proposals to make the EU's climate, energy, land use, **transport** and taxation **policies fit for reducing net greenhouse gas emissions by at least 55% by 2030**, compared to 1990 levels.
- Achieving these emission reductions is crucial to Europe becoming the world's first climate-neutral continent by 2050 and making the European Green Deal a reality.



Making transport sustainable for all

The European Commission proposes more ambitious targets for reducing the CO₂ emissions of new cars and vans.

55%

reduction of emissions from cars by
2030

50%

reduction of emissions from vans by
2030

0

emissions from new cars by 2035



Boosting global climate action

- With investment in **renewable energy technologies**, we are developing expertise and products that will also benefit the rest of the world.
- With the **shift to green transport**, we will create world leading companies which can serve a growing global market.
- By working with our international partners, we will **reduce emissions together** in maritime transport and aviation around the world.





SUSTAINABLE & SMART **MOBILITY STRATEGY**

Putting European transport on track for the future



Mobility and
Transport

SUSTAINABLE & SMART
MOBILITY STRATEGY



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Through the implementation of this strategy, we will create an irreversible shift to zero-emission mobility while making our **transport system more efficient and resilient.**

EUROPEAN COMMISSIONER FOR MOBILITY AND
TRANSPORT ADINA VĂLEAN

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THE GREEN DEAL and the Sustainable & Smart Mobility Strategy

50% increase of rail freight traffic by 2030 & double by 2050

OBJECTIVE I – SUSTAINABLE MOBILITY



AN IRREVERSIBLE SHIFT TO ZERO-EMISSION MOBILITY

- 90 % reduction in transport emissions;
- All transport modes are made more sustainable;
- Sustainable alternatives are available;
- Right incentives are in place for sustainable choices.

OBJECTIVE II – SMART MOBILITY



ACHIEVING SEAMLESS, SAFE AND EFFICIENT CONNECTIVITY

- Seamless **multimodal** transport based on digital solutions;
- Unleash full potential of **data**;
- Develop and deploy **connected**, cooperative, and automated mobility services;
- Paperless freight transport in favour of fast, digital procedures.

OBJECTIVE III – RESILIENT mobility



A MORE RESILIENT SINGLE EUROPEAN TRANSPORT AREA: FOR INCLUSIVE CONNECTIVITY

- Reinforced Single Market:
 - more investment in infrastructure and fleets;
 - deepening and enforcing internal market;
 - making our system crisis proof.
- Fair and just mobility (that is affordable and accessible);
- Enhanced safety and security.



THE EU AS THE WORLD'S CONNECTIVITY HUB

European transport on track for the future

#MobilityStrategy

Milestones – 2030/35/50

By 2030

- Min. 30 million zero-emission cars and 80 000 zero-emission lorries in operation
- Min. 100 climate neutral cities
- **Scheduled collective travel under 500 km should be carbon-neutral within the EU**
- **Doubled high-speed rail traffic, rail freight traffic increases by 50%**
- Transport by inland waterways & short sea shipping increases by 25%
- **Rail & waterborne-based intermodal will be able to compete on equal footing with road-only transport in the EU**
- **Paperless freight transport**
- Automated mobility deployed at a large scale
- **Integrated electronic ticketing**
- **Operational multimodal Trans-European Transport Network equipped for sustainable and smart transport with high speed connectivity (core network)**
- Zero-emission ocean-going vessels ready for market

By 2035

- Large zero-emission aircraft ready for market

By 2050

- Nearly all cars, vans, buses as well as new heavy-duty vehicles will be zero-emission
- **Doubled rail freight traffic, tripled high-speed rail traffic**
- Transport by inland waterways & short sea shipping increases by 50%
- **External costs of transport within the EU will be covered by the transport users**
- Death toll for all modes of transport in the EU close to zero
- **Operational multimodal Trans-European Transport Network equipped for sustainable and smart transport with high speed connectivity (comprehensive network)**

SUSTAINABLE & SMART
MOBILITY STRATEGY

Rail transport



Rail – Key elements

- **EU 2021 Rail Corridor Initiative:**
 - Action plan to boost passenger rail services
 - Better alignment of TEN-T corridors and rail freight corridors
- Review of **TEN-T Guidelines**, incl. high-speed lines
- Measures to **better manage & coordinate international rail traffic** (2022)
- Framework for **ticketing across modes**
- **Deployment of new technologies** such as digital coupling & automation
- **Further decarbonisation** through **electrification** & increased use of **hydrogen** and **batteries** where electrification is not possible
- **European Year of Rail 2021**
- Revision of the Directive on the **certification of train drivers**

Rail – Key elements

- Review of the **regulatory framework for intermodal transport**, including the Combined Transport Directive
- Explore the benefits of retrofitting and renewal schemes in various transport modes
- Establish **EU framework for harmonised measurement of transport and logistics emissions** and issue **guidelines for operators and platforms on informing users about the carbon footprint of their deliveries** and on offering sustainable delivery choices
- Adopt **railway technical standards and specifications package on ERTMS/Control-Command and Signalling (CCS)**; and develop **mandatory deployment plans** for automatic train operation, automated traffic management and advanced CCS
- **Review the regulatory framework for interoperable data sharing** in rail transport
- Renew **Shift2Rail Partnership, EuropeRail**
- Provide **guidance on freight PSOs** and review the **transport relevant State aid rules**
- Prepare **crisis contingency plan(s) for the transport sector**, including health-safety and operational measures and setting out essential transport services
- Review of the **passenger rights regulatory framework**, including to ensure its resilience to extensive travel disruptions, and including options for multimodal tickets



2022 TSI revision package

Digital rail

- Enhance ERTMS technical and operational interoperability
- Incorporate the ERTMS game changers
- Facilitate the introduction of digital technologies through modularization
- Enhance information flows for freight and passengers

Green freight

- Support a more efficient freight
- Further simplify and improve requirements on rail vehicles
- Support the uptake of environmental friendly technologies

Standing tasks

- Harmonise and simplify transition periods
- Incorporate new standards
- Fix deficiencies, close open points, review specific cases
- Complete and clear TSIs



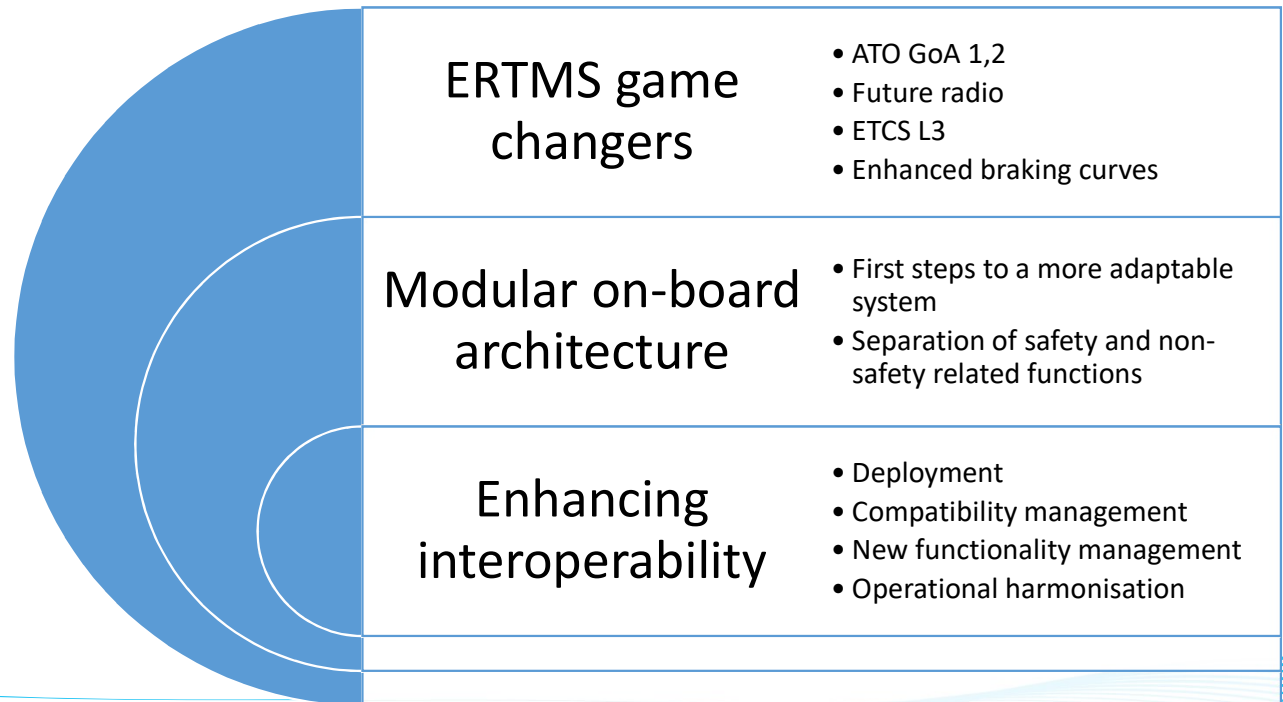
@Transport_EU

Mobility and
Transport

CONNECTING
EUROPE

CCS: 2022 TSI revision

- “Top down” objectives and specific actions derived from joint MOVE/ERA/sector work on CCS System Framework





New Europe's Rail Joint Undertaking

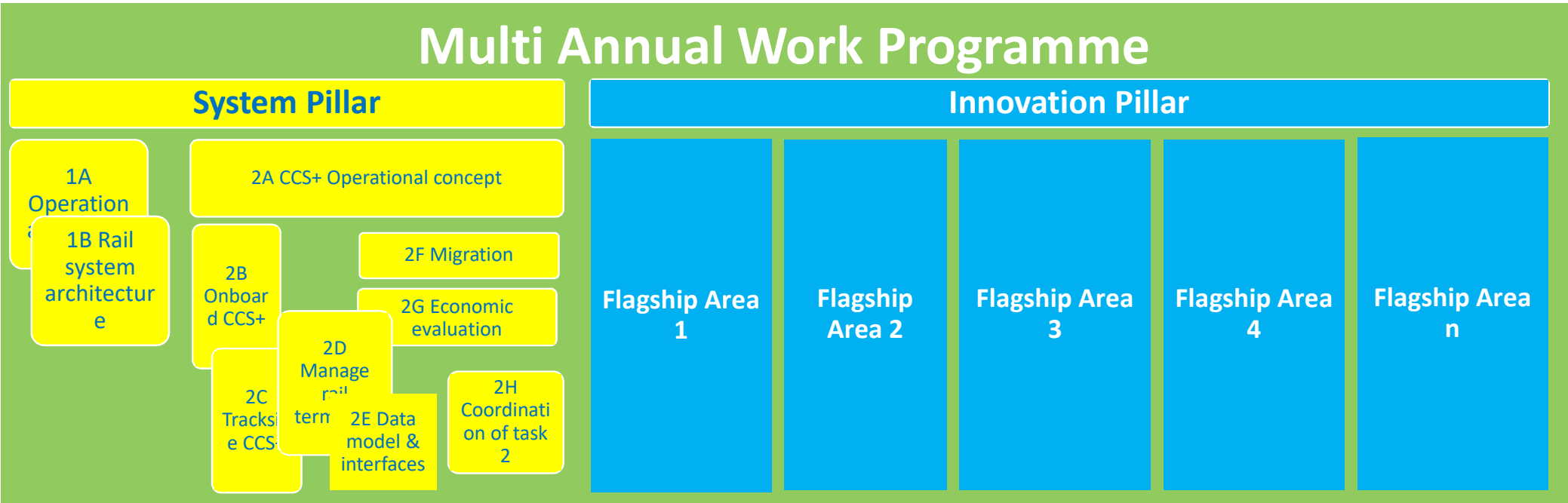
The Council of the European Union LOOKS FORWARD to the **new Europe's Rail Joint Undertaking** which should play a vital role in research on the new digital technologies in rail, thereby delivering a coordinated approach with the sector to the overall evolution of the railway systems. This should also lead to a more rapid development of the technical regulatory framework, taking into account the time that was necessary to deploy previous standards

EU-Rail Programme

Master Plan



Multi Annual Work Programme



Work in progress



Europe's Rail Joint Undertaking – key dates

- Sector consultation <https://shift2rail.org/shift2rail-successor/>
 - Written till 26 November
 - On-line meeting on 19 November
- First Calls
 - Publication March 2022
 - Start of the projects Q4 2022
- First demonstrators 2025

Thank you