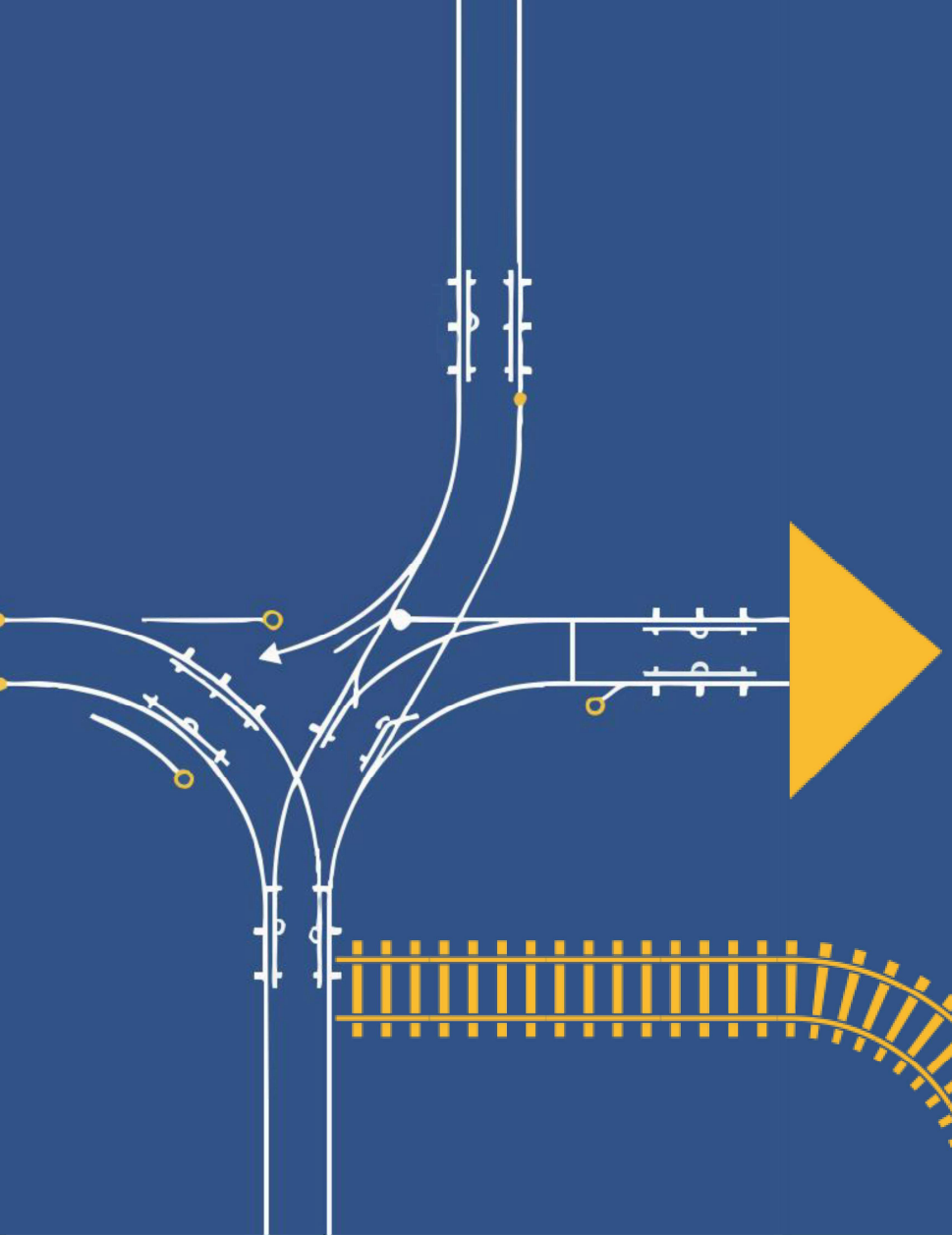


Journée technique ferroviaire

le 17 mars 2026 à Nîmes

CGVF Montrer Libérer Transmettre

Oc via
CONTOURNEMENT FERROVIAIRE
NÎMES - MONTPELLIER

Présentation du rôle et des missions de l'UIC

Journée technique ferroviaire

le 17 mars 2026 à Nîmes

UIC: the worldwide organisation for the promotion of rail transport

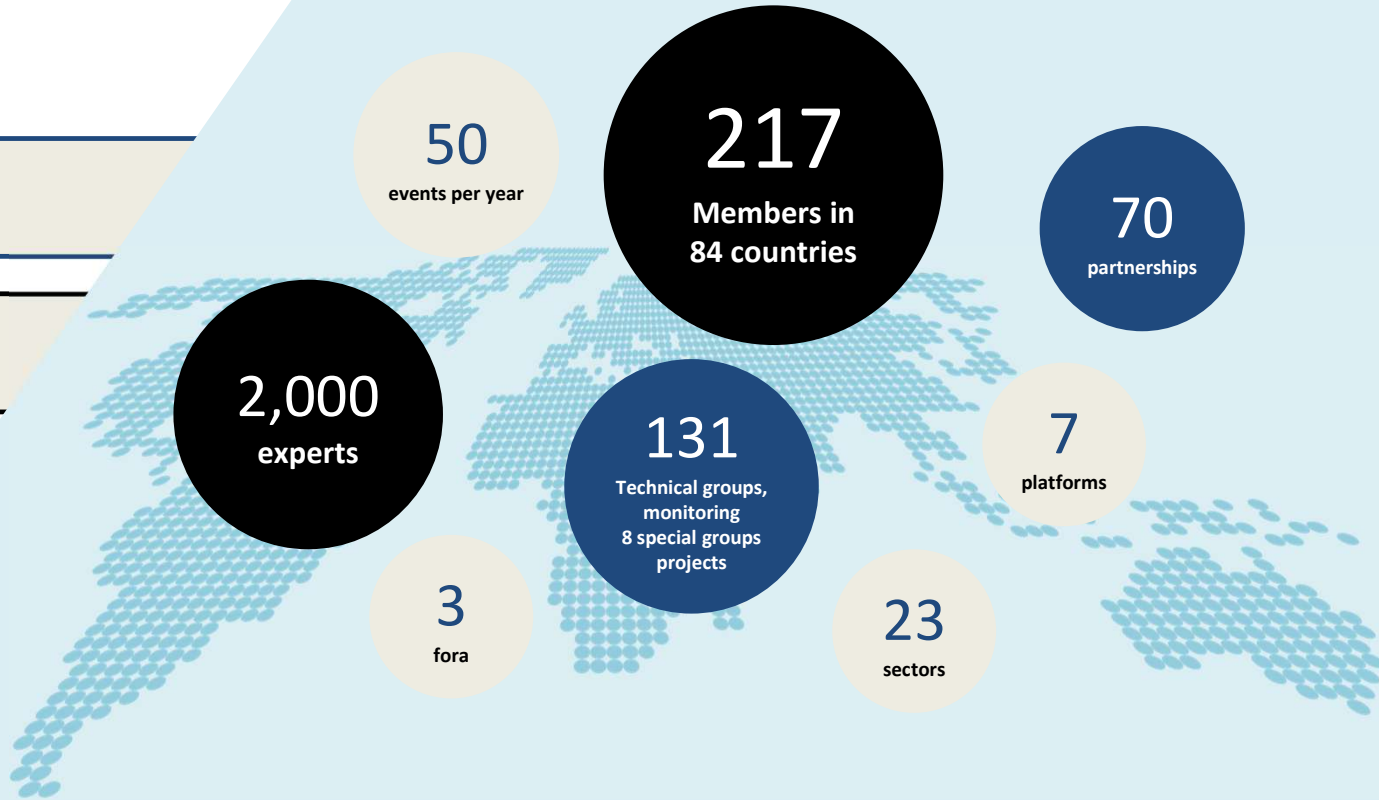
INTERNATIONAL UNION OF RAILWAYS

Fostering close cooperation links
with all actors in the rail transport domain

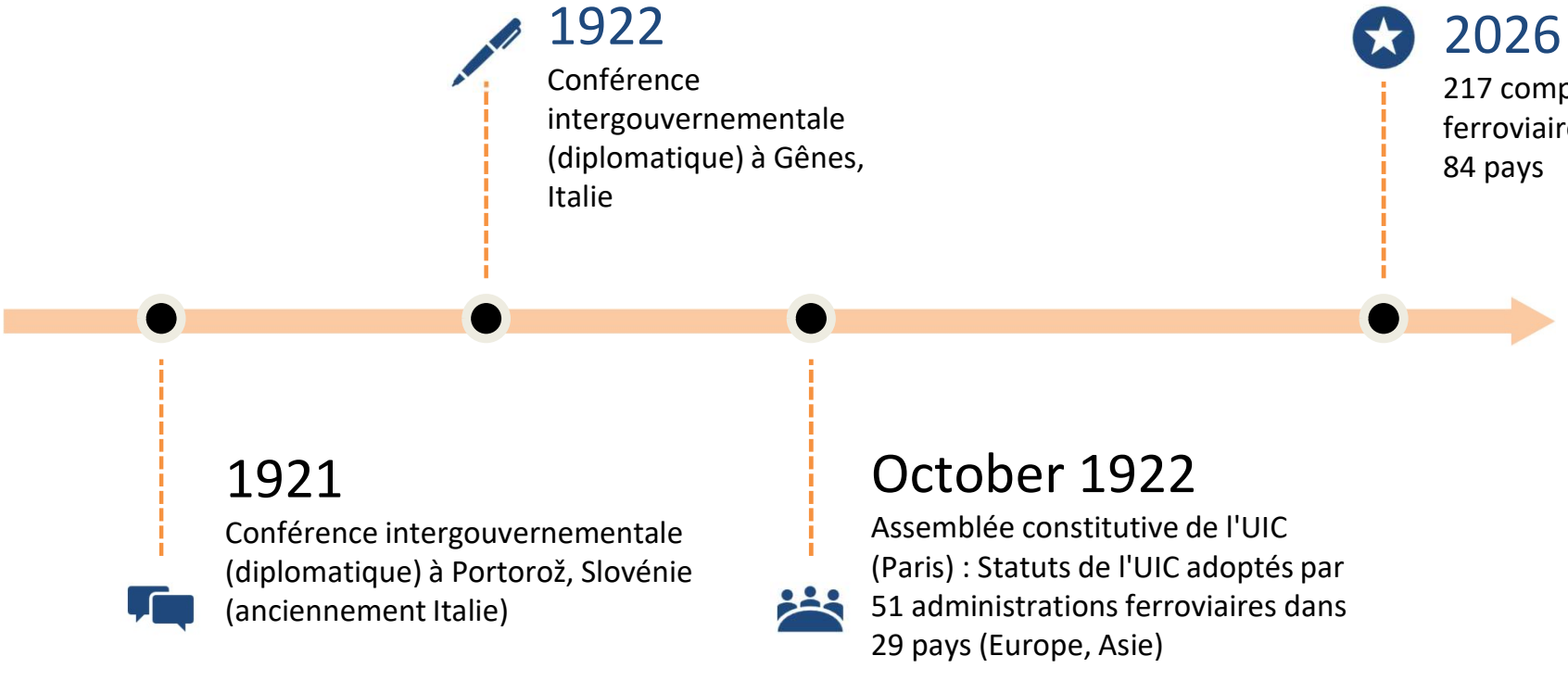
Understanding the business needs
of the rail community

Developing innovation programmes
to identify solutions to those needs

Preparing and publishing **Reports, Specifications, Guidelines, IRS**

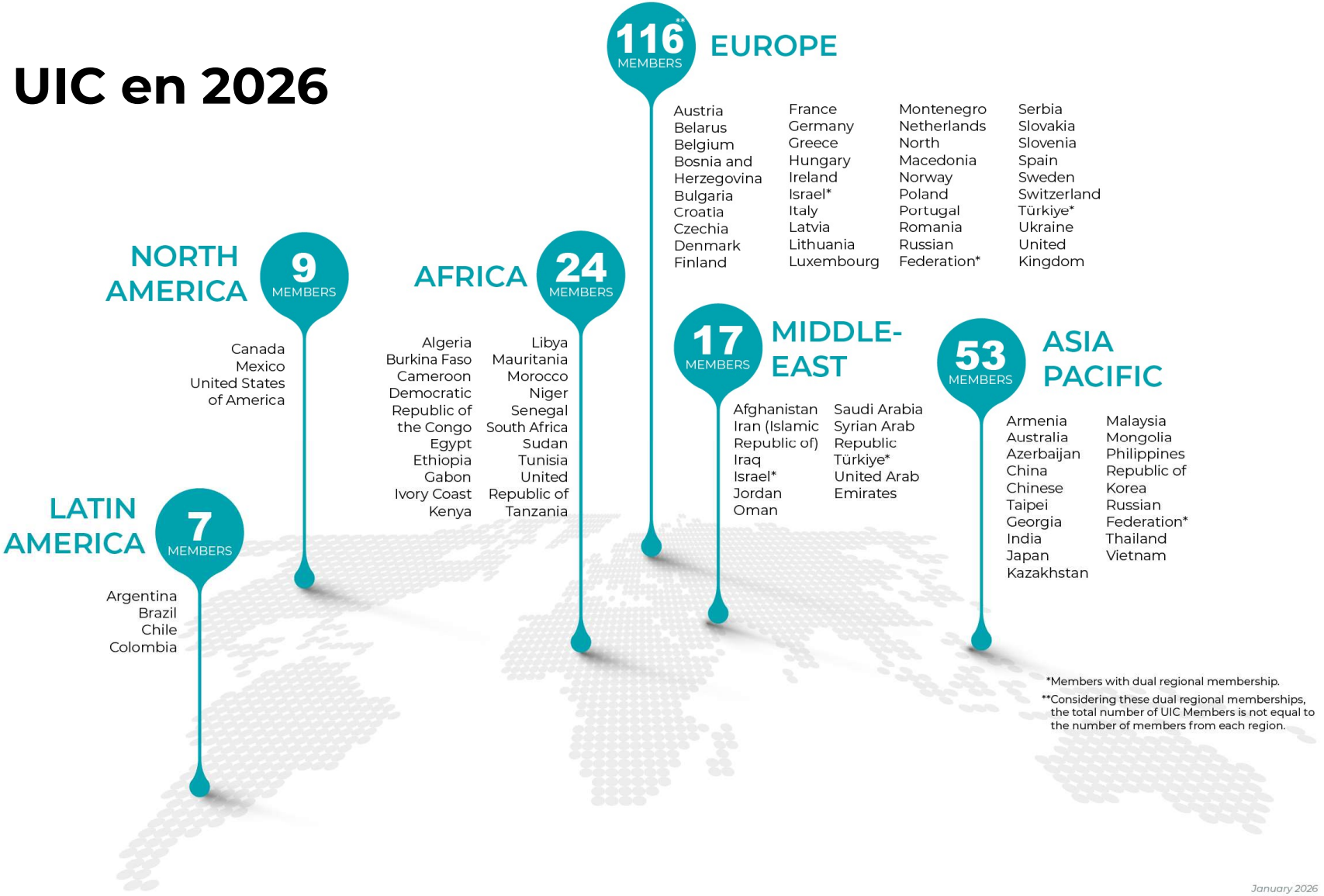


UIC : une longue tradition au service des chemins de fer membres et de la facilitation de la coopération ferroviaire internationale



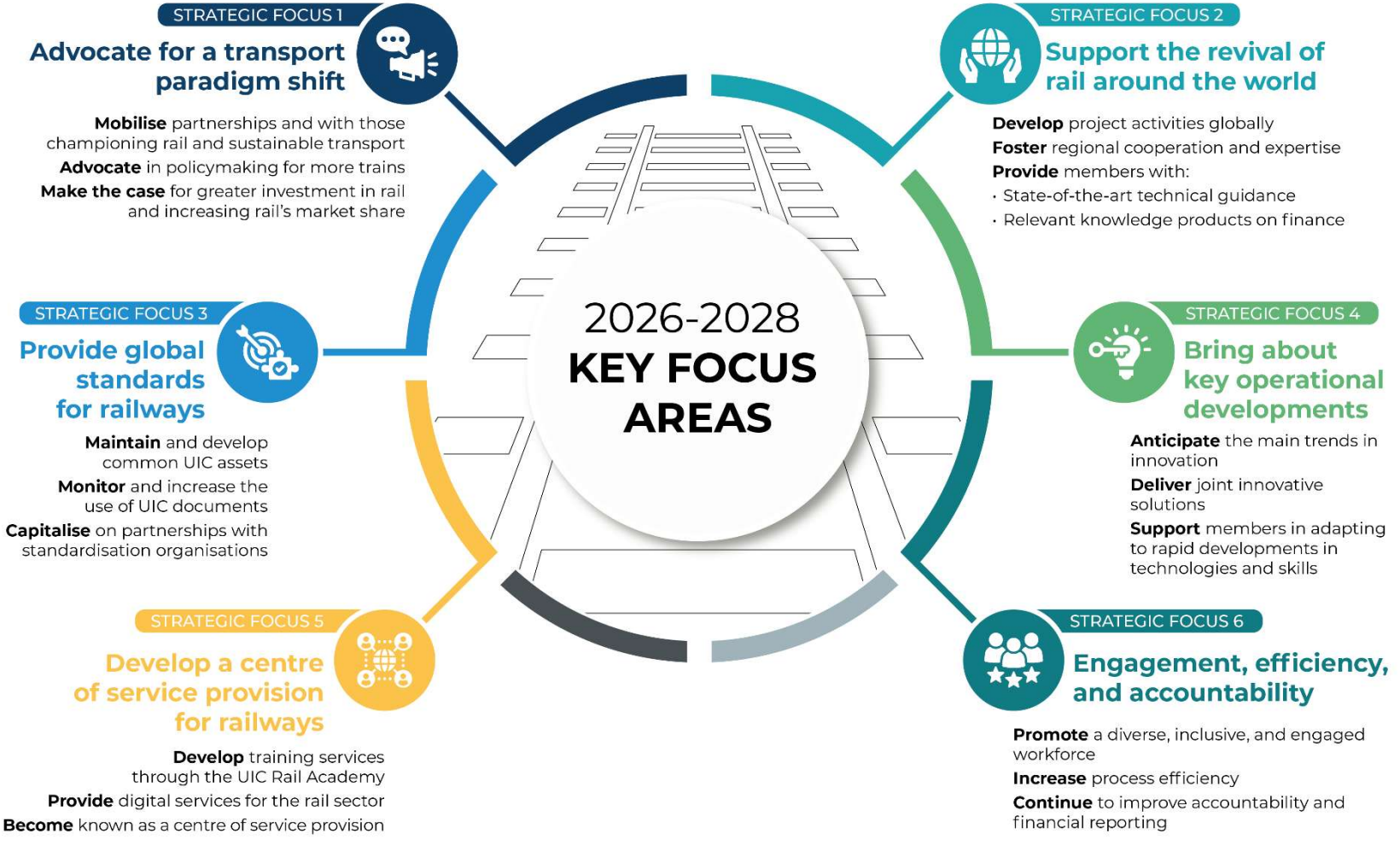
INTERNATIONAL UNION OF RAILWAYS

UIC en 2026



*Members with dual regional membership.

**Considering these dual regional memberships, the total number of UIC Members is not equal to the number of members from each region.


2026-2028
KEY FOCUS AREAS
STRATEGIC FOCUS 1
Advocate for a transport paradigm shift
Mobilise partnerships and with those championing rail and sustainable transport
Advocate in policymaking for more trains
Make the case for greater investment in rail and increasing rail's market share
STRATEGIC FOCUS 2
Support the revival of rail around the world
Develop project activities globally
Foster regional cooperation and expertise
Provide members with:
· State-of-the-art technical guidance
· Relevant knowledge products on finance
STRATEGIC FOCUS 3
Provide global standards for railways
Maintain and develop common UIC assets
Monitor and increase the use of UIC documents
Capitalise on partnerships with standardisation organisations
STRATEGIC FOCUS 4
Bring about key operational developments
Anticipate the main trends in innovation
Deliver joint innovative solutions
Support members in adapting to rapid developments in technologies and skills
STRATEGIC FOCUS 5
Develop a centre of service provision for railways
Develop training services through the UIC Rail Academy
Provide digital services for the rail sector
Become known as a centre of service provision
STRATEGIC FOCUS 6
Engagement, efficiency, and accountability
Promote a diverse, inclusive, and engaged workforce
Increase process efficiency
Continue to improve accountability and financial reporting

Activités de l'UIC

Dialogue platform focusing on members' challenges

- Sharing of best practices
- Exchanges of information
- Experiments, joint studies, POCs, etc.

Specifications / Reports /Solutions

- Contributing to TSIs and standards
- Railway best practices
- Application guidelines
- Online tools and databases
- 398 UIC Technical Documents

Training courses and conferences

- Courses on cutting-edge topics
- Conferences on areas of interest (Asset Management, GSM-R, FRMCS, civil engineering structures, railway tracks, High-Speed, Railway Stations, Rail Tourism, Regional Trains, Ticket Distribution etc.)

Working groups and joint projects

- Shared projects to address the strategy defined by the members
- Internal and external working groups with railway members

General organisation of Rolling Stock & Energy Sectors & Labelling


Railway System Forum

Chair: Robert Ampomah, Network Rail,
Adriano Scapati, UIC

Rolling Stock and Energy Sectors & Labelling

Laurent Fréchède, UIC






Rolling Stock

Chair: Marco Caposciutti, Trenitalia
Laurent Fréchède, UIC

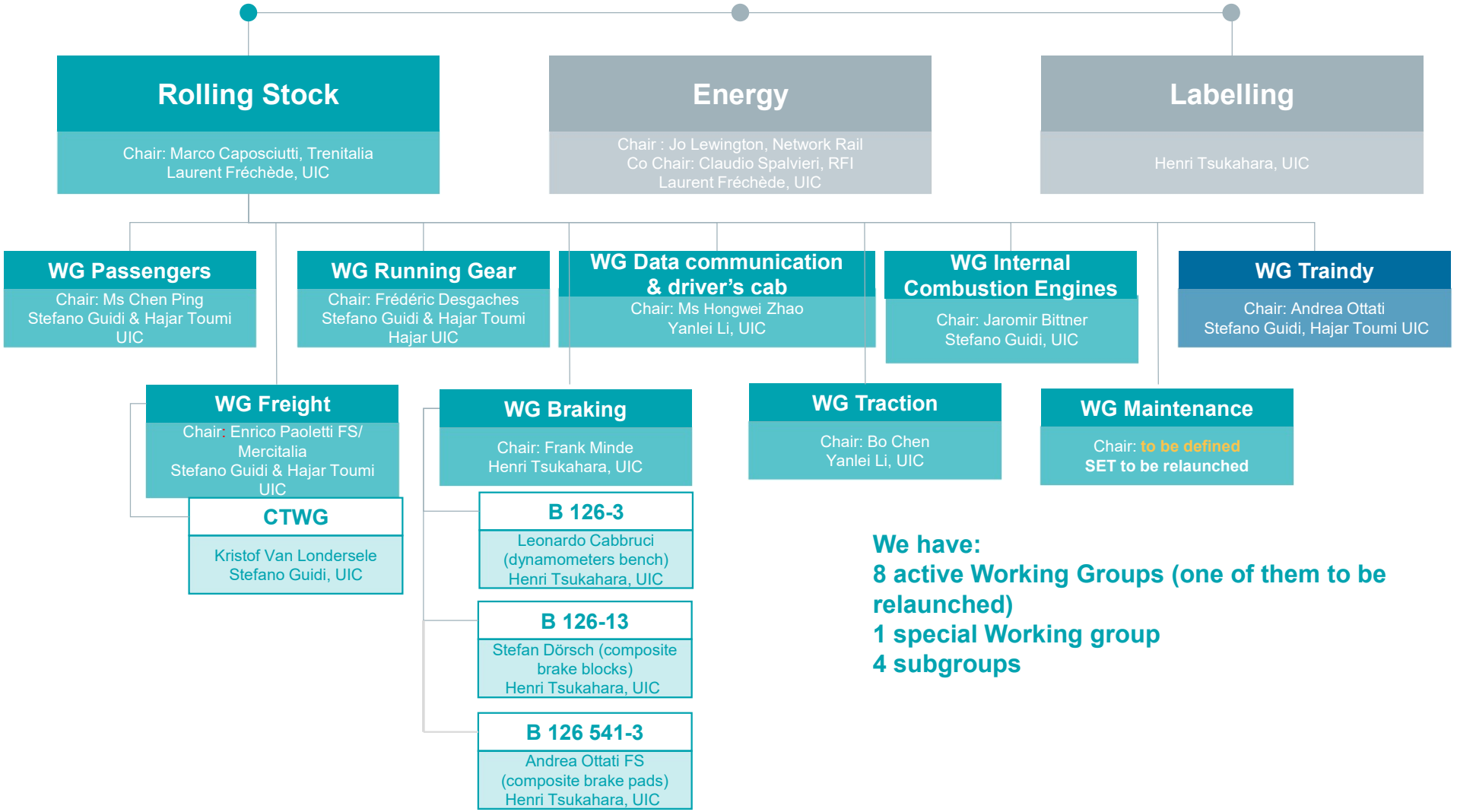
Energy

Chair : Jo Lewington, Network Rail
Co Chair: Claudio Spalvieri, RFI
Laurent Fréchède, UIC

Labelling

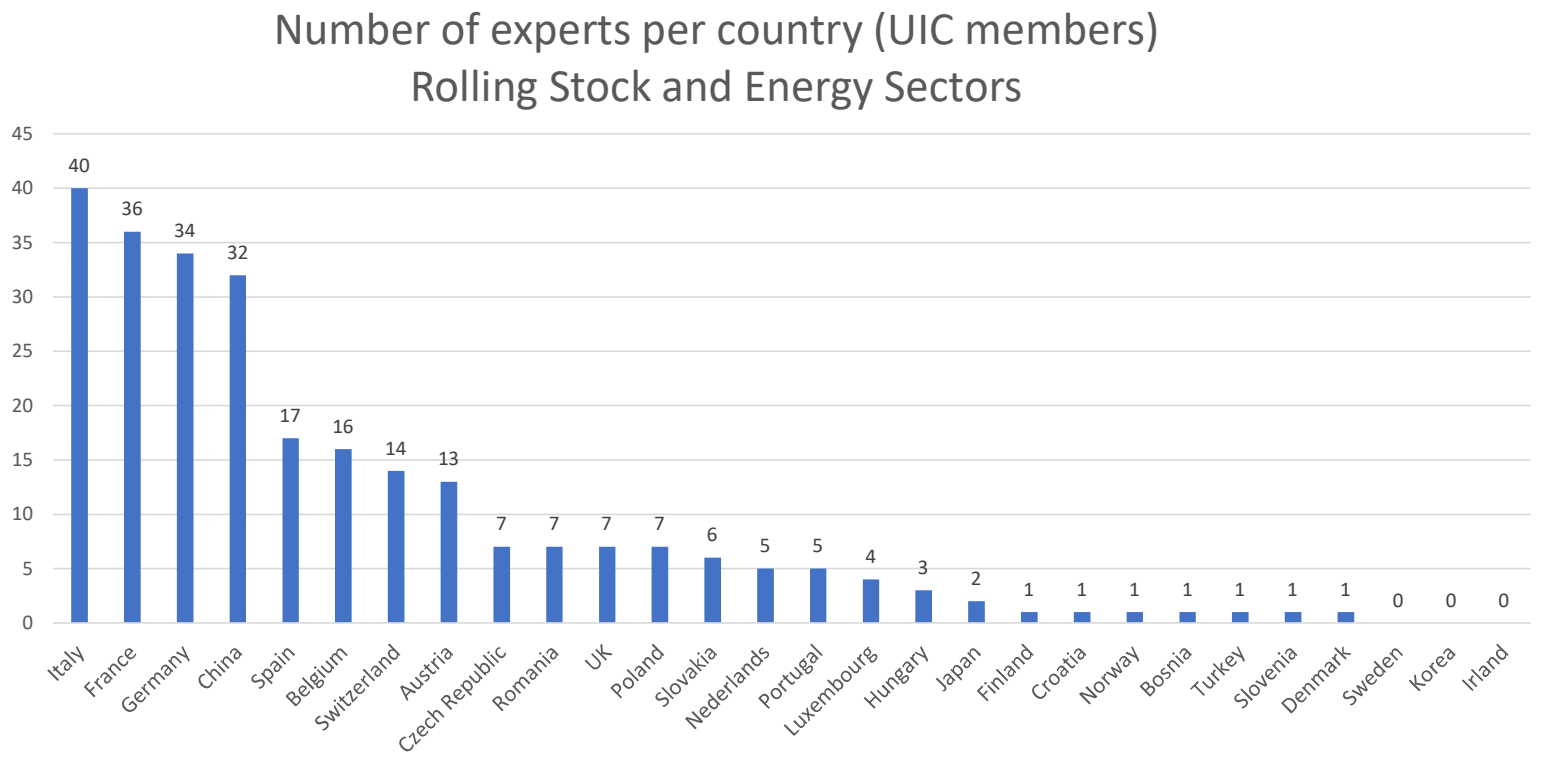
Henri Tsukahara, UIC

Rolling Stock, a very active Sector (more than 310 leaflets &IRS and more than 240 experts skilled, motivated and engaged)



We have:
8 active Working Groups (one of them to be relaunched)
1 special Working group
4 subgroups

Rolling Stock Sector, Energy Sector and labelling: about 330 documents, 280 experts from 26 differents countries 11 OPTINs ongoing.... who are we?



Experts from other countries are wery welcome
(Sweden, Korea, Irland, Greece, Australia….)

Number of experts	RS et Energy
Italy	40
France	36
Germany	34
China	32
Spain	17
Belgium	16
Switzerland	14
Austria	13
Czech Republ	7
Romania	7
UK	7
Poland	7
Slovakia	6
Nederlands	5
Portugal	5
Luxembourg	4
India	4
Hungary	3
Japan	2
Finland	1
Croatia	1
Norway	1
Bosnia	1
Turkey	1
Slovenia	1
Denmark	1
Sweden	0
Korea	0
Irland	0
Greece	0
Australia	0

Our working groups

Objectives

Defend and protect the interests of ECM & Railway Undertaking through the different WG

- Sharing best practices directly applicable, not only on Rolling Stocks but also on spare parts
- Resolving issues with peer review inside our working groups
- Benefiting from the international knowledge of UIC members outside Europe
- Assuming an influential body with CER, ERA and other standardisation organisations (ISO, IEC, EN….)

What for

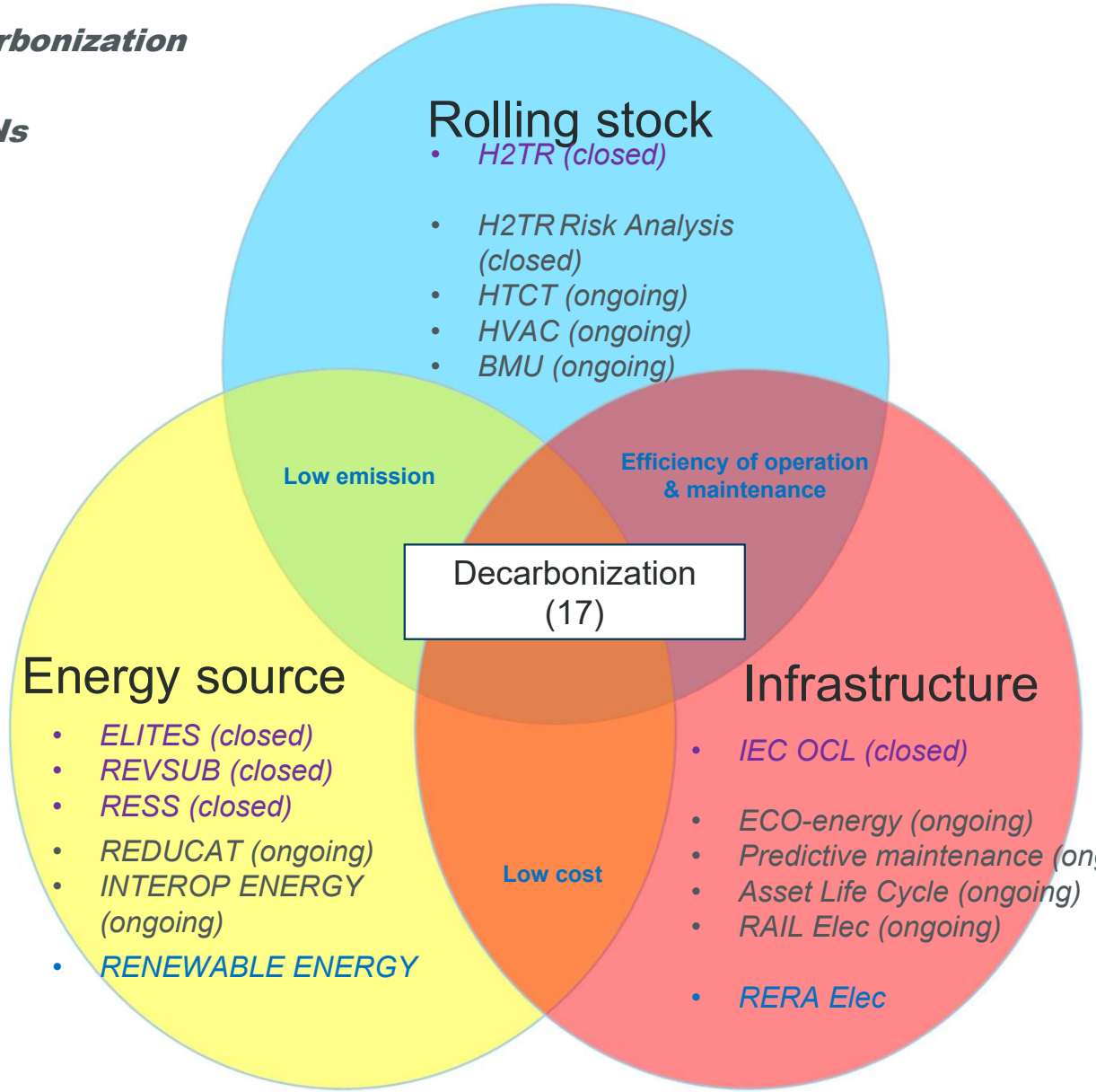
- Defining operational and technical requirements for the design of railway vehicles or spare parts, based on the needs of ECM & RUs (UIC technical body to defend members operation)
- to give to Railway Undertakings the most valuable information and the most up to date information
- Cooperation with EU Institutions and International Standardisation Bodies in defining their rolling stock existing and future (spare parts included)

17 OPTINs for decarbonization

⇒ 5 closed

⇒ 10 ongoing OPTINs

⇒ 2 to be launched



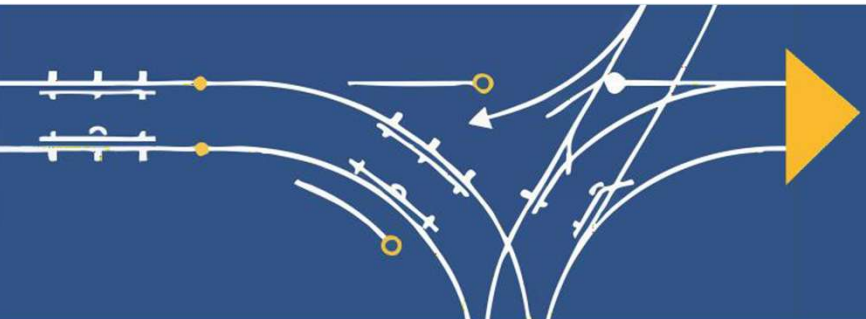
- In purple, those which are closed (reports or IRS available)
- In black, the 10 which are ongoing
- In blue, the 2 OPTINs to be launched

INTERNATIONAL UNION
OF RAILWAYS

RERA

Resilient Railways facing Climate Change

Global Impact Global cooperation



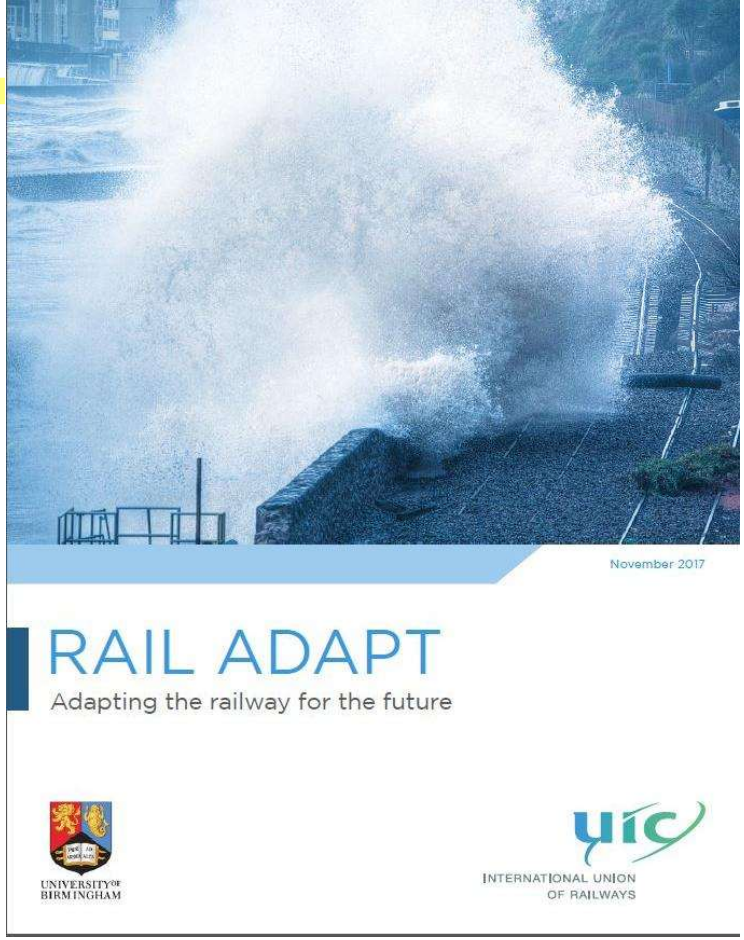
Journée technique ferroviaire

le 17 mars 2026 à Nîmes

CGV Montpellier Nîmes Tournefeuille

Oc via
CONTOURNEMENT FERROVIAIRE
NÎMES - MONTPELLIER

15 ans de partage des meilleures pratiques sur l'adaptation au changement climatique et la résilience météorologique



Journée technique ferroviaire

le 17 mars 2026 à Nîmes

CGFL

oc via
CONTOURNEMENT FERROVIAIRE NÎMES - MONTPELLIER

RERA

Resilient Railways facing Climate Change

RERA Contingency 2025

RERA Quake 2025

RERA Cyber 2025

RERA Temp 2022-24

RERA Rain 2022-24

RERA Wind 2024-26

RERA Elec 2026

RERA Hub 2026 - ∞

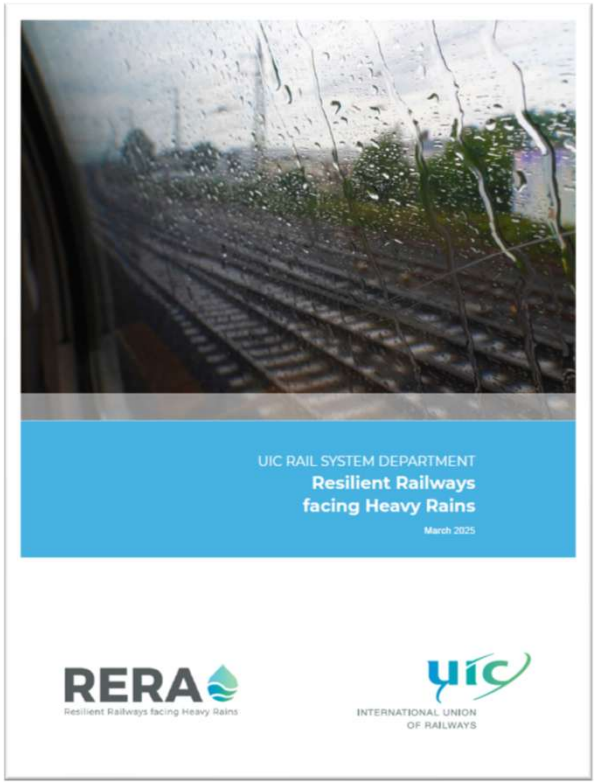
RERA

Resilient Railways facing Heavy Rains

1. Analyse de l’impact climatique

2. Évaluation de la vulnérabilité, du risque et de la criticité

3. Planification de l’adaptation



Resilient Railways facing Heavy Rains

Journée technique ferroviaire

le 17 mars 2026 à Nîmes

CGVF

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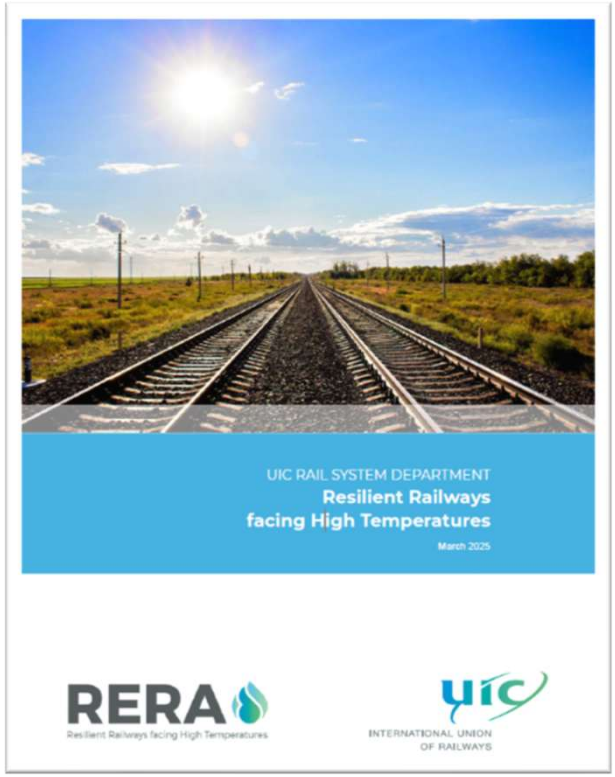
RERA

Resilient Railways facing High Temperatures



Resilient Railways facing High Temperatures

Journée technique ferroviaire

le 17 mars 2026 à Nîmes

CGV Montpellier Nîmes Tours

Oc via
CONTOURNEMENT FERROVIAIRE NÎMES - MONTPELLIER

RERA

Resilient Railways facing Climate Change

RERA QUAKE

Magnitude	Description	Typical maximum modified Mercalli intensity[15]	Average earthquake effects	Average frequency of occurrence globally (estimated)
1.0–1.9	Micro	I	Microearthquakes, not felt. Recorded by seismographs.[12]	Continual/several million per year
2.0–2.9	Minor	I	Felt slightly by some people. No damage to buildings.	Over one million per year
3.0–3.9	Slight	II to III	Often felt by people, but very rarely causes damage. Shaking of indoor objects can be noticeable.	Over 100,000 per year
4.0–4.9	Light	IV to V	Noticeable shaking of indoor objects and rattling noises. Felt by most people in the affected area. Slightly felt outside. Generally causes zero to minimal damage. Moderate to significant damage is very unlikely. Some objects may fall off shelves or be knocked over.	10,000 to 15,000 per year
5.0–5.9	Moderate	VI to VII	Can cause damage of varying severity to poorly constructed buildings. Zero to slight damage to all other buildings. Felt by everyone.	1,000 to 1,500 per year
6.0–6.9	Strong	VII to IX	Damage to a moderate number of well-built structures in populated areas. Earthquake-resistant structures survive with slight to moderate damage. Poorly designed structures receive moderate to severe damage. Felt in wider areas; up to hundreds of kilometers from the epicenter. Strong to violent shaking in the epicentral area.	100 to 150 per year
7.0–7.9	Major		Causes damage to most buildings, some to partially or completely collapse or receive severe damage. Well-designed structures are likely to receive damage. Felt across great distances with major damage mostly limited to 250 km from the epicenter.	10 to 20 per year
8.0–8.9	Great	VIII or higher	Major damage to buildings, and structures likely to be destroyed. Will cause moderate to heavy damage to sturdy or earthquake-resistant buildings. Damaging in large areas. Felt in extremely large regions.	One per year
9.0–9.9	Extreme		Near total destruction – severe damage or collapse to all buildings. Heavy damage and shaking extend to distant locations. Permanent changes in ground topography.	One to three per century[13]

Journée technique ferroviaire

le 17 mars 2026 à Nîmes

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NÎMES - MONTPELLIER

RERA

Resilient Railways Facing High Winds

Situation :

- Accident Great Belt Bridge (DK, 2019) – L'ERA a lancé le processus JNS afin de garantir la sécurité de la circulation des trains de marchandises face aux vents latéraux.

Objectifs

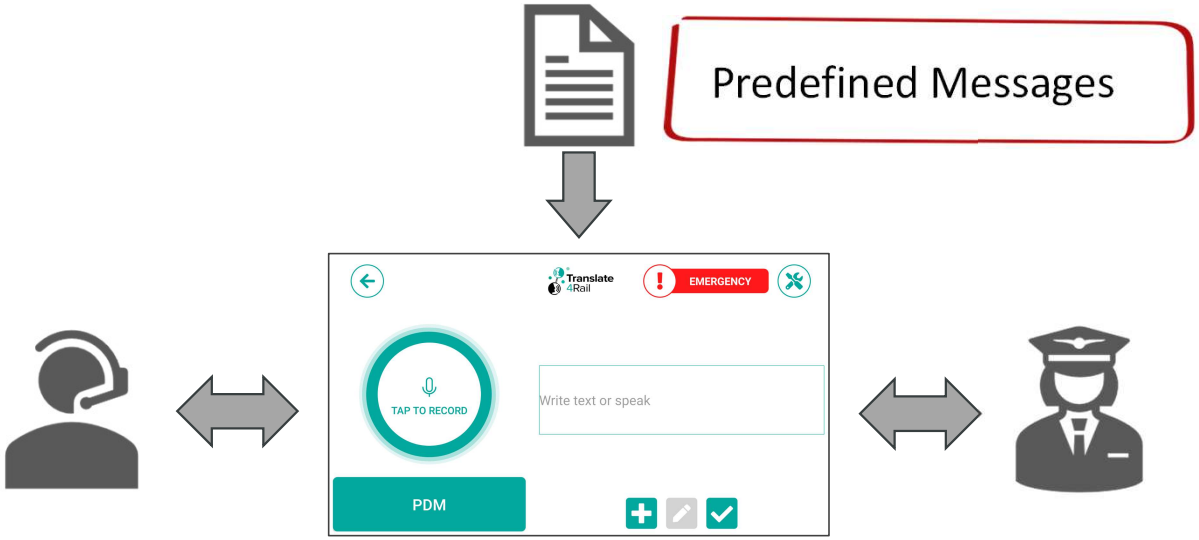
- Objectifs du projet JNS mené en coordination avec l'UIC – des travaux seront réalisés sur les courbes de vent latéral (CWC) des semi-remorques.

Principales tâches :

- Identification des systèmes de mesure du vent de pointe, destiné à améliorer la sécurité des opérations.
- Effectuation des calculs et des essais en soufflerie pour élaborer une CWC spécifique pour le transport combiné.
- Proposition de règles d'exploitation pour améliorer le niveau de sûreté (mesures non structurelles), et de mesures structurelles si necessaire.

Présentation générale du projet Translate4Rail et du prototype d'outil

- Financé par l'entreprise commune Shift2Rail (programme de recherche et d'innovation Horizon 2020) ;
- Consortium UIC-RNE (2019-2021) ;
- Permet la communication opérationnelle sur le terrain entre un conducteur de train et un contrôleur de trafic ;
- Acquisition des compétences linguistiques de niveau B1.



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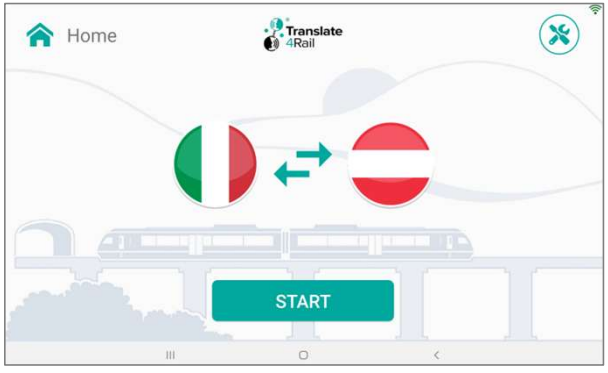

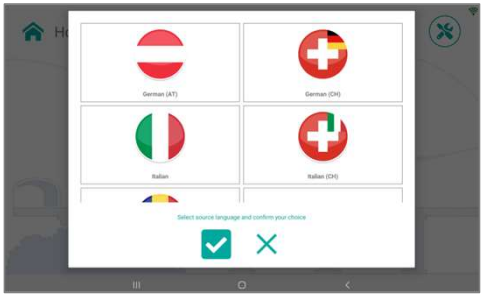

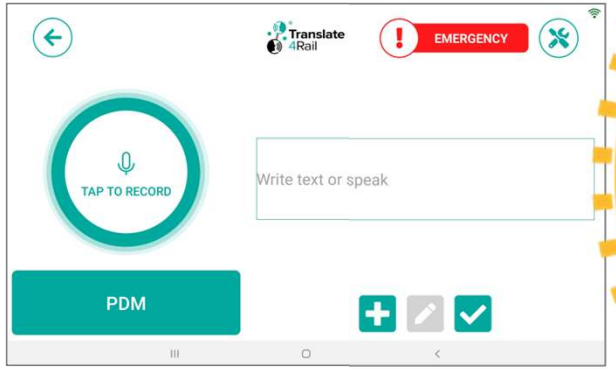

Merci pour votre attention

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