



INTERNATIONAL UNION
OF RAILWAYS
INTERNATIONAL UNION OF RAILWAYS

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Foreword UIC Activity Report 2022

FOREWORD BY KRZYSZTOF MAMIŃSKI, **UIC CHAIR**

2022 marked the 100th anniversary of our organisation.

been to strengthen international railway cooperation.

and universality. These are timeless values which have

In terms of priorities for the organisation, UIC needs to

be accountable and credible to its members. UIC also needs to focus on the most important/strategic issues

for the rail sector, such as the global promotion of rail

as an effective tool for decarbonising transport, while

also making it the backbone of sustainable mass public

transport systems in the world within the next 10 years.

This is an essential goal in the face of global challenges

• Develop interregional projects in order to increase

the involvement and cooperation of all regions to

achieve the common global objectives of railway

development and engendering a modal shift in

development and innovation activities within the EU

RAIL Partnership through projects initiated by UIC

effective action for development and innovation in

• Harmonise and enhance the synergies of

• Enhance UIC's appeal as a technical global

• Be guided by specific values and principles

organisation among its members by initiating

and climate change. UIC also needs to:

global transport

the railway sector, and

also proved to be particularly important in recent times.

I would like to take this occasion to once again thank our

UIC members and employees for their hard and valuable

work towards UIC's development. For years, UIC's aim has

We base our actions around three values: unity, solidarity,



Over the past three years, UIC has been working to adapt to this changing world and to strengthen the position and competitiveness of the rail sector. In 2022, UIC focused on three main themes (mentioned below), as detailed in the UIC Work Programme 2023-2025. These

- The desired modal shift/decarbonisation by 2030 (this objective is reflected in the UIC Vision 2030 "Design a
- innovation projects)
- The continuous improvement of rail services (this

These three axes served as UIC's guidelines in 2022, and

Rail must play a leading role in decarbonising the

We have a lot of work ahead of us to unlock the railways' full potential. We need to improve our cost efficiency through digitalisation and innovation, and by solving interoperability problems and capacity constraints, but above all, we need to invest in modern infrastructure and rolling stock. As Chair of the UIC, I am determined to continue to work with all our members to ensure that rail plays an important global role in ensuring the sustainability of the transport sector and in achieving the FOREWORD BY FRANÇOIS DAVENNE, **UIC DIRECTOR GENERAL**



- Innovation (increase UIC participation in research and
- objective is reflected in the UIC Manifesto)

were complemented by a series of activities, publications and events during the centenary year.

transport sector globally and regionally. It is the most sustainable mass mode of transport, and is the only one currently ready to effectively face up to our climate change challenges. It must therefore be placed at the heart of the development of future mobility and global logistics chains.

aforementioned environmental goals.

2022 marked the centenary of our organisation, meaning that it was crucial to have a clear path for UIC's development, endorsed during the 101st General Assembly.

This strategy is grounded in the recognition of UIC's added values, as evidenced by:

- A framework agreement signed with the European Union Agency for Railways (ERA) in December 2021 for more pronounced cooperation and structured activity in the region
- UIC's involvement in crucial aspects of the Europe's Rail Joint Undertaking (ER JU) System and Innovation Pillars, including system architecture, 5G, operational rules, cross cutting activities, and so on
- UIC delivering outputs with the Open Sales & Distribution Model (OSDM), which is a data model. The aviation system AMADEUS now fully supports
- Rail Freight Forward (RFF) streamlining a technical vision for the European freight sector

Accountability is also a key success factor, as part of this, the UIC 2020-2022 Work Programme was for the first time evaluated through the **UIC Activity Report** 2020-2021. The 101st General Assembly also officially recognised that the main operational targets have been achieved.

In 2022 UIC also published a work programme for the forthcoming 2023-2025 period. The same five strategic focus areas as the previous edition underpin the programme, as well as the UIC Manifesto, the Vision of Rail 2030, and the Europe's Rail Joint Undertaking (ERJU) roadmap being taking into account, with a special emphasis on regional empowerment and digitalisation.

Adopted in July 2022 by the 100th General Assembly, the Manifesto contains existing and future solutions for rail to become the backbone of mobility and details the development of concrete solutions, which are meant to create a new transport paradigm taking the vital role of railways, public transport, and active mobility into account. in order to:

- Transform cities and connect communities
- Use clean energy, technology, and innovation
- Promote intermodality and seamless connections
- Transform the customer experience

These three documents, the UIC Work Programme, the Vision 2030 and the UIC Manifesto, form the basis on which the UIC will carry out strategic work over the next 5, 10 and 15 years.

The year 2022, beyond being the milestone of UIC's 100th anniversary, has initiated a period of consolidation, continuity, and stability.

Mission, key facts and figures

UIC is the worldwide organisation for the promotion of rail transport at a global level and for collaborative development of the railway system. It brings together 219 members from all 5 continents, among them rail operators, infrastructure managers, railway service providers, etc.

UIC's main tasks include understanding the business needs of the rail community, developing innovation programmes to identify solutions to those needs, as well as preparing and publishing documents such as reports, specifications, guidelines, and IRSs that facilitate the implementation of these innovative solutions.

219
members in 82 countries

5,000 billion passenger-kilometres

10,000

billion
tonne-kilometres

1

million

kilometres of line

LATIN

Argentina Brazil Chile

AMERICA

million rail personnel

NORTH

AMERICA

Canada

United States

5

of America

Mexico

120 EUROPE

Austria
Belarus
Belgium
BosniaHerzegowina
Bulgaria
Croatia
Czech
Republic

Denmark

Finland
France
FYROM /
Macedonia
Germany
Greece
Hungary
Ireland
Israel*

Latvia Serbia Lithuania Slovakia Luxembourg Slovenia Montenegro Spain Netherlands Sweden Norway Switzerland Poland Turkey* Ukraine Portugal Romania United Russia* Kingdom

MIDDLE-EAST

> Afghanistan Saudi Arabia Iran Syria Iraq Turkey* Israel* United Arab Jordan Emirates

54 ASIA PACIFIC

Armenia Japan Australia Kazakhstan Azerbaijan Malaysia China Mongolia Chinese Philippines Taipei Russia* Georgia South Korea Thailand India Indonesia Vietnam

*Members with dual regional membership

2,000 experts

AFRICA 21

Algeria Ivory Coast

Morocco

Senegal

Sudan

Tunisia

Niger

Cameroon Mauritania

Ethiopia South Africa

Burkina Faso

(Dem. Rep.)

Congo

Egypt

Gabon

70 partnerships

fora

50 events per year

23
sectors

9 platforms

6

technical groups, monitoring 8 special groups projects

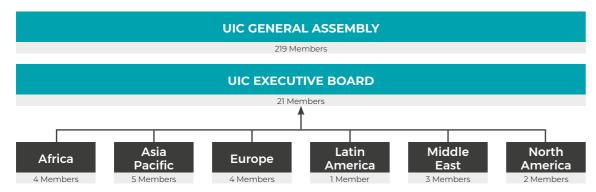
7

UIC Governance



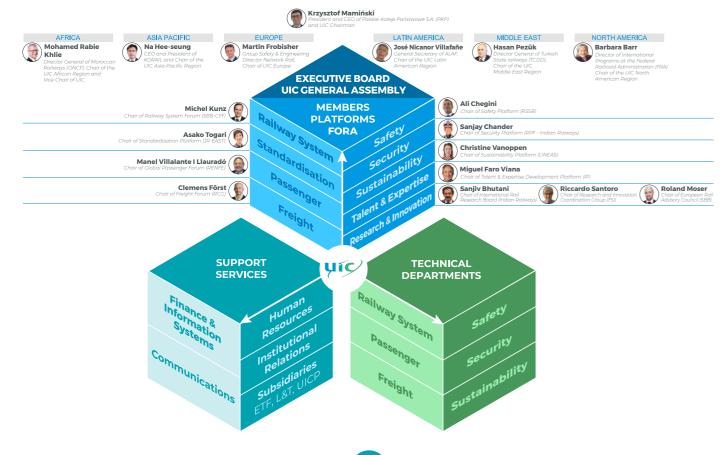




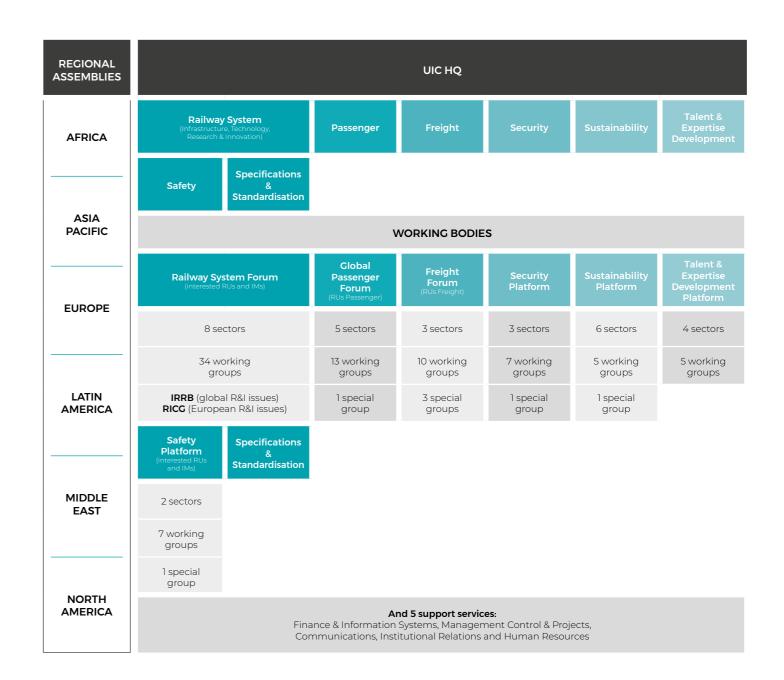


⁺² Members representing Oceania and Russia (currently suspended)

Understanding UIC



UIC Working Structure



UIC's activity UIC Activity Report 2022

UIC's activity



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.)

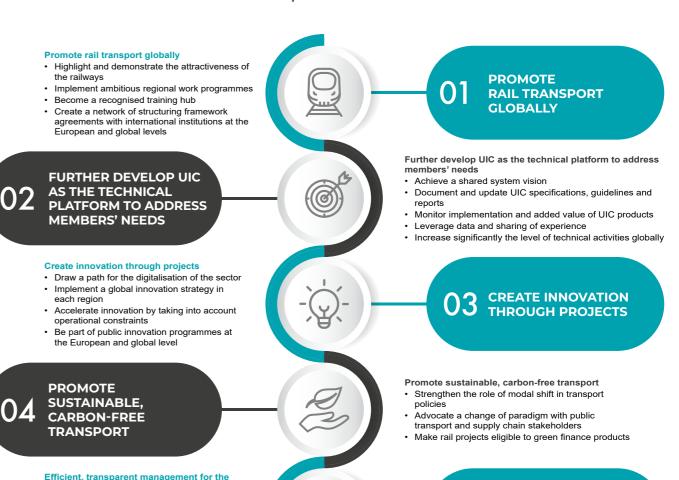
Working groups and joint projects

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

In 2022, the UIC carried out its activities and projects within the framework of the strategic axes defined by the 2020-2022 Work Programme, detailed below:

STRATEGIC FOCUS AREAS

Share, Open, Connect



Efficient, transparent management for the benefit of our members

- · Ethical and transparent governance
- · Regular reporting and ongoing assessment of added value from activities
- · Ongoing skills development
- Provide the Regions with a vehicle for project development

EFFICIENT. **TRANSPARENT** MANAGEMENT FOR THE **BENEFIT OF OUR MEMBERS**

UIC's raison d'être: sharing technical expertise

Over 100 years, UIC has developed its expertise on the main technical railway topics.

Although the list below is not exhaustive, the technical skills that characterise UIC include the following:

Operations

Operations (and Safety) encompass all the processes and responsibilities required to operate a train with passengers or freight, from "service design" to "return on experience", with a complete overview of system interactions, considering all of the structural and operational interfaces, most notably rolling stock, infrastructure, control-command and signalling (CCS), energy, and external interfaces.

Operations include a systemic approach, with safety being both at the heart of operations and central to ensuring operational excellence and performance. Operations need to display customer-oriented, competitive, agile, sustainable, and interoperable values.

In 2022, the Operations Sector launched flagship projects such as:

- Contributions to the design and organisation of future railway operations & traffic management
 - Traffic control centres & crisis management
 - CCS & increasing railway capacity

- New opportunities & use cases for the carrying out of operations, brought about by railway system digitalisation
 - Support for automation (DAC, ATO, artificial intelligence, robotics, 5G use cases, etc.),
 - Railway Digital Modelling
 - Enhancing real time operations and customer information during disruption: digital platforms for the interoperability of data operations and exchange between railway undertakings and infrastructure managers
- Digitalisation of safety in railway
 - Creating new methods for safety demonstrations/ adapting the safety and operating demonstration and risk analysis processes, aiming to internationalise the certification and approval of innovative systems

Safety and Interoperability

UIC and the European Union Agency for Railways (ERA) signed a cooperation agreement in 2021. This agreement consolidates the role and responsibilities of UIC as a technical body as part of the European railway regulatory framework. For instance, UIC provides technical reports, specifications and guidelines that can be approved by ERA and classified as Accepted Means of Compliance (AMOC) within European regulation. This has been the case since December 2021, with an AMOC on the "Safety of Loads" and "Tests and Checks before Departure" available on the ERA Website. These, for instance, label the UIC Loading Guidelines Volumes 1 and 2 as best practices, greatly increasing the likelihood of compliance.

The UIC Safety Platform is an advisory body open to all UIC members, which releases recommendations and launches projects to help control, mitigate or eradicate safety risks and eliminate their underlying causes and

UIC is also a member of a network of officials and experts from railway companies in the North Africa and Middle East regions. This network was established by the EuroMed Rail Safety and Interoperability Project "EUMedRail", coordinated by ERA. As part of this, UIC's priority actions included dissemination and training activities, adopting shared principles and implementing comparable approaches to safety management, regulation, and supervision, through the application of common safety methods.



In 2022, 3 main events were organised:

- On 18 October, the RAIL HOF (Human and Organisational Factors) Digital Platform was launched at the International Railway Safety Council - IRSC 2022 in Seville, by UIC and its members, with the support of and in collaboration with ERA. This new platform has 3 components: a LinkedIn page, a secure space, a website.
- On 16 November, the UIC Safety Platform organised its first webinar on "Safety at Work: Protecting Rail Workers from Trains" at UIC HO in Paris, with around 100 attendees from 28 countries around the world gathering to discuss the safety challenges that the railway industry is currently facing.
- The international conferences to launch the 14th ILCAD campaign and the first edition of TRESPAD on "Trespass and Suicide Prevention" hosted by AAR/ FRA/OLI were held from 8 to 10 June 2022 in Denver, USA. Both international conferences are hosted by a partner-country and bring together rail industry representatives, road authorities, academics, and other stakeholders from around the world.

UIC AT

Las Vegas

UIC AT THE 84TH SESSION OF THE INLAND TRANSPORT COMMITTEE

UNECE's 75th anniversary of the Inland Transport Committee,

UIC ASIA-PACIFIC NEWCOMERS WEB MEETING SERIES

Online

UIC-UNCRD CONFERENCE ON SUSTAINABLE **RAILWAYS IN ASIA-PACIFIC**



RAIL SUSTAINABLE INDEX LAUNCH

Online

UIC CENTENARY LAUNCH WORKSHOP

Online

UIC DRONE DAYS

Paris UIC HQ

INTERNATIONAL TRANSPORT FORUM

Leipzio





22 FEBRUARY 2022



23 FEBRUARY 2022



14 APRIL 2022



3 MAY 2022



5 MAY 2022



11-12 MAY 2022



18-20 MAY 2022

Technical Activities for Railway Systems

In 2022, significant progress in the infrastructure domain was made, including the following projects:

- HARMO-TRACK project, which aims to harmonise data formats and thresholds for track geometry and dynamic measurements
- SAFIRST project, working on side-wind assessments for infrastructure and rolling stock
- CROSS-T project, aiming to ensure safe train operations when crossing in mixed traffic lines
- AERONOISE project, which focuses on the development of an improved noise emission measurement method for high-speed trains
- DYNMEASURE project, focusing on dynamic railway measurement systems at the trackside and on-board
- G-CODE project, which aims to propose a new, harmonised methodology for the calculation of the clearance gauge

Other highlights for 2022 include the launch of the Drone4Rail for Plain Track project. It aims to study and standardise drone use for various applications relating to plain track assessment, improving inspection efficiency. The key outcome will be publication of a set of guidelines and further IRS development.

Establishing key recommendations on software and hardware issues, as well as data management and analysis, is a further key objective of the project.

Drone4Rail for Plain Track is also continuing the work which was initiated as part of its predecessor project, UIC Drone4Rail, which focused on bridge inspections.

Digital

In accordance with its strategy, UIC has continued to develop and increase all of its digital railway activities in 2022, with a focus on different areas of innovation.

Telecoms

Efforts and the work carried out for the development of the Future Railway Mobile Communication System (FRMCS), the 5G standard for railways that will replace GSM-R, have continued to increase. These encompass all the aspects necessary to defining a new system: specifications (naturally), the inclusion of FRMCS mechanisms in 3GPP standards, product prototypes as part of a dedicated project financed by the European Commission (H2020 5Grail), the definition of initial testing, the obtainment of chipset prototypes capable of managing the FRMCS European frequencies, the start of studies on migration conditions, and so on.

The pace will not slow in 2023, as, on the one hand, GSM-R will soon become obsolete, and, on the other hand, the railways need to digitalise, and FRMCS is vital for facilitating this process. While not only pursuing this crucial and challenging strategic FRMCS objective, UIC is continuing to support the GSM-R standard on behalf of the whole railway community.

Cybersecurity

The CyberSecurity Solution Platform (CSSP) is now running full steam ahead, having produced its first assessments on cybersecurity solution typologies, depending on the railway issues in critical networks.

Following a logical approach, the CSSP has, for instance, supported the FRMCS team with the necessary cybersecurity solutions for deployment in the future TOBA (Telecom In-Board Architecture) 5G box. This activity offers a considerable advantage, as close contact with the suppliers specialised in cybersecurity is maintained. These often have different expertise to railway suppliers, which brings in additional experience and knowledge on the solutions already used in other industries.

Digital modelling

In 2022, the digital modelling activities ramped up through RSM (the Railway System Model) demonstrating its capacity to bring together various railway digital models such as the IFC for construction, Eulynx for signalling, or even the RINF model created by the European Railway Agency. This element is crucial because many railways have invested a significant amount of time and effort in the existing model, with it not being an option to restart the process with a brand-new railway digital model. At the same time, the OntoRail software platform reached a level of maturity, which enabled it to integrate all of the distinct ontologies and permitted semantic comparisons between them. This development paves the way for a concrete grouping of railway ontologies, therefore preserving railway investments and allowing certain properties or functions to be dedicated to the adequate digital model, without reinventing everything in each isolated system. This integration was demonstrated in specific use cases within Lynx4Rail (a Shift2Rail project) and will be strengthened in the current Europe's Rail MOTIONAL project. These are both 45% financed by the European Commission.

Artificial intelligence

The AIPM (Artificial Intelligence for Predictive Maintenance) project, launched at the end of 2021, is now up and running. The team published a first report on its activities, setting out the scope and providing a baseline for the in-depth assessments which the working group will focus on going forward. Since the group's inception, UIC has been supporting it with two external AI-application specialists, who have developed their skills across numerous other sectors. This is certainly one of the key reasons for the group's success in terms of deliverables and is of interest to railway representatives, whose numbers are consistently increasing.

And also...

Many other activities linked to the digital railway system are hosted or have been launched by UIC, such as the progress in C-DAS (the Connected Driving Assistance System), the start of the Traction Energy Settlement standard's implementation or the preparation of a foundation for railway open-source technology (OpenRail) that will be starting its operations in 2023. And of course, there is more to come!



11TH INTERNATIONAL RAILWAY SUMMIT

Berlin

UIC INTERNATIONAL SUSTAINABLE RAILWAY AWARDS

Berlin

WORLD CONGRESS ON RAIL RESEARCH

Birmingham

TRESPAD CONFERENCE ON SUICIDE & TRESPASSING PREVENTION

Denver

ILCAD CONFERENCE

Denver

5TH UIC HARMOTRACK PLENARY MEETING

Paris UIC HQ

IDEATHON UIC NOISE & VIBRATION

Paris UIC HQ

UIC SECURITY CONGRESS

Warsaw



30 MAY - 1ST JUNE 2022



1ST JUNE 2022



6-10 JUNE 2022



8 JUNE 2022



9 JUNE 2022



13-14 JUNE 2022



14 JUNE 2022



14-15 JUNE 2022

UIC's raison d'être: sharing technical expertise **UIC Activity Report 2022**





Passengers

UIC has established a Station Managers Global Group, which assists UIC members in adopting the best possible approaches for the coherent functioning of infrastructure (including roads, buildings, and bicycle and pedestrian routes) and the daily activities of station managers. UIC has designed and owns and manages MERITS (Multiple East-West Railways Integrated Timetable Storage). This B2B solution comprises of a centralised database containing the passenger train timetables from most European countries. It helps railway undertakings provide train timetables to their passengers (on national and cross-border trains) and facilitates the creation of new train timetables.

Furthermore, UIC has defined OSDM¹, a standard enabling the sale of both online and offline tickets to passengers using the same interface. This interface includes fares, a multimodal trip search (including bus and local transport ticketing), booking and graphical seat reservations. OSDM is also prepared for a multimodality extension (MaaS).

UIC has developed a Software as a Service (SaaS) solution called ETCD (E-Ticket Control Database)2, which enables control information on railway tickets to be exchanged between ticket issuers and passenger carriers.

In 2022, 20 railways were able to exchange their yearly fares within the OSDM format and 13 railways and rail distributors exchanged their ticket and control data in real-time through eTCD.

1. UIC IRS 90918-10: Open Sales and Distribution Model OSDM 2. UIC IRS 90918-4: e-Ticket Exchange for Control eTCD

Freight

Via its representatives, UIC participates in the GCU Joint Committee, which is the governing body of the General Contract of Use for Wagons (GCU). This multilateral contract specifies the mutual rights and obligations of wagon keepers and railway undertakings with regard to the use of rail freight wagons as a means of transport throughout Europe and beyond, and thus facilitate cross border freight railway activities. Since its inception, the GCU has grown to an impressive network of more than 600 signatories across 20 countries, with more than 600,000 wagons currently declared in the GCU wagon database. Since 2006, the UIC Loading Guidelines are no longer an Appendix but instead a full-fledged code of practice for the loading and securing of goods on railway wagons referenced in the GCU. In 2022 it was also officially designated as ERA's AMOC (Acceptable Means of Compliance) on the Safety of Loads.

In 2022, the UIC Freight Department expanded beyond its proven strong representation in Europe (with the Rail Freight Forward coalition) and Asia (with its recurring studies on Eurasian Corridor development). First, the department organised an entire "African Thursday" dedicated to freight activities in Africa. Although this is still in the early stages of development, many countries on this continent are discovering the value of a welldeveloped rail freight network. Secondly, the Freight Department formed a dedicated freight group within the Middle East region, as part of which the majority of rail freight stakeholders in the Middle East region were brought together in two conferences. After the second conference, a formal group was founded, and although the major action pillars have not yet been defined.

Freight and Combined Transport

As road-rail intermodal loading units (semi-trailers, swap bodies, etc.) are optimised for road transport, their upper sections often exceed the height and gauges of railway lines when conveyed on wagons. In order to facilitate and streamline the transport authorisations for these units, UIC has been developing and running the "Conditions for coding intermodal loading units in combined transport, combined transport lines and wagons"³ for over 40 years. Therefore, UIC is the technical body for the facilitation of train operations over long distances and on the various European networks, by limiting the use of exceptional consignments and by taking constraints due to different gauges used on the various networks into account.

In November 2022, the Combined Transport Group published its eighth report on combined transport. This report has grown to a vital method for gathering data on intermodal and combined transport and also in terms of analysing contemporary themes, named the "focus areas". The latest report constituted a step forward by ensuring the methodological soundness of the reported data, by extending the scope to initial analysis outside Europe, and by including statistics from inland waterways (IWW). As part of Freight Month, a whole week was dedicated to presenting the added value UIC brings to the topic of combined transport.

3. UIC IRS 50596-6: Conditions for coding intermodal loading units in combined transport, combined transport lines and wagons

100[™] GENERAL **ASSEMBLY**

Paris UIC HQ

ECOSTABLING WORKSHOP

Online

INNOTRANS

Berlin

SAFETY4RAIL FINAL CONFERENCE

Paris UIC HQ





28 SEPTEMBER 2022



Prague

SFERA, SMART **COMMUNICATIONS FOR EFFICIENT RAIL ACTIVITIES**

Paris UIC HQ

2ND AFRICAN RAIL DIGITAL CONGRESS

Tunis

EXCELLENCE IN RAILWAY PUBLICATION AWARDS

Paris UIC HQ



30 JUNE 2022





20-23 SEPTEMBER 2022





5-7 OCTOBER 2022



10 OCTOBER 2022



17-20 OCTOBER 2022



25 OCTOBER 2022

Labelling

UIC issues labels for rolling stock components (such as braking equipment and its associated test equipment, thermal engines, etc.). These labels give railway companies the guarantee that their suppliers comply with UIC specifications.

In 2022, 10 UIC Labels were issued following an assessment from the nominated UIC expert team and approval by the UIC body responsible.

2 of these UIC Labels concerned diesel engines, with another 4 on brake pads, 8 regarding brake blocks and 1 concerning a test bench for friction materials.



Security

The UIC Security Platform develops and disseminates global analysis and recommendations for the protection of persons, information, goods, rolling stock, and infrastructure from all forms of threat, ranging from everyday delinquency to terrorist attacks, in order to improve service quality and transport efficiency. In addition to these guidelines, UIC's security team has developed the Rail Security Hub, a free online platform that offers UIC members a comprehensive catalogue of solutions to railway security issues (with more than 50 security solutions already being available) (railsecurityhub.org). The Network of Quick Responders has also been very active within this period, with nine surveys being carried out addressing the security topics such as the use of intelligent video surveillance systems, human trafficking, crowd management, suspicious and unattended items in public transportation, security organisation and the provision of security services, and graffiti.

In 2022, two main events were organised by the Platform:

- On 14-15 June, the 17th UIC World Security Congress was successfully held in Warsaw, Poland. Around 100 participants from 25 countries from all around the world had the opportunity to discuss the congress' theme of "Innovative security solutions for rail".
- On 4-6 October, the 7th International Conference on the Observation, Analysis and Prevention of Insecurity which focussed on the theme of "Security in Mobility" was organised with the International Centre for the Prevention of Crime (ICPC) at UIC in Paris.

During this time, the security division was also involved in two research projects co-funded by the European Commission: PROACTIVE (proactive-h2020.eu) and SAFETY4RAILS (safety4rails.eu).

Energy

In 2022, UIC launched its Energy Saving Taskforce, that aims at identifying ways to reduce energy consumption in the railways. UIC is working on alternatives to diesel engines, including the use of alternative fuels, and ways to retrofit existing diesel locomotive fleets at a lower cost.

As a result of the Taskforce's initial meetings in 2022 (which have continued in 2023), the taskforce members quickly started sharing an overview of their specific energy saving strategies and measures, dealing with all aspects of the railway system (not only traction energy), alongside planning an in-person workshop, defining the taskforce's aims and prioritising the main domains for energy saving measures by looking at efficiency over required cost, time and efforts. In the near future, UIC will draft an overview report about the energy consumption in rail, the energy saving strategies, and the practical and regulation-related challenges.



Sustainability

The UIC Sustainability Platform provides focus and leadership for the environmental and social sustainability agenda in the global railway community. Members promote and aim to maintain railways as the greenest form of collective and mass mobility through collaborative knowledge and advocacy. Working groups address a range of topics such as air quality, circular economies, energy and CO₂ emissions, noise and vibration, and sustainable land use, in addition to other transversal issues such as sustainable procurement and gender equality practices.

In 2022, a range of important technical tools and expertise-based products were produced:

- The first Rail Sustainability index (RSi) data collection cycle was launched, with scores being issued to 35 members around the world. This benchmarking tool supports members in demonstrating their contribution to a range of United Nations Sustainable Development Goals and formed the basis for the first Global Rail Sustainability Report.
- The first International Sustainable Railway Awards were held in June 2022 in Berlin, with inspiring winners from around the world receiving awards on the three chosen topics, the Planet, People, and Prosperity.
- Technical expertise was shared through the new Energy Saving Taskforce, with two technical publications on biodiversity being released: the REVERSE report and the BISON report, as well as the Zero Waste workshop "Circular Inflows", and the workshop "Integrating Renewable Energy" being held, and 2 separate noise reports on parked and stationary trains and nuisance and health impacts being published.

COMMUTER AND REGIONAL TRAIN SERVICES TRAINING

Paris UIC HQ



26-27 OCTOBER 2022

RAIL COOL PROJECT

Online



28 OCTOBER 2022

FIT FOR FREIGHT **WORKSHOPS**

Online

UIC AT COP27 Sharm El Sheikh

2-29 NOVEMBER 2022



6-18 NOVEMBER 2022

SAFETY AT WORK WORKSHOP

16 NOVEMBER 2022

Online

ENERGY SAVING TASK FORCE KICK OFF

ATTI WORKSHOP Online

HACKATON Paris UIC HQ

UIC TRAINRAIL



24 NOVEMBER 2022



25 NOVEMBER 2022



29 NOVEMBER 2022

2022, UIC's centenary year

Since 1922, UIC has adapted to the challenges of each era, including the reconstruction of networks and the resumption of international traffic after a conflict, the unification of technical standards (the UIC Code) and the operation of networks, the creation of joint coordination and management bodies, the first studies on and steps toward a future European high-speed rail network, and the creation of European passenger and freight products. UIC's working bodies have been continuously revised to keep pace with railway company developments and to adapt to structural changes in the railway market.

The past century has thus been marked by major milestones and successes for UIC, which have shaped and continue to shape the railway landscape. These include the Trans-European Transport Network (TEN-T), the Trans-European High-Speed Network, international corridors, GSM-R, UIC leaflets and its decisive contribution to safety and sustainable development.

Today, UIC faces many challenges. In order to meet them, the UIC considers it a priority to uphold the spirit of multilateral cooperation and to continue its commitment to interoperability and the development of a railway system as the backbone of mobility.

As UIC is nothing without the contribution of its members, the organisation wanted to start its centenary by giving its members and partners the opportunity

to debate a crucial topic with a symposium organised at the end of 2021 entitled "The future of the railways: Making a modal shift desirable".

This two-day event brought together 1,250 participants and 60 speakers from 59 countries, and provided the confirmation that rail transport has a key role to play, particularly in achieving the objectives of climate change adaptation, as it provided an opportunity to hear UIC members' needs and understand their plans. These high-level exchanges enabled the Rail Vision 2030: Solutions for a better future to be drafted.

The Chair of UIC, Krzysztof Mamiński, the current President of Polish Railways, stressed that rail transport must become the backbone of future mobility on a large scale, not only in Europe, but across the entire world. In particular, he called on all UIC members to work together towards this goal and highlighted that

"by definition, rail is the most efficient and environmentally friendly means of public transport. Over the course of this decade, rail freight transport in the European Union should increase by 50% and high-speed rail transport should double. I am convinced that UIC will play an even greater role in the coming years in promoting new innovative solutions in the rail sector for a real modal shift."

Rail Vision 2030: Solutions for a better future

Shaping a better future ...

At the end of 2021, on the occasion of the COP26 Conference of the Parties, a framework document entitled "Rail Vision 2030, shaping a better future" was released. This document, drawn up by UIC members, represents their vision and the first concrete milestone in their commitment to progress over the next 10 years.

The Rail Vision 2030 includes a call to action for policy makers and world leaders to help shape this better future. In this optimistic scenario, by 2030 the world will be well on its way to achieving the objectives of the Paris Agreement.

High-speed rail and rail freight will have doubled, passenger numbers will have increased by 50% and millions of new green jobs will have been created. Diesel trains will be on the way out and rail transport will have become the backbone of a sustainable mobility system.

As a result, greenhouse gas emissions from transport, which in 2021 accounted for a quarter of all global emissions, will finally have begun to fall - a scenario that is only possible with a thriving railway.

High-speed rail and rail freight will have doubled, passenger numbers will have increased by 50% and millions of new green jobs will have been created. Diesel trains will be approaching obsolescence and rail transport will have become the backbone of a sustainable mobility system.

... With solutions that already exist or are being developed: the UIC Manifesto

The UIC Manifesto was published in July 2022 and follows on from the "Rail Vision 2030". It is the result of discussions at the Centenary Symposium at the end of 2021 and of joint work by UIC members. It brings together existing and future solutions to help achieve the "Rail Vision 2030" to ensure that rail serves people and the planet.

With this Manifesto, UIC intends to demonstrate that the railways can act quickly and in a coordinated manner to tackle the climate emergency, by proposing solutions that already exist or are in the process of being implemented.

At the COP27 Conference of the Parties, UIC, together with UITP, the International Association of Public Transport, stressed that transferring traffic to rail and public transport is the quickest way to decarbonise the transport sector.

Transport is currently responsible for 23% of global greenhouse gas emissions and without immediate action, its share of emissions could rise to 40% by 2030. Measures must be implemented over the next ten years to achieve the objective of limiting global warming to 1.5°C. To achieve this, low-cost solutions already exist for rail. The UIC Vision 2030, accompanied by the UIC Manifesto, aims to demonstrate how rapid transformation can have a powerful impact.

WCRT CONGRESS Paris UIC HQ

2 DECEMBER 2022

101ST GENERAL ASSEMBLY
Paris UIC HQ UIC CENTENARY EXHIBITION

Paris UIC HQ









8 DECEMBER 2022 7 I

7 DECEMBER 2022

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UIC Activity Report 2022

The priority for our sector is to fund transformational projects, those that will have a big impact on efficiency in the short term, for railways at a regional and global level.

Furthermore, COVID-19 changed expectations, as we experienced car-free cities, working from home, and the realisation that work and commuting are not synonymous.

The UIC members have therefore outlined the 4 transformations that rail - alongside public transport and stakeholders in the logistics chain - must achieve between now and 2030.



Seamless interconnectivity:

- Rail freight hubs will offer electrified multimodal solutions with innovative loading systems, which are directly connected to roads, canals, and seaports.
- Most passenger journeys will be made using electronic multimodal tickets.

With electronic tickets, passengers will be able to move seamlessly between different modes of transport, including aviation.

Energy and technological innovation:

- Automated train operation, robotics, modern
 5G-based communication (UIC FRMCS) and artificial intelligence will improve railway efficiency.
- Diesel trains will be a thing of the past, with a largescale programme to electrify main lines.
- Dedicated renewable energy production and energy storage will be developed on the railways.

Transforming cities and connecting communities:

- Increased grouping will enable frequent and shortdistance rail freight to connect to urban hubs, where goods will be transported around the urban area on cargo bikes and electric vans.
- By better connecting cities and reducing car use, rail stations will become gateways to less congested cities where people can breathe cleaner air.

Transforming the customer experience:

- All passengers will feel safer: these actions have been supported by a more diverse and gender-balanced transport workforce.
- Particularly vulnerable infrastructure owners have been given access to the finance and technology they need to adapt to climate change and are therefore more reliable.
- Rail operators have adapted to new passenger behaviours and have become increasingly aware of customer needs.

These are the components of the UIC's "Shaping a better future" narrative.

Given the changing transport landscape, offering more people better access to rail and public transport is the quickest and most cost-effective way of decarbonising society's daily mobility. Ultimately, it will be behavioural change that guarantee the success of decarbonisation measures in the long term.

In conclusion, all those involved in rail and public transport must collectively rethink mobility. To do this, the public must understand the value of rail in urban life. We need to rediscover the virtue that rail and public transport bring to our daily lives in terms of their frugality:

- In energy consumption
- In terms of public space
- In terms of life cycle
- As our systems are scalable

Beyond the publication of these two strategic documents, UIC continued in its preparation for the future and for new innovations with the publication of its new three-year work programme, covering the period 2023-2025, at the end of 2022.

To meet all of these challenges, UIC also released a calendar of events linked to these objectives during its centenary year. These included the Sustainable Railway Awards, ILCAD (International Level Crossing Awareness Day), WCRR (World Congress on Railway Research), the UIC Safety Congress and WCRT (World Congress on Rail Training). UIC was also actively involved in COP27.



Manifesto for the UIC Centenary, 2022 ©UIC

Information about the **UIC centenary** (including a historical timeline) is available at <u>uic.org/centenary</u>.

UIC Activity Report 2022

UIC 2022 highlights



In 2022, as it does every year, UIC brought its members together for two General Assemblies, one held in June and the second in December. Among the global activities reported were the following:

Publish a study on how to boost passenger preference for rail

Further to the White Paper on the "Resumption of business post the Covid-19 pandemic, recommendations for the railway sector" (focus on passenger activities) and as a result of life continuing in this "new normal", restoring the confidence of passengers in railways has emerged as a priority. This work was launched in October 2021 with the support of the consultancy firm, McKinsey. The main findings from the research, building upon what rail operators had already achieved post-pandemic, offer guidelines on how rail operators can boost their modal share and make the industry more sustainable in the long term. The study is available <a href="https://example.com/here-example.com/he

Draft a COP27 and multi-year strategy for global advocacy as a sustainable mobility and climate solution

This strategy for global advocacy as a sustainable mobility and climate solution, which was prepared by the Global Rail Sustainability Taskforce, was supported by UIC members

The main highlights of the December Assembly included the new UIC 2023-2025 Work Programme, UIC's added value and the focus on regional activities.

A number of agreements with third parties were also concluded in 2022, including:

- A Memorandum of Understanding with the African Bank of Development (AfDB) and African Development Fund (ADF)
- A Memorandum of Understanding with the Bureau International des Containers (BIC)
- A Sharing Agreement with the Rail Industry Safety & Standards Board (RISSB)
- A Memorandum of Understanding with RailNetEurope

To close the centenary year, an exhibition of historic objects was held at UIC from 6-8 December 2022, and was jointly organised with the help of SNCF, the French State Railways.

The exhibition consisted of photographs, posters, works of art, objects and videos retracing the key events and milestones of UIC's history in chronological order.

<u>A catalogue</u> containing details about each object was published specially for the occasion.



Launching projects in the regions

In 2022, UIC's plan was to maintain its activities, so that it could continue its regional activities outside of Europe, with these including:

- Fostering closer collaboration with international financial institutions, such as the Asian Development Bank
- Currently working closely with the African Union to develop concrete implementation projects as well as a rail programme and a consistent vision for Africa. A virtual conference was also held in Tunis in October 2022
- Intending to develop activity in North and South America to attract new members in these areas

Regulatory Frameworks

UIC collaborates with experts who have worked on the implementation of railway regulatory frameworks at the international or European levels (e.g., the 3rd and 4th European Railway Packages⁴). On a practical level, specific discussion papers and working groups aiming at proposing solutions have been launched, in addition to training sessions being developed.

A solid position in Europe within ERJU (Europe's Rail Joint Undertaking)

The Europe's Rail Joint Undertaking is an initiative from the European Commission to unify and accelerate the development of railway innovation in Europe, succeeding the Shift2Rail's previous programme. In 2022, it included a new component, the System Pillar, which focuses on facilitating and orientating the development of relevant specifications for the modernisation of the railway system, in coordination with ERA, who are responsible for railway regulations in Europe.

4. <u>transport.ec.europa.eu/transport-modes/rail/railway-packages_en</u>

Aside from creating the System Pilar Steering Group where all of the railway sector domains, including UIC, are represented, Europe's Rail launched this initiative by issuing a multi-year €45M tender to support necessary efforts within the sector, including both railways and suppliers.

An ad-hoc consortium was then set up by the various European stakeholders, of which UIC is a very active member, with the consortium ultimately being awarded the multi-annual System Pillar contract.

The roles and duties of UIC within the consortium are wide-ranging, including being:

- Technical coordinator and domain lead for Task 1 (Railway System Architecture)
- Domain lead for Telecoms in Task 2 (Control-Command System)
- Technical coordinator and domain lead for Task 4 (Digital Automatic Coupling)
- Technical coordinator and domain lead for the Horizontal Task PRAMMS
- Technical coordinator for Horizontal Task 1 Modelling

Numerous UIC experts are also contributing to all these tasks.

In addition, UIC was also selected to participate in operational projects of Europe's Rail Innovation Pillar, such as in Flagship Project 1: MOTIONAL (regarding digital modelling activities), and in Flagship Project 2: R2DATO (regarding telecom activities). Participation in other flagship projects should also commence in 2023.

Through having these important positions in Europe's Rail's activities, UIC continues to demonstrate its key role as the technical body for European railways.

Focus on UIC's successful projects in 2022

The UIC FRMCS (Future Railway Mobile Communication System) programme continues its progress and delivers favourable outcomes

The year 2022 was an intensive and productive year for the UIC FRMCS Programme. With the progress made in its various domains, it is essential to highlight four major firsts for the project:

- The first set of FRMCS specifications was finalised ("UIC FRMCS V1")
- The first set of test cases, corresponding to this version, was expanded upon
- The first laboratory tests of FRMCS ecosystem prototypes were a success
- The first prototypes of the FRMCS TOBA (a new concept for onboard train) were included in these tests

Aside from the "usual" activities (definitions and specifications developed within the dedicated telecom groups of UIC), it is important to note that the 5Grail project, financed by the European Commission through the global H2020 programme and coordinated by UIC, was instrumental in delivering and testing the first 5G FRMCS prototypes, for both infrastructure and onboard.



All of this was only possible thanks to the total dedication of the UIC team, strong commitment from various railways, and highly efficient collaboration with the railway telecom supply industry.

FRMCS is now definitively and successfully following in the footprints of GSM-R... before replacing it!



The Fit for Freight series - explaining the new freight competence centres

The Fit for Freight series started in November 2022, as part of the Freight Month celebrations for UIC's 100th anniversary. The webinars were designed to showcase best practices, highlight the daily use of UIC assets, and explain how UIC's work contributes to benefiting the rail sector.

Freight Month aimed to shine the spotlight on UIC's long history and the future of its freight activities. For many decades now, UIC has played a leading role in developing and determining technical standards for the rail freight sector, as the core of its mission is to facilitate efficient international operability.

The month kicked off with the Freight Department's core assets being presented via the newly developed Fit for Freight competence centres, which were introduced via two podcasts. The first was dedicated to wagon use and the other to international freight corridors. Technical webinars on data exchange and load safety were also held. On 9 November, the 8th edition of the Combined Transport Report, jointly issued by UIC and UIRR, was presented as part of an in-person event which took place at the UIC Headquarters. Later on in November, all of the UIC Freight Forum members discussed current rail freight issues and established new projects to be developed in the near future.



Freight Month's last few weeks were dedicated to UIC's corridor approach as a solution to strengthening the freight sector's cooperation on a global scale, and to side events, such as the ATTI Morning organised by the Agreement on Freight Train Transfer Inspection (ATTI) Special Group which facilitates seamless cross-border quality controls to increase efficiency in freight transport, the CEF PSA Unified Braking Scheme (UBS) final conference and the UIC Pallet's induction into the Logistics Hall of

OSDM (Open Sales and Distribution Model) simplifying and improving the booking process for public transport customers

OSDM is a UIC initiative to significantly simplify and improve the booking process for customers when using public transport, as well as to lower the complexity and distribution costs for retailers, distributors, and carriers. The specifications are defined by experts from different stakeholders (third party distributors, IT providers and railways) – who meet in an OSDM Technical Workgroup on a voluntary basis – and are made publicly available in open source on www.osdm.io.

It was back in 2019 that UIC started the process of further developing standards for e-ticketing in order to facilitate through-ticketing and intermodality, with the overall aim of enhancing international passenger journeys.

Jointly produced by members of UIC and ticket vendors, with members of EU Travel Tech and the European Travel Agents' and Tour Operators' Association, the OSDM Platform replaces the former PRIFIS international tariff distribution tool, a shared database containing prices and tariffs for non-reservation tickets.

Now that the specifications are mature, the OSDM Technical Workgroup is providing support to companies willing to implement OSDM by working on a catalogue of configurable test scenarios which can be easily adapted to company environment, allowing them to quickly test their new OSDM API.



Bileto, Sqills, and Turnit (bus and railway reservation and inventory management solution providers) are now implementing the OSDM 2.0 version for their railway and bus customers, and the Polish State Railways, PKP, are offering to develop this catalogue of scenarios. Therefore, with the delivery of this test scenario catalogue, UIC, with the OSDM open framework, is providing a neutral and independent means to facilitate and foster the adoption of OSDM.

More info:

- · <u>UIC OSDM page</u> · <u>Video</u> GitHub <u>(short version)</u>
- <u>factsheet</u>
- <u>Video</u> (long version)

The 6th UIC World Congress on Rail Training (WCRT) - enhancing workforce development through sharing best practices in rail training across the entire industry

The 6th edition of the WCRT was organised by UIC and held from 30 November to 2 December at the UIC Headquarters, in partnership with SNCF, FS, and DB and was sponsored by Alstom. For the first time since its inception in 2011, the event was hybrid, with attendees both in-person in Paris and remotely. The congress brought together more than 200 participants from over 27 countries around the world, representing more than 50 railway undertakings, universities, and engineering schools.

The event was a unique opportunity for railway HR departments and training professionals to get together and discuss current issues

in their field, such as responding to Covid-19, innovation & technology, training simulators and virtual reality, international and national frameworks for training and education, HR training lifecycles, gamification, the future skills strategies in an international framework, learning technology, and the sustainable management of skills and human resources.

UIC launched its first global TrainRail Hackathon as part of a series of measures to increase the railway's appeal, aimed at universities and railway undertakings. It focused on the theme "How can railways be resilient in the face of pandemics?" and was the result of multiregional

collaboration between universities, railway undertakings, and corporate training centres. The final was held on 29 November, with the awards for the hackathon being presented during the congress' opening ceremony.



UIC Activity Report 2022

The World Congress on Railway Research (WCRR) - bringing together the global railway research and innovation community to exchange ideas and present the latest technology from around the world

UIC took part in the 13th World Congress on Railway Research (WCRR) held from 6-10 June 2022 at the International Convention Centre (ICC) in Birmingham, UK, hosted by RSSB and the University of Birmingham. It was held under the theme "Reshaping our railways post-pandemic: Research with an impact".

The event was attended by around 700 participants in-person across the global railway research and innovation community, with the aim of exchanging ideas and presenting the latest technology being developed around the world. The Covid-19 pandemic had a significant and long-lasting impact on the rail sector and the congress was an opportunity to discuss how new knowledge and novel solutions generated by research can play a vital role in the recovery.

The event programme was organised around a series of plenary, oral and interactive sessions, followed by technical visits on the last day, as well as a masterclass and professional growth programme.

UIC and its working groups presented 24 papers (out of a total of 300) to the congress, on topics spanning a wide range of technical developments, innovations, and related issues. It was the first time that UIC presented such a substantial number of papers to the congress.

The UIC stand in the Exhibition Hall was the focal point for communicating UIC's work to all of the participants, facilitating meetings with visitors and offering a base for networking with the other members of the railway research and innovation community.

During the handover to the next WCRR host, CEO and President of MxV, Kari Gonzales, announced that the 14th edition of WCRR will take place in Colorado, USA, in 2025.



2nd African Rail Digital Congress in Tunisia - Accelerating Digital Transformation in Africa: What are the Challenges for Railways?

The 2nd African Rail Digital Congress was hosted by the Tunisian National Railway Company (SNCFT), the African Union of Railways (AUR) and UIC, in Tunisia, and was attended by Taoufik Boufaied, CEO of SNCFT and President of AUR. The congress provided a great opportunity for the 100 participants from different countries to swap ideas on best practices and the associated successes and risks.

These discussions showed that digitalisation is the way forward for improving operations and increasing efficiency.

François Davenne, UIC Director-General, gave a speech, stating that the FRMCS programme is the backbone of the railway's digital strategy. He further noted that the congress would allow a "roadmap for tomorrow" to be created which would make Africa ready for 21st century mobility and provide the population with the transport capacity they expect for "the Africa they want" within the Agenda 2063.

The congress also ratified the Tunis Declaration on Digitalisation in the Railway Sector including that:

- The challenges related to mobility and climate change call for substantial investment in both infrastructure and rolling stock, which will require railway manufacturers to change their tariff policies.
- All these investments will have to be supported by the current digital revolution.



The Conference of Parties COP27 in Egypt - a stronger UIC presence

As it is every year, UIC was present at the 27th Conference of the Parties (COP) in Sharm El-Sheikh, Egypt, held under the presidency of the Government of Egypt between 6 and 18 November 2022 as a UN-accredited observer organisation.

Egypt's COP27 presidency vision was to move from negotiations and planning to implementation, with real, concrete action. In the spirit of this aim, UIC worked with members and partners to highlight the railway sector as a key pillar of a future sustainable mobility system.

Find out more here.



The 17th UIC World Security Congress – part of the UIC Centenary and UIC's innovation month

The theme of this year's edition was "Innovative security solutions for rail", and offered a unique opportunity for the partners to exchange ideas on the challenges of making rail more safe and secure. It was jointly organised by UIC and PKP and was held on 14-15 June 2022 in Warsaw, Poland.

Around 100 participants from 25 countries around the world representing security managers, transport and police authorities, and international organisations participated in-person in Warsaw or joined online. Among the topics discussed were rail security strategies and cooperation with authorities, the implementation and evaluation of innovative solutions (e.g., smart CCTV, drones, detectors, access control), best practices for security by design, and on-going EU security research project updates and international cooperation activities.

West Security Pror June

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UIC 2022 highlights **UIC Activity Report 2022**

The More Trains campaign - consolidating and delivering key messages from the railway sector at COP27

The More Trains campaign was launched in advance of COP27 and advocates for a systemic transformation. This includes significantly reducing emissions from the transport sector in the next decade. An incremental reduction of emissions from each sub-sector will not only be needed but also a holistic transformation whereby a modal shift will play a key role. The key asks from the rail community include:

- Commitment at the highest levels to specific policy targets and long-term planning
- Policies that incentivise rail and enable fair competition with other modes, integrating externalities
- Climate finance for trains, for tracks and for a just transition

On this occasion, championing the voice of railways and representing UIC members, Vera Fiorani, CEO of RFI (Rete Ferroviaria Italiana) and Abdi Zenebe, CEO of Ethio-Djibouti Railways, together with UIC Director-General François Davenne and the Head of the UIC Sustainability Unit, Lucie Anderton, were in Sharm El-Sheikh, attending speaking engagements and ministerial meetings.

Since its launch, key partners, including Alstom, have been supporting the initiative. Cecile Texier, Sustainability & CSR Vice President at Alstom, believes that railways have to be "used to their full potential to achieve Net Zero Mobility as soon as possible", and that the "More Trains Alliance will strengthen the rail industry's collective advocacy and visibility to this end".



UIC has teamed up with Alstom, SNCF and many other partners and members to produce the paper "Next stop 2030" and a new animated video which was launched at COP27.

The More Trains joint communication campaign materials were used at COP27 to share the sector's vision, illustrating the contribution that rail can make in achieving carbonneutral transport and using concrete examples which have already been implemented. This campaign builds off the UIC Vision 2030 and brings together success stories from rail around the world under the four key transformational areas: transforming cities and connecting communities, energy, technology, and innovation, intermodality and seamless connection, and customer experience. It also features alternative financing models that enable More Trains to decarbonise and become more sustainable.



The ILCAD & TRESPAD events in Denver (Colorado), USA initiatives to raise awareness on level crossings, suicide & trespassing



TreSPAD

TRACKS ARE FOR TRAINS

The three days of events, running from 8 to 10 June 2022 in Denver (Colorado), USA, were hosted by the Association of American Railroads (AAR), the Federal Railroad Administration, (FRA) and Operation Lifesaver, Inc. (OLI), and started on 8 June at Union Station in Denver.

The 160 delegates included academics, researchers, transport and safety agencies, and human factors, enforcement, and awareness specialists from both the rail and road sectors, coming from Europe, Argentina, Mexico, Canada, and the United States.

On 8 June, delegates gathered at the Colorado Railroad Museum in Denver for the 1st edition of the Session on International Trespass and Suicide Prevention.

On 9 June, 45 countries shared best practices on level crossing safety at the 14th edition of ILCAD.

The International Level Crossing Awareness Day (ILCAD) is a worldwide initiative to improve general awareness of level crossing safety. Since 2009, the campaign has been spearheaded by UIC, the worldwide railway organisation, with the support of the railway community around the world.

Ilcad.org



Financial figures

Financial figures

Financial figures

While the world economy was still recovering from the consequences of the Covid-19 pandemic, 2022 proved to be another difficult year with another major challenge emerging, namely the Ukrainian crisis.

Unfortunately, UIC was not spared from the negative effects of these successive crises and major parts of the UIC economic model were heavily impacted in 2021, such as, for instance, facility rentals, UIC seminars and congresses or membership fees and contributions. Despite these crises, UIC budget remained balanced in 2021.

Fortunately, UIC was able to operate with a reduced budget in 2022: the fees collected amounted to \in 8.518M, in comparison to the 2019 budget of \in 9.3M. In 2023, with the members' support during the 100th GA, a return to a situation closer to that of the pre-Covid period is expected, with predicted fees of \in 9.185M.

In 2022, the UIC management also made every effort to mitigate the financial impact on the organisation of the General Assembly's decision to suspend the Russian and Belarussian members (€-0.5M).

Consequently, the 2022 year ended with a shortfall of €-280K, slightly better than the €-303K anticipated at the December 2022 General Assembly, and far better than the predicted shortfall of €-503K that was presented at the June 2022 General Assembly, where the impact of the Ukrainian crisis was financially analysed.

This result was achieved largely thanks to a strong recovery of the UIC facility rents as part of the UIC-P subsidiary's activities and the ETF subsidiary's excellent turnover. ETF is responsible for the commercialisation of UIC documents and is also active in internationally labelling rail equipment. These factors compensated, on the one hand, for the decrease in membership fees and, on the other hand, for the general impact of inflation on goods and services.

Within this mix, the significant progress made on fee recovery should be highlighted, which resulted in a significant decrease in the provision for unpaid fees, at €-218K.

Simplified PNL	2022 Actual (05'2023)	2021 Actual
Fees	8 518	9 026
other income (mainly UIC-P result)	2 175	1 642
Financial and exceptional income	494	322
Reversal of provisions	885	676
REVENUES	12 073	11 666
Operational expenses	4 920	3 727
Staff costs	5 688	6 072
Financial and exceptional charges	261	129
Depreciation and provision	1 482	1 712
Income tax expense	0	-4
EXPENSES	12 352	11 636
NET RESULT	-279	30

The 2022 accounts were duly approved by the June 2023 General Assembly that decided to register the loss in the organisation's "other reserves" account.

2022 Project activities

During the year 2022, UIC continued to strengthen its commitment to its members in terms of technical railway expertise.

As a result, when compared to 2021, more members were involved in the new Opt-in projects within the various fora, platforms, and technical working groups, as detailed below:

Now, considering the whole the stream of technical projects developed at UIC, the increase in activity shows a similar financial trend:

- Total Opt-in projects (funding from members): stable at 8.4M€
- Total external projects (funding from sources other than members): growth from 1.4M€ to 2.1M€

This has enabled UIC to successfully reach its target of 2 million euros growth in 3 years, from 8M€ in 2020 to 10M€ in 2022, as set out in the 3-year plan 2020-2022.



Who we work with

The UIC Team



Dissemination

UIC has the capacity to disseminate railway best practices through more than 85 events per year (seminars, webinars) and publications (documents, websites).









Who we work with

UIC has close relationships with around 70 partners, from governmental / intergovernmental institutions, technical and standardisation groups, civil society, and finance.































































































































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