UIC, the worldwide organisation of railways, brings together its Members in Budapest for its 94th General Assembly

Mr François Davenne becomes UIC Director General

Focus on Future Railway Mobile Communication System (FRMCS), digital, sustainable issues and standardisation

(Budapest, 26 June 2019) The Executive Board and the 94th General Assembly of UIC, the worldwide railway organisation, took place on 25 June in Budapest, at the kind invitation of MÁV Hungarian State Railways. The meetings were chaired by UIC Chairman Mr Gianluigi Castelli, Chairman of Ferroviedello Stato Italiane (FS), in the presence of Ali İhsan Uygun, Director General of TCDD, Turkish State Railways and Vice Chairman of UIC.

Dr Róbert Homolya, CEO of Hungarian State Railways MÁV welcomed the UIC Members: “MÁV is truly grateful for this occasion to demonstrate our commitment to the railway community, to celebrate our common values as represented by UIC: unity, solidarity and universality. We also wish to express our appreciation for all the work, sharing of experience and progress done under the aegis of UIC, be it the high-level meetings or in the technical working groups. Whether it is interoperability, intermodality, standardisation, sustainability, safety or digitalisation – UIC addresses those issues which are most pressing not only for MÁV Hungarian State Railways, but also for each of us as members. Let us take this important opportunity to share and discuss our experience, locate our common challenges and turn them into opportunities”.

Also as part of the opening speeches, Mr Vargha, State Secretary for Civil Intelligence of the Hungarian Ministry of Foreign Affairs highlighted the competitiveness of the region and the necessary need to continue to link cities, ports and airports and to further implement the modern railway network. The UIC General Assembly then appointed Mr Ali İhsan Uygun as Director General of Turkish State Railways (TCDD) as UIC Vice-Chairman until the end of 2020.

UIC Governance

UIC Chairman Gianluigi Castelli highlighted that the period of transition has been managed very well over the last six months thanks to Jean-Pierre Loubinoux and François Davenne. He said: “These days Mr Loubinoux, after more than ten years at the top, leaves behind a great legacy of work, competence and prestige at UIC, while François Davenne takes on the challenging role of Director General. I am confident that François Davenne will be very successful. Vice Chairman Mr. Apaydin, whom I thank for his excellent work, leaves the post of Vice President to Mr. Ali İhsan Uygun. We recently met in Rome and, as Chair, we are both committed to ensure the fluidity of these important changes and the continuity of UIC activities. In fact, we had tasked Mr Loubinoux and Mr Davenne to conduct a smooth transition from the former to the latter and, judging by the feedback received, this has been achieved”.

Furthermore, Jean-Pierre Loubinoux has been named Honorary Director General by the General Assembly.
Report from the UIC Chairman

UIC Chairman Mr Castelli in his report reviewed the activities of UIC since the last General Assembly in December in Paris and reminded the meeting of the orientations and main challenges for the months to come.

He said: “As a world organisation, UIC has the duty to draft the future of the railway and transport sector as a whole, from a global perspective.

In the freight sector, the intercontinental horizon has been clear already for a long while and, in the next few years, we will be challenged to push the integration between countries to the maximum, both those belonging to the European/Asian/African terrestrial platform and the American ones. Strengthening the East-West and North-South international corridors, we can make freight a vehicle for the social and economic development of our planet. UIC is working on that.

Passenger transport is based on the development of high-speed corridors, thus creating a "proximity" network tightly linking many more countries. In fact, high speed railways are growing all over the world, and commuter services as well. Performance has constantly been improving thanks to the use of more and more advanced technologies together with the rapidly increasing number of kilometres of tracks.

Establishing common standards is a long and arduous process, requiring the approval of many international stakeholders. But interoperability is the only road ahead to further develop our industry.

The UIC, by tradition, vocation and competence, plays a crucial role in this process. In fact, our organisation is a privileged observatory of the railway business and is the world organisation, together with ISO and IEEE, capable of driving the definition of appropriate standards, thus enabling the creation of a true world market. As Chairman, I am particularly keen on discussing and approving the plan to update and keep updated all the 700 UIC leaflets. To realise such an ambitious plan, anyway, we need to rigorously rationalise the process as well as to respect quality and meet deadlines. In my opinion, new resources must be deployed. For example, I would like to propose to this Assembly, in particular to the representatives of the major railways, to take a direct responsibility, in cooperation with other UIC members, to update some of the leaflets.

Further digitalisation of railways relies on good cooperation both between railways and with telecommunication players. New 5G networks offer a great opportunity for railways by enabling, among others, the internet of things and better real-time information. This will make railways more reliable, effective and efficient.

The deployment of ERTMS and FRMCS (Future Rail Mobile Communication Systems) should be the centrepiece of the technical UIC strategy. FRMCS is currently one of the most important projects: UIC and its members are committed to a very large investment on a multi-year timeline.

Current systems do not sufficiently take advantage of new technologies and practices, including the use of satellite positioning technologies, high-speed, high-capacity data and voice communications systems (Wi-Fi, 4G/LTE) and automation, as well as innovative real-time data collection, processing and communication systems.

The recent presentations on the FRCMS, Blockchain, Digital Platform’s DIGIM I and II, all show concrete progress and demonstrate the UIC’s global engagement in the digital transformation of the Rail System.

Digital tools need to address individual requirements by creating door-to-door solutions and added value for the customer experience before, during and after travel.

In this new context Mobility-as-a-Service (MaaS) describes a shift away from personally-owned modes of transportation and towards mobility solutions that are consumed as a service based on travellers needs. MaaS regards the entire transport system as a single entity and heavy and light Rail, with its low rate of emissions, shall be part of it.

In the first half of 2019, the UIC has made progress in pursuing this goal:

- MERITS, the timetable and fare database aimed: on 1 March MERITS data were marketed to all players (railway companies, third parties, authorities) with new contractual schemes that allow a non-discriminatory access to data through license fees.
Two new projects on intermodality have been launched in 2019:
  
  - **Air + Rail**: initiative in collaboration with IATA and some railway companies, aimed at testing the effects of modal integration between rail and air transport.
  - **Door2Door**: project in partnership with UITP and some railway companies involved in the challenge of the One Stop Shop for the issuing of intermodal tickets.

UIC work for COP25 is in progress as the railway sector must be considered a main actor in achieving the 17 UN Sustainable Development Goals, particularly the ninth (Industry, Innovation, and Infrastructure) and the eleventh (Sustainable Cities and Communities). The UIC is currently working on the taxonomy of green activities with the purpose to orient “green finance” towards rail investments.”

He added: “Undoubtedly, the current significant level and number of ongoing technical projects protects the UIC know how and technical heritage. Fortunately, the UIC remains attractive: all major members have confirmed their participation - and we have had a slight increase in the number of members. However, increasing interregional cooperation remains a challenge. All of us shall look at the UIC as an institution that can boost our business, contribute to our success, promote research and innovation, select the best practices and make them available to all of our associates. This is made possible by our commitment to make UIC an increasingly inclusive organisation, being aware that our improvements drive the improvement of the whole railways community of the world”.

Mr Jean-Pierre Loubinoux, as Director General for more than 10 years, has passing the torch today to François Davenne, highlighted the record participation of the members showing the interest and recognition of the added value of their association. Jean-Pierre Loubinoux also emphasised the global representativeness of the General Assembly. Beyond the technical, administrative and financial topics, Jean-Pierre Loubinoux has highlighted the exceptional harmony that has prevailed both in these statutory meetings and in friendly meetings between Members. Harmony that exists at the UIC, combined with the excellence of Hungarian hospitality. He sent his farewell message after more than 10 years at UIC. He started by “My dear colleagues, my dear friends,

After merely 11 years as Director General of UIC, time has come for me to hand over this responsibility to François Davenne.

I wish him full success in steering and further developing our worldwide association.

I also wish to heartily thank all the teams from our headquarters or our regions, all our members and partners for their support and involvement, without whom nothing could have been possible.

As any organization composed of so many members, of so many people, men and women, coming from so many countries, UIC needs attention and care.

I could talk about UIC for a long time!

Talk with strength, with passion and conviction, but also with tenderness”.

The full message is available at this link: [https://uic.org/com/IMG/pdf/jean-pierre_loubinoux_farewell_speech_en.pdf](https://uic.org/com/IMG/pdf/jean-pierre_loubinoux_farewell_speech_en.pdf)

François Davenne becomes the new Director General of UIC

François Davenne has been announced as Director General of UIC. The appointment will take effect on 1 July 2019 with a four-year mandate. Mr Davenne succeeds Jean-Pierre Loubinoux.

Mr Davenne was appointed last year during the UIC General Assembly in Madrid and joined the association as Deputy Director General in January 2019 in order to ensure a smooth transition with his predecessor in the spirit of continuity.

François Davenne, taking the floor to share the mid-year report with Members, said:“I have a strong feeling of responsibility and trust in succeeding Jean-Pierre Loubinoux.” And then: “UIC is today in full capacity to deliver to its member the full added value of a collectively designed set of standards. The times are coming for developing a global approach for railways in Europe due to
the completion of the 4th Railway package. In Asia and Middle East due to the will of networking the major economies. In Africa because the challenge of urbanisation and development will not be fulfilled without strong railway and public transport. In the Americas, where the issues related to climate change and growing urbanisation are also crucial.

In this framework, UIC is to become the forum were our members can define the global standards and the system vision they want to achieve. Due to the team efforts under Jean-Pierre Loubinoux leadership, we are now ready to install UIC as the reference for setting up rail services, as IATA and ICAO are the reference for setting up aviation services. Our organisation has the potential to deliver this achievement because we are encompassing the full spectrum of what it takes for organising a service, from ticketing to radio systems, passing by wagon exchange regulation. For the sector, collectively, we are the only place where the picture is complete. This is also more and more recognized by the European Commission, that requests increasingly our technical expertise because, though central, interoperability and safety are not the whole rail system."

During his mandate, Mr Davenne will focus, in particular, on improving the perception of the rail sector and on consolidating the position of the railways as the backbone of smart and decarbonised mobility. He will continue to promote UIC’s operational role globally. Thanks to the commitment of its members, the association benefits from a remarkable asset of standards describing the entire range of operational functions in the rail system. To fight against climate change and to establish the railways as the transport mode of the future, UIC must serve as a central forum in which its members can define an innovative technical vision.

Global issues

Future Railway Mobile Communication System (FRMCS)

GSM-R covers some 150,000 Km of tracks in Europe, 210,000 Km in the world and is still growing. GSM-R obsolescence is estimated at the horizon 2030 from an industrial point of view and 2035 from a contractual point of view. The sector needs to be therefore ready by 2025 with a new system. All countries currently using GSM-R are concerned. National migrations will need to happen most probably between 2025 and 2035.

This new system is the Future Railway Mobile Communication System (FRMCS) which will replace GSM-R and cover new needs, such as ATO (Automatic Train Operation). It is one of the key ERTMS game changers and probably the most impacting one; it is also an essential support to railway digitalisation.

FRMCS will be a major component of the European system, part of next ERTMS (including Technical Specifications for Interoperability, TSI), but is applicable to the worldwide railway community. An Interim report has been given to the Members.

Digital

The DIGIM II project was presented by Francis Bédel, UIC Chief Digital Officer. DIGIM II is seeking to benefit from the digital impact on the business processes in the rail sector to develop business processes, to improve safety and security, to optimize and improve the operations and to better use the existing data.

DIGIM II project goals and objectives are:
• To alert drivers about the status of level crossing.
• To detect potential collision risk and warn the driver or intervene on behalf of her/him to prevent the collision.
• To design, test and validate a Proof of Concept (PoC)
• The collaboration between railways and manufacturers.

The connected digital level crossing project is seeking to be connected with cars to alert and warn drivers about level crossing, and in case of no action/not enough action from the driver, to take control of the car; hence the system would be used by cars equipped with driver assistant technologies. This project is developed in partnership with Dassault Systems.

It started in April 2019 and will finish at the end of March 2020. FS, Network Rail, IP, CARS, RAI and SNCF have confirmed their participation. Confirmation from VIA RAIL, ÖBB and SBB (through
the Swiss Association of Public Transport) is expected. More Members are encouraged to join this project.

- Block Chain as freight use case for DIGIM III was also presented during the General Assembly, by Sandra Géhenot, UIC Freight Director and Francis Bédel, UIC Chief Digital Officer.

UIC is particularly committed to supporting the successful implementation of international rail freight services at world level. Particular attention has been paid since 2010 to rail freight corridors linking Asia, the Middle East and Europe. The latest study, carried out in 2017 in collaboration with Roland Berger Transportation Consultancy, showed that Eurasian rail cargo transport has grown significantly in recent years. Interviews with stakeholders confirmed that a number of improvements have driven the volume development on Eurasian rail routes. However, there is still room for efficiency and quality gains in areas such as waiting times and processes for border crossings and customs, and in reliability and client information to increase the attractiveness of rail transport for logistics service providers. Taking into account the characteristics of Blockchain in terms of transparency, traceability, trust and distributed governance, it is easily understood that this technology can potentially allow the development of a better mobility and bring substantial advantages/benefits to the transport system, and to rail freight corridors in particular.

With this in mind, UIC developed a Proof of Concept (PoC) based on the transport contract. This PoC was presented during the Global Rail Freight Conference in June 2018. It is now envisaged to run a pilot train. Members are highly encouraged to take part in this strategic project which will be launched in 2020 in the framework of DIGIM III.

**Sustainable development issues**

The interim report on Eco-scoring project was given by Jerzy Wisniewski, UIC Director of Fundamental Values. Information was given at last General Assembly that UIC is at the initiative of developing a non-financial evaluation of the societal benefits of rail investments. In this context, a workshop took place in November 2018 with several financial stakeholders and a number of interested members from which a number of possibilities emerged. Since then these interested members from all region have gathered 4 times as part as a very active working group. The group is currently elaborating some criteria to evaluate which of the 17 UN's Sustainable Development Goals (SDGs) are relevant for the rail sector and when a SDG is relevant, which criteria of this given SDG is relevant and how it can be assessed vis à vis the rail sector. A synopsis will be available for the December General Assembly.

**Standardisation**

A mid-year standardisation report was presented by Laurent Schmitt, Chairman Standardisation Platform, Simon Fletcher, UIC Chief Standardisation officer & Célia Levy, UIC Head of Standardisation Programming. This focused on:

- the rolling 3-year International Railway Solutions (IRS) Work programme, which includes the migration plan for leaflets to become IRSs
- the publication of the standardisation guidelines (processes) and the ‘editors’ guide for drafting an IRS (M1). These will be available on UIC website before summer
- the IRSs that have already been published this year. By end June, 11 IRSs will have been published for a total of 15 IRSs published. Two more IRS are following very closely. The others are programmed for the second half of this year
- the relationships with external bodies such as ISO, IEC (International Electrotechnical Commission), OSJD (Organisation for the cooperation of Railways), CEN_CENELEC (European Committee for Electrotechnical Standardization).

The General Assembly has kept on fully supporting this project.

**Innovation and Research**

The General Assembly approved the updated version of the Global Vision for Railway Development prepared by the International Railway Research Board (IRRB) and presented by Jerzy Wisniewski to the Members. This document will be available soon.
Appointments
UIC Director General Mr Jean-Pierre Loubinoux announced the following appointments within UIC working bodies and UIC HQ:

- Christian Chavanel, currently Director Interoperability and Standardisation at SNCF, as Director Rail System as of 1 July 2019.

The UIC General Assembly paid tribute to all the work, involvement and progress achieved by Marc Antoni, Rail System Director from January 2015 to July 2019: “curiosity, humility, respect are the keys to building the railway brotherhood”.

Finance
The General Assembly approved the 2018 accounts, noted the current financial situation and the projections for 2020.

Relations with partner organisations and third parties
One agreement and three Memorandum of Understanding were signed or approved during the General Assembly.

- Agreement signed with UIRR, the International Union for Combined Rail/Road (UIRR) Transport, in presence of Sandra Géhénot, UIC Director for Freight and Mr Ralf-Charley Schultze, President of UIRR. The UIC has developed a specific structure to support the development of combined transport (GTC), in particular to develop cooperation at international and European levels with a view to advancing and promoting intermodal techniques and making them reliable, competitive and better-suited to the requirements of the market and the environment. Having enjoyed a regular work relationship with UIRR for many years, the parties now wish to consolidate the relationship and better define the perimeter of their joint work in order to propose concrete results in the chosen areas for their collaboration.

- Memorandum of Understanding with the Association of Latin America Railway Association (ALAF), in presence of Marc Guigon, Coordinator of UIC Latin American Region and José Nicanor Villafane, Secretary General of ALAF. ALAF was created with the purpose or promoting safe, efficient and economic rail transport in Latin America. ALAF and UIC have decided to reinforce their cooperation, assistance and exchange of knowledge in the framework of a Memorandum of Understanding.

- Memorandum of Understanding with the National Association of passenger transport of Brazil (ANPTrilhos), in presence of Marc Guigon, Coordinator of the UIC Latin American Region and Joubert Flores, President of ANPTrilhos. ANPTrilhos is the National Association that represents the passenger rail operators and the rail sector in Brazil and promotes passenger rail transport. ANPTrilhos and UIC wish to promote and reinforce cooperation, assistance and exchange of knowledge and experience among them in an adequate general framework to establish cooperation and a long-term partnership among themselves in a number of selected areas.

- Memorandum of Understanding with Monash University. Monash University’s Institute of Railway Technology is part of the Australian University and one of the main technology service providers to heavy haul railway operations and leading mass transit railway systems; it provides a "one-stop" technology access point for the international railway industry. The Institute of Railway Technology is continuously developing new technologies to support increasing productivity and safety requirements at the same time as reducing risks and costs, ultimately improving the bottom line for its enterprise partners. Anticipating a future membership of Monash University, UIC and Monash University have decided to cooperate on a number of mutually beneficial fields of activities in the framework of an MoU signed in Manila last month and approved by the General Assembly.

Membership
During this General Assembly, 5 new Members were welcomed by UIC:
Africa:
-Zambia Rail (ZRL) as associate member

Asia-Pacific:
-Tongji University (China) as affiliate member
-Department of Transport and Main Roads of Queensland (TMR) as affiliate member

Europe:
-KEOLIS (France) as associate member
-University of Pardubice (Czech Republic) as affiliate member

Mr Abbas Nazari, UIC Representative of the UIC Middle East Regional Office, on behalf of Mr Saeid Rasouli, Vice-Minister for Roads and Urban Development, Chairman of the Board and President of Iranian Railways RAI, invited participants of the General Assembly to the International Conference on Railway stations UIC nextstation that will be held in Tehran on 11-13 November 2019. The brochure is available here: bit.ly/31M0nTU

Mr Wang Tongjun, Vice President of China State Railway Group, Co.,Ltd., invited Members to the UIC World High Speed Congress to be held from 30 June to 2 July 2020 in Beijing.

The next UIC General Assembly will be held on 11 December 2019 in Paris.

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