

# 7<sup>th</sup> UIC nextstation conference



## UIC nextstation “Railway Stations Boosting the City” TEHRAN 2019

# CALL FOR PAPERS

11-13 November 2019  
TEHRAN, IRAN

<https://nextstation.org/>



Organised by



INTERNATIONAL UNION  
OF RAILWAYS

# Welcome

The International Union of Railways is pleased to announce the 7<sup>th</sup> UIC nextstation conference on railway stations organised together with the Railways of the Islamic Republic of Iran. The UIC conference will be held on 11 to 13 November 2019 in Tehran, Iran.

UIC is the worldwide organisation for the promotion of rail transport at a global level and collaborative development of the railway system. It brings together some 200 members on all 5 continents, among them rail operators, infrastructure managers, railway service providers, etc. UIC maintains close cooperation links with all actors in the rail transport domain right around the world, including manufacturers, railway associations, public authorities and stakeholders in other domains and sectors whose experiences may be beneficial to rail development. The UIC's main tasks include understanding the business needs of the rail community, developing programmes of innovation to identify solutions to those needs and preparing and publishing a series of documents known as IRS (International Railway Solutions) that facilitate the implementation of the innovative solutions.

Dear Members,  
dear Partners,

Since their development, stations have always been interesting places. Places of interface between intracity and intercity mobility, between all modes of transport, in a sustainable combination. Beyond their historic importance, we have to remind their role in global travel, of which they are the cause, the consequence, and the symbol. Around the world one million kilometers of rail infrastructure carry one million trains every day. But on this huge network each station is unique as a social mirror of its city, its country, its people.

Railway stations have also the capacity to make us dream, to dream of the smart mobilities of tomorrow, by inviting younger generations to dream even higher and smarter than the heritage our forefathers left us.

In a nutshell, here is the spirit of the last UIC nextstation conference, which took place in 2017 in Madrid. Which now transmits the torch to the Tehran conference to be held in November 2019

I give the floor to François Davenne, upcoming Director General of UIC, who will make the transition with Tehran edition.



*Photo credit: UIC / Philippe Fraysseix*

**Jean-Pierre LOUBINOUX**  
**UIC Director General**



*Photo credit: UIC / Juliette Jem*

UIC nextstation usually gives the opportunity every two years to bring together all the actors involved in this complex object that a station is. This year, the theme is “Railway Stations Boosting the City”, that is to say that we will gather actors from all horizons to understand what stations bring to the urban life, taking into account all the possible angles.

Indeed, a station is the entry point to the backbone of the railways. It is now well understood, as transport and structural functions to the city, railway stations must be adapted to the new characteristics of the city, and because the city is changing, the station must follow the same model. Which means that if cities turn into smart cities, stations have to become smart stations. This is one of the main strategic axes which form the station sector activity.

We are living in an increasingly digital world, and what we will explore is the capacity of the stations of the future to play their role of smart interfaces. Stations should interface smoothly with the complex ecosystem of the local transports, whether they are public or private, on one hand, and with the rail system, on the other hand, that ensure both regional and long-distance transport. We have here a huge technical challenge, in particular for dealing with big data management in order to offer the best services possible, but also privacy and a high level of cyber security.

Beyond those technical aspects, we have above all a common purpose. We all know that whatever will happen, urban mobility will increase, and there is a very simple reason for that: we will live increasingly in cities, not only in Europe, Asia or Middle-East, but also in Africa. If we want our cities to offer healthy, safe and sustainable public space, we need to transform the stations of today into the smart connecting nodes of the polycentric cities of tomorrow.

From our collective thinking during the UIC nextstation event in Tehran in November 2019 will emerge concrete and shared solutions. Particularly the role of the station in generating the cities.

**François DAVENNE**  
**UIC Deputy Director General**



*Photo credit: RAI*

On 11 - 13 November 2019, the Railways of I. R. Iran (RAI), under the auspices of the International Union of Railways (UIC), will be hosting the 7<sup>th</sup> edition of UIC nextstation 2019 Conference in Tehran.

UIC nextstation 2019 will be dedicated to the theme “Railway Stations Boosting the City”. Being a subject of interest for the rail transport players and experts, the event will be a platform for decision-makers, representatives of industries and academic individuals to share information and exchange experiences concerning the latest developments on designing and operating rail stations across the world, stations governance, multimodality of stations, security, etc.

During the conference, we would like to discuss the future of railway stations’ needs with a systemic approach, its connectivity with the city and how the railway stations feed commercial and social ties.

Nowadays, policy-makers and transport activists pay serious attention to certain concepts such as commercialization, economization of activities, improvement of efficiency and quality of services. To achieve these goals, it is necessary to create certain conditions such as the modernization of railway stations. In this regard RAI, as one of the largest rail networks in the Middle-East, is pleased to host the UIC nextstation 2019 for the first time in the region.

**Saeid RASOULI**  
**Vice Minister and RAI President**





*Save the date  
and join us in  
Tehran on 11-13  
November 2019*

The government of the Islamic Republic of Iran has put rail development on top of its priorities and the 6<sup>th</sup> Development Plan (2016-2021) of the country has foreseen that rail freight transport is to be increased from the present 12% to 30% and passenger transport from the present 8% to 20%.

Presently the Railways of the Islamic Republic of Iran owns 13000 kilometres of rail lines, 6500 km of new rail lines under construction and there 25000 freight cars, 1900 passenger coaches moving on its rail network.

The rail network of Iranian Railways (RAI) is currently connected to the railways of the CIS countries via the Sarakhs border as well as the Incheh Burun borders with Turkmenistan. It is connected to Turkey's railway via the Razi border, to Pakistan railways via the Mirjaveh border and to Azerbaijan via the Astra border. The Iranian railway network has also been developed and extended to the Iraq border in Shalamcheh and also to the Afghanistan border. It is also linked to the Persian Gulf and the Caspian Sea and has the possibility of combined transportation.

# *UIC nextstation 2019*

## *Call for papers*

Any person who would like to attend the 7<sup>th</sup> UIC nextstation conference as a speaker must consider the following information.

### **Conference overview**

7<sup>th</sup> UIC nextstation conference “Railway Station Boosting the City”, on 11 to 13 November 2019

### **Conference theme**

The 7<sup>th</sup> UIC nextstation conference is launching a call for papers to invite potential speakers on the theme of “Railway Stations Boosting the City”.

### **Preliminary conference programme**

The event will be composed of two parts, the first two days will focus on the conference and the next day on the technical visit at the cultural city of Isfahan, a UNESCO heritage site.

The conference part will include opening and closing ceremonies as well as plenary and parallel sessions.

# “Railway Stations Boosting the City”

## Sunday - 10 November 2019 (Tehran)

@ Evin Hotel

18:00 Registration

20:00 Welcome Cocktail

## Monday - 11 November 2019 (Tehran)

@ Evin Hotel

08:00 Registration

09:00 Opening Ceremony

10:30 Coffee break, visit of the trade exhibition

11:00 1<sup>st</sup> Round Table: Rail Based City

12:30 Lunch Break, visit of the trade exhibition

14:00 Parallel Sessions 1

1.A Station Design 1

1.B Sustainability

15:30 Coffee Break, visit of the trade exhibition

16:00 Parallel Sessions 2

2.A Smart solutions for stations

2.B Services & Commercial activities

18:00 End of the Parallel Sessions

20:00 Gala Evening, Official Dinner

## Tuesday - 12 November 2019 (Tehran)

@ Evin Hotel

08:00 Registration

09:00 Parallel Sessions 3

3.A Station Design 2

3.B Mobility, Accessibility & Door-to-Door solutions

10:30 Coffee break, visit of the trade exhibition

11:00 Parallel Sessions 4

4.A Safety & Security

4.B Station Management & Financing

12:30 Lunch Break, visit of the trade exhibition

14:00 2<sup>nd</sup> Round Table: Generating Added Values for Cities: Main Challenges

15:30 Coffee break, visit of the trade exhibition

16:00 Closing Ceremony

17:00 End of the 7<sup>th</sup> UIC nextstation conference and departure to Isfahan

## Wednesday - 13 November 2019 (Isfahan)

Technical and Cultural Visits

Back to Tehran

## Parallel sessions

As in previous editions, the scientific committee of the conference has decided to give the participants the choice to attend 8 parallel sessions over 2 days.

### DAY 1



Station Design 1

or



Sustainability



Smart Solutions  
for Stations

or



Services &  
Commercial  
activities

### DAY 2



Station Design 2

or



Mobility,  
Accessibility &  
Door-to-Door  
solutions



Safety & Security

or



Station  
Management &  
Financing





## Description of parallel sessions

### STATION DESIGN 1

How the station **fits into the design of the city is one of the issues**. Railway stations worldwide are assuming the role of urban centers. More than just relevant for transport purposes, stations are developing into attractive hubs that stimulate the socio-economic fabric of the city. **Urban planning** must be able to integrate the station's functions, including new ones. The city's **master plan** for urban mobility matter must also be questioned. Is the intensive use of the private car still the most appropriate model? How can these conventional mobilities be replaced by the **Transit Oriented Development** concept while being more efficient and less costly for the city and its citizens? What is the **stakeholders' management approach** in this regard?



### SUSTAINABILITY

The railway stations must be able to provide more solutions than it already provides. Today's major challenge is to how to apply the challenges of **sustainable development goals** to the operation of stations. **Green solutions** in terms of **energy management**, infrastructure **life cycle**, **green procurement**, **social role** and **resilience** will determine the future of stations.



## SMART SOLUTIONS FOR STATIONS



Held in Madrid, the 2017 UIC nextstation conference addressed **best practices** for **smart stations** in **smart cities**. With the emergence of new challenges in railway station management, the **Internet of Things** (IoT) is delivering smart solutions to enhance the passenger experience. **Digitalisation** is driving digital transformation in stations. Data is being gathered ever more securely and efficiently in stations worldwide, and **smart data management** may be the key to reinforcing the railway station as a central facet of citizens' daily lives.

## SERVICES & COMMERCIAL ACTIVITIES



While rail is an excellent mode of transport for both short and long journeys, there is benefit to be had from exploring **new in-station functionalities**. The station plays a central role not only because of its central location in the mobility chain, but also in terms of customers' and citizens' **commercial and service requirements**. The efficiency of rail transport must be complemented by **efficiency of time spent** in the station. It is important to identify ways to make the station more useful not only for **passengers and commuters** but also for **tourists**. Let us not forget that **stations in rural areas and small stations** also have a very important role to place in relation to the social structure of cities. Stakeholders must work together to identify and develop future opportunities in this respect.

## STATION DESIGN 2



The emergence of **Building Information Modelling** (BIM) for construction of new railway stations brings with it the prospect of greater efficiency in project delivery and asset management. Another useful tool is the **Building Management System** (BMS). The Digitalisation will be used extensively to manage construction in the future, but it is important not to lose sight of the need to adapt this new way of technology to **local architectural identity** and **historical heritage**. **Stations must be designed**, to be **more resilient** and to adapt to changing circumstances, particularly with regard to **climate change**.

## MOBILITY, ACCESSIBILITY & DOOR 2 DOOR SOLUTIONS



With the rise of sustainable mobility, **new means of mobility** and **e-mobility** are taking the lead in the development of environmentally-friendly vehicles. However, new modes of transport such as **shared mobility** and **micro/slow mobility** are becoming increasingly popular among urban citizens, representing a clear shift towards mobility as a service – the **MaaS** model. As patterns of intermodal passenger transport continue to evolve, the station is fast becoming a crucial center for integrated intermodality. Implementation of a **co-design framework between cities and railways for Door-to-Door projects is therefore important in order to secure accessibility, flexibility and universality.**

## SAFETY & SECURITY



Stations are not only a gateway to the rail system; they are also centers of mobility and are lively and popular meeting places. They are “calling cards” for cities and, increasingly, offer urban retail and service facilities across a balanced range of industries. Nevertheless, given the challenges posed by the increasing complexity of railway stations, the **need for a comprehensive station management approach** becomes all the more important in order to provide a great **experience for customers** in a **safe and secure environment**, even in **crowded situations. Which are the policies** that need to be developed to ensure that the stations of the future can meet these challenges?

## STATION MANAGEMENT & FINANCING



This parallel session is intended to **be free and open to all** to facilitate any discussions that may compliment the other sessions. In particular, financial analysis is very important for UIC members. Infrastructure development is increasingly wide-ranging and complex, resulting in higher construction costs. New **financing methods** must therefore emerge in order to meet these needs.

*All additional topics are welcome and will be subject to further analysis by the UIC scientific committee, which will give its decision as soon as possible after the submission.*

# *Abstracts*

## **Abstract submission procedure**

Abstracts must be submitted through the official UIC nextstation conference website (<https://nextstation.org/>).

For international attendees, no other form of submission is accepted. One speaker per presentation.

## Required content of abstract submission

To complete the Abstract submission procedure, you have to share with the International Union of Railways (UIC) the following items:

- 1) Your main choice of Parallel Session and your potential second choice
- 2) Reason for your choice of subject matter (how does your subject fit into the general context of the conference and the parallel session?)
- 3) Complete the Applicant Form on the UIC nextstation website (<https://nextstation.org/application-form-for-speakers>)
- 4) Accept the UIC property agreement condition to share your presentation after the conference

## Copyright

At the time of submitting your paper proposal, you will be asked to also agree to a copyright transfer statement to transfer publication and other rights to the International Union of Railways in order to establish a data base of knowledge on the UIC nextstation website (<https://nextstation.org/>).

## Criteria for the speaker selection

- A) Correlation and relevance with the theme of the conference and the Parallel Sessions
- B) Innovative &/or Disruptive approach of the railway stations
- C) Quality of the Abstract
- D) Pathway to implementation for railway managers (applicability)
- E) Similar speech given at previous conferences will not be accepted (except for specific cases)
- F) Working language is English, no other language allowed for abstract and presentation



## Process after acceptance of your abstract/registration

Selection of papers will be done just afterward and will be communicated by 15<sup>th</sup> August 2019, directly to the applicant. In case the lecture is approved, the final presentation will have to be provided by 4<sup>th</sup> October 2019, exclusively in English and according to the guideline/template that will be provided in due time by UIC.

UIC will provide all the needed information on the UIC nextstation conference website <https://nextstation.org/>.

The registration for the speakers is free of charge. After confirming your participation as a speaker, you will receive a code to register for free in the “registration” area of the website.

We hope, on behalf of UIC and RAI, that you will be able to support this important event and we look forward to receive your proposal.

## Reach the conference

For the smooth running of the conference, every speaker is supposed to reach and attend the UIC conference. The International Union of Railways provides any useful information for getting visa, journey and accommodation.

If you can't attend the conference, speakers are supposed to find an alternative solution, such as a representative person to introduce the speech.

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**Should you need any further information concerning this event, you may contact:**

**Mr Clément GAUTIER, Coordinator of the UIC nextstation conference: [gautier@uic.org](mailto:gautier@uic.org)**

**Ms Barbara MOUCHEL, Organisation: [mouchel@uic.org](mailto:mouchel@uic.org)**





*Looking forward  
to welcoming you  
in Tehran*

<https://nextstation.org/>



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