



# Economic and Social Council

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## Economic Commission for Europe

### Inland Transport Committee

#### Working Party on Rail Transport

##### Seventy-second session

Geneva, 21-23 November 2018

Item 3 of the provisional agenda

##### Workshop on “Innovation in the railways”

## Innovation in the railways

### Submitted by the secretariat

#### I. Background

1. The railways across the ECE region have evolved significantly in recent years as a result of the continued innovation in the sector. This innovation has occurred on the infrastructure, on the rolling stock and also in the way in which passengers travel and freight is moved on the railways.
2. The Pan-European region is often seen as being at the forefront of railway innovation and developments in ITS. Important innovations include such things as the European Rail Traffic Management System (ERTMS) for signalling, ever increasing maximum allowed speeds for rolling stock (and infrastructure), new practices in ticketing and demand management and real-time tracking and tracing of freight.
3. The Working Party has continued to follow this evolution with a dedicated item in its agenda on ITS and innovation in the sector. To provide a more detailed update on key trends in this area the Working Party agreed at its seventy-first session to dedicate a workshop on this subject at the seventy-second session.
4. In order to provide member States detailed information on railway innovation, presenters from countries, international institutions, operators and the private sector will provide their experiences and good practices.
5. The workshop will set out the main statistics on innovation in the railways showing where innovation takes place in the sector as well as the experiences of individual member States in implementing cutting edge technology. The workshop will initially look at national and international policies to facilitate the development of new technologies and practices and then focus on innovations and best practice in the following areas:

- Infrastructure: railway infrastructure has seen significant innovation that has changed the face of railways. This session will focus on developments such as high-speed railway lines, new and safer signalling technology, new approaches to gauge changing, and new techniques in asset management.
  - Passenger rail transport: often the most visible innovations are those that are experienced by passengers. This session will look at the innovations that have brought into the passenger rail market, areas that could be covered will include the introduction of on-board internet services, improved passenger information, new rolling stock, and innovative ticketing and demand management solutions as well as behind the scenes innovations such as those relating to cyber security.
  - Freight rail transport: given the often disadvantaged competitive position of rail freight, operators have sought a number of technological solutions such as tracking and tracing and new loading units to be able to extract further business for the freight sector.
6. A detailed agenda will be published on the Working Party website prior to the workshop.

## **II. Next steps**

7. The secretariat will prepare a summary of the workshop and will publish it on the Working Party website. The Working Party may wish to discuss the outcomes of the workshop and further actions in relation to this subject.
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