



The UIC Energy Efficiency and CO2 Emissions Expert Network is happy to invite you to take part in the workshop "Energy efficient time table planning" that will be held in Brussels on 20 February 2017 in Infrabel, near Brussels-Midi station.

### Background

Eco-driving, eco-stabling and measuring energy consumption and savings have been at the core of our discussions and workshops over the past years.

*At the earliest stage of the train production lie potentials for energy savings: the timetabling step.*

An efficient timetable is indeed regarded as a timetable without conflicts and with some spare time, which in real operation can be used to return to a punctual running of trains.

By avoiding conflicts and stops, the robustness of the timetable also has a significant impact on the energy consumption of the global system, as spare time can be used by Driving Advisory Systems or Automatic Train Operation to reduce energy consumption and energy costs.

The goal of this workshop is thus make a first attempt to break new grounds with a view to achieve greater energy efficiency by means of optimised timetabling.

If participants confirm their interest in digging deeper into the topic, other meetings could then be organized in the future.

### Workshop highlights

- Influence of a time table planning on energy efficiency
- Experience from other transport modes, e.g. aviation (Ralph Luijt, NS);
- Presentation of specific software and IT systems
- Experiences from Railway undertakings and Infrastructure Managers;
- Beyond the state-of-the art: Open discussion.

### Venue

Infrabel  
7th floor, zaal Claey's,  
Frankrijkstraat 85  
1060 Brussels, near Brussel-Zuid

### Registration

To register for the workshop and obtain practical information, please follow the link below:

<https://events.uic.org/energy-efficient-time-tabling-workshop-20-february-2018-brussels>

For more information, please contact

[dekeyzer@uic.org](mailto:dekeyzer@uic.org) or tel + 33 1 44 49 20 37 – mob + 33 6 12 62 02 94

## Draft Agenda

Moderation: Chloé Lima-Vanzeler (SNCF) and Bart Van der Spiegel (Infrabel)

11:00	<i>Sign in</i>	
11:30	<b>Welcome</b>	Isabelle De Keyzer (UIC)
11:35	<b><u>Introduction</u></b> Influence of a robust time table planning on energy efficiency	Bart Van der Spiegel, Infrabel
11:55	<b><u>Experience from other transport modes</u></b> <ul style="list-style-type: none"> <li>The case of aviation</li> </ul>	Ralph Luijt, NS
12:15	<b><u>Presentation of specific software and IT systems</u></b> <ul style="list-style-type: none"> <li>TTG timetabling solution</li> <li>Alstom solution</li> <li>Applications to verify the robustness of time tables</li> <li>The case of SBB: <ul style="list-style-type: none"> <li>Findings of the Pilot of energy efficient timetable and DAS</li> <li>Goal and steps for the development of an energy efficient track "EcoTrack"</li> </ul> </li> <li>Siemens solution</li> </ul>	B. Lambla, P. Pudney, TTG D. Mulard, A. Fievet, Alstom F. Weymann, ViaCon Ph. Keiser, SBB  A. Hubert, Hacon
13:30	<b>Lunch</b>	
14:30	<b><u>Experiences from Railway undertakings and Infrastructure Managers:</u></b> <ul style="list-style-type: none"> <li>ProRail &amp; NS</li> <li>Energy-efficient timetabling for mixed train flow</li> <li>Lineas</li> <li>NMBS-SNCB</li> </ul>	G. Scheepmaker, NS Yu. Anfinogenov A., RZD M. Sterckx, Lineas Chr. Tassin, NMBS-SNCB
15:45	<b><u>Beyond the state-of-the art:</u></b> Open discussion  <b><u>Conclusions and next steps</u></b>	
16:30	<b><u>End of the day</u></b>	

### **Optional/for information:**

17 :30	European Railway Awards 2018 Networking Event	
18 :30	Awards Ceremony	

**Note:** In case you want to attend the European Railway Awards 2018, you will get practical information and access to the registration form here:

<http://www.europeanrailwayaward.eu/registration.html>