



# NeTIRail-INFRA final conference Ljubljana, Slovenia 24 May 2018

## Detailed Programme & Practical Information



*An event co-organised by:*





On behalf of the H2020 EU-funded project NeTIRail-INFRA we would like to invite you to the

## **FINAL CONFERENCE of the NeTIRail-INFRA Project** **to be held on 24 May 2018 in Ljubljana**

The NeTIRail-INFRA project is a 3-year, 5.4m€ collaborative R&D project funded by the European Commission, sponsored by INEA within the Horizon 2020 programme. NeTIRail is coordinated by The University of Sheffield, and has a total of 13 partners from 8 different countries.

### **Background to NeTIRail-INFRA**

The NeTIRail-INFRA concept was based on designing railway infrastructure and monitoring tailored to the needs of specific lines to ensure the most cost effective and sustainable solution for different line types and geographical locations.

There is particular emphasis in the project on lesser used lines which are marginally economical and at risk of closure or require substantial public subsidies. As well as the lesser used lines the project also considers capacity constrained and freight dominated lines. And therefore, as well as identifying and developing new technologies, the project has also focused on the societal and economic benefits of marginal routes and the impact of the project's innovations to society and the economy.

With this vision, NeTIRail-INFRA main scope has been to:

- Identify the appropriate existing technologies for different line types and climate
- Develop new technologies for cost effective transition zones, low cost electrification and measurement and monitoring technologies
- Optimise S&C maintenance
- Assess the societal and economic benefits of lesser used lines and assess the impact of the technologies developed within the project
- Produce a GIS based decision support tool to aid asset managers in identifying the most appropriate technologies for their lines.



### **Conference highlights**

- Presentation of all of the technologies developed within the NeTIRail-INFRA project
- Demonstrations of sensor technologies and the decision support tools
- Visit of the Slovenia railway museum, evening dinner and networking lunch

This public event is open for experts from all across Europe's rail infrastructure industry and academia.

**Join us! It will be a fantastic time for looking at the future scenarios  
for railways in 2030/2050 and of course, to boost networking**

**Register online at:** <http://netirail.eu/-News-and-Events-3->

**Registration is mandatory and free of charge but only a limited number of participants can be welcomed on a first-come-first-served basis**

# NeTIRail-INFRA final conference

## Ljubljana, 24 May 2018

### Agenda

Time	Title	Who
09:00-09:30	Registration and coffee	
09:30-09:45	Welcome and project overview	David Fletcher, USFD
09:45-10:00	Wider economic benefit and economic incentives (WP1)	Andrew Smith, University of Leeds
10:00-11:00	<p><b>Track innovations and results (WP2)</b></p> <p>Overview</p> <p>A description of the Lean techniques for Switches &amp; Crossings employed and the key findings from case studies in Slovenia and Turkey</p> <p>Lubrication</p> <p>Innovative low-cost transition zone design and modelling</p> <p>Corrugation</p>	<p>Vlasta Miklavzin, Prometni Institut</p> <p>Jonathan Paragreen, USFD</p> <p>Hasret Sahin, INTADER</p> <p>Rahi Rahbari, USFD</p> <p>Alfredo Nunez, TU Delft</p>
11:00-11:15	Coffee break	
11:15-12:15	<p><b>Overhead line innovations and results (WP3)</b></p> <p>Current and voltage monitoring, for the overhead contact line system</p> <ul style="list-style-type: none"> <li>Description of the developed system</li> <li>Experiments results presentation</li> </ul> <p>Acceleration monitoring system, for the overhead contact line system</p> <ul style="list-style-type: none"> <li>Description of the developed system</li> <li>Experiments results presentation</li> </ul> <p>Modelling of low cost trolley wire type overhead line system compared to catenary system</p>	<p>Tudor Popa, ADS Electronics</p> <p>Rahi Rahbari, USFD</p>



12:15-13:15	<p><b>Track monitoring innovations and results (WP4)</b></p> <p>Axle box acceleration measurements in Romania: Faurei test ring and line Braşov to Zărneşti</p> <ul style="list-style-type: none"> <li>Using a train in operation (with passengers onboard). Condition of the rails using Axle Box Acceleration in the line Braşov to Zărneşti was captured. This conducted to analyze trade-offs between number of interventions and the effects on the rail condition performance.</li> <li>Estimation of rail condition of the Faurei test ring was estimated. Field inspections proved the validity of the approach under different speeds</li> </ul> <p>Dynamic measurements in Slovenia</p> <ul style="list-style-type: none"> <li>Dynamic technology and measurement equipment</li> <li>Comparison with other monitoring technologies</li> </ul> <p>Application for comfort monitoring, using low cost Smartphone</p> <ul style="list-style-type: none"> <li>Summary description of the developed application</li> <li>Results presentation of experiments</li> </ul> <p>Acceleration monitoring system, for plain line and S&amp;C</p> <ul style="list-style-type: none"> <li>Summary description of the developed system</li> <li>Results presentation of experiments</li> </ul> <p>Upgrading old interlocking systems</p> <ul style="list-style-type: none"> <li>Summary description of the developed solution.</li> <li>Results presentation of experiments</li> </ul>	<p>Alfredo Nunez, TU Delft</p> <p>Vlasta Miklavzin, Prometni Institut</p> <p>Lucian Emanuel Anghel, ADS Electronics</p> <p>Tudor Popa, ADS Electronics</p>
13:15-14:00	Lunch	
14:00-14:40	<p><b>GIS asset management and decision-making tool demonstration (WP6)</b></p> <p>Overview</p> <p>Development of the planning tool</p> <p>Demonstration of the tool</p>	<p>Airy Magnien, UIC</p> <p>Olivier Boudou, UIC</p> <p>Kardelen Karatas, UIC and Lucian Emanuel Anghel, ADS Electronics</p>
14:40-15:15	<p><b>Societal impact of innovations (WP5)</b></p> <ul style="list-style-type: none"> <li>Informed decisions about railway innovations require an assessment of all possible effects. These include effects on society beyond those usually taken into account in a traditional cost-benefits analysis.</li> <li>Presentation of the results of the NeTIRail-INFRA societal assessment of selected case studies</li> </ul>	<p>Elisa ORRU, University of Freiburg</p>
15:15-15:55	<p><b>Economic impact of innovations and economic incentives (WP1)</b></p> <p>The economic appraisal of NeTIRail railway innovations</p> <ul style="list-style-type: none"> <li>Economic understanding of engineering processes</li> <li>Cost-benefit analysis of Netirail innovations</li> </ul>	<p>Manuel Ojeda Cabral, University of Leeds</p> <p>Jan-Eric Nilsson, VTI</p>
15:55-17:00	Questions, feedback and close of conference	ALL
	Drink reception and networking	

## Venue

Wednesday 23 May 2018

Guided tour of the Slovenia Railway Museum and Networking dinner

**When:**

18:00 pm (guided tour)

19:30 pm (dinner)

**Where:**

Railway Museum  
Parmova 35  
1000 Ljubljana

Google map of the Railway Museum



Thursday 24 May 2018

NeTIRail-INFRA final conference

**When:**

9:00 am to 5.30 pm

**Where:**

Slovenske železnice, d.o.o.  
Kolodvorska 11  
1506 Ljubljana, Slovenia

**Meeting room:**

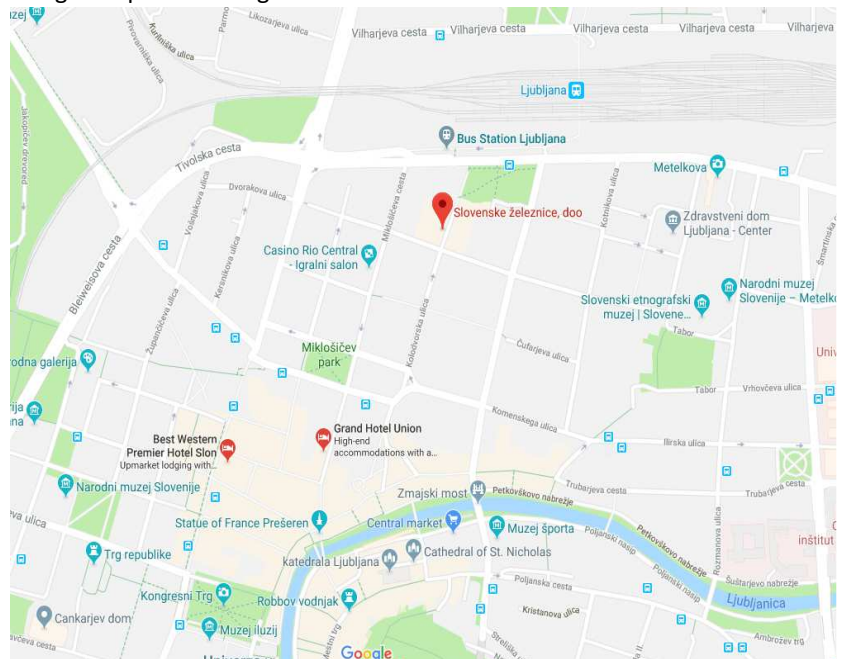
Conference hall "Steklena dvorana", basement floor

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Google map of the congress centre





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## Access to final conference venue:

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**From the Central Train and Bus Station and Shuttle service:** 5 minute walk.

The closest airport to get to Ljubljana is Ljubljana airport. Other airport connections are with Zagreb, Trieste or Venice airports. For the further way along the road to Ljubljana it is possible to take a bus or shuttle service.

### Transfer from Ljubljana Airport:

For transfer from Ljubljana airport there are good connections with Ljubljana by bus or shuttle services.

Bus and private airport transfer services:

<http://www.ljubljana.info/airport/bus/>

<http://www.fraport-slovenija.si/en/passengers-and-visitors/getting-here/>

Shuttle service:

- GoOpti: <https://www.goopti.com/en/>
- Markun: [www.prevozi-markun.com](http://www.prevozi-markun.com)





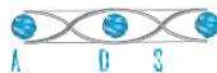
## List of hotels in Ljubljana

Name of the hotel	Rating	Room type	Indicative prices*	Distance from the venue	Contact / booking link
<a href="#">HOTEL INTERCONTINENTAL</a>	5*	Superior DBL/ TWIN room, SNGL use	215,00 €	400m	<a href="http://bit.ly/2InWhYq">http://bit.ly/2InWhYq</a>
		Deluxe room	235,00 €		
		Club room	275,00 €		
<a href="#">Central Hotel</a>	4*	DBL room, SNGL use	139,00 €	300m	<a href="http://bit.ly/2Gp7Xtj">http://bit.ly/2Gp7Xtj</a>
<a href="#">GRAND HOTEL UNION</a>	4*	DBL room, SNGL use	250,00 €	600m	<a href="http://bit.ly/2InifL4">http://bit.ly/2InifL4</a>
<a href="#">HOTEL LEV</a>	4*	DBL room, SNGL use	190,00 €	800m	<a href="http://bit.ly/2InifL4">http://bit.ly/2InifL4</a>
<a href="#">HOTEL CUBO</a>	4*	Single room	180,00 €	1,1km	reception@hotelcubo.com
		DBL room, SNGL use	190,00 €		
<a href="#">BEST WESTERN PREMIER HOTEL SLON</a>	4*	DBL Deluxe room, SNGL use	168,00 €	800m	sales@hotelslon.com
<a href="#">HOTEL VANDER</a>	4*	Small room, SNGL use	164,00 €	950m	reception@vanderhotel.com
		Large room, SNGL use	184,00 €		
<a href="#">NOX HOTEL</a>	4*	DBL room, SNGL use	110,00 €	6,6km	info@hotelnox.com
<a href="#">BIROKRAT HOTEL</a>	4*	Single room	110,00 €	3,7km	nastja.miklus@birokrat.si
		DBL/ TWIN room, SNGL use	135,00 €		
<a href="#">RADISSON BLU PLAZA HOTEL</a>	4*	Single room	171,00 €	4,2km	spela.zupanc@radissonblu.com
<a href="#">M HOTEL</a>	4*	DBL room, SNGL use	120,00 €	2,6km	info@m-hotel.si
<a href="#">HOTEL MRAK</a>	3*	DBL room, SNGL use	118,00 €	1,4km	sales@hotelmrak.si
		Apartments, sngl use	145,00 €		
<a href="#">CITY HOTEL</a>	3*	Comfort DBL room, SNGL use	135,00 €	350 m	<a href="http://bit.ly/2GsQaBB">http://bit.ly/2GsQaBB</a>
<a href="#">HOTEL PARK</a>	3*	Single occupancy	110,00 €	800m	meta.sajovic@hotelpark
<a href="#">HOTEL MEKSIKO</a>	3*	DBL room, SNGL use	118,00 €	1,2km	info@hotel-meksiko.si
<a href="#">LJUBLJANA RESORT HOTEL</a>	3*	Single room	65,00 €	5,1km	irena.stegel@epic.si
<a href="#">HOTEL STIL</a>	3*	Single room	85,00 €	6,6km	hotel@hotel-stil.si
<a href="#">A HOTEL</a>	3*	DbL/Twin room, SNGL use	112,00 €	3,7km	info@ahotel.si
<a href="#">GOSTIŠČE PRI POKU</a>		Comfort single room	85,00 €	8,4km	mateja@pripoku.com
		DbL standard room, SNGL use	75,00 €		

\* Prices do not include daily tourist tax



The University Of Sheffield.



### Facts and figures:

Total budget: €5,4 million

Duration: 36 months

Project start date: 01/06/2015

Project end date: 31/05/2018

Partners: 13 partners from 8 countries

Project coordinator: University of Sheffield

EU H2020 project

Grant agreement n° 636237

