# **ILCAD 2018**

# "Young level crossing users"



ZAGREB

**JUNE 7, 2018** 











**JUNE 7, 2018** 

# **MAIN ORGANISER**



# **HOSTS / CO-ORGANISERS OF THE CONFERENCE**





# **PATRONS**

# **President of the Republic of Croatia**



Ministry of the Sea, Transport and Infrastructure



Ministry of the Interior



**National Road Safety Programme of RH** 











**JUNE 7, 2018** 

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**JUNE 7, 2018** 

ILCAD (International Level Crossing Awareness Day) is a joint commitment continuing from the success of the first European Level Crossing Awareness Day held on 25th June 2009 in 28 countries raising public awareness on the dangers of misbehaviour at level crossings. Since then, UIC has been coordinating this worldwide event to raise public awareness about the dangers at level crossings.

ILCAD, spearheaded by the UIC, draws railway industry representatives, road authorities, academics and more from around the world - aims to raise awareness about the dangers associated with the road/rail interfaces (level crossings).

Each year a partner country of ILCAD hosts the International Level Crossing Awareness Day (ILCAD). This year is a 10<sup>th</sup> edition on ILCAD and conference will be held in Zagreb, Croatia. The previous editions of ILCAD were held in Montreal (2017), Riga and Tallinn (2016), Istanbul (2015), Lisbon (2014), Geneva (2013), Paris (2012), Warsaw (2011), Brussels (2010), Brussels (2009).

International Union of Railways (UIC), Faculty of Transport and Traffic Sciences from University of Zagreb and HZ Infrastructure (Croatian railway infrastructure manager) are pleased to host the 10<sup>th</sup> ILCAD international conference on June 7, 2018, in Zagreb, Croatia. An exhibition of level crossing technologies plus a road/rail safety village are set up parallel to the conference which will be followed by a technical visit on June 8 around Zagreb. The conference shall be broadcast on 7 June 2018 on ILCAD website <a href="http://www.ilcad.org/ILCAD-2018.html">http://www.ilcad.org/ILCAD-2018.html</a> and YouTube channel of the Faculty of Transport and Traffic Sciences project "Implementation of measures to increase safety of the most vulnerable road users at level crossings"

https://www.youtube.com/watch?v=ORTLQJ7bqDg&feature=youtu.be









# **QUOTES AND STATEMENTS**











**JUNE 7, 2018** 



# RENATO MAZZONCINI UIC CHAIRMAN AND CEO OF FS ITALIANE

fsitaliane.it



# **Message from RENATO MAZZONCINI**

FS Italiane strongly supports this UIC Campaign. It is crucial to raise awareness among European citizens on dangers at level crossings and on related safety rules. This campaign targets particularly younger generations who get involved in accidents while distracted by the use of smartphones or similar devices, just to name two main causes of accident. The FS Italiane Group has been committed for many years to improve safety cultures at level crossings and to prevent people risking their and others life. About twenty years ago, we started reducing the numbers of level crossings. In order to mitigate the effects of noncompliance on those still in place, we are installing state-of-the-art technologies. The ultimate goal is the safety of the entire railway system.









**JUNE 7, 2018** 



**JEAN-PIERRE LOUBINOUX UIC Director General** 

loubinoux@uic.org https://uic.org

www.uic.org











#UICrail

# **Message from JEAN-PIERRE LOUBINOUX**

The rail community that I represent as the UIC Director General is proud once again, year after year, to be consistently the driving force behind the creation of this International campaign on Level Crossings, ILCAD.

Thanks to its network of experts and its spirit of cooperation and solidarity, UIC's mission is to be also concretely at the service of lives, across the world.

Human factors are the main cause of road collisions (including at level crossings). This year, the theme of the awareness campaign is targeting the young users.

Whether pedestrians or cyclists, using their smartphones, GPS, headphones, etc. They must be aware of the risks at level crossings.

Their attention and responsibility for themselves and their friends is fundamental to save so many lives. The message of the ILCAD campaign this year is: "Don't beat the train!" And it is addressed to everyone, even though special attention is therefore focused on young people this year.

I wish all ILCAD partners a fruitful campaign today!









**JUNE 7, 2018** 



JEAN TODT

FIA President

UN SG'S Special Envoy for Road Safety

itodt@fia.com
http://www.fia.com



FEDERATION INTERNATIONALE DE L'AUTOMOBILE

# **Message from JEAN TODT:**

Crashes at level crossings deserve special attention. Although they might account for a limited proportion of road crashes, their severity makes them a key area of intervention. Their primary cause is inappropriate behaviour of road users: bad evaluation of risk, lack of attention, misunderstanding of road signs. This is why your event today is important: railway industry representatives, road authorities, academics and experts from around the world need to raise awareness about the dangers surrounding level crossings. The outcome of your work will help countries create an effective framework for the management of safety at level crossings. To this end, let me express two topics for your consideration. Firstly, we need a joint vision of what technological innovation, which minimises human error and violations, may look like. Secondly, railway and road managers need to work together at a national level to develop targeted level crossing safety campaigns and education programmes. This would create a preventive mechanism that will improve safety in the long term.









**JUNE 7, 2018** 



LIBOR LOCHMAN

CER Executive Director

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http://www.cer.be

# **Message from LIBOR LOCHMAN**

The deaths caused by accidents at level crossings account for almost one third of all railway fatalities. Our member companies are therefore constantly deploying innovative technologies to further improve safety at level crossings. At the same time, it is equally important to raise awareness and to promote safe behaviour of road users. CER therefore supports the International Level Crossing Awareness Day (ILCAD), now in its tenth edition, as a useful platform which encourages cooperation among rail companies as well as other related sectors, especially road.











**JUNE 7, 2018** 



# **ANTONIO AVENOSO**

**Executive Director** 



information@etsc.eu http://www.etsc.eu/

# **Message from ANTONIO AVENOSO**

We're delighted to support the  $10^{th}$  annual International Level Crossing Awareness Day to be launched in Zagreb.

"In many areas of transport safety, international cooperation and knowledge sharing can prevent needless deaths; level crossing safety is no exception. It's critical that policymakers, railway operators and road managers work together to end the avoidable tragedy of level crossing collisions.









**JUNE 7, 2018** 



DAVOR BOŽINOVIĆ

Minister

REPUBLIC OF CROATIA

MINISTRY OF THE INTERIOR



http://www.mup.hr

# Message from DAVOR BOŽINOVIĆ:

Level crossings are neuralgic points of every traffic system, and this can also be said for the traffic system in the Republic of Croatia. Especially in locations, where level crossings are secured only by vertical traffic signalling, this means that it is up to the road vehicle driver and his good or bad perception to notice an approaching train.

Besides, drivers these days are less focused due to the use of new communication devices, and this can be fatal to almost all road traffic participants, from motor vehicle drivers, to cyclists and pedestrians.

Making traffic participants aware that their mistakes unfortunately cannot be mended is a key message and we have to persist in conveying this.

In the implementation of the National road safety programme of the Republic of Croatia 2011-2020, funding was allocated for the project of Implementation of measures for the increase of safety for the most vulnerable traffic participants at level crossings. It is namely only educated children, who later on become young people, and finally adults, who can be aware of the consequences that arise in non-observance of traffic and related safety regulations. The Project is carried out successfully, and the following evaluations will provide judgement of its efficacy.

Thanks to innovative preventive-educational project measures, the International Union of Railways has recognized intense efforts made by Croatia, which are aimed at increasing the awareness of traffic participants and level crossing safety, which is why Croatia was given the opportunity to co-organize the ILCAD conference. We are so proud of this!

As Minister of the Interior of the Republic of Croatia, an institution which is in charge of the National road safety programme of the Republic of Croatia 2011-2020, I would like to wish all conference participants successful work and a pleasant stay in Zagreb.









**JUNE 7, 2018** 



NIKOLINA BRNJAC
State Secretary
REPUBLIC OF CROATIA
MINISTRY OF THE SEA, TRANSPORT AND INFRASTRUCTURE

http://www.mmpi.hr

# **Message from NIKOLINA BRNJAC:**

We are thrilled that this year's International Level Crossing Awareness Day is being hosted in Zagreb, Croatia, despite numerous other interested countries on the waiting list. This is a great honor not only to the Faculty of Traffic and Transport Sciences and HŽ Infrastruktura as co-organizers, but also to the Republic of Croatia as a whole.

Rail traffic safety is one of key priorities and a competitive benefit of all railway companies. Ministry of the Sea, Transport and Infrastructure and  $H\check{Z}$  Infrastruktura d. o. o. as its national railway infrastructure management company invests into rail traffic safety in different ways, from investing into technical and technological solutions, through continuous training of their staff to prevention campaigns, including in particular printing brochures intended for users of rail transport services and other stakeholders.

Our national railway infrastructure manager is responsible for securing 1511 railway crossings, out of which most installations have been functioning for more than 40 years. With the primary intention of improving safety level of road-rail and pedestrian crossings, the Ministry of the Sea, Transport and Infrastructure took on 3 May 2018 the Decision on adoption of the rail-road and pedestrian crossing securing plan for the period 2018-2022, the implementation of which will contribute to considerable improving of rail and road safety level in the Republic of Croatia. Solution of the safety problem at rail-road and pedestrian crossings is also covered by the Strategy of Traffic Sector Development in the Republic of Croatia in the period 2017-2030 as one of the measures for promotion of rail and road safety. To implement the measures covered by the Plan and the Strategy, the Ministry of the Sea, Transport and Infrastructure throughout HŽ Infrastruktura d. o. o. is planning to launch a, investment cycle aimed at improving road and rail safety by investing 250 million kn in the period 2018-2022 into securing road-rail crossings. Besides, financing for 50 road-rail crossings is provided from the World Bank loans, for 114 crossings from state-guaranteed credit facilities. There are also plans to apply for financing of 100 more crossings from EU funds through the Operational Competition and Cohesion Programme.

Last but not least, Ministry of the Sea, Transport and Infrastructure with continue their efforts into modernization of the largest possible number of road-rail crossings, to improve safety of all traffic participants.

In conclusion, current international practice has shown that the most efficient way of changing the conduct and reducing the number of accidents at road-rail crossings is training of traffic participants with emphasis on risks and potential consequences of ignoring basic traffic rules. We are therefore pleased that all stakeholders have recognized importance of this event and we hope that this year's International Level Crossing Awareness Day will achieve its stated objectives and thus produce expected results.









**JUNE 7, 2018** 



# DANIJELA BARIĆ Head of Chair for Road Transport Technology UNIVERSITY OF ZAGREB FACULTY OF TRANSPORT AND TRAFFIC SCIENCES







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http://www.fpz.unizg.hr/projekt-sigurnost-na-zcp/

# Message from DANIJELA BARIĆ

I am proud that Faculty of Transport and Traffic Sciences together with the International Union of Railways (UIC) and HZ Infrastructure hosts this year's International Level Crossing Awareness Day, especially as this year is 10th anniversary of ILCAD conference.

Safety at Level Crossings (LC) is a shared responsibility of the road and rail sector. Despite technical and technological improvements in Level Crossing infrastructure and safety systems as well as interventions using intelligent transport systems, the number of accidents at LCs remains high, and studies point to LC users' risky behaviour as the key factor. Even the most advanced protection systems will not suffice if the users do not obey or do not understand traffic rules regarding level crossings. Therefore, investing in transport infrastructure is very important, but investing in education and prevention is of even greater importance. There should be more emphasis on educating users on level crossing dangers, preventive programs and systematic training programs for traffic participants, which aim at changing the patterns of their risky behaviour at LC.

Faculty of Transport and Traffic Sciences has several research projects regarding safety at LCs. One of the recent projects is "Implementation of measures to increase safety of the most vulnerable road users at level crossings" (Website: <a href="www.fpz.unizq.hr/projekt-siqurnost-na-zcp/">www.fpz.unizq.hr/projekt-siqurnost-na-zcp/</a>
YouTube channel: <a href="https://www.youtube.com/channel/UC 8WyiVQmWEX7NIHpadRj6A">https://www.youtube.com/channel/UC 8WyiVQmWEX7NIHpadRj6A</a>). This project is a part of the National program of road traffic safety of the Republic of Croatia 2011 – 2020 run by the Ministry of the Interior of the Republic of Croatia. To make the measures recognizable to LC users, each project measure has a name that is also a message: "Safety begins with you", "Your opinion is important", "Book Month", "Traveling exhibition - Safety and design", "Conscientious driver", "Social Networks", "Media", "LC-locator", etc. We have designed and applied new methods of education using modern technologies such as Virtual Reality (VR). We hope that this will contribute to increasing the awareness of the LC users.

Let the spirit of ILCAD be in our minds not only for one day in a year, on ILCAD day, but every day. Only then will we achieve the desired "Vision Zero".









**JUNE 7, 2018** 



# IVAN KRŠIĆ Board President of HŽ INFRASTRUKTURA



Ivan.Krsic@hzinfra.hr
http://www.hzinfra.hr/

# Message from IVAN KRŠIĆ

We are extremely honoured that HŽ Infrastruktura is one of the organizers and hosts of the 10th International ILCAD conference, which is this year held under the title Safety of Young People at Level Crossings. As railway infrastructure manager, this is one of our basic determining characteristics and for this very reason, our business activities are directed at improving the quality of the rail network and infrastructure, and thus to the improvement of rail traffic safety level. Since the conference topic is connected to safety of younger population in the railway area, I am very pleased to emphasize that almost 20 years of our engagement in education and promotion is primarily directed at children and young people. We believe that this jubilee ILCAD conference will contribute to strengthening the awareness of how important it is to observe traffic culture and regulations of all traffic participants, especially young population, which is the focus of this conference.









**JUNE 7, 2018** 



ŽELJKO UKIĆ
CEO
HŽ PASSENGER TRANSPORT Limited Liability Company



http://www.hzpp.hr

# Message from ŽELJKO UKIĆ

HŽ Putnički prijevoz joined the campaign organised for the International Level Crossing Awareness Day - ILCAD. This year's campaign is dedicated to young people who, in todays hyperconnected world, simultaneously talk to friends, receive messages and calls, play games, make selfies and listen to music via earphones. Such distractions lower the capability to notice one's surroundings, which, especially in traffic, can lead to serious injuries and accidents which leave young people and their families with permanent psychological and social consequences, while also endangering other participants in road and rail traffic.

The most effective way to change such behaviour and lower risks related to level crossing is the education of young participants in traffic and promoting safe behaviour at level crossings with the aim to lower numbers of accidents and fatalities. Even with all investments into rail traffic safety, each participant must accept their part of the responsibility - stop, look up and be careful because the train is always faster.









**JUNE 7, 2018** 



## **SARAH MAYES**

National Director, Operation Lifesaver Canada

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# **English websites:**

http://www.operationlifesaver.ca http://www.looklistenlive.ca

### French websites:

http://www.opérationgareautrain.ca http://www.regarderécoutervivre.ca





## **Message from SARAH MAYES**

We're pleased that ILCAD will be focusing its 2018 conference on young level-crossing users. Young people – those aged 18-35 years – make up the majority of those seriously injured or killed in railway crossing and trespassing incidents in Canada each year. That's why Operation Lifesaver Canada has focused on developing campaigns and materials – including its Look.Listen.Live. virtual-reality campaign, and its upcoming #STOPTrackTragedies campaign – to specifically reach young people. We wish ILCAD every success with its 10th anniversary conference, and in raising rail safety awareness with this key audience.









**JUNE 7, 2018** 



# TAMO VAHEMETS CEO, Operation Lifesaver Estonia

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# **Message from TAMO VAHEMETS**

# Public railway safety is an inalienable part of safety culture

The traditional ILCAD has become for those involved in railway safety promotion an event that brings together organisations and people contributing to railway safety from different countries.

The knowledge that there exist many organisations in the world looking daily for new ways and solutions to minimize the number of railway fatalities is encouraging us and taking us forward.

Railway safety is an inalienable part of safety culture. Knowledge and behavioural patterns are acquired since childhood and stay with us throughout our lifespan. Right choices always comprise safety, enabling us to live our daily lives healthy and successfully.

The vision of ILCAD could be: 0 fatality caused by a lack of knowledge on railways. The vision "0 fatalities caused by lack of knowledge on railways" would present a huge challenge to all of us, making us think how could our message reach all the target groups of society? What would be the role of governments, railway companies, non-profit organisations and citizens themselves?

The 0-vision would help us in setting long-term goals and take small steps every day towards a safer living environment.

I welcome all those who have joined ILCAD and wish you all the success in conducting the railway safety promotion campaign.









**JUNE 7, 2018** 



# WENDE CORCORAN Interim President, Operation Lifesaver, Inc. (USA)

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http://www.oli.org

# **Message from WENDE CORCORAN**

In the United States, <u>Operation Lifesaver</u>, <u>Inc. (OLI)</u> is once again pleased to observe <u>International Level Crossing Awareness Day (ILCAD)</u> on <u>June 7</u>, with this year's target audience of young level crossing users. Joining with more than 40 countries worldwide, <u>our national and state Operation Lifesaver programs will highlight</u> the importance of educating drivers and pedestrians about the importance of using caution at all crossings and along train tracks.

OLI is committed to reducing crossing collisions and protecting our nation's families and communities from having to endure preventable tragedies. Our national awareness campaign, <u>See Tracks? Think Train!</u> along with these <u>driving safety tips</u>, can help save lives at crossings.

This year, we have released a 10-minute new driver training video, "How to Drive Near Trains," and a <u>30-second public service announcement</u> for teens and other new drivers. We also have engaging new educational materials for youths aged 5-14 to teach them about safety at crossings.









**JUNE 7, 2018** 



PETER REIDY
Chairman, TrackSAFE NZ
Chief Executive, KiwiRail

http://www.tracksafe.co.nz/
http://www.kiwirail.co.nz/



# **Message from PETER REIDY**

TrackSAFE Foundation New Zealand (TrackSAFE NZ) is once again pleased to support the International Union of Railways (UIC) in the launch of International Level Crossing Awareness Day on 7 June 2018.

We are extremely proud to be part of a global community of organisations working together to raise awareness about safety at level crossings.

In New Zealand we have around 3,000 level crossings, or one approximately every 1.5 kms on around 4,000km of track. Since 2012, 34 people have died in level crossing collisions with trains.

Social and environmental changes in New Zealand are contributing to an increased risk profile at our level crossings, particularly in urban areas.

In particular, the introduction of faster and quieter electric trains, together with growth in commuter services in Auckland and Wellington is increasing the risk to pedestrians.

We are also seeing more people using personal technology which is contributing to pedestrian distraction around railway tracks. Three deaths at level crossings in the past two years reportedly involved the use of headphones.

New Zealand's new Government has just released a draft Government Policy Statement on Land Transport. It makes safety a priority and includes support for investment in rail safety, including partnering with KiwiRail to upgrade level crossings.

The policy also recognises the importance of the many stakeholders in New Zealand taking a coordinated approach. Those stakeholders include rail operators, Police and local government agencies.

TrackSAFE NZ believes the focus on investment and on taking a coordinated approach are positive steps which will contribute to a New Zealand rail network increasingly free of deaths and serious injuries.

We wish all organisations around the world all the very best for this year's ILCAD campaign, as we come together globally to address the issue of safety at railway level crossings.









**JUNE 7, 2018** 



# NAOMI FRAUENFELDER Executive Director TrackSAFE Foundation

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# **Message from NAOMI FRAUENFELDER**

The TrackSAFE Foundation in Australia is pleased to join forces with over 40 different countries to celebrate the 10<sup>th</sup> International Level Crossing Awareness Day (ILCAD) in June 2018. We are all addressing the same global issues when it comes to level crossing safety. The Day represents a global commitment to raise awareness around the dangers associated with level crossings and to communicate – in a united voice – strong messages of safety from every corner of the world.

In the month of June, the TrackSAFE Foundation will host its bi-annual Level Crossing Safety Forum. TrackSAFE will bring back together a group of experts from rail, government, road, police and other key groups from across Australia and New Zealand to address level crossing safety issues and to share knowledge as well as lessons learned. As we are all aware, level crossing safety is an ongoing issue that requires a collective, all-encompassing approach with relevant authorities to ensure common issues can be workshopped collaboratively. We are pleased to be hosting the Forum in the same month as ILCAD.

ILCAD must be congratulated for presenting an opportunity to collaborate on all aspects of level crossing safety in a global context and for keeping level crossing safety high on the priority list of so many countries.











**JUNE 7, 2018** 



KATARZYNA KUCHAREK
Chief Executive Officer

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# **Message from KATARZYNA KUCHAREK**

In Poland various companies and entities are responsible for railway safety. As the first one PKP Polish Railway Lines Company started cooperation within working group in International union of railways. We conduct together with Polish National Railways, Railway Security Guard, Railway Transport Office and many others awareness campaign "Safe rail-road level crossing..." since 2005. Millions of leaflets, TV spot broadcasts, thousands of children trained, events at crossings, billboards, radio spot broadcasts, instructional meetings organized for operators, educational lectures, press articles, hundreds of briefings organized, simulations of car/locomotive collisions and conferences. We hardly believe in "zero accidents vision". All countries with huge experience are for us role model. We really appreciate fact that all ILCAD participants are ready to help each other and share experience to improve railway safety. At the same time all of you can count on us.









**JUNE 7, 2018** 



RYUTARO UENISHI Senior Manager

East Japan Railway Company,
Paris office

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http://www.jreast.co.jp/e/

# **Message from RYUTARO UENISHI**

Welcome to our East Japan Railway Company activity.

I work as a senior manager of Paris office and I'm also japan delegate of UIC safety platform.

As you might know, 16 million passenger/day are using our network, and we provide 12,229 train services a day.

In terms of Level Crossing, approx.700,000 times of LC have worked per day.

We have been decreasing the total number of LC during 3 decades, from 8,358 to 6,860, around 20%.

Since JNR (Japanese National Railways) was privatized in 1987, we have implemented lots of LC countermeasures. As a result, the number of LC accident decreased one sixth from 247 cases to 39 cases in 2016.

Today, I will let you know the development of Level Crossing awareness and education approach in Japan, particularly for East Japan Railway.









**JUNE 7, 2018** 



# YASUHIRO FURUSAWA Senior Manager

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http://www.westjr.co.jp

# Message from YASUHIRO FURUSAWA

I am very pleased that we can share technologies related to level crossings at such conferences.

In Japan, the level crossing has many problems, too.

We would like to solve them with technology.

Among this situation, we had reached the point of not only improvement of facilities but also shortening of warning time.

This time I would like to introduce them.









**JUNE 7, 2018** 



## **ZVONIMIR VIDUKA**

**Director** 

**ALTPRO** 



Origin of your safety.

https://altpro.hr/

# Message from ZVONIMIR VIDUKA

There has been a worldwide increase in discussion about railway safety, but the level crossing safety has always been one of the most discussed topics. Many accidents which are happening can be avoided by new innovative solutions on sites where the road meets the rail. ALTPRO made its mission to research and develop solutions to increase safety on the railway. Level crossing protection system RLC23 is our contribution and the result of years invested in the direction of accidents prevention and safer crossing of the rail.









JUNE 7, 2018

# **CONFERENCE PROGRAM**









**JUNE 7, 2018** 

# 6<sup>th</sup> of June 2018, Wednesday

**18.00h** – Zagreb railway station, meeting next to the locomotive

18.15h - 19.00h - Visit of the Croatian railway museum / "A journey through the Timetables"

19.00h - 21.00h - Welcome cocktail dinner in Hotel Orient Express (sponsor UIC)

# 7<sup>th</sup> of June 2018, Thursday CONFERENCE DAY - in museum MIMARA

9.00h - 9.30h - Registration

9.30h - 10.15h - Opening ceremony / moderator: Danijela Barić

### Introduction of ILCAD Conference

# **Opening Video messages**

- **Jean Todt**, President of Fédération Internationale de l'Automobile (FIA) & United Nations SG'S Special Envoy for Road Safety
- Jean-Pierre Loubinoux, Director General, International Union of Railways (UIC)

## **Opening speeches**

- Danijela Barić, Head of Chair for Road Transport Technology, Faculty of Transport and Traffic Sciences
- Marko Z. Žubrinić, Member of the Management Board, HŽ Infrastructure
- Žarko Katić, State Secretary, Ministry of the Interior
- Nikolina Brnjac, State Secretary, Ministry of the Sea, Transport and Infrastructure
- Krešimir Ćosić, Envoy of the President of the Republic of Croatia
- **Stela Dendić** & **Antonio Markić**, representatives of the Youngs from Technical School Zagreb ("Young Level Crossing Users")

# **Keynote Speakers**

10.15-10.30 Mr. Marko Z. Žubrinić, Member of the Management Board, HŽ Infrastructure: *Investment in network modernization and improvement of traffic safety* 

10.30-10.45 Mr. Pier Eringa, CEO, ProRail and President of EIM - European Rail Infrastructure Managers: *The road to zero level crossing in the Netherlands* 

**10.45h - 11.15h – Media statements** (Media corner)

**10.45h - 11.15h – Coffee break** (sponsor RAILWAY-CARRIAGES FACTORY ČAKOVEC)









**JUNE 7, 2018** 

# **11.15h - 13.30h - Presentations** (1st part)

11.15-11.35 Mr. Jeroen Nederlof, Chairman of European Level Crossing Forum (ELCF), and Mrs. Brenda Struve ProRail: *How to prevent slow pedestrians to get locked between barriers* 

11.35–11.55 Mrs. Juny Op de Beeck, Mr. Vincent Godeau, Mrs. Annelies de Keyser, Infrabel: Safety at level crossings: New risk model & Awareness campaign targeting young users

11.55–12.10 Mr. Robert Wainwright, Network Rail: Level crossing safety campaign in UK

12.10-12.25 Mr. Pavel Skládaný, Mrs. Pavlína Skládaná, CDV - Transport research centre: **Young trespassers, their knowledge and opinions** 

12.25-12.35 Mr. Pavel Tucka, CDV - Transport research centre: *Educational films for professional drivers* 

12.35–12.50 Mrs. Katarzyna Kucharek, PKP: Selected activities addressed to rail-road level crossing young users

12.50-13.05 Mr. Ryutaro Uenishi, East-Japan Railway Company: *Development of level crossing awareness in Japan* 

13.05–13.20 Mr. Ivan Domladovac, Altpro: *Innovative level crossings solutions for the global market* 

13.20-13.30 Q&A

13.30h - 14.00h - Safety Village & millennium photography in front of Mimara museum

**14.00h - 15.00h – Lunch** (sponsor IDS INGEGNERIA DEI SISTEMI)

**15.00h - 17.15h – Presentations** (2<sup>nd</sup> part)

15.00-15.15 Mr. Josip Rotar, Public Agency of the Republic of Slovenia for Railway Transport: Management of railway safety performance in Republic of Slovenia

15.15-15.30 Mr. Andy Elkins, Operation Lifesaver: Operation Lifesaver USA programme

15.30-15.50 Mr. Tamo Vahemets, Operation Lifesaver Estonia: *OLE awareness activities* and on behalf of Mrs. Sarah Mayes, Operation Lifesaver Canada: *Update on OL Canada's rail safety public awareness campaign* 

15.50–16.05 Mr. Yasuhiro Furusawa, West Japan Railway Company: *The way of dramatic reducing level crossing accidents by more than 80% in 30 years - From the aspect of innovative technologies* 

16.05-16.20 Mrs. Virginie Taillandier, SNCF: *New thinking about LC through design and cognitive analysis* 

16.20-16.35 Mr. Ladislav Šula, TSF Traffic Safety Fund: *Using TSF funds for global* improvement of level crossing safety of vehicle by implementing pilot projects of 100 % accident free level crossing systems

16.35-16.50 Mr. Martin Starčević, Faculty of Transport and Traffic Sciences: *VR application* as an educational tool for level crossing users

16.50-17.05 Mrs. Isabelle Fonverne, International Union of Railways (UIC): 10 years of ILCAD & SAFER-LC project









**JUNE 7, 2018** 

17.05-17.15 **Q&A** 

**17.15h - 18.15h - Presentations** (3<sup>rd</sup> part - sponsors) – 10'

17.15-17.25 Altpro (Tin Viduka: *Origin of your safety*)

17.25-17.35 Končar Power Plant and Electric Traction Engineering Inc. (Vjekoslav Solić: Končar KET solutions for railway transport)

17.35-17.45 **IDS Ingegneria Dei Sistemi** (Dave Farman: *Level crossing obstacle detection product*)

17.45-17.55 Schweizer Electronic AG (Jose Ruiz: Successful story about low-cost level-crossings Vamos in the UK)

17.55-18.05 Future Product Design (Vladimir Kranz: Revolutionary new design of 100 % accident free level crossing system for vehicles and pedestrians)

**18.05-18.15 Closing Remarks** 

**20.00h - 24.00h - GALA dinner** (sponsor KONČAR POWER PLANT AND ELECTRIC TRACTION ENGINEERING INC.)









**JUNE 7, 2018** 

# 7<sup>th</sup> of June 2018, Thursday

# "SAFETY VILLAGE" – in front of Mimara museum

- **12.00h 19.00h** "Young people for Young People" During the conference, a campaign with the aim of education, prevention and promotion will be organized for the public in front of the Mimara museum on the subject of young people's safety in traffic and at level crossings.
- 12.00h Opening of the education and promotion programme
- 12.00h 13.00h Conference promotion video, Vatra band video, sponsor Video mix
- **12.30h** Visit of elementary schools and tour/ mascot animation
- **12.30h 17.30h** "Is Anyone Awake" a memory game competition and knowledge quiz (prizes: 1<sup>st</sup> prize, 2<sup>nd</sup>..., 3<sup>rd</sup>...)
- **13.00h** Safety Village tour for conference participants/ introduction of presenters, short statements, messages on safety
- 13.00h 18.00h Croatian Automobile Club (HAK) simulation of a car roll-over
- **13.00h 18.00h** Altpro photo booth/ taking photographs for charity/ on-the-spot donations...
- 13.45h Taking of a millennium photo in text format: 2018 ILCAD ZAGREB
- **14.00h 15.00h** Art corner / visual arts students / a video made by secondary Technical school Zagreb / elementary school literary pieces / live stream
- **18.00h 19.00h** *Vatra* band/ promotion of a short-edited video "Is Anyone Awake" / contact and photographs taken with the audience / signing of a special postcards edition











**JUNE 7, 2018** 

# 8<sup>th</sup> of June 2018, Friday – TECHNICAL VISIT –











**JUNE 7, 2018** 

# **SPEAKERS**









**JUNE 7, 2018** 



# MARKO ZDRAVKO ŽUBRINIĆ

Member of the Management Board

HŽ Infrastructure / HŽ Infrastruktura

http://www.hzinfra.hr/

# **Biography:**

Marko Zdravko Žubrinić, graduate engineer, permanent court expert for road and rail traffic, technology and assessment already for fourteen years, Member of the Management Board of HŽ Infrastruktura d.o.o. since October 2, 2017. He started his career as sales manager at the Suzuki dealership of Auto Hrvatska, where he worked until 1992. He continued to a position at INA INTCO, where he was employed since the beginning of 1996 as site manager on Sahara oil fields in North Africa. After Africa, he moved to Atlanta, USA, where he was CEO of Draco Int. until 1997. Upon his return from the United States, he worked until 2000 as marketing director of Croatia/Dinamo Football Club. Until 2003, he held the title of senior advisor for the World Bank project at the Centre for the Support of Business Changes for HŽ restructuring. At the beginning of 2003, he founded the Croatian state Agency for Export and Investment Promotion and managed it until mid-2004. Until 2012, he worked as advisor to the CEO for marketing and communications at the Croatian Employers' Association. Until 2017, he served as CEO of a private company for business consultancy in Croatia and abroad. Many years of experience gained by this Zagrebian by birth so far, his continuous professional development in Croatia and abroad in the field of management, new business development, marketing and communications, have fortified his ability to adapt to people of various professional cultures and backgrounds. He is committed to achieving the goals set by his employers, priorities of the Management Board and continuous learning.

## Title of presentation:

## Investment in network modernization and improvement of traffic safety

### **Summary:**

HŽ Infrastruktura is the project leader of the largest infrastructure projects in the Republic of Croatia at the moment, and at the national level, it leads the way in absorbing FU funds intended for the traffic sector. The presentation provides an insight into strategic projects of HŽ Infrastruktura, aimed at modernizing the network and track structures, with the purpose of increasing the quality of service and raising the level of safety. A special overview of investment in level crossing was provided, for which significant financing was secured. In the same way, besides technological improvement of level crossings, in its educational activities, HŽ Infrastruktura is trying to increase awareness of traffic participants regarding dangers at level crossings, and to prevent accidents. Special focus was put on the most vulnerable group of traffic participants, these are children and young people. Therefore, activities in this segment will be mentioned in the presentation as well.









**JUNE 7, 2018** 



**ERINGA PIER** 

CEO ProRail
President, EIM

http://www.prorail.nl

# **Biography:**

Prior to his appointment as CEO of ProRail in april 2015, Mr Eringa was chairman of the Albert Schweitzer hospital in Dordrecht and turned this into the best hospital in the Netherlands. Mr. Eringa is an experienced executive in public service and public administration. He has been responsible for the municipal organization (approximately 2,400 employees) of the historic city of Nijmegen. Eringa has also held various positions in the Dutch police force. He started his career as an inspector of the local police in Leeuwarden and finished as police chief of the Flevoland region. He also has experience in the rail sector. Between 1999 and 2002 he was Regional Director for the Dutch Railways (NS) being responsible for rail passenger transport in the North East Netherlands. He was also Executive Vice President Security and member of the national management team.

Besides his assignment at ProRail, Eringa currently holds the following positions: Chairman of the Supervisory Board of Aveleijn, a care for clients with intellectual disabilities, Deputy Chairman Supervisory Committee Management National Police, Supervisory Board Chairman amateur section of the Royal Dutch Football Association KNVB and vice chairman KNBSB-Board (Baseball and Softball).

### Title of presentation:

# The road to zero level crossings in the Netherlands

### **Summary:**

In his contribution 'The road to zero level crossings in the Netherlands' Mr. Eringa will likely\* address the following:

- His commitment to attack the issue of level crossings at the source and his ambition to reduce the number of level crossings to zero, based on his experience in other sector and the railways.
- His personal involvement when incidents happen
- Facts and figures about level crossings in NL and
- ProRail's approach to further reduce the number of incidents by reducing the number of level crossings, especially the ones which are not actively secured
- Human factor: he will show some examples of dangerous behavior and what the rail infrastructure manager can do about it

# Some quotes:

'The best level crossing is a non-existing one'

'I feel personally committed to lead my company on the road to zero level crossings'

'Involvement of all stakeholders is crucial to further reduce the number of (incidents) at level crossings. This applies specifically to the road owners involved, since a level crossing is by nature a crossing between road and rail'

'I was glad that recently at the professional Scheldeprijs-race the riders who ignored a red sign and passed the barriers at a level crossing were kick out of the race'

'our approach has resulted in a reduction of incidents at level crossings but we have to invest in order to maintain this downward trend'









**JUNE 7, 2018** 



JEROEN NEDERLOF
Level crossing manager
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BRENDA STRUVE
Test manager
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# **Biography:**

Mr. Jeroen Nederlof has been working for 40 years in the railway sector, almost 20 years specifically on level crossing issues. Jeroen Nederlof is also Chairman of the UIC Group on level crossing safety "ELCF".

# **Biography:**

Mrs. Brenda Struve: has been working in the railway sector for 17 years. The last 10 years at the Innovation Department of ProRail. Currently Brenda Struve organizes tests of new products and designs.

### Title of presentation:

## How to prevent slow pedestrians to get locked between barriers

### **Summary:**

This conference focuses on dangerous behavior of young people on level crossings. In the Netherlands the number of accidents at level crossings has been drastically reduced, especially regarding young people.

Measures taken: closing level crossings, standardizing active protection with barriers, put separate lanes for pedestrians and cyclists with full barriers; and of course organize awareness and education campaigns during decades for school children.

One of the negative effects of these full barriers is to be trapped between them. Over the past years we have seen more incidents with older or disabled pedestrians also caused by a panic reaction during their passage across over the level crossing while the bells start ringing and the barriers are moving downwards.

ProRail has developed for them an instrument for specific large sized level crossings: a CROSSING Assistant. It is a kind of active information display that informs people if they have enough time to cross the level crossing without being disturbed. ProRail has developed the Crossing Assistant with TNO (Human Factors Science), and DoubleYou (Innovative Product Design).

The Crossing assistant has been tested on a level crossing in Haarlem. The question was, do people understand this concept and do they react with a safe behavior. The results of the test are positive. Pedestrians feel safer, they appreciate it, they use it.

The prototype needs some technical adjustments to make it more robust and cheaper, so that the business case become positive.









**JUNE 7, 2018** 



JUNY OP DE BEECK **Project manager** Communication juny.opdebeeck@infrabel.be

http://www.infrabel.be/safety



**GODEAU VINCENT** Safety advisor vincent.godeau@infrabel.be http://www.infrabel.be



**ANNELIES DE KEYSER** Project manager Safety **Communication at Infrabel** annelies.dekeyser@infrabel.be http://www.infrabel.be

# **Biography:**

manager in Communication at Infrabel since 2012. After working as an advisor for Resident & Local affairs, she specializes in safety awareness campaigns. She develops and manages the awareness campaign aiming adults about trespassing and safety at level crossings

# **Biography:**

Juny Op de Beeck is a project Vincent Godeau is Advisor in safety management at Infrabel since 2009. After working as a railway accident investigator, he specialized in level crossing safety policy. He develops and manages the Rail-Road the Interface actions plan for communication. which the goal is to improve develops the safety at LC with the implementation of new infrastructural measures.

# **Biography:**

Annelies De Keyser works at Infrabel since 2007. After working as an advisor for Internal communication and as an intranet manager, she is now a project manager in division Safety She and manages awareness campaigns targeting children (6 - 12 year) and adolescents (12 -18 year), about trespassing and safety at level crossings.

# Title of presentation:

New risk model & Awareness campaign targeting young users

# **Summary:**

The number of cases of trespassing on the tracks and accidents at level crossings are increasing in Belgium. What should Infrabel do?

Infrabel introduces its new risk model enabling identification of the level crossings with the highest accident risk and two awareness campaigns targeting young users.









**JUNE 7, 2018** 



## ROBERT WAINWRIGHT (ROB) Head of Level Crossings

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http://www.networkrail.co.uk

#### **Biography:**

Rob currently works for Network Rail as Head of Level Crossings. His role is to lead the strategic direction for level crossing risk reduction for the business.

Until his appointment in December 2017, Rob's career had seen him work within Timetabling, Operations and since 2014 within the Quality, Health, Safety and Environment team as the National Train Accident Risk Reduction Specialist

Rob has been responsible for the movement to leading indicators to measure performance for train accident risk reduction and the creation of the prioritisation methodology for Network Rail's national safety improvement projects.

#### Title of presentation:

#### **Influencing User Behavior at Level Crossings**

#### **Summary:**

Network Rail has come a long way in reducing risk in the last 10 years. We have invested around £200m in closures, upgrades, development of technology and user engagement activities. Looking at how to influence user behavior has been a key part of our strategy in that time.

Network Rail and RSSB have undertaken research activities which have fed into level crossing safety improvements. From research into the effectiveness of current level crossing signs to the willingness to wait at level crossings. This qualitative research coupled with quantitative data analysis has focused our risk reduction activities.

Through the design and installation of new technologies to aid decision making, and use of overt enforcement equipment used in partnership with the British Transport Police we have a number of options available to changing behavior on site.

Public safety awareness campaigns provide risk awareness and knowledge to users provides a broad range of activities to change user behavior.











**JUNE 7, 2018** 



PAVLÍNA SKLÁDANÁ
Researcher
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PAVEL SKLÁDANÝ
Researcher
http://www.cdv.cz

#### **Biography:**

Mgr. Pavlína Skládaná was born 1973, and graduated 1997 at Philosophical Faculty of Masaryk University of Brno, in sociology. She worked for various organisations in the area of urban studies and physical planning, since 1996 has been working in Transport Research Centre (CDV) as traffic researcher. She is focused mainly on social aspects of traffic safety, behaviour and attitudes of drivers and other road users, impact of measures (legislative, physical, educational) on drivers' and pedestrians' behaviour; in the field of railway safety, she took charge of sociological part of projects AGATHA, ARIANA, SVEZA, ALICE, AMELIA and NEOS. In addition to national activities, she participated in many international projects, e.g. SARTRE 2-4, GADGET, ESCAPE, SIZE, CLOSE TO, PEPPER, Pilot4Safety, BESTPOINT, SOLUTIONS, ESRA.

#### **Biography:**

Ing. Pavel Skládaný was born 1966, and graduated 1989 at University Transport and Telecommunications in Žilina, in management of road transport and traffic engineering. He has been working since 1989 in **Transport** Research Centre (CDV) traffic as researcher. His expertise involves road safety programs, audits and inspections, solving black spots, and safety on level crossings.

#### Title of presentation:

#### Young trespassers, their knowledge and opinions

#### **Summary:**

In the frame of research project aimed at problems of railway trespassing, attitudes and behaviour of young people were investigated. Using the observations, survey, and focus group interviews, it was found that students and children have relatively good theoretical knowledge of risks connected with trespassing and they are mostly aware of illegality of this behaviour; nevertheless, they largely use illegal shortcuts and they also use the railway tracks as a playground. On the basis of these findings, short educational film for children and teenagers is prepared, to explain practical risks and possible consequences of trespassing.









**JUNE 7, 2018** 



PAVEL TUČKA Researcher

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#### **Biography:**

Pavel Tučka was born 24.7.1966 and 1989 graduated at Faculty of Civil Engineering of Brno University of Technology. He has been working in Transport Research Centre since 1994, currently as the Head of Road Safety Department. He is involved in the research of selected traffic-engineering parameters in relation to the road safety, road safety audits and inspections, expert systems for dealing with black spots, LC safety, and traffic calming.

#### Title of presentation:

**Educational films for professional drivers** 

#### **Summary:**

The set of five short films was made, aimed at target group of professional drivers. The spots were based on detailed knowledge of most common problems of truck drivers at railway level crossings. Each spot described concrete risk situation and offered suitable solution. The effectiveness of the films was tested in frame of regular training of professional drivers. The drivers completed the test before and after the viewing of the film; the knowledge of several aspects increased considerably after the projection.









**JUNE 7, 2018** 



KATARZYNA KUCHAREK
Chief Executive Officer

Katarzyna.kucharek@pkp.pl http://www.fundacjapkp.pl

#### **Biography:**

Katarzyna Kucharek has been working in the railway industry for over 10 years. At present, she is a Chief Executive Officer of the board in PKP Group Foundation. One of the Foundation's priority goals is safety.

During her work at PKP Polish Railway Company (Polish Railway Infrastructure Manager) she was responsible for the social awareness campaign - Safe Rail-Road Level Crossing – "Stop and Live!".

Mrs. Kucharek has also an extensive experience in the international environment (working groups on safety at rail-road level crossings coordinated by the International Union of Railways and the United Nations Economic Commission for Europe).

#### Title of presentation:

Selected activities addressed to rail-road level crossing young users

#### **Summary:**

In Poland many institutions and companies deal with safety at rail-road level crossings and railway areas, for example PKP Polish Railway Lines Company, Office of Rail Transport, Railway Research Institute. PKP Group Foundation cooperates with most of them and supports in many ways. We all together educate people of all ages, modernize railway infrastructure and law enforcement.

Poland carries on various year round events pointed towards improving the safety. It looks that finally all these efforts support the expected result - reduce the number of accidents at rail-road level crossings. The international cooperation had greatly influenced the implementation of new ideas. We still use for example "report defect" form, where people can react for abnormalities at rail-road level crossings, and then are inform about way of settling the matter.









**JUNE 7, 2018** 



RYUTARO UENISHI
Senior Manager,
Paris office,
East Japan Railway Company
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http://www.jreast.co.jp/e/

#### **Biography:**

Ryutaro Uenishi, Senior manager, Paris office, East Japan Railway Company.

After gradated University in Japan, In 2007, Joined West Japan Railway Company. Since joined, as a Japanese career development, I have had a train driver's license and experienced a part of train controller as well. As a part of train controller, I have announced not only train delay information and also train accident to media including TV and Newspaper.

Furthermore, there has been working at Human resources division, Corporate communications dept., and secretary of board member as well.

June 2016 Senior manager of International affairs, Corporate Planning Headquarters.

In August 2016, Dispatched from Japan to Paris as a senior manager of Japan Railways Group and also East Japan Railway Company. I've been responsible for and a delegate of UIC safety platform.

#### Title of presentation:

#### Development of Level Crossing awareness approach in Japan

#### **Summary:**

We are East Japan Railway Company(JR-EAST), which is the biggest railway in Japan.

As of April 2017, 16 million passenger/day are using our network and we provide 12,229 train services a day.

In terms of Level Crossing, approx.700,000 times of LC have worked per day.

Since privatization in 1987, we have implemented lots of LC countermeasures. As a result, the number of LC accident decreased one sixth from 247 cases to 39 cases in 2016.

Particularly for education and awareness for young public,

we have had a collaboration with traffic safety authority and have put some LC illustrations in traffic rule book which is distributed to all the drivers 10 million books per year. Of course, many rule books have been distributed to new young drivers.

And co-operating with Police, we have deployed practical simulation device of LC obstacle warning button at each driver's license center in over 26 prefectures/47s and implemented a campaign for new young drivers.

Furthermore, we also televised commercial with using Japanese enchanting ancient warriors 'Samurai'.









**JUNE 7, 2018** 



**IVAN DOMLADOVAC** 

**ALTPRO** 

https://altpro.hr/

#### **Biography:**

Ivan Domladovac has a Bachelor's and Master's degree in applied science in electro-technical engineering. Right after graduating from college (12 years) Ivan has been working in ALTPRO, first as a R&D engineer and later as a system engineer. Currently, for the last 5 years Ivan is working in Sales and Marketing department as Key Account Manager responsible for ALTPRO key customers and partners. Covering different markets from America to Far East, Ivan has gained knowledge about global requirements for safety on level crossings and how to satisfy different and demanding customer needs both from technical and commercial aspects.

Ivan is representing Croatia as a member of CENELEC and UNIFE expert working groups defining next generation of safety and interoperability standards in Europe.

#### Title of presentation:

Innovative level crossings solutions for the global market

#### **Summary:**

The presentation will outline the fully adaptable and versatile level crossing protection solution from company ALTPRO. The emphasis will be put on the adaptability to different market specifications/requirements. Each country has its own traffic rules and the RLC23 level crossing protection system is built in a way to be adaptable to each set of rules. Furthermore, other traffic problems the system solves (obstacle detection and similar) will also be addressed in the presentation. At the moment system is used on 3 continents (Europe, Asia and Africa). ALTPRO has gained huge experience and specific knowledge by making projects in harsh environmental conditions at completely different markets.









**JUNE 7, 2018** 



JOSIP ROTAR
Senior advisor at Safety unit

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#### **Biography:**

Josip Rotar is employed at the Public Agency of the Republic of Slovenia for Railway Transport. He is responsible for the field of safety certificates and authorizations. His work covers also monitoring of safety statistics on Railway Infrastructure in Slovenia and preparation of Annual Safety Reports. He is also active in civil society organizations, where he deals with the advocacy of cycling and the safety of cyclists in transport. He studied at the Faculty of Civil Engineering, Transportation Engineering and Architecture at the University of Maribor.

#### Title of presentation:

Management of Railway Safety Performance in Republic of Slovenia

#### **Summary:**

Accidents at level crossings represent one of the biggest safety challenges on the railways in the Republic of Slovenia. It is one of the key risk categories that the security authorities monitor and compare with all the EU national reference values in their countries. This presentation will show the trend of safety statistics on Slovenian railways in recent years and efforts to improve safety regulatory framework. Status of the railway infrastructure will also be presented with an emphasis on level crossings in Slovenia. The systematic approach to safety management in order to ensure continuous improvement on the railways will also be presented.









**JUNE 7, 2018** 



KENNETH "ANDY" ELKINS

Director / Operation Lifesaver, Inc. /

Board of Directors

aelkins@aar.org www.https://oli.org

#### **Biography:**

Andy Served 27 Years with the Metro Nashville, Tennessee Police Department. His last tour was as a Special Operations Officer where he worked as a WMD / CBRNE Operator and Instructor.

He served as a Tactical Hazmat Instructor for 3 years at the Security and Emergency Response Training Center in Pueblo, Colorado until taking his current position with the Bureau of Explosives (BOE) of the Association for American Railroads (AAR).

Andy Manages Hazmat Compliance for the BOE / AAR and represents the AAR on the Board of Directors for Operation Lifesaver, Inc.

#### Title of presentation:

Operation Lifesaver, Inc. United States Update

#### **Summary:**

The OLI board of directors has been working on a new strategic plan to guide the organization's efforts going forward. Here are the three overarching goals of the plan.

- 1. Improve safety outcomes.
- 2. Ensure consistent standards for all OLI activities.
- 3. Increase and sustain funding.

We look forward to working with all of our safety partners around the globe to further our shared mission – to prevent collisions, injuries and fatalities on and around railroad tracks and highway-rail grade crossings.









**JUNE 7, 2018** 



TAMO VAHEMETS +372 50 45 112

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https://ole.ee/en/

#### **Biography:**

2016-2018 – Eesti Energia AS, Head on Security Department, www.energia.ee

2015 – But Me NPO, founder, Chairman of Management Board, www.agamina.ee

2013 –2016 Port of Tallinn, Community Safety Programme Manager, <a href="www.portoftallinn.com">www.portoftallinn.com</a>

2009 – Estonian Club, Member of Management Board, <a href="www.eestiklubi.ee">www.eestiklubi.ee</a>
(Valuation of Estonian cultural heritage)

2007 – Baltic WingTsun Association, Member of Management Board, <a href="www.wingtsun.ee">www.wingtsun.ee</a> (Organisation of martial arts training)

2004 – Operation Lifesaver Estonia, founder, Chairman of Management Board and CEO, www.ole.ee (Activities in the field of public railway safety)

1995 – 2012 Head of Security of Estonian Railways, www.evr.ee

(Coordination of company's security activities and administration of motor vehicle fleet)

1994 – Riveta Club, founding member, President, trainer of martial arts, <a href="www.riveta.ee">www.riveta.ee</a> (Organising dance and stage fight shows and coordinating the work of children's theatre)

#### Title of presentation:

**Operation lifesaver Estonia's safety activities** 









**JUNE 7, 2018** 



### YASUHIRO FURUSAWA Senior Manager

furusawa@japanrail.fr http://www.westjr.co.jp

#### **Biography:**

From 06/98 to 05/00 Maintenance Engineer at signal and communications maintenance office.

From 06/00 to 09/03 Construction Engineer at engineering office.

From 10/03 to 05/10 Senior Engineer at Electric Construction Office's Train traffic management system development room.

From 06/10 to 05/12 Chief Engineer at Electric Engineering Department Signal Division of Headquarters.

From 06/12 to 05/15 Chief Engineer at Control Center System section.

From 06/15 to 05/17 Section Manager at Operation System Department of my company's subsidiary. From 06/17 to Now Senior Manager at Paris Office.

#### Title of presentation:

The way of dramatic reducing level crossing accidents by more than 80% in 30 years. -From the aspect of innovative technologies

#### **Summary:**

Since the establishment of our company (West Japan Railway Company) in 1987, the number of occurrences of level crossing accidents had been successfully reduced by more than 80% in 30 years. In this presentation we will introduce it from the aspect of innovative technologies improving safety at level crossing. The innovative technologies introduced in our company are 4 technologies.

First, we are introducing "3-dimensional laser radar type obstacle detection device" that monitors the detection area 3-dimensionally and has high detection function.

Second, we have special signal light emitting devices will stop display when obstacles were detected or emergency buttons is handled at level crossing. This device was improved with the aim of train driver's awareness of special signal light's stop indication by "voice" using radio.

Next, with level crossing so far it was impossible to judge whether the train will stop or pass at the next station. Therefore, the time to wait was long because the alarm had been ringing for the same time even when the train stopped or passed. In order to improve this, we have introduced a level crossing alarm time control device (so-called clever level crossing)

Finally, In case of any accidents, we may stop many trains and stop at the station for a long time. At this time, level crossing just after the station will be in alarm condition. In the case of the station that can control the departure signal, we can stop the alarm at level crossing by stopping, but if the station can't be controlled, level crossing is blocked for a long time, Inducing reckless crossing and blocking road traffic. For such stations, we have introduced interlocking devices to enable control of departure signal.









**JUNE 7, 2018** 



# VIRGINIE TAILLANDIER Smart level crossing project manager

virginie.taillandier@sncf.fr

#### **Biography:**

Virginie TAILLANDIER has a master degree in marketing.

She is currently in charge of the Project "Tech4rail level crossing" at the Innovation & Research Department of SNCF.

She has been an Expert on level crossing safety at SNCF Network - Safety Division for 5 years.

She started her career in the rail transport sector and worked at different positions related to security and safety at RATP (Parisian Metro and Suburban transport).

She also worked in the domain of information systems in the car industry.

#### Title of presentation:

New thinking about LC through design and cognitive analysis

#### **Summary:**

The connected / autonomous vehicles will soon be on the roads. Until the day vehicles are able to communicate with level crossings (C Roads) and avoid accidents, SNCF will be continuing to work on new solutions.

SNCF is willing to go beyond the statistical analysis of accidents to:

- understand human behavior through cognitive analysis
- rethink the design of the level crossing
- make it evolve by rethinking its integration / set up in connected cities and with new mobilities.









**JUNE 7, 2018** 



MARTIN STARČEVIĆ

Postdoctoral research assistant

Faculty of Transport and Traffic Sciences

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http://www.fpz.unizg.hr/projekt-sigurnost-na-zcp/

#### **Biography:**

Martin Starčević was born on 1979, in Zagreb. In 1998 he enrolled at the Faculty of Transport and Traffic Sciences, where he earned the academic title bachelor of engineering in 2005. Since 2007, he is an employee of the Faculty of Transport and Traffic Sciences where he defended his doctoral dissertation in 2015 titled: *Level Crossings Risk Assessment Model*. Since 2007, he has been engaged in scientific projects: *Railway Development as a Future Cargo Holder, Strategic Modeling of Air Traffic* and *Research of Measures for increasing Safety at Level Crossings*. Also, from 2016 to 2018, he was engaged in the project *Implementation of Measures to increase the Safety of the most Vulnerable Road Users at Level Crossings*, which has been implemented within the *National Road Traffic Safety Programme of Republic of Croatia 2011 – 2020*. He has published several scientific papers and has participated in conferences at home and abroad.

#### Title of presentation:

**VR Application as an Educational Tool for Level Crossing Users** 

#### **Summary:**

This presentation addresses the use of newly developed VR (virtual reality) application as a new educational tool, designed to get driving school's students, as well as elementary and high school children in the Republic of Croatia, more deeply aware of level crossings dangers as pedestrians and future motor vehicle drivers. The VR application was developed on Faculty of Transport and Traffic Sciences within the project Implementation of Measures to Increase the Safety of the most Vulnerable Road Users at Level Crossings within the framework of the National Road Traffic Safety Program in the Republic of Croatia 2011-2020 by Croatian Ministry of the Interior.









**JUNE 7, 2018** 



## ISABELLE FONVERNE UIC, Senior Advisor, Safety

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http://www.uic.org ; www.ilcad.org https://www.facebook.com/ILCAD http://twitter.com/#!/ilcad

ILCAD YOUTUBE channel: https://bit.ly/2GWJNKq

https://www.instagram.com/ilcaduic/

#### **Biography:**

- 9/1988- 11/1990 EUROSIT: Export Department of a French exporting company in the field of office furniture and seats
- 12/1990-01/1992 BERCY EXPO, international real estate project to renovate Bercy area in the 12<sup>th</sup> arrondissement of Paris
- From 01/1992 until today: UIC, the worldwide professional association representing the railway sector and promoting rail transport: <a href="https://www.uic.org">www.uic.org</a>

I have been working at UIC from 1992 in different domains of activities (high speed, economics, environment, technology and research, interoperability and safety).

- From 2010-today: Senior Advisor, Safety and Interoperability
  - In charge of level crossing safety at the UIC Safety Division
  - Coordinator of the European Level Crossing Forum (ELCF)
  - Coordinator of a UIC railway safety group "SSMG" (Systems Safety Management Group) working on the EU Agency for railways working programme
  - Coordinator of a UIC railway "IRSN" (International Railway Safety Network).
  - Since 2009: Project manager and Coordinator of the International Level Crossing Awareness Day (ILCAD) the unique road/rail safety awareness campaign on a global level (45 countries on board): visit www.ilcad.org
  - Member of the UNECE WP on Road Traffic Safety and I have been cooperating actively with the UNECE in Geneva to create a Group of Experts on level crossing safety. This group met for the first time in January 2014 and finalized a report in January 2017.
  - Member of the Steering Committee of the Global Level Crossing Symposium (GLXS)
  - Member of the consortium and coordination team at UIC for the EU Project Safer-LC <a href="http://safer-lc.eu/">http://safer-lc.eu/</a>

#### Title of presentation:

10 years of ILCAD and Overview of "Safer-LC, UIC Coordinated EU project (within Horizon 2020): Safer Level Crossings by integrating and optimizing road-rail infrastructure management and design"

#### **Summary:**

#### 1. ILCAD

- From a concept ILCAD (<a href="www.ilcad.org">www.ilcad.org</a>) has become a well-known name. The idea born from exchanges between members of the level crossing safety called ELCF (European Level Crossing Forum), has become a global human adventure with people involved in the launch conference, and from behind the scene with partners around the world who organize smaller or bigger events in their own countries or simply relay the information on their social networks.
- ILCAD started on a European scale in 2009, one thought that this event would happens once, but because level crossing collisions do not happen only once and only in Europe, partners requested to go on and The International Union of Railways (UIC) developed it worldwide.
- Building on previous successes in Brussels, Warsaw, Paris, Geneva, Lisbon, Istanbul, Riga and Montreal, Zagreb this year will play host to the international conference on safety at the road/rail interface.
- UIC together with railway industry stakeholders, road authorities, academics and international institutions are proud to meet today for the launch of the 10th edition of International Level Crossing Awareness Day (ILCAD).
- Again over 40 countries will participate behind the curtain in this wonderful human adventure
- The public targeted by this year's campaign are "Young level crossing users" the 2018 motto is "Don't beat the train!"
- "SAFER LC, UIC Coordinated EU project (within Horizon 2020): Safer Level Crossings by integrating and optimizing roadrail infrastructure management and design": Overview of the project









**JUNE 7, 2018** 



## DAVE FARMAN Rail business consultant

d.farman@idscorporation.com

http://www.idscorporation.com

#### **Biography:**

Dave Farman has been working in the rail industry developing and supplying safety critical solutions for over 20 years. For the last 10 years he has worked to deliver level crossing safety equipment in the UK, successfully providing 200 systems to the UK marketplace while working for TEW Plus Ltd and later LB Foster. Dave recently took a position with IDS Ingegneria Dei Sistemi based in Pisa, Italy to provide consultancy services in developing and marketing their own Level Crossing Obstacle Detection solution.

#### Title of presentation:

#### IDS INGEGNERIA DEI SISTEMI - LEVEL CROSSING OBSTACLE DETECTION PRODUCT

#### **Summary:**

Obstacle detection solutions are fast becoming the safest form of protection against obstacles and trains coming into contact at Level Crossings.

A mixture of solutions and technologies have been delivered to many countries rail organizations throughout with world providing varying levels of success.

IDS Ingegneria Dei Sistemi has successfully implemented a RADAR technology solution in Italy at 100 Level Crossings for the national operator and has now developed a next generation product offering very high levels of reliability and sustainability.

The IDS Level Crossing Obstacle Detection solution will be presented and on show at ILCAD 2018 with presentations describing the technical aspects of the solution, safety rating, reliability and whole life cost projections.









**JUNE 7, 2018** 

### **ORGANISERS AND SPONSORS**









**JUNE 7, 2018** 



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 that facilitate the implementation of the innovative solutions.

https://uic.org/









**JUNE 7, 2018** 





Faculty of Transport and Traffic Sciences, established in 1984, is the faculty of the University of Zagreb, and the leading high education as well as scientific and research institution in the field of transport and traffic engineering in Croatia. Faculty staff participates in national, regional and international scientific, research and development projects funded by the national Ministry of Science, Education and Sports, European Commission and international institutions. The Faculty participates in public and commercial projects aimed at solving transport and traffic problems of transportation sectors in Croatia. International cooperation through exchange of academic staff and students presents an important part of academical and research activities.

Faculty of Transport and Traffic Sciences offers programmes in Traffic and Transport, Intelligent Transport Systems and Logistics, and Aeronautics. Programme of Traffic and Transport involves courses in Road, Railway, Urban, Air, Waterway, Postal, and Information and Communication Transport and Traffic. All programmes are taught at the three-year undergraduate (180 ECTS) and two-year graduate levels (120 ECTS) Postgraduate studies provide three-year Doctoral Studies in the field of Transport and Traffic Engineering, as well as one-year Specialist Studies in Urban Transport and Traffic, Inter-modal Transport and Traffic, and Transport Logistics and Management.

Transport and traffic engineers generally work in transport services and other related enterprises and public institutions dealing with various transport modes and/or traffic technology, logistics, and management. The job of transport and traffic engineer covers wide range of professional activities, e.g. planning, design, operation, supervision, and maintenance of transport and traffic facilities and processes.

The research carried out is of a high international standard with the goal of providing modern transport and traffic technology, infrastructure, logistics and intelligent transport systems solutions in road, waterway, postal, information and communication, urban, air and railway transport.

www.fpz.unizg.hr/









**JUNE 7, 2018** 



Railway system safety is one of the basic determining factors of HŽ Infrastruktura, therefore, all of our business activities are aimed at improving the quality of the railway line network and infrastructure, and as a result of this, at increasing the level of safety during railway traffic operations. Besides network modernization projects, HŽ Infrastruktura has also been continuously working on raising the level of level crossing safety. Our commitment to safety issues is also reflected in the adopted Safety Policy and determining of annual safety quality and quantity goals for the Operational Plan of Safety Policy implementation. HŽ Infrastruktura is trying to give its contribution to the increase of railway traffic safety by organizing educational and promotional activities. With the aim of preventing accidents and raising awareness of the general public, especially children and young people, HŽ Infrastruktura has been carrying out its educational campaign entitled "The Train is Always Faster" for nearly twenty years. We are convinced that this 10th jubilee ILCAD conference, which will take place on June 7 in Zagreb, will contribute to raising awareness of how important it is to observe the traffic culture and regulations.

http://www.hzinfra.hr/









**JUNE 7, 2018** 



Company ALTPRO was established in 1994 and has over 20 years of experience in research, development and production of safety and signalling equipment for rolling stock and infrastructure. Based on the company's "know-how" ALTPRO products have been fully developed and produced in Croatia and have proved their competitiveness on the global market. Through a net of distributors and representatives, ALTPRO products are present on the markets of more than 47 countries on 6 continents.

With its complete safety and signalling product range for rolling stock (ATP systems) and infrastructure (level crossings, axle counters, wheel sensors), ALTPRO is one of the few producers of such equipment in the world. All ALTPRO's safety products have been certified according to EU standards by the independent assessment bodies such as TÜV Rheinland.

The level crossing protection system RLC23 turned out to be the right solution for the world market. By delivering RLC23 to the markets of 3 continents so far (Europe, Africa, Asia), ALTPRO has accumulated vast knowledge and experience in the system implementation in various conditions. Number of innovations and the versatility has made RLC23 one of the most competitive SIL4 certified level crossing protection solutions in the world.

ALTPRO is able to deliver turn-key project starting from project documentation, equipment delivery, implementation, testing, commissioning and maintenance. The product and services are completely adapted to customer requirements. Implemented innovations and production in nearly 4700 square meters enables ALTPRO to satisfy needs of each customer.

RLC23 is a highly decorated system in Croatia and on the international innovation fairs.

https://www.altpro.hr/









**JUNE 7, 2018** 



KONČAR – Power Plant and Electric Traction Engineering Inc., abbreviated KONČAR KET, is a leading sale and marketing company as well as a holder of engineering activities within the KONČAR Group.

The Company core business activity is construction of complex plants and facilities intended for electrical power systems, transport and industry on turn-key principle using the products from KONČAR Group product range. We offer a proved quality, innovative and ecologically acceptable solutions.

KONČAR-KET has many years of experience in construction of new as well as reconstruction of existing railway and tramcar infrastructure.

Our solutions include designing, erecting, commissioning and maintaining: electric traction substations, sectioning stations, coach preheating devices, point heating systems, insulated section control systems, railway station signalling and safety equipment power supply systems, rectifying systems, reactive power compensators and complete level crossing devices.

KLC3 is the third generation of Končar Level Crossing Devices. It complies with the highest security requirements of CENELEC norms (SIL4).

We implement smart grid solutions in remote control centres, i.e. KET PROZA NET SCADA System provides a high level of supervision and control efficiency.

Our advantage is the know-how of equipment and plant technologies and control systems as well as the usage of advanced methods and technologies.

http://www.koncar-ket.hr/en/









**JUNE 7, 2018** 



IDS Ingegneria Dei Sistemi S.p.A. is an independent engineering and systems technologies company, providing research, innovation and products in the unmanned, electromagnetic, radar and air navigation fields, for both civilian and defense applications. Since 1980 IDS has specialized in providing consulting services for high-tech engineering projects, and in developing integrated software solutions and measurement systems. IDS is an international company with over 600 professional employees. Its headquarters are in Pisa, Italy, and it has subsidiary companies in Australia, UK, Canada, Brazil and South Korea. The company is organized into four business areas: Air Navigation Division, Electromagnetic Engineering Division, Aeronautical and Unmanned Systems Division and Radar Division. Proprietary software tools are developed, documented and maintained according to ISO 9001:2015, and in the case of the Aeronautical and Unmanned Systems Division. AS/EN 9100:2016, ESA and Defence Administration quality and security standards.

www.idscorporation.com









**JUNE 7, 2018** 



HŽ Putnički prijevoz (HŽPP) is the only passenger rail operator in the Republic of Croatia and it connects city and county centres within the county, as well as with other European city centres.

HŽPP is member of several international railway associations: Community of European Railway and Infrastructure Companies (CER), International Union of Railways (UIC), International Rail Transport Committee (CIT), G4 Group and Forum Train Europe (FTE).

HŽPP constantly invests into raising the quality of its transport services and in the last five-year-period, 21 new trains were put into operation and the new integrated tickets booking & sales system was implemented, within which the terminals at cash registers were modernised, mobile terminals for conductors were introduced, ticket sale via the internet and smart-phone apps was introduced, ticket sale machines were placed in 7 major railway stations, smart cards were introduced and the sale of international tickets was modernised.

By continuing the implementation of restructuration measures, HŽPP is preparing for the railway passenger transport market liberalisation in the Republic of Croatia. The plan is to continue the procurement of trains, renew the existing fleet, invest in IT modernization and introduce modern technologies, as well as entering into strategic partnerships with regional and local self-government units and bus operators. One of the main goals is to improve integrated passenger transport, thus rounding up the market in order to create added value for passengers and increase service quality, as well as benefits for the local community and the environment.

http://www.hzpp.hr/









**JUNE 7, 2018** 



Founded 40 years ago in New York. Branches in Europe started in 1990 with headquarters in Prague. Main orientation of FPD was telecommunication technology especially big telephone exchanges and GSM networks.

FPD was developing GSM network for major mobilephone operators as O2, Vodaphone, T-Mobile, including transition towers up to 40 m. FPD was taking major part in upgrading whole GSM network eg. buying whole network of 3000 GSM transitions stations from T-Mobile and 2500 from Vodaphone, dismantling them and relocating globally to other major GSM operators around the word (mainly to Russia, India, Africa).

In big telephone exchanges and switch techboards, FPD was exclusive distributor for major US manufacturer HARRIS (25 000 employees worldwide) and was outselling all European manufacturers like Siemens, Alcatel combine.

Since 2010 FPD is focusing on safety systems for level crossings. For example FPD has developed and patented "Advance signaling" system assuring 100 % accident free level crossing for vehicles. Latest developments of FPD are level crossing turnstiles for pedestrians which are providing 100 % accident free safety also for pedestrians.

Furthermore, FPD developed sophisticated monitoring of health condition of engine drivers and personnel involved in train traffic control so they will not collapse or fail during the work shifts.

FPD is also active in active in practical implementation of "Advance signaling" system not only in the Czech Republic but also internationally on global bases.

FPD is also active in promoting level crossing safety by organizing and also attending various conference educational programs and presentations on global bases , like ILCAD, where not only informs about the newest possibilities of improvement on level crossings safety , but also is open to discuss and consult of participants also organize on global bases Pilot projects of "Advance signaling" finance by Traffic Safety Fund to promote FPD goal "100 % accident free level crossing for vehicles and pedestrians globally".

http://www.fpdco.com/







**JUNE 7, 2018** 

### SCHWEIZER ELECTRONIC

Schweizer Electronic is headquartered in Switzerland, has many subsidiaries in European countries and many distribution partners worldwide. We are divided in 3 Business Units:

1. Rail Automation: Development and manufacturing of innovative, high-tech level crossings up to SIL 4 safety. These crossings are based upon standard industrial components and have very low life-cycle costs. Our newly developed level-crossing system Vamos does not need any preventive maintenance at all! Our intelligent diagnostic and telemetry systems are part of industry 4.0.

Fixed installed warning systems for specific track sections (tunnel, mining, oil refinery), as well as Central Monitoring System (CMS) make also part of our product portfolio.

- 2. Work-Protection: Development and manufacturing of mobile and permanent automatic track warning systems to protect workforce and rail equipment. This equipment is completely failsafe and SIL 4 certified. Our systems are used worldwide. Biggest customers are private and state railway companies, as well as safety and construction companies. Network Rail, SBB, Deutsche Bahn, ÖBB, RFI, ADIF and others have homologated our products.
- 3. Radio Systems: SIL3 radio remote control system for railway operations with high standards. The flexible radio system concept enables optimal use of resources, and thereby contributes to significant increase in productivity. Typical applications for the radio system are shunting, flow and crossing operations, construction machines or special vehicles.

http://www.schweizer-electronic.com/









**JUNE 7, 2018** 



The Croatian Automobile Club (HAK) is a national, non-profit, non-partisan association with joint motorcyclists and citizens, drivers and motor vehicle owners. Established in 1906, today it numbers 69 automobile clubs from all over Croatia and has more than 230,000 active members and users.

We provide our members with roadside assistance, special discounts and benefits, free information, travel planners, tips and tests - to be safe on the road and to reach their destination.

HAK organizes roadside assistance in Croatia and abroad - 24 hours a day and 365 days a year, through a free phone number 1987 – breakdown and towing service on the road in Croatia and by calling +385 1 1987, assistance on the road abroad.

HAK membership for a safe journey in Croatia and abroad. Customer Support via Phone 0800 9987.

HAK Family Membership - a form of membership that makes all benefits and savings on travel or purchases available to all family members with a unique membership fee.

Savings and discounts for members - discounts on fuel, railways and many partners in Croatia and Europe. You can save the full amount of membership fees at HAK often with only one purchase.

Significant public authorities - informing the public about the state and the roadway in the country; issuing of international driving licenses and permits for driving a foreign vehicle abroad, customs clearance, driver's examination, expert supervision of the driving schools, expert supervision over the vehicle technical inspection stations, homologation.

Preventive and Educational Programs - Safe in Traffic, Safe in School with HAK, See and Click, Days of Technical Correctness, Click, a series of international programs and tests.

www.hak.hr









**JUNE 7, 2018** 



Rail Cargo Carrier has been engaged in cross-border transport with top quality block trains since 2013, and these trains provide a prominent service in the whole logistic and transport chain via the international cooperation and the continuous international production. Rail Cargo Carrier is the international production unit of the Rail Cargo Group, and was founded from Rail Service Hungaria – a subsidiary of Rail Cargo Hungaria – on February 6, 2013.

The managing company, Rail Cargo Carrier Kft. seated in Budapest connects the production units operating in Bulgaria, Germany, Italy, Croatia, Romania, Slovakia, Slovenia, the Czech Republic and Hungary.

Norms and standards are part of our daily business. Our internal management system ensures that we set and maintain consistently high standards in the areas of quality, health and the protection of personnel and property as well as in terms of sustainability and environmental protection. Our corporate management system ensures that this quality is documented and certified by an independent body.

We convince you with high quality and maximum reliability across all national boundaries.

Quality Austria has certified that Rail Cargo Carrier is compliant with the following quality standards: ISO 9001:2008, ISO 14001:2004, ISO 18001:2007.

http://www.railcargocarrier.com/en/









**JUNE 7, 2018** 



Railway-Carriages Factory Cakovec Ltd. has a long tradition (established in 1945), in the maintenance and manufacturing of all series of rail vehicles, such as freight wagons, tank cars, diesel engine trains, vehicles of different series for infrastructure maintenance, wagons of special purpose and construction of trains.

The company operates in two locations, in Cakovec, where the company's headquarters are, as well as in Bjelovar, where a separate facility of company is located.

In 2013., a capable and ambitious team from Railway-Carriages Factory Cakovec Ltd. took over a stumbled company in Bjelovar, which had the conditions for bankruptcy, and set it on a healthy basis where today a hundred people are employed successfully. Workshop in Cakovec is located on a total of 57,000 m² of land, out of which 12,100 m² represent five production halls. The site in Bjelovar is located on a total of 79,000 m² of land, of which 9,200 m² represent production halls.

The company employs a total of 236 employees. Production processes take place in two separate areas, maintenance and manufacturing.

Over the past few years, great attention has been paid to the development, especially the development of new innovative products - wagons. With great pleasure and pride we can say that Railway-Carriages Factory Cakovec Ltd. is one of the few companies in the world that has an internationally recognized patent on their wagon.

The self-prop rail wagon (for transport of bulk cargo) has already been present on the world market as a wagon-patent (no such thing exists in the world)! With patent protection, the self prop rail wagon is the winner of many innovations at exhibitions around the world (7 gold and 1 silver).

After the production of RoLa wagon (for freight vehicles transportation), several very successful reconstructions of freight wagons for various purposes, participation in the production of low-noise electromotor trains produced for HZ Passenger transport "Self prop rail" is the scale of our success.

With our quality of service and innovation we are trying to impose on the European market. We prove our quality through numerous authorizations, certifications and attests, to name but a few, EN ISO 9001: 2008, EN ISO 14001: 2004, BS OHSAS 18001: 2007, EN ISO 50001: 2011, ECM - Authorization for the function of maintenance of railway vehicles, VPI - Authorization to maintain railway vehicles for international private operators, DIN EN15085-2, DIN EN ISO 3834-2, EN 14025, EN 1090, an authorized test site for pressure vessel testing.

The Croatian cargo carriage market is too low for all stakeholders, only the capacities of Railway-Carriages Factory Cakovec Ltd. exceed the needs of the Croatian market for the maintenance of freight wagons, so it is necessary to open new markets that can enable us a safer business future.

Development is very important to Railway-Carriages Factory Cakovec Ltd., through the development of new knowledge, new technologies, new equipment that makes production processes faster and more efficient and the products themselves are more quality. Development activities are a permanent task of all our employees, and we are now starting to develop new, innovative products that we will offer to the market as soon as possible. That is why we have decided to make the most of all available sources of financing, both domestic and European, that stimulate development and innovation, whether they are European funds, ministries of the Republic of Croatia, various agencies and others.

All the activities we take make it possible for us to have a stable business. It is very important to note that the company was founded in 1945. and that we have so far completed each business year with a positive result, with profit. The combination of the valuable hands of our employees, diligence and minds are a guarantee of success.

http://www.rzv.hr/en\_index.html









**JUNE 7, 2018** 



CITUS an IT company specialized in research, development and implementation of innovative IT solutions established at 1999. CITUS is a Microsoft Certified Partner specialized in consulting, architecture of IT systems, development and implementation of innovative mobile and cloud IT solutions. Its services, solutions and products are based on innovations and for them CITUS have received over 60 international awards and have won gold medals for innovation in ICT (USA, Great Britain, Russia, Korea, Taiwan, Malaysia, Korea, Poland, Croatia etc.). Of each innovation CITUS created successful solution. CITUS is owner of the 5 patents in the field of ICT. Just for illustration on European Business Awards (EBA) 2016/2017 competition they were National winner in category Innovation, and on the biggest American exhibition of innovations and new technologies INPEX 2015, won two gold medals and the award The Best Invention of Europe. They have ISO 9001-2015 certificate for quality. CITUS team are highly educated and certified professionals. It is multidisciplinary team of professionals with the approach "out of the box" and they do not take NO as an answer. They are lecturers at various conferences. Three CITUS employees are holders of the prestigious MVP-Microsoft Most Valuable Professional titles for Office 365 and the development of Web applications.

CITUS solutions are innovative and created on the latest technologies. They are very intuitive and easy to use with touch free approach i.e. just with the gesture (no need to touch keyboard, mouse or touch screen). It can be used through shop window, it is available 0-24, absolutely hygienic, without possibility of equipment damage because the user is not in contact with it. They provide big interaction through gamification, creation of avatar etc. Based on the patents and innovative platforms they created products/solutions: Smart Fridge, Smart Shelf, Smart Ticketing, Smart Shop Window, Business Process Gamification, Smart City lights, Smart Traffic, Smart Retail, Smart Education, Smart Healthcare etc.

Products/solutions have been developed on their own knowledge and their competitiveness have been proven in the global market through years of work. Some of them are: <a href="www.can-motion.com">www.can-motion.com</a> i <a href="www.BodyMeasures.com.hr">www.BodyMeasures.com.hr</a> i <a href="www.conferenceatnet.com">www.conferenceatnet.com</a>.









**JUNE 7, 2018** 



#### Let's relax and enter the fairy tale...

Zagorje – the green entrance door of Croatia is the best region suitable for vacation. It is the oasis of preserved nature, clean air, greenery and healthy thermal waters. In the archipelago of picturesque hills lies the whole range of spas, castles and manors, roman roads, agritourisms, museums, churches, and trails for hiking, riding and cycling.

Zagorje is Croatia's largest thermal area where the water paints the rainbow. Exactly here are the most thermal springs, which, translated into modern baths with excellent hotels and gastronomic offer, make Zagorje to the real Croatian continental riviera. On the water planet in Thermae Tuhelj the passion of the slides and "wild" rivers is calmed by the largest world of saunas and the healing mud rich in minerals. The hug of the water warmth is magical. Just like in Thermae Jezerčica, the place where volcanic droplets touch and merge with gentle Zagorje hills. A special, intimate atmosphere will give you the hotel Villa Magdalena, which won the title of the best continental small family hotel for several years. They say that there is no man who at least once did not wish to be pampered while enjoying the delicious delicacies on the plate and in the glass, and exactly that provides the wine and gastro offer of the Hotel Kaj in Marija Bistrica. Close encounter with hot minerals from the depths of the Earth – is the ticket for the feeling of the new birth. The water warmth of Aquae Vivae hugs here since the time of the old Romans. It is not known if Neanderthal, the Krapina early man, also bathed and treated himself here, but it is known that his home was the cave in Hušnjakovo, where is situated The Krapina Neandhertal Museum which proves that the civilisation of the thermal water is eternal. Feel it...

It's true! It's possible to experience a fairy tale.

Come and experience it.

www.visitzagorje.hr









**JUNE 7, 2018** 

#### Impressum:

#### **ILCAD 2018**

International Level Crossing Awareness Day <a href="http://www.ilcad.org/ILCAD-2018.html">http://www.ilcad.org/ILCAD-2018.html</a>

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