

# SECRET

PROJECT



SECURITY OF RAILWAYS AGAINST  
ELECTROMAGNETIC ATTACKS

## Final conference 2015

October, 29th

IFSTTAR  
20, Rue Elisée Reclus  
59650 Villeneuve d'Ascq

### PROGRAMME

#### OCTOBER, 29TH, MORNING

09:00	~ Registration and coffee ~
10:00	<b>Welcome of the conference</b> <i>Marc Antoni (UIC) and Jean-Paul MIZZI (IFSTTAR)</i>
10:15	<b>Introduction</b> <i>Erik Bessmann (IFSTTAR)</i>
10:30	<b>SECRET project: Context and objectives</b> <i>Virginie Deniau (IFSTTAR)</i>
11:00	<b>Intentional ElectroMagnetic Interferences (IEMI) and railway: What are the risks?</b> <i>Henry Philippe (SNCF)</i>
11:15	<b>Risk Assessment: human factor and cyber threat analysis</b> <i>Alessandro Zanasi (Zanasi &amp; Partners)</i>
11:30	<b>QUESTIONS / ANSWERS</b>
11:40	<b>Standardisation and immunity tests regarding Intentional Electromagnetic Interferences (IEMI)</b> <i>Véronique Beauvois (ULG)</i>
	<b>Railway Vulnerability to EM attacks</b> <i>Flavio Canavero (POLITO)</i>
12:00	<b>QUESTIONS / ANSWERS</b>
12:10	<b>DEMONSTRATIONS</b> WP2: Test bench to test GSM-R susceptibility to EM attacks WP3: EM Attack detection : Focus on the implementation solutions
12:30	~ Lunch break ~



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## OCTOBER, 29TH, AFTERNOON

- 13:50 **Intentional ElectroMagnetic Interference in Railway: why and how to sense them?**  
*Marc Heddebaut (IFSTTAR)*
- 14:10 **Impact of EM attack signatures on ETCS Quality of Service Indicators**  
*Marina Aguado (UPV/EHU)*
- 14:25 **QUESTIONS / ANSWERS**
- 14:35 **Architecture for resilience in presence of IEMI**  
*Antonio Kung and Michel Sall (TRIALOG)*
- 14:45 **Multipath Communication System (MCS): Using Multipath-Transmission Control Protocol (MPTCP) for resiliency**  
*Eduardo Jacob (UPV/EHU)*
- 14:55 **DEMONSTRATIONS**  
Proof of concept of resilient architecture for dynamic protection system to IEMI, for railway applications  
*Presented and commented by Christian Pinedo (UPV/EHU)*
- 15:15 **QUESTIONS / ANSWERS**
- 15:25 ~ Coffee break ~
- 15:40 **Recommendations to railway domain issued from SECRET project**  
*Pierre Lambert (Alstom)*
- 16:10 **QUESTIONS / ANSWERS**
- 16:20 **Point of views**  
*IEC, EPSF, ERA, EC*
- 16:50 **Exploitation plan**  
*Marie-Hélène Bonneau (UIC)*
- 17:00 **Closing of the session**  
*IFSTTAR*



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