



# Final Conference, October 29<sup>th</sup> 2015

## Introduction & Agenda

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# Introduction

## ❖ **Reminder of some key SECRET issues :**

- SECRET was motivated by the awareness of the threat of intentional electromagnetic interferences vs the evolution of our critical infrastructures
- Our objectives through SECRET :
  - Illustrate the danger of IEMI by highlighting the simplicity of certain magnetic attacks
  - Sensitize the different railway actors to strengthen the ER system resilience
  - Open ways to solutions to get resilience to face this type of attacks, through specific strategies :
    - Test to assess the susceptibility of individual network components deal with intentional interferences
    - Methods of detection of electromagnetic attacks
    - Resilience of infrastructure which as to insure the maintenance of communication for the transmission of critical information
- We intend to extract exploitable recommendations at different levels (organisation, standardization, technical recommendations)

## ❖ **We are glad to welcome you today for a programme of presentations and demonstrations**

# Agenda (1)

- ❖ 10:00 – 10:15 Welcome of the conference
- ❖ 10:15 – 10:30 Introduction
- ❖ 10:30 – 11:00 Secret Project : context and objectives
- ❖ 11:00 – 11:15 International Electromagnetic Interferences (IEMI) and railway:  
What are the risks?
- ❖ 11:15 – 11:30 Risk assessment factor and cyber threat analysis
- ❖ 11:30 – 11:40 Q/A
- ❖ 11:40 – 12:00
  - Standardization & Immunity tests regarding Intentional Electromagnetic Interferences (IEMI)
  - Railway vulnerability to EM attacks
- ❖ 12:00 – 12:10 Q/A
- ❖ 12:10 – 12:30 Demonstrations

## Agenda (2)

- ❖ 13:50 – 14:10 International EM Interference in railway: why and how to sense them
- ❖ 14:10 – 14:25 Impact of EM attack signatures on ETCS
- ❖ 14:25 – 14:35 Quality of Service
- ❖ 14:25 – 14:35 Q/A
- ❖ 14:35 – 14:45 Architecture for resilience in presence of IEMI
- ❖ 14:45 – 14:55 Multipath Communication System (MCS): Using Multipath-Transmission Control Protocol (MPTCP) for resiliency
- ❖ 14:55 – 15:15 demonstrations
- ❖ 15:15 – 15:25 Q/A
- ❖ 15:25 – 15:40 Coffee break
- ❖ 15:40 – 16:10 Recommendations to railway domain issued from SECRET project
- ❖ 16:10 – 16:20 Q/A
- ❖ 16:20 – 16:50 “point of vues” session
- ❖ 16:50 – 17:00 Exploitation plan
- ❖ 17:00 Closing of the conference