

UPDATES FROM THE UIC SECURITY PLATFORM

76th UNECE Working Party on Rail Transport
18 November 2022, online

Marie-Hélène Bonneau– UIC Head of security division

Update on UIC security platform activities

Update on UIC security platform activities

- **Worldwide activity**

- chaired by RPF (Indian Railways Protection Force) from 1st July 2022 for 2 years
- Co-chaired by SNCF from 1st July 2022 for 2 years

- **New working group to be launched in 2023**

- crisis management in case of a security incident

- **UIC Security Hub**

- Around 100 security solutions available

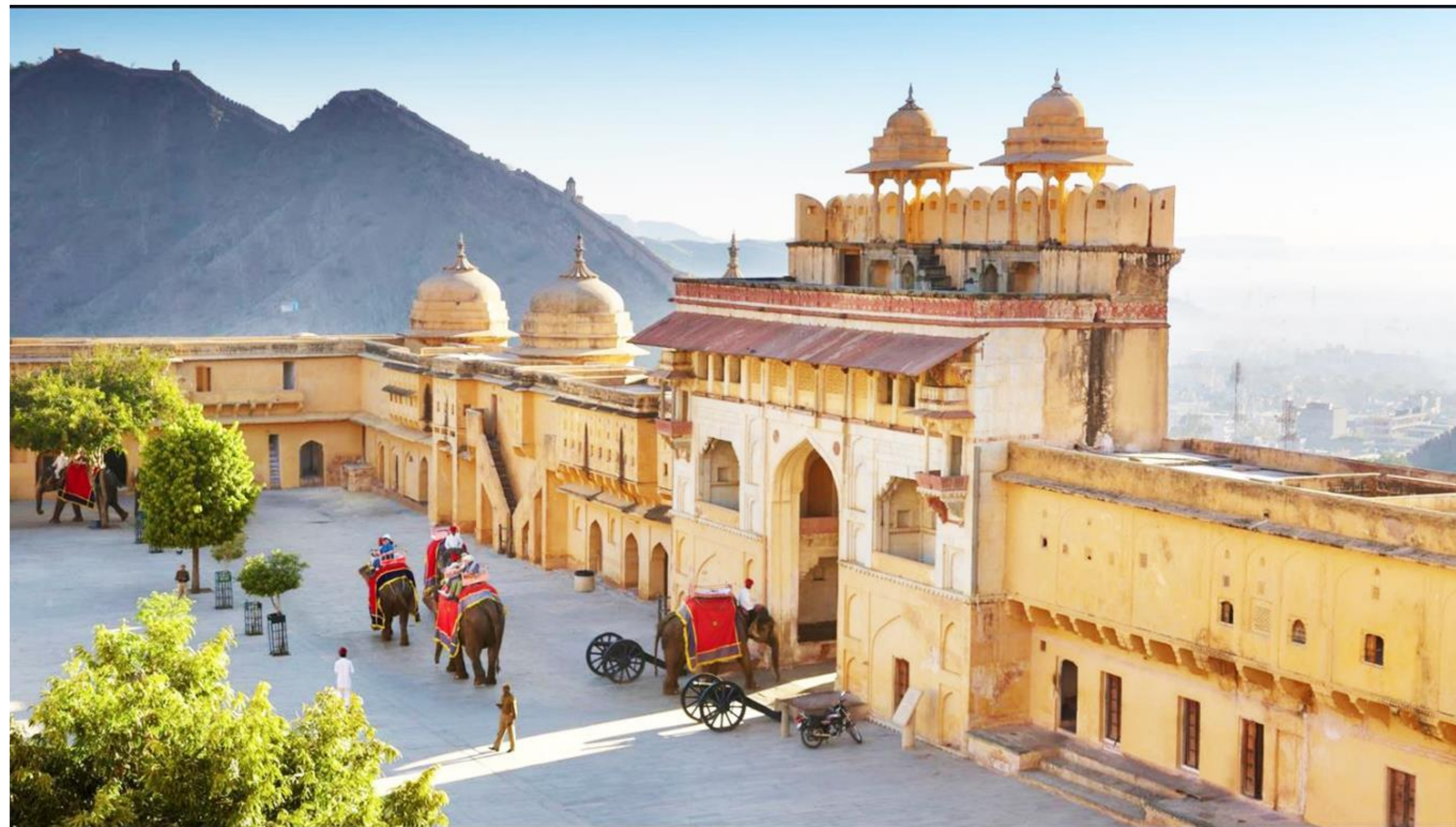
- **Latest surveys (available on the hub)**

- 37th Suspicious and unattended items in public transportation
- 38th Security organization and provision of security services
- 39th Covid19 Lessons Learned
- 40th Graffiti – on going



Next Security platform event

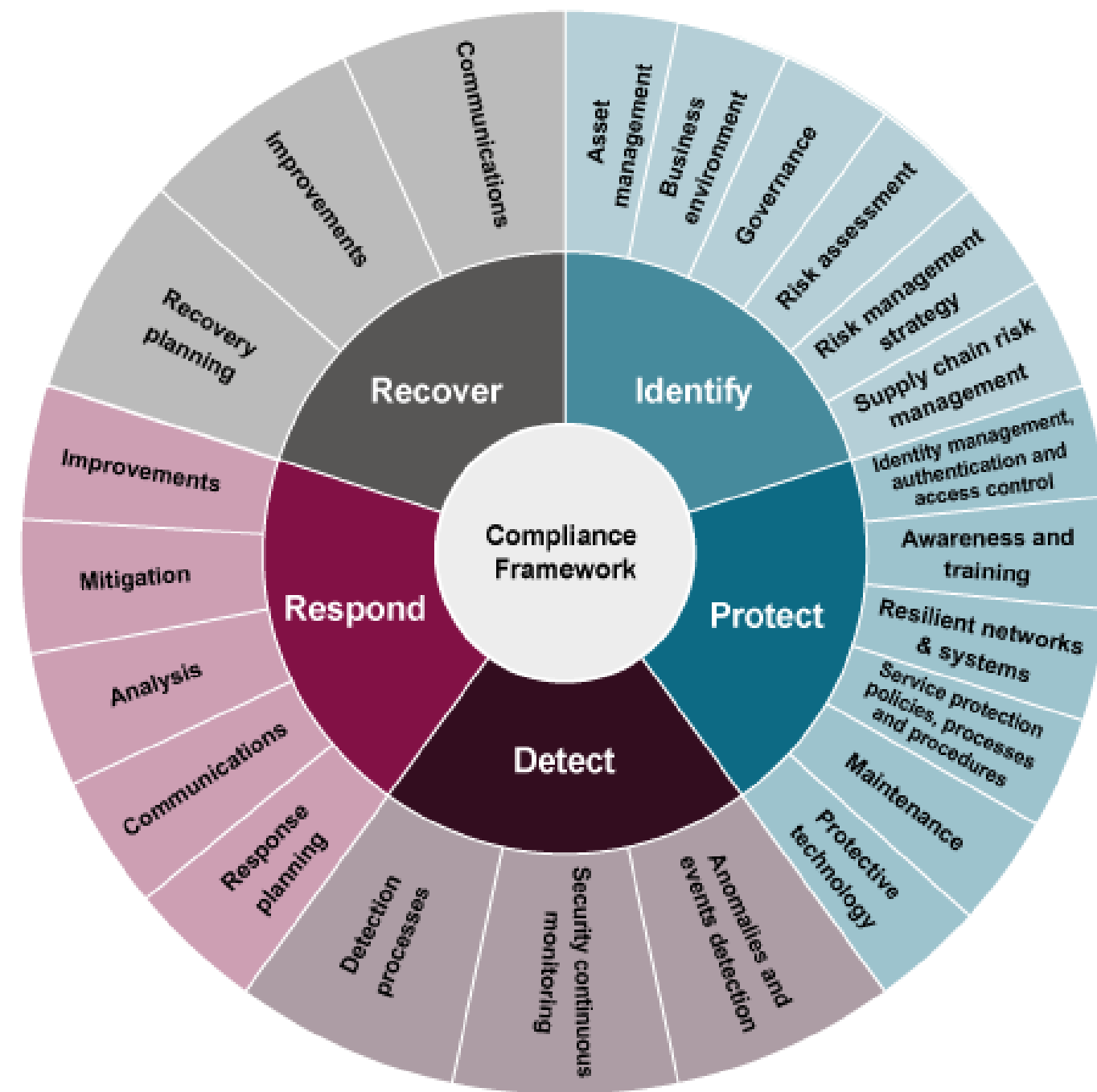
- ❑ 18th UIC World Security Congress to be held in Jaipur, India on 20-23 February 2023



**Update on EU research project
SAFETY4RAILS**

SAFETY4RAILS Project overview

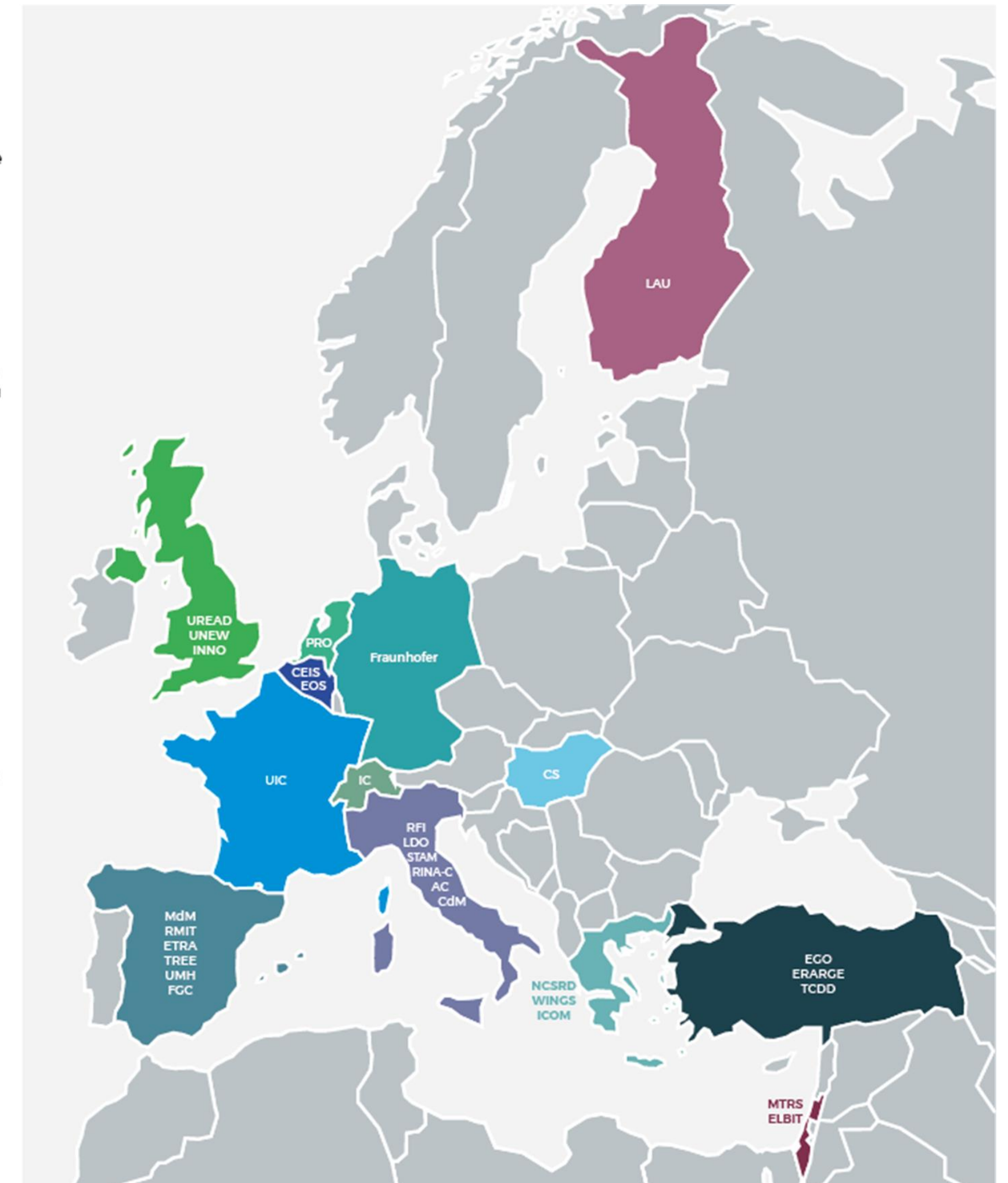
EU H2020 project, 24 months, start 01/10/2020, 31 partners, incl. 8 end-user organisations



GOAL : Increase security and resilience of railway and metro infrastructures to combined cyber physical threats including natural hazards

OBJECTIVES: capabilities to support the characteristics of resilient systems

- GERMANY**
Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V. (Fraunhofer), Coordinator, represented by its Institute for High-Speed Dynamics, Ernst-Mach-Institut (Fraunhofer EM)
- FRANCE**
Union Internationale des Chemins de fer (UIC - the worldwide railway organisation)
- SPAIN**
Metro de Madrid (MdM)
Royal Melbourne Institute of Technology (RMIT)
ETRA Investigacion y Desarrollo (ETRA)
Tree Technology (TREE)
Universidad Miguel Hernandez de Elche (UMH)
Ferrocarrils de la Generalitat de Catalunya (FGC)
- TURKEY**
Ankara Elektrik, Havagazi ve Otobusisletme Muessesesi (EGO)
Ergunler Insaat Petrol Urunleri Otomotiv Tekstil Madencilik su Urunler Sanayi ve Ticaret (ERARGE)
TAŞIMACILIK A.Ş GENEL MÜDÜRLÜĞÜ (TCDD)
- ITALY**
Rete Ferroviaria Italiana (RFI)
Leonardo (LDO)
Stam srl (STAM)
Rina Consulting spa (RINA-C)
Alpha-Cyber srl (AC)
Comune Di Milano (CdM)
- BELGIUM**
Compagnie Européenne d'Intelligence Stratégique (CEIS)
European Organisation for Security (EOS)
- SWITZERLAND**
IC Information Company (IC)
- GREECE**
National Center for Scientific Research "Demokritos" (NCSRDI)
Wings ICT Solutions Information & Communication Technologies (WINGS)
Intracom SA Telecom Solutions (ICOM)
- UNITED KINGDOM**
The University of Reading (UREAD)
University of Newcastle Upon Tyne (UNEW)
Innova Integra Limited (INNO)
- FINLAND**
Laurea-Ammattikorkeakoulu oy (LAU)
- HUNGARY**
Cyber Services Zartkoruen Mukodo Reszvenytarsasag (CS)
- ISRAEL**
M T R S 3 Solutions and Services (MTRS)
Elbit Systems C4I and Cyber (ELBIT)
- NETHERLANDS**
Prorail BV (PRO)



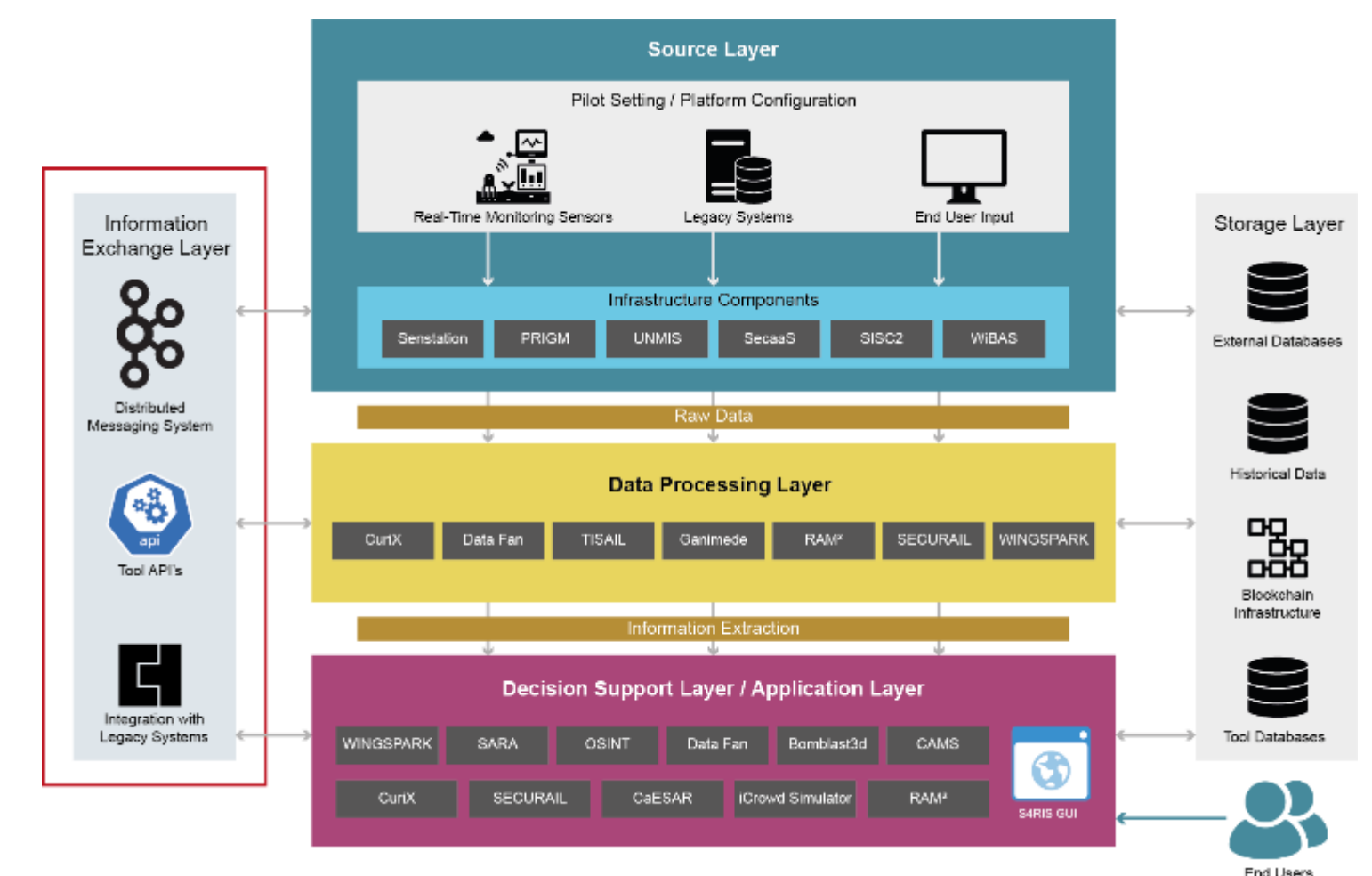
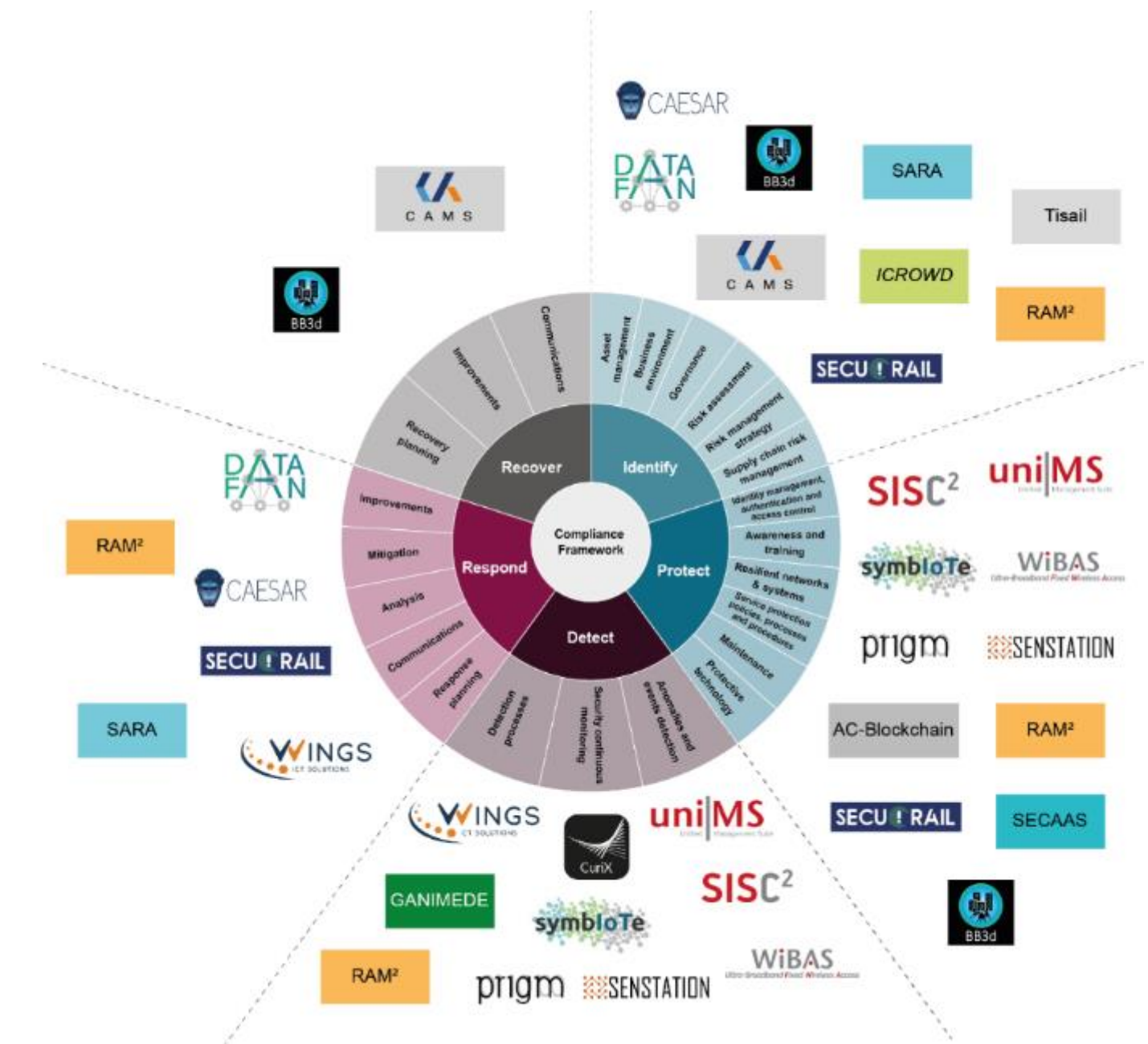
SAFETY4RAILS main outputs

19 tools further developed and adapted to the scope

- 7 tools provide monitoring and infrastructure services related to security, network infrastructure and CCTV data stream analysis.
- 8 tools provide an intersection of monitoring, simulation and decision support services through the use of intelligent risk assessment mechanisms
- 4 tools provide simulation services such as agent-based crowd simulation and bomb blast simulation scenarios allowing for security and resilience assessment of stations

The S4RIS platform

- Combines the solutions for physical, cyber and combined cyber-physical threats to function together as one system with an efficient exchange of data and information.



4 pilots for testing and user validation

Madrid (Metro de Madrid) - February 2022

Combined cyber-physical attack at a metro station close to a stadium after a large sporting event.

Ankara (EGO and TCDD) – May 2022

Series of cyber-attacks and physical attacks targeting sensitive devices and sensors.

Rome (RFI) – June 2022

Physical attack – potential terrorist attack via Improvised Explosive Device (IED) carried via baggage and by a terrorist using firearms inside a railway station.

Milan (CDM) July 2022

Natural disaster – flooding scenario.

SAFETY4RAILS Policy Recommendations

- ❑ Encourage operators to adopt a holistic cyber-physical approach to threats
- ❑ Align the implementation of CER & NIS 2 Directives in Member States
- ❑ Promote formal synergies in their enforcement
- ❑ Promote best practices for ethical crisis communication and data management
- ❑ Additional effort in standardisation activities to capture new technologies (e.g., AI, Block-chain) and to address specific requirements for supporting tools



- 40 Public deliverables
 - e.g.
 - Crisis management tool
 - Toolkit of measures and strategies for rail operators to effectively identify and respond to incidents
 - Innovative mitigation actions for metro and railway systems
 - Guidelines for Ethically Sustainable Crisis Communications and Information Sharing
 - Citizen's engagement concept
 - Brochures and newsletters
 - Final brochure with the main lessons learnt at [link](#)
 - Scientific publications
- <https://safety4rails.eu/library/>

Thank you for your attention

For further information:

- UIC website (Security activity): <https://uic.org/security>
- Security private workspace: <http://extranet.uic.org> (Around 1000 documents available)
- Rail Security HUB : <https://railsecurityhub.org> (more than 80 security solutions available)
- Contact: Security@uic.org

Stay in touch with UIC:

www.uic.org



#UICrail

Thank you for your attention.