

# Preparing the rail sector against CBRNe threats

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## Facts & Figures

Call ID: ISF-2024-TF2-AG-PROTECT; topic CBRN

Grant Agreement: N° 101190621

EU Contribution: € 2,498,985

Project start date: 01/06/2025

Duration: 30 months

Project coordinator: UIC Security Department

## Introduction

Some historic examples of CBRNe attacks in the railways include the 1995 Tokyo metro sarin nerve agent attack and the 2004 Madrid, 2005 London and 2016 Brussels IED attacks, all of which led to many deaths and casualties.

Inherent characteristics of railway premises may contribute to their attractiveness to terrorist [1]. The rail environment is massive, with 1,151,314 line-kilometres in the world [2] and rail stations are considered public spaces, all of which means that a completely 'hardened' approach to security is neither feasible nor desirable.

While ensuring the security of the rail environment is the main responsibility of national authorities, the rail sector has a complementary role to play [3]. Indeed, in the 'golden minutes' following a CBRNe attack, railway staff would likely act as 'immediate responders,' or those who are most likely to be the first to prevent or react to a security incident when it occurs on railway premises, before the arrival of First Responders (FR) like firefighters and Law Enforcement Agencies (LEAs) [4] [5]. Furthermore, ensuring rail companies have a good 'security culture' may help mitigate impacts [6].

## The CBRNe4rail project

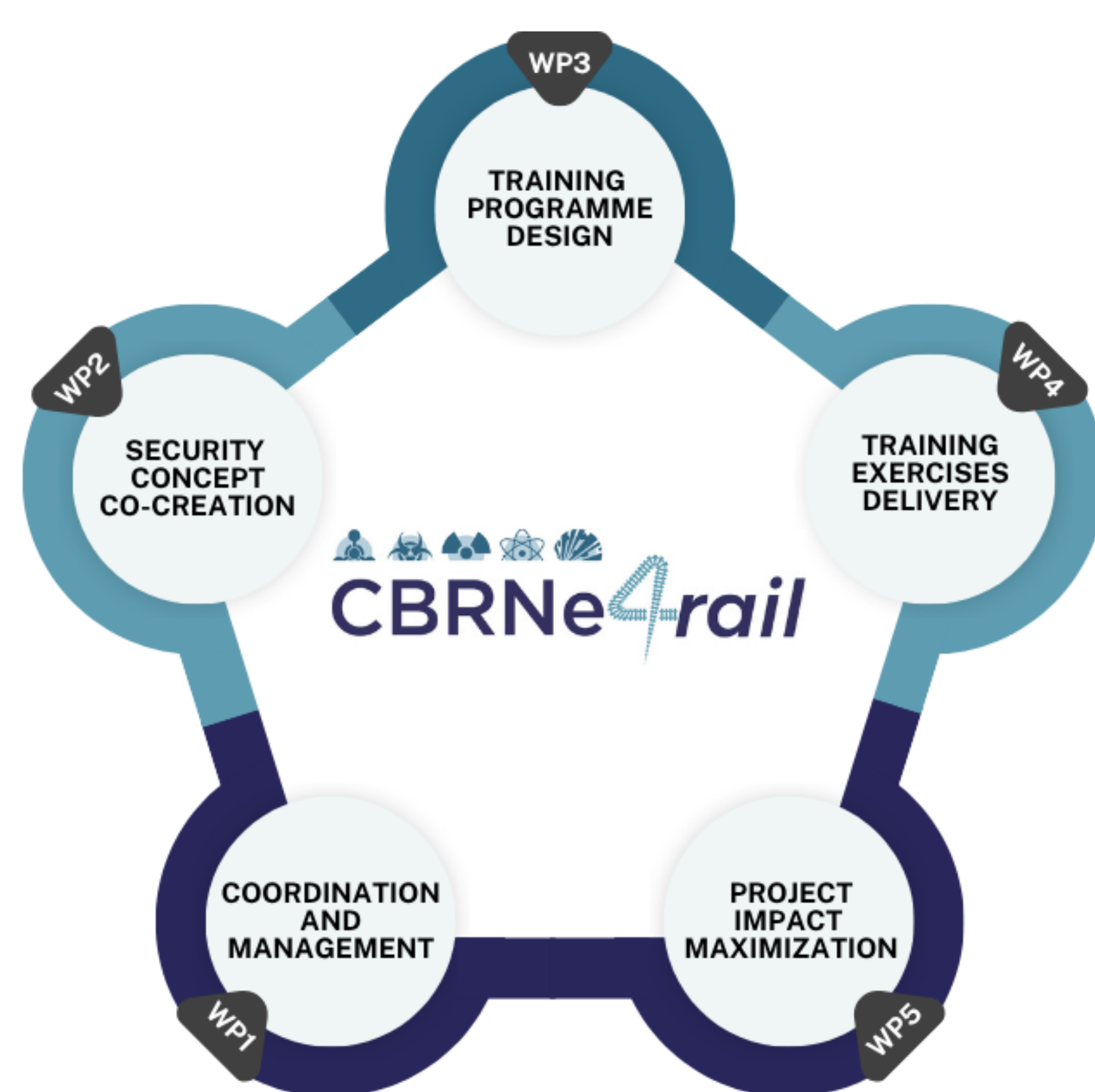
In line with the above challenges, the EU co-funded CBRNe4rail (CBRNe preparedness for passenger rail transport hubs) project aims to enhance railway stakeholders' awareness and response capabilities by improving security plans and providing targeted training for effective management of CBRNe emergencies.

The **core methodology** is based on the active involvement of railway companies and FR in the codesign and implementation of all project activities.

Surveys, on-site expert field visits and workshops are being used to co-create and validate a railway CBRNe security concept.

A harmonised CBRNe training programme for the sector is being designed with and will be delivered to railway staff.

At least 4 in-situ training exercises will be carried out in 2027.



## Current work

- Survey to assess awareness, preparedness, governance practices, and training needs related to CBRNe threats in the railway sector
  - 93 respondents from 23 countries
- State of the Art review of past and ongoing EU-funded CBRNe projects to establish a gaps, needs and recommendations analysis
  - 15 projects reviewed
- Study visits conducted at railway stations structured in two phases: an information-gathering phase and a physical site visit
  - Five visits: Poland, Italy, Spain, Slovenia and Sweden



## Expected Final Results

- An actionable guideline for railway end-users on how to adjust security plans
- An Integrated, agile and scalable curriculum (theoretical module, VR training, practical sessions)
- In-situ exercises at 4 railway stations
- A harmonized and certified CBRNe rail training program

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