



INTERNATIONAL UNION
OF RAILWAYS

unity, solidarity, universality

DATABASE OF TERRORIST ATTACKS AGAINST RAILWAYS ANNUAL REPORT

UNECE Working Party on Rail Transport, Geneva, 27-29 November 2017

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UIC Security Division

Terrorist attacks database

- ❖ Database built upon the outcomes of the EU funded TETRIS project.
- ❖ Open Source Data on terrorist attacks against railways carried since 1970.
- ❖ Countries analyzed:
 - Austria
 - Belgium
 - France
 - Germany
 - Greece
 - Ireland
 - Italy
 - Netherlands
 - Spain
 - Switzerland
 - United Kingdom

The Threat assessment tool

- ❖ *The original database has been reviewed, modified and enriched* in order to become a functional tool for internal use, allowing the UIC Security Division to:
 - ✓ Effectively access the data stored in the database (240+ entries).
 - ✓ Integrate timely updates upon each new attack.
 - ✓ Easily manage existing data and allow for implementation of further categories (e.g. data about attacks in other Countries).
 - ✓ Quickly extract of up-to-date charts and diagrams.
 - ✓ Produce periodical report featuring updated data, charts and analyses on the terrorist attacks against railways.

THREAT ASSESSMENT/ ATTACK DATABASE

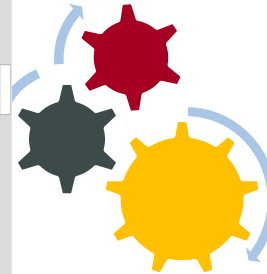


ANNUAL REPORT

INTERNAL USE

Allowing UIC Security Division to:

- ✓ Effectively access the data stored in the database.
- ✓ Integrate timely updates upon each new attack.
- ✓ Easily manage existing data and allow for implementation of further data categories (e.g. data about attacks in other Countries).
- ✓ Quickly extract of up-to-date charts and diagrams.
- ✓ Perform both quantitative and qualitative analyses over 30 data categories (grouped into 7 macro-categories).



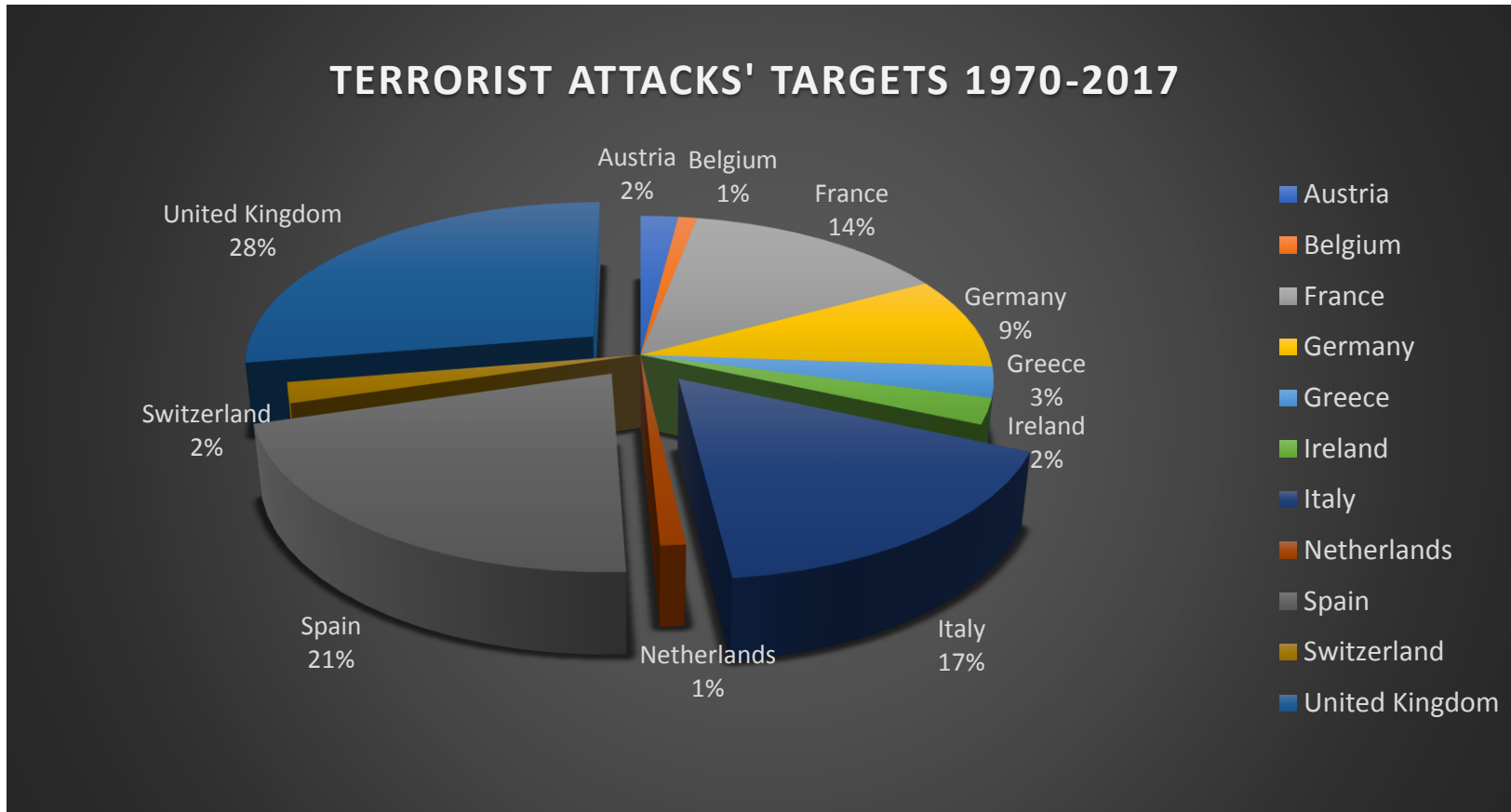
DELIVERABLE TO UIC MEMBERS

Featuring:

- ✓ Qualitative and quantitative analyses of terrorist attacks carried out against railways.
- ✓ Updated charts and figures describing the phenomenon and its evolutionary patterns.
- ✓ First report on terrorist attacks against railways is expected to be delivered to the Members in Jan 2018.

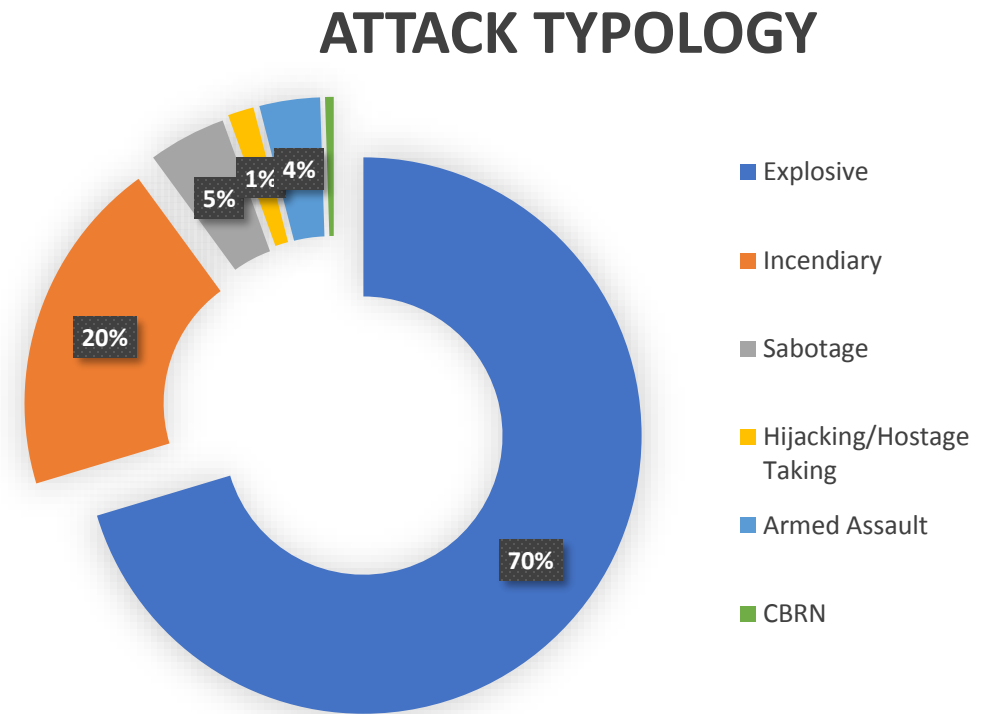
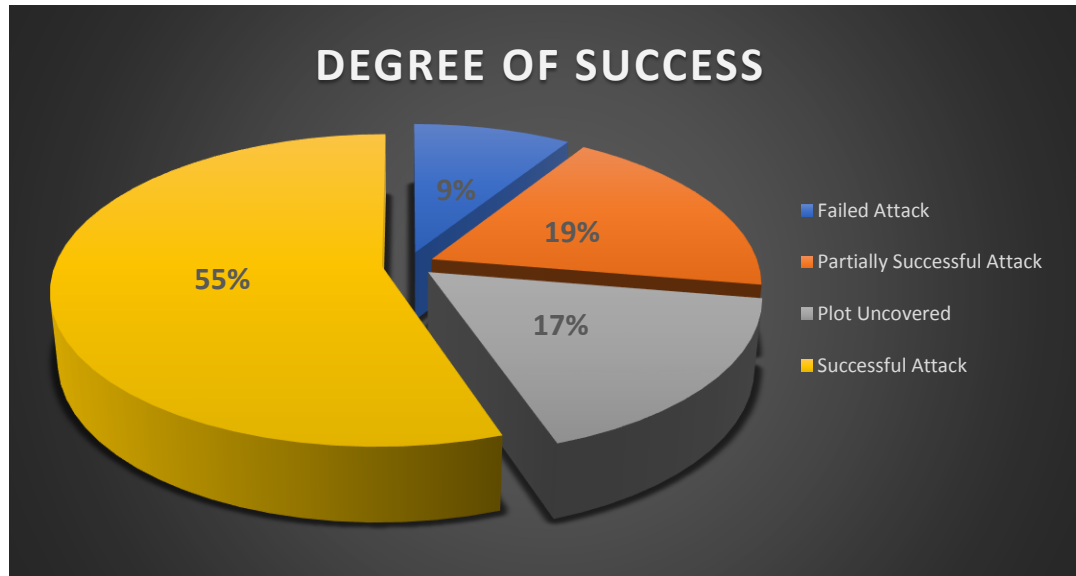
Examples of charts extracted from data

- ❖ During the last 40 years more than 200 terroristic attacks were conducted against railways in 10 European Countries.



Examples of charts extracted from data

- ❖ Most of the attacks were conducted by the use of explosives (70%) or incendiary devices (20%).
- ❖ The armed assault, which in the last few years generally gained much prominence in the news as a mean of attack, accounted until 2015 for only 2% of the total.
- ❖ The targeted assets were almost equally represented by infrastructure/line (39%), trains (33%) and stations (27%).



AVOIDING THE REPETITION
OF PAST ATTACK SCHEMES



TERRORISTIC
ATTACKS DATABASE
&
ANNUAL REPORT

SECURITY MANAGEMENT'S
MISSION



FORESEEING SOLUTIONS
TO NEW THREATS



PARTICIPATION IN EU
RESEARCH PROJECTS

UIC involvement in ongoing EU funded projects



Proactive Enhancement
of Human Performance in Border Control



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 653676

BODEGA (BOrdDErGuArd): PROACTIVE ENHANCEMENT OF HUMAN PERFORMANCE IN BORDER CONTROL

WEBSITE: www.bodega-project.eu

• FP : HORIZON 2020

• BUDGET : 5 M€

• TIMEFRAME : 01/06/2015 – 31/08/2018

• COORDINATOR : VTT, Finland

OBJECTIVES: BODEGA project will investigate and model Human Factors in border control to provide innovative socio-technical solutions for enhancing border guards' performance of critical tasks, support border management decision-making and optimize travelers' border crossing experience. BODEGA will develop a toolbox which integrates the solutions for easy adoption of the BODEGA's results by stakeholders in border control. **For more information please contact:** PAPILLAULT@UIC.ORG



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 723205

SAFER-LC: SAFER LEVEL CROSSING BY INTEGRATING AND OPTIMIZING ROAD-RAIL INFRASTRUCTURE MANAGEMENT AND DESIGN

WEBSITE: www.safer-lc.eu

• FP : HORIZON 2020

• BUDGET : ~5 M€

• TIMEFRAME : 01/05/2017 – 30/04/2020

• COORDINATOR : UIC

OBJECTIVES: to DEVELOP innovative solutions to enhance the safety of level crossings for road as well as rail users; to DEMONSTRATE how these new technological and non-technological solutions can be integrated, validate their feasibility and evaluate their performance taking into account, the level crossing user's perspective and behavior; to DELIVER a bundle of recommended technical specifications, human processes and organizational and legal frameworks for implementation; to DEVELOP a toolbox accessible through a user-friendly interface which will integrate all the project results and solutions to help both rail and road managers to improve safety at level crossings. **For more information please contact:** BONNEAU@UIC.ORG



This project has received funding from the Shift2Rail Joint Undertaking under the European Union's Horizon 2020 research and innovation programme under grant agreement No 730043 addressing the topic 'Threat detection and profile protection definition for cybersecurity assessment'.

CYRAIL: CYBERSECURITY IN THE RAIL SECTOR

WEBSITE: www.cyrail.eu

• FP : SHIFT2RAIL - HORIZON 2020

• BUDGET : 1,5 M€

• TIMEFRAME : 01/10/2016 – 30/09/2018

• COORDINATOR : EVOLEO

TECHNOLOGIES LDA, PORTUGAL

OBJECTIVES: to PERFORM an exhaustive cyber security assessment of the Railway systems focusing on the most critical railway services, zones and communications; to DELIVER a taxonomy of threats targeting rail management and control systems capable of classifying, describing and analysing cyber-attack threats; to ASSESS and SELECT innovative rail management systems attack detection techniques; to SPECIFY countermeasures and mitigation strategies for improved quality levels; to DESCRIBE resilience mechanisms for operational safety; to SPECIFY protection profiles with evaluation of assurance levels. **For more information please contact:** BONNEAU@UIC.ORG

Latest UIC Publications



PREDICT PROJECT SUMMARY **(March 2017)**

Available on the UIC Website at:
uic.org/Security-Research-Projects



RECOMMENDATIONS FOR CRISIS MANAGEMENT **(April 2017)**

Available on the UIC Website at:
uic.org/security#documents



STATION SECURITY FOR STATION BUSINESS – HANDBOOK ON EFFECTIVE SOLUTIONS **(October 2017)**

Available on the UIC Website at:
uic.org/security#documents

Thank You!

Thanks for your attention!

FOR ANY FURTHER INFORMATION:

Visit UIC Website: uic.org/security

Contact us at: security@uic.org