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Analysis of suicide and trespass on railways properties

Presentation of results

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Objective

- **To collect and analyse data** related to railway suicides and trespassing accidents
- The more specific objectives were
 - To provide a **systematic description** of current knowledge concerning railway suicides and trespassing accidents,
 - To collect **statistical** and **behavioural** data concerning railway suicides and trespassing accidents,
 - To collect data concerning the **consequences** of suicides and trespassing accidents, and
 - To **analyse** the collected data and draw the conclusions



Data collection

- Literature review (articles, reports; web based database)
- Collection of statistics (number of cases + information on individual accidents)
- Information on behaviour (Analysis of pre-existing information, observational studies and consultations with experts and train drivers)
- Consequences (survey)
- Measures to prevent railway suicides and trespassing accidents (survey)



Statistics; number of cases

	ERADIS	UIC safety database
Suicides	Yes	Yes
Attempted suicides	No	Yes
Trespassing accidents	Yes	Yes
Data collection	Mandatory to EU Member States	Voluntary
Coverage	National level	UIC member organisations
Definitions	Uniform	Can vary between countries
Access to data	Public	As a rule limited to UIC members
Level of detail	Aggregated (annual) data only	Aggregated data + data on individual incidents
Data on contributing factors	No	Yes
Data on location, date and time	No	Yes



Statistics; detailed incident data

Country	Aggregated (A) / Individual (I)	Years
BE	I	2008–2011
CZ	I	2010–2011
DE	I	2005–2011
ES	A	2005–2008 & 2010
FI	I	2005–2010
FR	A	2010–2011
NL	I	1980–2010
PL	I	2008–2012
SE	A	2011
SI	A	2007–2011
SK	A	2005–2010
UK	I	2002–2012



Statistics

- Most information on age, gender, timing of event and location
- Least information on access point, mental health, self-harm, suicide note or farewells and intoxication.



What do we know about the problem and the victims?

- Differences:
 - Motive
 - Behaviour
 - Mental health and intoxication
- Similarities:
 - Victims were predominantly males
 - Events occur typically in cities but outside station areas
 - Victims are typically hit by passenger train
 - Suicides were almost always committed by persons alone, and even in trespassing accidents there were seldom more than one victim
 - Fairly evenly distributed throughout the year and weekdays



Responsibility for investigation of railway suicides and trespassing accidents by country

Country	Responsibility for investigation			
	Police	Railway companies	Accident investigators	Other
Belgium	X		X	
Finland	X			
France	X			X
Germany	X	X		X
Lithuania	X	X		
The Netherlands	X			
Slovakia		X	X	X
Slovenia	X		X	
Spain	X	X	X	
Sweden		X		
Turkey	X			
UK	X	X		



Classification of railway suicides and trespassing accidents by country

Country	Decision taken	Comment
Belgium	Police	The decision is mainly based on the train driver report.
Finland	Coroner	The final decision on the intentionality is made by the coroner on the findings from autopsy and police report.
France	Police	The decision is taken on the basis of information retrieved from the victim or the testimony of the driver.
Germany	Not explicitly mentioned	The railway company searches the cause. The authorities (police, road authority) search the causing person. In some cases the prosecutor's office (justice) investigates too.
Lithuania	Police	
Slovakia	Police, a national investigation body (MDVRR SR) and the infrastructure manager	The event is classified only on basis of the train driver's opinion or opinion of eventual witnesses.
Slovenia	Police	Other bodies taking part in the investigation include the Inquiry Commission and the Head Railway Accident Investigator
Spain	National Accident Investigation Commission or a judge (in cases of great damage also the police and security forces)	The train driver reports to the infrastructure manager, who prepares a first report. The final report is published by the National Rail Accident Investigation Commission.
Sweden	Police	The Infrastructure Manager (IM) and Railway Undertaking (RU) both undertake their own investigation and are the responsible bodies.
The Netherlands	Public Prosecutor Office	The Railway Police investigates the event (murder, suicide or accident) and the Public Prosecutor Office makes the decision.
Turkey	The responsible bodies are police department, attorney general ship and military police	The classification is done based on testimony of witnesses and train driver.
UK	The official decision is made by the coroner	An initial classification is made by RSSB, using information supplied by British Transport Police and other industry stakeholders.



What are the consequences of these events?

- Events have far reaching consequences for a wide range of actors and agencies within society
- Consequences
 - Emotional
 - Organisational impacts and financial implications
 - Discomfort
- Length of delay: 45 min–3 hours



Behaviour

- Description of behaviours, which are potentially observable at different points in time

Suicide

Sudden movement
Concealment
Waiting

Locations
Curves, bends
Privacy

Leaving belongings
Suicide notes

Interactions with people
- With drivers
- (lack of) with other passengers

Trespass

Shortcuts
Convenience of walking on tracks
Distraction (headphones)
Limited perception of risk
Errors in judgement
Overconfidence (about getting out of the way)
Criminal activity
Games



Recommendations

- Additional data collection
 - Establishment of European database for detailed incident data; development of guidelines for the data collection
 - Collection of data on the frequency of trespassing
- Additional analysis
 - In-depth case studies on behaviour
- Better access to information
 - Better access to relevant databases, reports
 - Promoting the publication of results
- Better cooperation between organisations
 - Exchange of information collected during accident investigation



Thank you for your attention!