

RESTRAIL

REduction of Suicides and Trespasses on RAILway property Collaborative project

Data concerning railway suicides and trespassing accidents (D1.1)

Summary and conclusion

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1 INTRODUCTION

The overall aim of RESTRAIL project is to reduce the occurrence of railway suicides and trespasses on railway property and the costly service disruption these events cause, by providing the rail industry with an analysis and identification of cost-effective prevention and mitigation measures.

Work package 1 (WP1) of RESTRAIL project *Qualitative analysis of suicide and trespass on railways properties* was dedicated to the collection and analysis of data related to railway suicides and trespassing accidents. The work in WP1 resulted in the description of state-of-the-art based on literature review, up-to-date statistics on railway suicides and trespassing accidents compiled from different sources, analysis of the consequences of railway suicides and trespassing accidents, and data on the behaviour of victim prior to the incident.

The railway suicides and trespassing accidents analysed by the WP1, are within the context of the European Railway Safety Directive (Directive 2004/49/EC, Annex 1) framework regulation. This set of regulation complements Regulation (EC) No 91/2003 of the European Parliament and of the Council of 16 December 2002 on rail transport statistics.

In 2004 information on safety of the railway system was scarce and not publicly available. Due to that it became necessary to establish a set of common safety indicators (CSIs). The purpose is that all EU Member States can collect information based on common safety indicators (CSIs) in a harmonized way through the annual reports of the National Safety authorities. Those reports are sent to the European Railway Agency (ERA), in order to be published in the public safety database ERADIS.

Nevertheless, the WP1 worked with other sources of data. The UIC Safety Database, national databases (railway companies) and specific questionnaires were conducted by the WP1. Generally all of those sources follow the current EU regulatory framework for CSIs.

The information collected in the frame of WP1 served as an input for other work packages. Specifically, the list of potential measures for preventing railway suicides and trespassing accidents together with other gathered information on railway suicides and trespassing accidents was exploited in WP2 (*Assessment of measures targeted to reduce railway suicides*) and in WP3 (*Assessment of prevention measures targeted to reduce railway trespasses*). The suggestions for incident management were exploited in WP4 (*Mitigation of consequences by improving procedure and decision making*). All working papers produced in WP1 were put out for consultation to all WP1 partners.

2 PURPOSE OF THE DOCUMENT

The deliverable D1.1 provide a concise description of research conducted in work package 1 *Qualitative analysis of suicides and trespass on railways properties* and to present the conclusions drawn from the analysis of the collected data. The work resulted in the description of state-of-the-art based on literature review, up-to-date statistics on railway suicides and trespassing accidents compiled from different sources, analysis of the consequences of railway suicides and trespassing accidents, and data on the behaviour of victims prior to the incident.

The purpose of this document is to give the summary and conclusion of the deliverable D1.1

3 SUMMARY AND CONCLUSIONS OF D1.1

3.1 Main findings

Literature review

The literature review was conducted on the basis of around 170 papers concerning railway suicides or trespassing accidents, or closely related themes. The literature was extensively focused on suicide (around 130 papers), or on fatalities at a more general level. Trespassing was treated in around 60 papers. The literature review highlighted the main differences and similarities between railway suicides and trespassing events and discussed the preventive measures. These measures can be applied to both events or be specifically targeted to prevent either railway suicides or trespassing accidents. According to the findings the current studies lack accurate knowledge of motives (the underlying reasons for these actions) and behaviour of people committing railway suicides and people trespassing. Previous studies, for example on railway trespassing, have been mostly based on reported incidents and fatalities, which does not necessarily show the extent of the problem (i.e. the frequency of trespassing) or its characteristics. In addition, the review shows that there is little published research evaluating the efficacy of proposed countermeasures to prevent railway suicides and/or trespassing.

The main differences between the victims of railway suicides and trespassing accidents (in addition to the intentionality of the deed) concern victims' mental health and intoxication. Victims of suicide quite often suffered from mental problems unlike victims of trespassing accidents, whereas trespassers were more often under the influence of alcohol. There were also differences in the behaviour at the moment of the incident. Railway suicides were characterised by victims awaiting trains for some time in the vicinity of the track, whereas trespassing accidents typically occurred to persons who were just crossing the track (e.g. taking a short cut).

Countermeasures

According to a survey among RESTRAIL partners more than 40 different (partly overlapping) measures for the prevention of railway suicides and trespassing accidents have been implemented in EU Member States as well as ideas for new measures. Most responses came from a small number of countries (especially from Great Britain and Belgium), while no preventative measures was reported from other countries (e.g. France and Poland). The reported measures concerned especially social measures targeting suicides (e.g. national and local prevention programmes, media guidelines), but also different kinds behavioural measures (e.g. posters, information campaigns and education at schools), physical measures (e.g. fencing and landscaping) and technological measures (e.g. video surveillance).

Analysis of the reported measures was not in the scope of this Deliverable. Instead, the results of the survey were forwarded to work packages 2 and 3 for further assessment.

Statistical data

There are two major international databases concerning railway suicides and trespassing accidents: the ERADIS database maintained by ERA and the UIC safety database. They both focus on serious incidents resulting in fatalities or serious injuries. The main differences between these databases are summarised in Table E.3.

Table E.3. The main differences between ERADIS and UIC Safety Database.

	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

Analysis of the data from the years 2006–2010 revealed that the ERADIS database includes incidents that are not included in the UIC database, and vice versa. When the ERADIS database was supplemented with data that was only in the UIC database, it was estimated that in 2010 the number of railway suicides in Europe was 2,854 and the number of fatalities resulting from trespassing accidents was 782.

According to UIC data in almost all trespassing accidents where the cause was identified the accidents were caused by either pedestrian's lack of attention or non-compliance with national laws and regulations. Furthermore, 65% of trespassing accidents occurred at stations and 35% on open lines. No clear seasonal trends were detected. Trespassing accidents tend to occur after 5 p.m. in the evening.

Some countries collect publicly available data on railway suicides and trespassing accidents that are not included in the ERADIS or UIC databases. In particular, in Great Britain the Rail Safety and Standards Board (RSSB) provide access in the internet to various kinds of useful information.

Detailed incident data

The detailed incident data was provided by 12 countries, out of which seven countries delivered data concerning individual cases and five countries provided aggregated data. The analysis of detailed incident data showed for example that (a) victims were predominantly males, both for suicides and trespassing accidents, (b) victims were typically between 20 and 59 years of age, (c) railway suicides and trespassing accidents seem to be fairly evenly distributed throughout the year, (d) all weekdays are represented quite evenly, (e) there are no clear seasonal peaks in the frequency of railway suicides and trespassing accidents, (f) most suicides and trespassing accidents occur during the latter half of the day, after noon, (g) suicides and trespassing accidents occurred typically on an open line, i.e. outside stations and marshalling yards, (h) suicides were almost always committed by persons alone, and even in trespassing accidents there were seldom more than one victim, and (j) victims were typically hit by a passenger train.

Most of the received information concerned the age, gender, timing of events and locations, whereas little information was received about the access point, mental health and distance from incident location to home or to closest mental hospital. Information regarding the latter variables is usually not easy to find and access because this kind of data is not collected regularly and at best described only in the narrative text of accidents reports.

Investigation of railway suicides and trespassing accidents

The investigation practices and processes for railway suicides and trespassing accidents vary between countries, even though there are also common elements. The minimum requirements for data collection are set in the Railway Safety Directive, which states that the railway undertakings and infrastructure managers are obliged to report, investigate and analyse accidents, near misses and other dangerous occurrences and to take necessary preventive measures. Although the Railway Safety Directive sets, who should conduct independent investigations of the accidents (aka National Investigation Body – NIB), the level of harmonisation of procedures for investigations, at European level, is not high. The definitions for railway suicides and trespassing accidents are often given in national laws, which are usually harmonised according to the EU legislation stating that suicide is an act to deliberately injure oneself resulting in death, as recorded and classified by the competent national authority. The classification is most often made by the police or a coroner. The objectives of the investigations concern e.g. the decision whether the incident was suicide or not, culpability, contributing factors and collection of statistics.

Railway suicides and trespassing accidents are typically observed first by train personnel, who then inform rescue and investigation organisations. Which organisations are involved in the investigation and their roles vary between countries. In most countries the police are responsible for at least of a part of the investigation. Railway companies or specific investigation bodies can do their own investigations. The collected information usually contains description of the event, location, date and time, but sometimes also e.g. information concerning the victim, injuries and other consequences. The access to the data concerning investigations is typically limited to (part of) the organisation that has collected the data.

Consequences of suicides and trespassing accidents

Most studies concerning the consequences of railway suicide and trespassing accidents have focused on the emotional and psychological consequences of these events, particularly for train drivers, for whom the effects can be distressing and debilitating. The evidence presented in the literature clearly demonstrates that these events have far reaching consequences for a wide range of actors and agencies within society, first and foremost the victims and their close associates, but also to the railway employees and organization; emergency services; witnesses and passengers. This situation also has wide organizational impacts and financial implications for the railway organization, due to: staff absence and cost of replacement staff; potential impact on the professional capacity of employees; time and costs to develop and implement mitigation and prevention strategies and training; disruption to the service, including cost of delays and cancellations; and the potential damage to the public perception of railways.

One of the key aspects of successfully managing a railway suicide incident or trespassing accident, is effective inter-agency collaboration and communication. This is significant given the diversity of organizations involved in the operation and the very specific and sensitive nature of the event. Within this, clarity regarding each agency's role and responsibilities is the key. Fluent flow of information and compatible procedures can be promoted by interagency agreements.

A survey among RESTRAIL partners revealed that countries typically collect data on the consequences of railway accidents caused by suicide and/or trespassing. The most commonly collected data concerns the delays caused (duration, frequency, trains affected) and the damage to humans (number and type of victim and severity of injury). Access to impact data is often

restricted to internal railway company use. In addition, countries typically have guidelines and procedures for managing the consequences of railway suicide and trespassing accidents. These relate most closely to the handling of the immediate consequences of an accident or incident (re: information flow, actors, responsibilities) rather than procedures for managing the wider consequences of such events. The main lead agent is the infrastructure manager with the police and rescue services also taking an important role in coordinating the post incident / accident operation.

Delays and cancellations resulting from suicides and trespassing have financial implications for the railway companies and cause inconvenience to passengers. One of the factors that affect the length of delay is the speed of the emergency service to intervene, which in turn is influenced by the accessibility of the accident / incident location.

Measures reported to mitigate the consequences of these accidents/incidents focussed more on preventing suicides and trespasses on railway property rather than the mitigation arrangements of such an event.

Behavioural data

The behavioural data collected concerned existing documentation and company records, but also four new studies of behaviour in railway suicide and trespass context. The results of these new studies add to what is known currently about behaviours leading up to incidents of suicide and trespass. However, there is still an incomplete understanding of behaviours. The conducted studies were exploratory and there is a need for more data collection and analysis.

On a more positive note, the findings suggest that there are opportunities for prevention. The results suggest for example that the industry may need to consider how it can engage more effectively with external organisations and the public who are using the railway, in further efforts to understand and respond with empathy to these complex issues of railway suicides and trespass.

3.2 Overall conclusions

New comprehensive approach

The work reported in this Deliverable is the first attempt to collect information on railway suicides and trespassers together, from a broad range of countries and data sources. The literature review conducted in this work package analysed railway suicides and trespassing accidents, their differences and similarities and at the end combined all the knowledge into one document.

The other tasks of this work package collected and analysed statistical and detailed incident data, investigation practices, information on the consequences of incidents and behaviour of victims. This is the first time that this information has been collected and analysed together from a variety of European countries to provide an extensive picture of the situation. The conducted literature review provided additional input to this discussion by collecting large amount of information in addition to the data collected from European railway organisations. Therefore, the collected data and the results received in this work package provide valuable input to railway community.

Sources, contents and accessibility of data

The statistical data concerning railway suicides and trespassing accidents was collected mainly from two international databases, which are the ERADIS database maintained by ERA and the UIC safety database. ERA provides a good database for follow-up of general development of railway suicides and trespassing accident on European and national levels, but lacks data on individual incidents and provides little information on contributing factors. UIC data complements the information provided by ERA, and contains information on contributing factors (even though the categorisation of causes tends to focus on factors that are beyond the influence of railway IM's and undertakings). Access to UIC database is normally limited to UIC members.

Project partners also collected data from their country and UIC from their member organisations concerning detailed incident data, preventative measures, investigation of railway suicides and trespassing accidents, consequences of incidents and behaviour of victims prior to incident. The aim was to find out what kind of relevant data is collected in different countries (in addition to the data that is included either in the ERA or UIC databases) and use it to deepen the knowledge on railway suicides and trespassing accidents. It became clear that the level of publicity and the level of detail of existing data vary significantly by country. For example, the results concerning the consequences of incidents reveal that all countries, to some extent, monitor data on consequences (encompassing railway suicide and trespassing), but it also highlighted that this data is not always collected systematically or disaggregated by incident type. The research also highlighted that this data may be confidential and therefore not necessarily available except by permission of data owner, which is typically infrastructure manager or railway undertaking.

The conducted literature review showed that detailed incident data provides valuable input to the discussion of railway suicides and trespasses in European level. The survey among RESTRAIL partners revealed that information on these events can be found from several European countries, but was not available to be included in the literature review since the data is not often analysed and made publicly available to the scientific community and to interested parties. However, on the other hand, the literature review provides valuable input especially concerning the pre-crash behaviour, illness and mental health of the victims. This is the information that is often described in the narrative text of accident reports, or requires additional interviews and thus the information is not often readily classified and easily accessible and thus not provided by our partners in detailed incident data collection.

Countermeasures

The results reported in this Deliverable will be further exploited in work packages 2 (Assessment of measures targeted to reduce railway suicides) and 3 (Assessment of prevention measures targeted to reduce railway trespasses). Therefore, it is not the main aim of this work package to draw conclusions on the effectiveness of different measures to prevent railway suicides and trespasses. The work on countermeasures was limited to literature review and a survey among RESTRAIL partners about measures used for the prevention of railway suicides and trespassing accidents.

It became clear from the literature review that little published research is available about the efficacy of different kinds of measures to prevent these events. Results from the RESTRAIL project will shed more light to the issue. It seems clear, however, that because of lack of data only rough estimates of the efficacy of different countermeasures can be derived. Therefore it is most important that in future countermeasures will be implemented in a way that enables reliable estimation of its effects, either in terms of suicides or trespassing accidents avoided or changes in target group behaviour that precedes these incidents. The results of the literature review suggest that railway suicide and trespassing related behaviour tends to be specific to location and/or

country and thus special attention should also be paid to evaluation of the applicability of identified measures to different railway and cultural environments.

3.3 Summary of main findings from work package 1

The summary main findings of work package 1 are presented in Tables E.4–E.7. Table E.4 presents the knowledge gained from different tasks in this work package, Table E.5 presents how the information can be used in the future, Table E.6 indicated the identified gaps in collected data and Table E.7 provides solutions to fill these gaps in the future.

Table E.4. Knowledge gained from different tasks in work package 1.

Types of data from different tasks in WP1	What have we got? What does this tell us about the problem?
State of the art - Literature	<ul style="list-style-type: none"> – Definition of suicide and trespassing accidents – Description of when and where these events occur – Data on gender and age of the victim; victim’s level of intoxication and any illnesses – Some information about pre-crash-behaviour – Data about mortality rates, consequences, classification of train-pedestrian collisions, method choice – Information on prevention
Incident data – Statistical data	<ul style="list-style-type: none"> – Two international databases: ERADIS and UIC Safety Database – 87% of railway related fatalities concern suicides and trespassing accidents – UIC Safety database contains information on individual trespassing accidents; information e.g. on cause, locations, date and time – Little publicly available data from national sources, except from GB – Railway companies seem reluctant to publish statistics. Possible reasons for this reluctance may be that a) it is considered bad for the image, and b) railways are hardly ever legally responsible for the events.
Incident data – detailed data	<ul style="list-style-type: none"> – Description of data on railway suicides and trespassing accidents collected from national sources, which are not normally open to public – Data on individual events from 7 countries, aggregated data from 5 countries; information concerning 23 variables – The availability and content of detailed incident data varies between countries (both concerning the included years and variables) – Most information concerning the age, gender, timing of events and location
Investigation of railway suicides and trespassing accidents	<ul style="list-style-type: none"> – Minimum requirements for data collection are set in the Railway Safety Directive – Further details of accident investigation vary between counties – The collected information usually contains description of the event, location, date and time, but sometimes also e.g. information concerning the victim, injuries and other consequences – The access to the data concerning investigations is limited
Consequences of suicide and trespass	<ul style="list-style-type: none"> – Most important impacts recorded by railways: cost of death and serious injury and delays and cancellations – Small number of existing studies, most focusing on psychological consequences for train drivers – Material and environmental damage less significant costs – Wider impacts include consequences for drivers and health and safety issues. – Differences in cost estimates by country – The results do not indicate an impact on reputation of the industry or rail organization – Access to impact data is often restricted to internal railway company use – Measures to mitigate the consequences focus on prevention – Psychological support measures in place for train drivers
Behaviours of trespassers and persons contemplating suicide	<ul style="list-style-type: none"> – Limited detail in the literature – Reasons for collecting behavioural information – to ascertain intention, to enable early interventions – Evidence from four countries in new studies on behaviours – Descriptions of behaviours, which are potentially observable at different points in time. – There is evidence of success in intervening on the basis of suspicious behaviours – More evidence on characteristics of trespassers and the frequency of trespassing in specific locations

Table E.5. The exploitation of collected data.

Types of data from different tasks in WP1	How can we use this in the future?
State of the art - Literature	<ul style="list-style-type: none"> – Description of the event exist from several countries; lessons can be learned – Learning who is trespassing and which locations attract people to trespass in the railway environment – Learning from efforts/strategies about prevention of train-pedestrian accidents that are developed
Incident data – Statistical data	<ul style="list-style-type: none"> – Aggregated ERADIS database provides reliable data on the scope of the problem – Valuable information to have a general picture of the problem in European level; raise awareness of the problem to initiate preventative measures – Monitor development in EU countries
Incident data – detailed data	<ul style="list-style-type: none"> – The analysis brought together a broad range of data from across Europe; enables lessons to be learned from other countries
Investigation of railway suicides and trespassing accidents	<ul style="list-style-type: none"> – Description and summary of investigation practices and processes; enables learning from practices used in other countries – Detailed information on railway suicides and trespassing accidents in EU countries is fragmented and incomplete. The collected (and published) information offers only limited support for the use of effective countermeasures.
Consequences of suicide and trespass	<ul style="list-style-type: none"> – Help to develop measures to prevent railway suicides and trespassing and mitigation of the consequences of these events – Data can also be used to evaluate the effectiveness of the prevention and mitigation measures implemented – Develop studies in which limitations of results are addressed – Use the methodology as a model for wider studies
Behaviours of trespassers and persons contemplating suicide	<ul style="list-style-type: none"> – Use successful parts of the methodology as a model for wider studies – Can be used to develop interventions in response to specific behaviours – Learn as many lessons as possible from successful interventions. Use the positive examples to inspire others. – Prevention in specific locations

Table E.6. The identified gaps in collected data.

Types of data from different tasks in WP1	Where are the gaps? What else do we need to know?
State of the art - Literature	<ul style="list-style-type: none"> – There are gaps concerning knowledge on how the victims act and why they choose the railway as a place to commit suicide – There is lack of information about the location characteristics and closeness to home or hospitals etc. – It's important to know more about the victims pre-crash-behaviour – Little published research on efficacy of different kinds of measures to prevent railway suicides and trespassing accidents
Incident data – Statistical data	<ul style="list-style-type: none"> – Limited information on contributing factors – Limited representativeness of UIC Safety Database – No individual data available on railway suicides and attempted suicides – Access to UIC Safety Database is limited to UIC members – Lack of data on attempted suicides in ERADIS – Lack of data on individual incidents in ERADIS
Incident data – detailed data	<ul style="list-style-type: none"> – Little information on pre-crash behaviour, illness, mental health of victims, details of location; this information is often in narrative text of accident reports and thus not readily classified and easily accessible – Little information on the frequency of trespassing and locations in which trespassing occurs – No common process for the collection of data on contributing factors so that the data would serve the development and implementation of preventative measures
Investigation of railway suicides and trespassing accidents	<ul style="list-style-type: none"> – Lack of uniform investigation and reporting processes for railway suicides and trespassing accidents – The requirements for data collection include mainly aggregated data such as total and relative numbers of yearly events
Consequences of suicide and trespass	<ul style="list-style-type: none"> – There is an incomplete understanding of the consequences of suicides and trespass: economic, material, environmental, services, passengers, railway reputation and wider impacts – Relation with wider societal and human impacts – Wider examples of mitigation measure (e.g. supporting cross agency working; health and safety during and after incident)
Behaviours of trespassers and persons contemplating suicide	<ul style="list-style-type: none"> – It can be difficult to identify some at-risk behaviours from other normal behaviours at stations. There is an incomplete understanding of the behaviours that indicate risk of subsequent incidents. – How can this knowledge be applied to new situations and contexts?

Table E.7. The solutions to fill the identified gaps in the future.

Types of data from different tasks in WP1	How can we fill these gaps? What are the steps needed achieve this?
State of the art - Literature	<ul style="list-style-type: none"> – Use information about victim and incident location. See how it correlates with locations of schools, hospitals and caring institutions/residential homes. – Challenge the accident investigators to collect more information about what they see and react on at the accident scene. Can they determine how the victim has reached the track? – Future countermeasures should be implemented in a way that reliable estimation of effects is possible – Promotion of publication of results from studies and experiments in scientific publications
Incident data – Statistical data	<ul style="list-style-type: none"> – The access to relevant databases should be enabled and facilitated – The establishment of European database for detailed incident data from national sources should be supported
Incident data – detailed data	<ul style="list-style-type: none"> – Cooperation between organisations involved in investigations to enable exchange of documented information on the incident; explore possibilities to classify some information – Development of European wide guidelines for collection of detailed incident data – Systematic collection of data on the frequency of trespassing – Increased foci on the development and implementation of effective preventative measures irrespective of culpability issues
Investigation of railway suicides and trespassing accidents	<ul style="list-style-type: none"> – Development and adoption of investigation methodology that would cover all potential contributing factors in a way that would enhance the use of effective countermeasures of different kinds – Making the results of studies on railway suicides and trespassing accidents available to the interested parties more widely, especially to those working in the railway sector
Consequences of suicide and trespass	<ul style="list-style-type: none"> – Raise awareness in the railways companies on the importance of collecting data on accidents/ incidents (e.g. use of data in decision making and CBA, particularly relevant in current economic climate) – Develop studies in which limitations of data are addressed – Broader consultation with experts and groups (e.g. police; rescue; health and social services; voluntary organisations) – Identify and develop best practice case studies of consequence mitigation measures in different countries / organisations. – Implementation of EU legislation on safety performance data and economic impact assessment, and common methodologies to calculate economic impact of accidents
Behaviours of trespassers and persons contemplating suicide	<ul style="list-style-type: none"> – Analysis of larger samples of pre-existing documents or other sources (databases / CCTV recordings) – Broader consultation with experts – Raise awareness in employees and the wider public, to promote earlier interventions

3.4 Recommendations

The work in this part of the project was carried out to draw together what is known about a number of different aspects of the problems of railway suicide and trespass. This has also provided opportunities to provide commentary and offer interpretations on the value of the different sources of data.

Conclusions from the analysis of different types of data from WP1 were brought together for the purpose of comparison in Tables E.4 to E.7. Part of this analysis has identified a number of opportunities for learning from these different data sources (e.g. about problems which have been identified through these data, practices for investigation and analysis, and options for prevention). The analysis also included a detailed review of the gaps in the current knowledge base (e.g. about victims, locations of incidents, contributory factors, behaviours, consequences of incidents, uniformity in investigation processes).

Suggestions were made in Table E.7 to attempt to fill these gaps in knowledge. In summary, the following recommendations should be considered.

1. Collect additional data through

- Establishment of European database for detailed incident data from national sources. It is suggested that further development of data collection on railway suicides and trespassing accidents will be based on gradual development of the ERADIS database. Some of the key issues are good national coverage and uniform definitions and reporting requirements. The long term objective could be the collection of individual data of incidents that according to current requirements are reported on aggregated level.
- Development of European wide guidelines for collection of detailed incident data. Such guidelines should describe e.g. a) what kinds of incidents are targeted (suicides and trespassing accidents resulting in serious personal injury), b) what kind of data is collected of each incident and how it is reported and saved c) responsible bodies and their roles, and d) cooperation between organisations involved in investigations of railway suicides and trespassing accidents to enable exchange of documented information on the incident. The collection should as far as possible concentrate on data which is based on verifiable facts or observations but allow also justifiable opinions e.g. on the behaviour and events leading to incident.

It is not necessary to collect all information that is available. The focus should be on data that a) is easily available (e.g. type, time and location of incident, information on the victim) or b) is largely missing in current databases but can be obtained without extensive efforts (e.g. behaviour of victim prior to the incident, detailed data on the location). It is not possible to say in advance which variables are more important than others. Only when reasonably large amounts of data have been collected and analysed conclusions can be drawn regarding the relative importance of different variables.

- Systematic collection of data on the frequency of trespassing. Currently there is very little data on the extent of trespassing, its location and distribution in time. Such information is needed for the allocation of measures to places and times where they are most effective. Because railway suicides also involve trespassing, information on trespassing in general can be used also for the prevention of suicides.
- Raising awareness in the railway companies on the importance of collecting data on railway suicides and trespassing accidents to be used as a basis for their decision making. Railway organisation sometimes consider railway suicides and trespassing accidents more as problem of society in general rather than a problem in which railways especially should or could focus.