



# RESTRAIL

REduction of Suicides and Trespasses on RAILway property

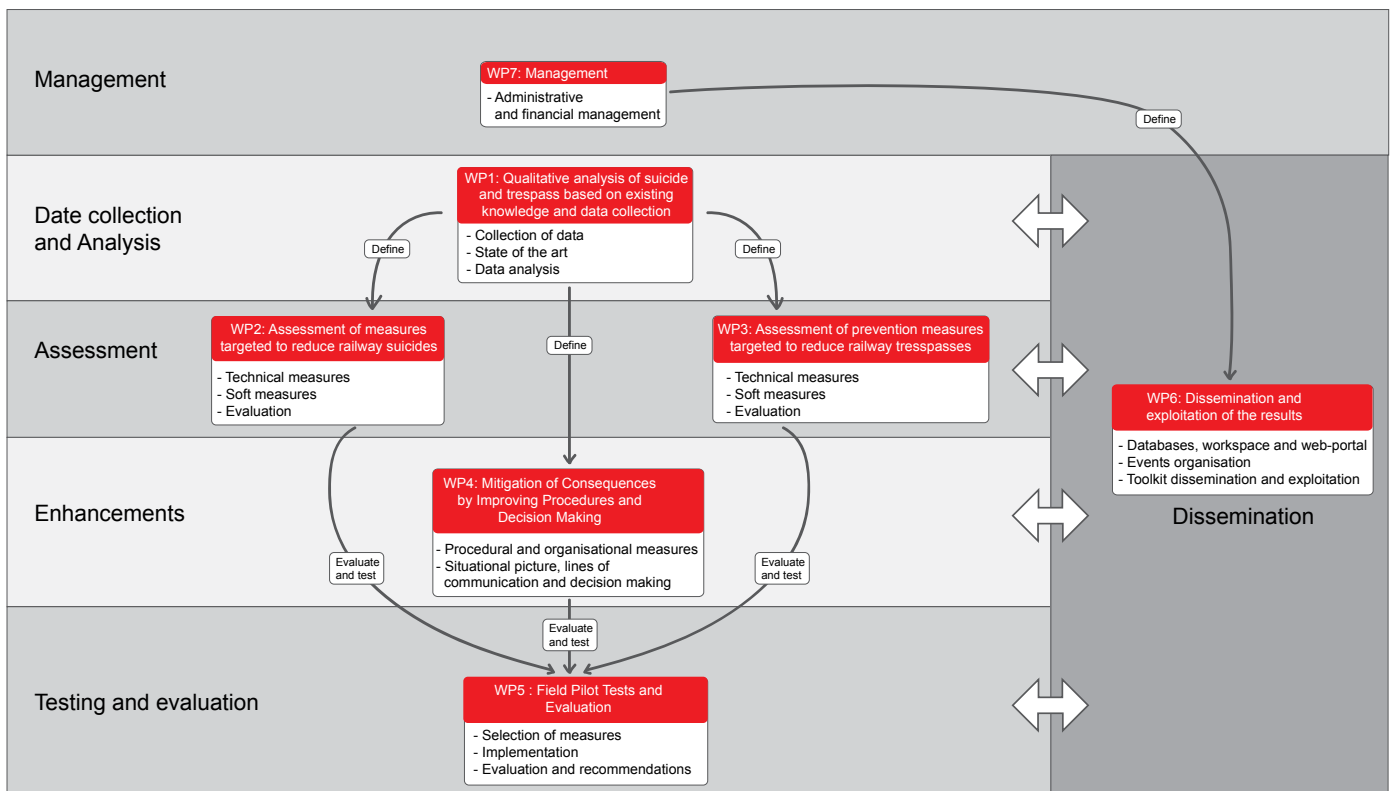
RESTRAIL Newsletter  
MAY 2013 - Nr 2

## Welcome to this second Newsletter from the RESTRAIL project on Reduction of suicides and trespasses on railway property

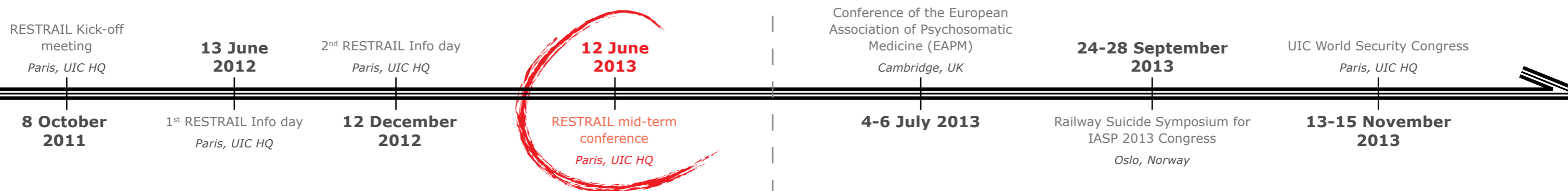
*This Newsletter intends to keep you updated on the ongoing activities of the RESTRAIL project.*

RESTRAIL is a 3-year project that started on 1st October 2011 and is co-funded by the European Commission's FP7 Programme, SST.2011.4.1-2.: Mitigation measures and good practice to reduce human fatalities and disruption of services resulting from suicides and trespassing on railway property. It is coordinated by UIC (International Union of Railways).

### Project structure



## Timeline of key events



### WP1: Data on railway suicides and trespassing accidents

Led by VTT (Finland)

#### INTRODUCTION

The aim of work package 1 was to collect and analyse data related to railway suicides and trespassing accidents.

The work in work package 1 resulted in:

- a description of the state-of-the-art based on a literature review,
- up-to-date statistics on railway suicides and trespassing accidents compiled from different sources,
- information on possible countermeasures to prevent railway suicides and trespassing accidents,
- analysis of the consequences of railway suicides and trespassing accidents, and
- data on the behaviour of victims prior to the incident.

The data was collected using forms or questionnaires that were filled by RESTRAIL partners, who typically acquired the requested data from documents or by interviewing national experts, and in some cases by organising workshops. In total, 14 countries provided data for WP1. The results of work package 1 provide valuable input to the railway community since it is the first attempt to collect information on railway suicides and trespassers together, from a broad range of countries and data sources.

#### RESULTS

##### State-of-the-art

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.



2<sup>nd</sup> RESTRAIL Info day, 12/12/2012 in Paris



#### Information on the number of yearly events

There are two major international databases concerning railway suicides and trespassing accidents: the ERADIS database maintained by ERA and the UIC safety database. Based on the analysis of these two databases 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.

#### Countermeasures to prevent railway suicides and trespassing accidents

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. Furthermore, several ideas on possible new measures were collected. The reported implemented measures concerned especially social measures targeting suicides (e.g. national and local prevention programmes, media guidelines), but also different kinds of 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). The information on countermeasures was forwarded to work packages 2 and 3 for further assessment.

#### Characteristics of victims and incident locations

The analysis of detailed incident data (provided by 12 countries) showed for example that

- victims were predominantly males, both for suicides and trespassing accidents,
- victims were typically between 20 and 59 years of age,
- railway suicides and trespassing accidents seem to be fairly evenly distributed throughout the year,
- all weekdays are represented quite evenly, and
- suicides were almost always committed by persons alone, and even in trespassing accidents there were seldom more than one victim.

Most of the received information concerned the age, gender, timing of events and locations whereas the least information was received concerning the access point, mental health and distance from incident location to home or to closest mental hospital.

## WP1

### Investigating the incidents

Accident investigation practices and processes vary between countries. The Railway Safety Directive sets the minimum requirements for data collection, but does not regulate the investigation process otherwise. The classification on whether the case was a suicide or accident is most often made by the police or a coroner. The organisations 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.

### What are the impacts?

Railway suicide and trespassing accidents have far reaching consequences for a wide range of actors and agencies within society: amongst them the victims and their close associates, train drivers and other witnesses, railway undertakings and infrastructure managers, emergency services and passengers. All countries have guidelines and procedures for managing the immediate consequences of railway suicide and trespassing accidents, and in some cases measures to mitigate the onset and development of post traumatic stress disorder amongst affected drivers. The most commonly collected data regarding impacts concerns damage to humans (number and type of victim and severity of injury) and delays (duration, frequency, number of trains). There are differences in how the financial costs of deaths and serious injuries are calculated in different countries. Average delays range from 45 minutes to 3 hours in different countries and cause considerable inconvenience to passengers as well as having significant operational and financial impacts for railways.

### Understanding railway suicide and trespassing behaviour

The behavioural data collection analysed material from existing documentation and company records and included four new studies which were conducted to collect behavioural data covering a combination of suicide and trespass contexts. Even though the conducted studies were exploratory and there is need for more data collection and analysis, 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.

## RECOMMENDATIONS

Recommendations of work package 1 were made based on the identified 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) and based on the 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).

The recommendations and the more detailed descriptions of actions related to each recommendation are listed in Table 1.

Recommendation	Detailed description of actions
Additional data collection	<ul style="list-style-type: none"> <li>- Establishment of European database for detailed incident data from national sources</li> <li>- Development of European wide guidelines for collection of detailed incident data</li> <li>- Systematic collection of data on frequency of trespassing</li> <li>- 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.</li> </ul>
Additional analysis	<ul style="list-style-type: none"> <li>- Making the assessment of effectiveness a regular element in all plans concerning the implementation of preventative measures</li> <li>- Developing common methods for the determination of factors contributing to individual trespassing accidents</li> <li>- Considering in-depth case studies of limited number of suicides and/or trespassing accidents, to gain knowledge of specific features of incidents that are not included in the routine collection of detailed incident data</li> <li>- Analysing behaviour in accidental and suicide events from larger samples of pre-existing documents or other sources of data to have better understanding of behaviours that indicate risk of subsequent incidents.</li> </ul>
Better access to information	<ul style="list-style-type: none"> <li>- Enabling and facilitating access to relevant databases, for researchers but also for the general public</li> <li>- 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</li> <li>- Promotion of publication of results from studies and experiments in scientific publications, even if the results are not as positive as expected.</li> </ul>
Encouraged cooperation between organisations	<ul style="list-style-type: none"> <li>- Cooperation between organisations involved in investigations of railway suicides and trespassing accidents to enable exchange of documented information on the incident</li> </ul>

Table 1. Recommendations of work package 1.

## WP2 & WP3 : Assessment of measures targeted to reduce railway suicides and trespasses

Led by TRAFIKVERKET (Sweden) and IFSTTAR (France)



## INTRODUCTION

The two work packages WP2 & WP3 are dedicated to analysing the best practices (technological and non-technological) and identifying, when possible, cost-efficient measures to prevent respectively suicide (WP2) and trespassing (WP3) accidents or incidents. The main tasks focus on the assessment of identified countermeasures (technical and soft measures) for preventing suicide and trespass, taking into account the research findings and good practices by railway undertakings (RU) and infrastructure managers (IM). Attention will be given to the development of new approaches of soft measures to avoid suicide and trespassing accidents.

The process has been successful in discriminating differences between different types of measures and a shorter list of more promising preventive measures (for suicide and trespass) that are suitable for more in-depth testing in RESTRAIL have been identified. There will be opportunities in a later work package of the project (WP5) to carry out more detailed evaluation of a number of preventative measures from this shortlist. The detailed information that has been collected is a useful resource and is being used as a basis for some initial guidance for implementation of the measures in RESTRAIL. It is anticipated that this information will be developed with partners during the field testing stage of the project, to produce a robust set of guidelines that will be available to railway organisations at the conclusion of the project.

## RESULTS

### Development of a Method for the evaluation of measures targeted to prevent railway suicides and trespassing accidents (Merged deliverables D2.1 & D3.1)

Discussions between experts, extended analyses and lessons learnt from participants' experience have revealed and/or confirmed that for IMs and RUs, suicide and trespassing are problems that are addressed together.

An initial set of 83 preventive measures to reduce the occurrence of suicide or trespassing, either used already or proposed by project partners, national infrastructure managers (IMs) and railway undertakings (RUs), has been grouped into

38 families of measures in which the modes of action for incidents and accidents are similar, using a safety barrier model. Since overlapping exists between preventive measures against suicide and trespassing, a model has been proposed to take into account shared and specific suicide and trespassing characteristics. The model also makes it possible to visualise how each stage of the suicide or trespassing processes can be linked to certain families of measures.

Several criteria were chosen for the evaluation procedure: (1) durability of effects, (2) costs and benefits (based on expert judgment and not on calculation of the C/B ratio), (3) integration with other policy measures, (4) impact on railway operations, (5) impact on people and jobs, (6) technological issues, (7) environment, (8) acceptance, and (9) transferability issues.

## WP2 & WP3

### Assessment of suitable measures (technical and soft measures) for the prevention of suicides and trespasses (Merged Deliverable D2.3 & D3.2)

The objectives of the work conducted were to assess preventive measures identified from WP1 taking into account the experience of infrastructure managers, railway undertakings and other users. Since measures geared towards preventing suicide cannot always be clearly distinguished from those aimed at preventing trespassing, and as those measures were reviewed and assessed using the same process, experts and criteria, the decision was taken to make the output from tasks 2.2, part of 2.3 and 3.2 a joint deliverable.

Applying the methodology described in Merged D2.1 & D3.1, the assessment took into account factors and information that could impact the success of measures if they were applied in different European environments, and drew conclusions on a list of measures defined as recommended and promising. The 38 families of measures were assessed by a group comprising members of WP2, WP3 and external IMs. Each family of measures was assessed separately for suicide and for trespassing. A set of available data was used for the preliminary classification that allowed sector experts in a second phase to assess the principles for classifying measures as "Recommended" or "Promising", i.e. effective, cost-effective, and free of shortcomings. Three main sources of information were used: the preferences of railway undertakings and infrastructure managers; estimates of impact at European level; weighted and individual scores according to 11 criteria representing implementation practicalities for each family of measures.



Fast train passing through railway pedestrian crossing



Camera on the platform of a train station



Anti-Trespass Guards (© Commel Srl)

### Recommended and promising measures:

The results of the work are a set of recommended and promising measures for testing in WP5, and an outline of the factors affecting successful implementation of the measures. In addition, implementation issues connected to the "Recommended" or "Promising" measures were also considered. The method has demonstrated satisfactory flexibility as well as a capacity to support the analysis and selection of measures.

For both suicide and trespass we identified 7 families of measures:

Family of measures	Classification for suicide	Classification for trespass
Targeted campaigns (including shock campaigns)	Recommended	Promising
Fences and barriers at specific parts of stations	Recommended	Recommended
Fences and barriers at locations outside stations where people take shortcuts across tracks	Recommended	Recommended
Surveillance to deter based on patrols	Promising	Promising
Mass media campaigns	Promising	Promising
Risk assessment (e.g. of stations, special circumstances, at risk groups or individuals).	Promising	Promising
Monitoring and learning from research and best practice	Promising	Promising

Only for suicide we identified 9 families of measures:

Family of measures	Classification for suicide
Surveillance and light to influence behaviour	Recommended
Detection system combined with sound warnings	Recommended
Increased visibility by lighting at railway crossings, tunnels and hotspots	Promising
Increasing visibility through removal of vegetation	Promising
Surveillance based on local intelligence (e.g. from police, health authorities)	Promising
Media Guidelines	Promising
Emergency information at stations (signs, posters, flyers, information on screens etc.)	Promising
Collaboration between organisations and agencies	Promising
Local suicide and trespassing prevention plan	Promising

Only for trespass we identified 3 families of measures:

Family of measures	Classification for trespass
Education and prevention in schools and outside of school	Recommended
Warning signs and posters to address trespassing	Recommended
Prohibited access signs	Promising

## WP2 & WP3

*Men on the ropes, a poster campaign launched by the Samaritans. By displaying a white male in the age range 30-50, it targets exactly the majority of railway suicide victims in GB. Furthermore, the poster is most correct in not addressing the despair or suicidal thought. Instead, it provides positive thoughts by referring to the man's strength. The helpline as well as the organisation operating the helpline are clearly shown.*

*Samaritans, poster campaign "Men on the ropes" (NetworkRail 2010)*



LES ENFANTS ONT  
QUELQUE CHOSE  
À VOUS DIRE.

SNCF



*"Together with the Ministry of National Education, the SNCF has created a prevention program on safety also including civic education in rail transport to influence young people to respect others, property, and safety rules. 450 agents who are specifically trained are going inside and outside schools, especially near railway stations or other priority places. For establishments that cannot host station agents, or in addition to their interventions, free internet resources are available (course materials, videos, quizzes, etc.) classified by difficulty level and contextualized around sustainable development and citizenship".*

(<http://www.sncf.com/fr/education/ecoles>)

*Poster used in a youth education campaign (© SNCF 2012)*

For both suicide and trespassing, general guidance is provided to support RUs, IMs and other stakeholders in the implementation of the proposed preventive measures. Facts and lessons learnt from experience regarding each specific recommended or promising preventive measure complete the guidance.

*On the right the new sign evoking death in contrast with the classic text-based prohibited access sign.*



### **New approach of soft measures for the prevention of suicides (Deliverable D2.2)**

Soft measures are dedicated to influence actors' knowledge and behaviours by actions such as communication, training, calls for more socially-responsible behaviour aimed at preventing voluntary decisions to commit the acts, legal measures and sanctions following such acts.

Soft measures against railway suicide include the design and placement of signage and posters in a railway environment, advertising crisis hotlines, mass media campaigns and media guidelines or local prevention campaigns, intervention in schools and provision of educational materials, briefing of station staff or security personnel, announcement in trains and at stations, gatekeeper programmes and hotspot analysis and education.

The analyses show that several soft measures against railway suicides are implemented in European countries and worldwide. Soft measures are often a part of a more general suicide prevention measure.

In order to assess information on existing and emerging soft measures against railway suicides in Europe and worldwide and their degree of implementation, a survey was designed and conducted among RESTRAIL partners. Surveys were also conducted with Bahnhofs Mission, German train drivers union, and also among Spanish engine drivers.

Our analysis showed that awareness rising programmes are implemented in five European countries and media approaches in six. Help lines are offered and operated in many countries, but only in five countries is the information about the hotline displayed in a railway environment. Poster campaigns were launched in five countries. Hotspots have been officially identified in nine of the countries but only five report that actions have been taken at the identified hotspots. Ten countries have special announcement to passengers waiting on stations and in trains even though all countries avoid using the word "suicide". Gatekeeper programme is as yet only implemented in Great Britain but several different European countries are planning on setting up gatekeeper programmes for frontline staff.

## WP2 & WP3

### ***New approach of soft measures for the prevention of trespassing (Deliverable D3.3)***

This deliverable reports on the development of new approaches to soft measures based on emerging techniques for training railway staff for dissuading different profiles of trespassers in order to identify new possible measures to be tested in WP5. Two complementary approaches were used to define which preventative measures emerge as 'innovative': (1) quantitative criteria to distinguish the new measures from mainstream approaches in the current literature and (2) qualitative criteria to define innovative approaches from the viewpoint of railway safety experts who participated in several focus groups in Spain, France, and Turkey. The main results suggest that effective interventions are based on integrative approaches to soft measures such as the following:

1. New approaches to education. Firstly, risk awareness should be raised at locations close to the tracks that may seem 'unusual' but which are in fact 'strategic'. Such problem locations are usually found in suburban areas and consist of bars, taverns, nightclubs, sport centres or arenas, bicycle paths, shopping centres, cinemas, new residential areas, squatter camps on vacant land. Secondly, education should be also targeted towards urban planners and community representatives. Thirdly, education campaigns should not be conducted in isolation, and should be reinforced by punitive measures.
2. Innovative collaboration between institutions and agencies. Working with media institutions is the main way of conducting education and communication at local or national level. Media communication should accompany educational information channelled through other means (e.g. billboards, leaflets) and followed up by punitive action. The second approach involves joint work within communities, between RUs and IMs on one hand, and urban planners, local authorities, municipalities, etc. on the other. The third innovative approach refers to finding new partners to participate in these efforts. These may include chambers of commerce, local stores, unions, media, youth, city planners, transportation engineers, manufacturers, and bystanders. Another new measure concerns cooperation within the sector, especially between RUs and IMs, to improve monitoring of hotspot dynamics.



3. Training railway staff to dissuade certain groups of trespassers does not appear to be a key preventative soft measure against trespassing. This measure depends heavily on each country's specific context. In France new approaches to training are not necessary. In Spain there is demand for training maintenance personnel in order to develop their skills in detecting and warning trespassers. In Turkey, staff need emergency situation and anger management, as well as communication training to help them manage difficult situations with third parties.



4. 'Soft' approaches to fencing and barriers. Although it may not appear obvious at first, fences may in fact be used as psychological deterrents rather than simply physical barriers, indicating the boundary of an area with restricted admission. This unusual point of view is not entirely supported by railway safety experts. However, both the literature and experts in France suggest greasing fences as a further means to reinforce their deterrent effect on behaviour. Although this is not a typical soft measure, it supports the unusual idea of 'softening' a classic technical solution.

## WP4: Mitigation of Consequences by Improving Procedures and Decision Making

Led by MTRS (Israel)

### INTRODUCTION

The objective of this work package is to develop methods and technological tools that can be integrated with existing procedures and technologies in order to achieve the most effective and cost-efficient means of mitigating the potential impact of suicides and trespass on railway infrastructures.

The first two deliverables: information reference source & information, and situation management and decision support platform, have been completed; the third – line restoration model, aimed to improve decision making, is available as a draft and application prototype.

The first part of this work package includes numerous interfaces with infrastructure managers (IMs) and police forces involved in managing suicide or fatal trespassing incidents. Clearly, in order to mitigate the consequences of such incidents, system shut down time must be reduced. Therefore, the added value of these deliverables comprises soft and hard tools, which aim to improve the full range of operational and technical arrangements that will allow doing so.

The operational arrangements, represented by the information reference source will support the stakeholders as they assimilate the identified methods, tools, procedures and managerial models in order to reduce the shut down time associated with suicides and trespasses incidents.

The technological deliverables - information, situation management and decision support platform, and the line restoration model are meant to improve the situational picture of the incident, the information collection and dissemination tools, the management of the business processes. These are all related to the incident response and decision making processes of the IMs; between them and the first responders, primarily the police; contractors and railway undertakings.



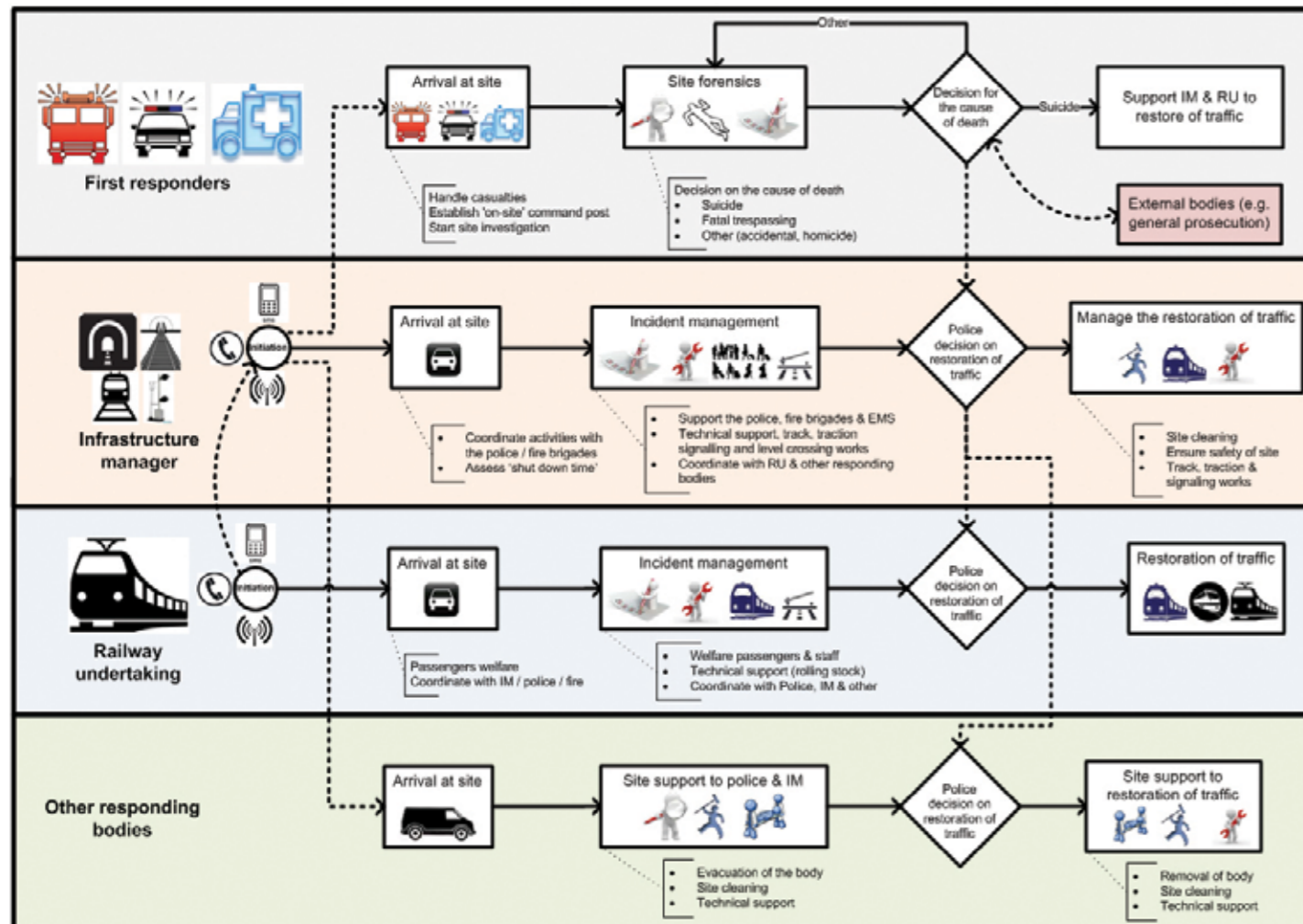
Railway accident

## WP4

### CONSEQUENCES MITIGATION INFORMATION REFERENCE SOURCE (Deliverable D4.1)

This deliverable focuses on the "procedural" aspects associated with mitigating the consequences of attempted suicides, also suicide and trespassing incidents with casualties. It enables the development of a functional information reference source for Infrastructure Managers (IMs), Railway Undertakings (RUs), police (state, municipal and railway), fire services and other first responders, regulatory and investigation bodies, which supports response management and consequences mitigation actions, particularly with respect to the shut-down time of railway operation. The reference source covers the following topics:

- » Incident response arrangements of the IM, RU, the police, the fire brigade, emergency medical services (EMS) and others.
- » Information management & lines of communication among responding bodies and with decision makers, with emphasis on information sharing and coordination.
- » Decision making processes for traffic restoration, including aspects relating to prior agreements among the responders, awareness of rail arrangements, managers' competence and training in handling incidents and decision making on- and off-site.
- » Conclusion & recommendations: a summary of the practices associated with the procedural aspects of handling suicide and trespassing incidents with casualties and their impact, and how these might be improved to minimise their impact on rail operations.



### INFORMATION, SITUATION MANAGEMENT AND DECISION SUPPORT PLATFORM (deliverable D4.2)

Information sharing platforms & effective lines of communication between responding bodies are essential for effective & coordinated incident management. Data shared in real time includes geo-data on the incident location and track access points; information on the site of the incident and on possible involvement of 3rd parties, on train data recording and essential actions as part of the response – safety, assistance to passengers, evacuation.



This deliverable includes the technical specification and prototype of the situation management system, intended to assist IMs and RUs to achieve the above goals, improve coordination among first responders and help reduce system shut-down time due to incidents with casualties. The solution highlights of the system include:

- » Full customisation: Easy-to-use planning tools and menu-driven operations, and a Business Process Manager (BPM) workflow/rule correlation engine. The business rules will be mapped into a set of workflows that will automate the appropriate incident management response. No software programming skills will be needed for customisation.
- » Hierarchical solution consisting of multiple layers, which may consist of multiple sites. Each site will be capable of monitoring and managing its own local facility and incidents, systems and client views, and will be unable to view higher layers without authorisation.
- » Effective and coordinated incident handling via incident execution: pre-planned incident response workflows will be activated automatically by a time schedule or a sensor alert, or manually by control room operators or field personnel. It will be possible to manually categorise incidents, to present operators with an incident task checklist that can include multiple choice tasks to allow adaptation to evolving situations.
- » Intuitive multi-layered Geographical Information System (GIS)-based display with dynamic updating to support effective monitoring, decision making and interaction. The system will be able to leverage an organization's existing GIS infrastructure to avoid duplication and unnecessary costs. GIS standards, such as Open Geospatial Consortium (OGC) and proprietary formats (ESRI, Google, AutoCAD, and etc.) will be supported.
- » Unified management of all video systems: public video IP feeds, cameras installed in stations, way-side CCTV, and on train forward facing CCTV. The single video matrix relevant to the incident will be automatically displayed, and may be shared among RU and IM. Operators will be able to manipulate cameras as required, to optimise incident handling.
- » Incident assessment: detailed incident debriefing with time-coded playback of incident handling to support improving incident response and also to serve as evidence.
- » Reporting/custom reporting: automated and fully customisable reporting capabilities.

**WP4**



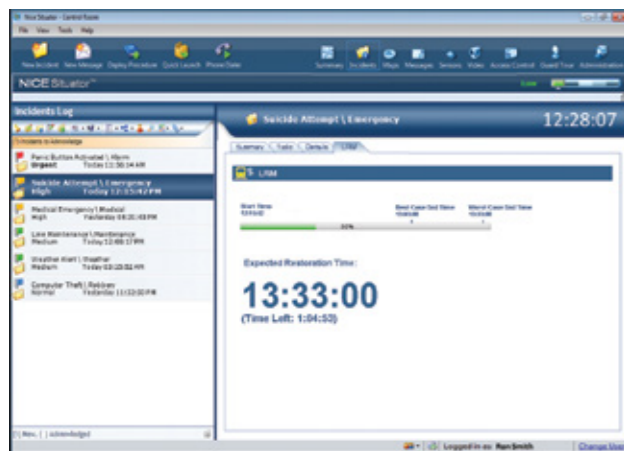
# SOLUTION

## IMPROVING SITUATIONAL PICTURE AND COMMUNICATION BETWEEN CONTROL CENTRES – THE LINE RESTORATION MODEL (Deliverable D4.3)



The Line Restoration Model was developed to reduce the line operation restoration time following suicide and trespassing incidents.

The Model receives information concerning the incident and its handling from the Situation Management System, and uses it to forecast the restoration time. By providing RUs and IMs with accurate as possible information, it allows them to prepare and take necessary action to resume operation without unnecessary delay, as soon as the incident is resolved. The Model's forecasts are of great value to the RUs and IMs, as they allow them to optimise the rescheduling of regional and long distance rail traffic, and also improve passenger service by providing passengers with information that allows them to decide whether to use alternative routes and/or modes of transport.



## NEXT STEPS - WP5: Pilot field tests and evaluation

Led by CIDAUT (Spain)

WP5 aims to assess a selection of the most promising measures and good practices in order to prevent suicides and trespass on railway property. For this purpose, WP5 partners will first select several measures to be implemented, taking into account the prevention and mitigation measures recommended from the previous work packages and the needs of the corresponding stakeholders. Subsequently, each WP5 partner will develop a specific implementation plan in order to monitor and evaluate their measures.

Once WP5 partners have defined their implementation plans and set up their test sites, the pilot tests can be executed, covering different European locations. Some test sites will focus on measures to prevent suicides only, others on means to prevent trespassing, while others will address the consequences of suicides or trespass and others will implement a mixture of measures. The selected measures will be implemented at different locations, such as: stations, level crossings, neighbours near hotspots, etc.

Having implemented the measures, each one will be evaluated in detail by comparing the pre and post-study situation evaluation with a view to demonstrating that the preventive measures recommended are effective and feasible. Apart from the evaluation of the results obtained, some recommendations and guidelines will be identified for the future application of evaluated measures drawing on the insight gained during the implementation of these pilot tests.



At present the following prevention measures have been selected by some WP5 partners, to be implemented over the next months:

1. Video enforcement and sound warning: whose objective is to monitor a location where trespassing is frequent, by video camera with motion detector, in order to detect pedestrian approaching tracks. In this case the pedestrian is warned over a loudspeaker.
2. Education in schools for 6-12 year olds: a 45 minute lesson about safe behaviour in a railway environment.
3. Railway Safety Museum Education Programme for children, young people and families: a railway education programme directed at children, young people and families that will be delivered in Madrid and Catalonia museums,
4. Gatekeeper programme "train the trainers": educational, seminars/training through a taught course to Railway frontline staff and individuals working in a railway environment.
5. Mid platform fencing: preventing access to fast lines where trains are not scheduled to stop, i.e. installing a barrier to prevent access to high speed lines at target stations. The measure does not prevent access to conventional lines.
6. Warning signs and posters to address trespassers: this measure will provide images/texts providing information about hazards and punishments associated with illegally crossing the tracks.
7. Combination of fences and communication campaign: a flyer together with explanation from the staff will be distributed to explain the technical measures.

*More prevention and mitigation measures will soon be selected by other WP5 partners, amplifying thus the number of such measures to be evaluated.*





REDuction of Suicides and Trespasses on RAILway property



**Welcome to the RESTRAIL project website**

The aim of the RESTRAIL (REDuction of Suicides and Trespasses on RAILway property) project is to reduce:

- The occurrence of suicides and trespass on railway property and
- The service disruption and other consequences these events cause

by providing the rail industry with an analysis and identification of cost effective prevention and mitigation measures."

**RESTRAIL brochure**



**Highlights**

**RESTRAIL Mid-Term Conference**

**RESTRAIL news**

**RESTRAIL project: Reduction of Suicides and (...)**

The meeting was organised by Intader with some of the RESTRAIL partners: TCDD team who will organise the pilot field tests in Turkey; UIC as coordinator of the project; IFSTTAR as leader for the task on the selection of measures, and VTT as (...)

**RESTRAIL coordinator invited by SNCF to attend the (...)**

The aim of this Steering Board was to present the latest developments in accidents (collisions) involving individuals on the French railway network between 2011 and 2012, and more specifically to analyse the time it takes to handle these (...)

**About**

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Coordinated by

RESTRAIL website  
[www.RESTRAIL.eu](http://www.RESTRAIL.eu)

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