RESTRAIL at a glance

Where are we now?

Research project

Funded by the European Commission
(Seventh Framework Programme)

3 Year Project starting October 2011
(Total Budget € 3,870,000)

RESTRAIL aim

The aim of the RESTRAIL 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 Consortium

Coordination by UIC
(Security division)

7 UIC members :
DBAG, FFE, IK, INFRABEL, PRORAIL, TCDD, TRAFIKVERKET
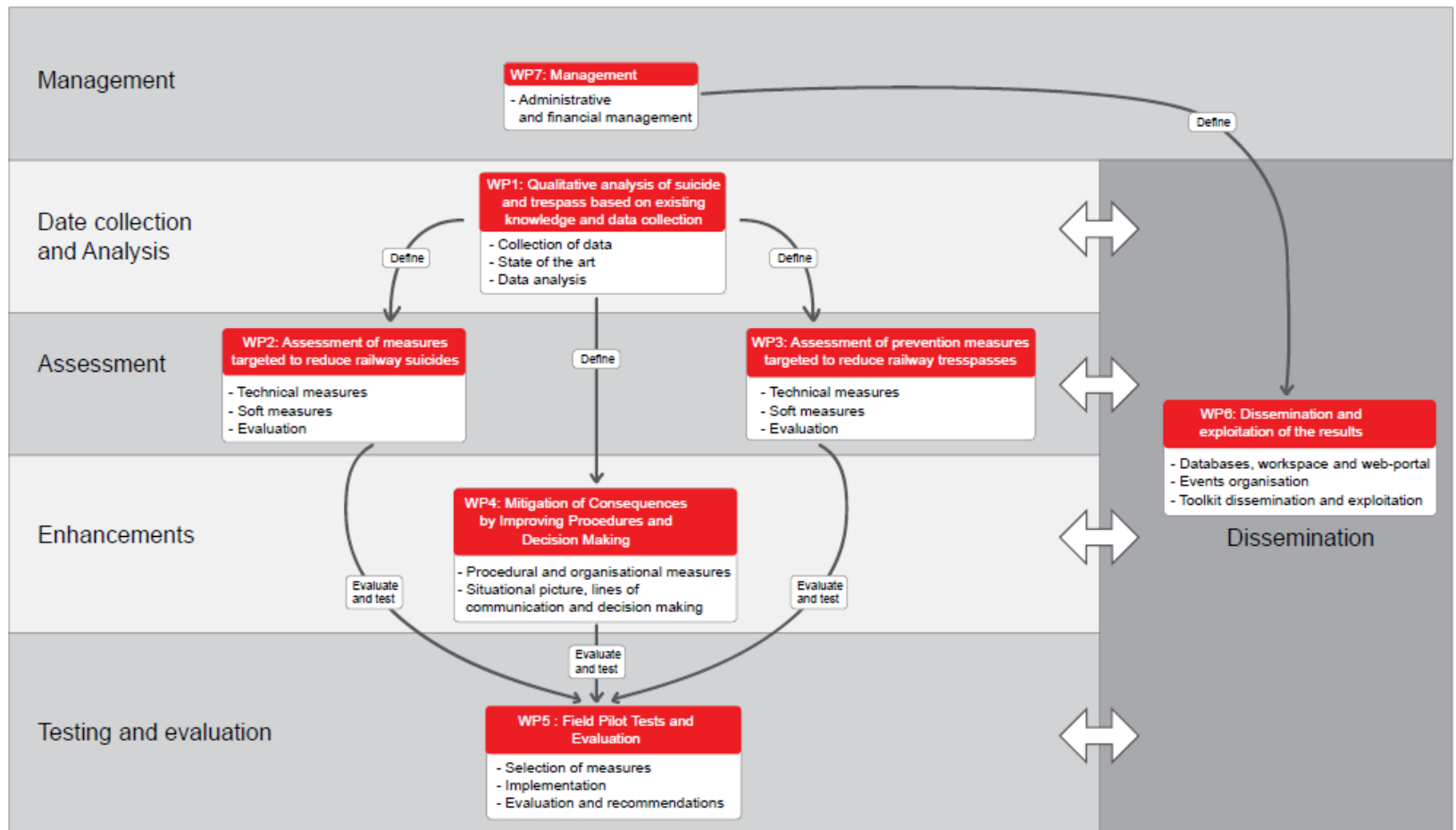
3 research centres :
VTT, CIDAUT, IFSTTAR

3 universities:
HMGU, KAU, Unott

3 industries:
ASTS, MTRS3, NICE

VTT
TRAFIKVERKET
KARLSTAD UNIV
IK
HMGU
DBAG

UNOTT
PRORAIL
INFRABEL
UIC
IFSTTAR

ASTS
CIDAUT
FFE

TCDD
MTRS3
NICE

Where are we now?

wp		YEAR 1				YEAR 2				YEAR 3				Lead partner
		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	
		Months												
		1 2 3	4 5 6	7 8 9	10 11 12	13 14 15	16 17 18	19 20 21	22 23 24	25 26 27	28 29 30	31 32 33	34 35 36	
1	Qualitative analysis of suicide and trespass on railways based on existing knowledge and data collection	D				D								VTT
2	Assessment of soft and technical measures targeted to reduce suicides the railways			D		D	D							TRV
3	Assessment of measures targeted to reduce trespassing accidents			D		D	D			D				IFSTTAR
4	Mitigation of Consequences by Improving Procedures and Decision Making			D	D		D			D				MTRS
5	Field pilot tests and evaluation											D	D	CIDAUT
6	Dissemination and exploitation	D D D									D		D	UIC
7	Management						R					R		UIC

RESTRAIL – Project structure

Project structure

Main results of WP1

- A description of the state-of-the-art

- 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.

WP2 + WP3
Key achievements

Maria Hedqvist,Trafikverket
Jean-Marie Burkhardt, IFSTTAR

Our findings

- No integrated classification
- 86 heterogeneous measures – grouped in 38 families
- We soon found similarities and differencies

Fences and barriers   Mosquito sound   CCTV   Collaboration

Landscaping   Training of staff   Airbags   Education

A SAMARITAN HELPED ME FIND MY STRENGTH

SAMARITANS

Key achievements

- Method and process to evaluate measures (July 2012)

- Evaluation of measures (February 2013)

  - Long and short forms

  - Workshops to evaluate and gather information

  - Evaluation by stakeholders

  - Evaluation of effect by experts

- Guidance for selection and implementation

Key achievements

- recommended/promising measures
  - To prevent suicide – 10
  - To prevent trespass - 4
  - To prevent both - 8

System Components

Video Camera: daytime color and nighttime black and white.

Infrared Illuminator: floods the scene with infrared lighting during nighttime, triggered by photoelectric sensor, invisible to human eye.

Speaker: connected to a telephone line so that an authorized official can dial in and warn the trespassers via the amplified speaker system.

Motion Detector: dual-technology motion detector combining stereo Doppler microwave technology (motion detection) with a dual element passive infrared sensor (heat detection).

Magnetometer: used to screen out trains.

Key achievements of WP4 – mitigation measures

Knowledge platform

- Response arrangements
- Information management & communication
- Decision making processes for traffic restoration

Information management
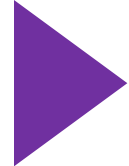
- Functional specification document
- Prototype (NICE Situator)

Decision support

- Line restoration model
- Integration of the model with the information management software

RESTRAIL information

- **Website**
  www.restrail.eu

- **Private workspace**
  http://ovidentia.uic.org/

- Brochure, newsletter
  Conferences and
  workshops

- **Coordinator contact** colliard@uic.org ; bonneau@uic.org

Thank you for your attention

Website : http://www.restrail.eu/