

ProtectRail presentation

Marrakesh, 16-17 March 2009

MH Bonneau - UIC

Framework of the project

- Call for Proposals for Security Research ([FP7-SEC-2009-1](#)) under the Seventh Framework Programme for Research and Technological Development (FP7) published on 3 September 2008. (FP7 Security Budget call :1.4 billion euros)

- **Technical content / scope:**

The task is to develop an integrated system to improve the security of rail transportation through better protection of railways and trains, and to reduce disparity in security between European railway systems. This will include the immunity of signal and power distribution systems against electromagnetic terrorism, the detection of abnormal objects on or under ballast; clearance of trains before daily use; control of access to driver's cabin, detection of unauthorised driver; new methods/tools to isolate and secure luggage; as well as a study and tools to reduce disparity of European railway systems' security. The action will demonstrate the potential of the European rail transportation systems for improved protection and homogeneity.

Timing of the Security Research Call 2

- 3 September 2008 Publication
- 4 December 2008 - Submission of the proposal
- January/February 2009 Evaluation
- Invitation to hearing on 17 February 2009
- Avril / May 2009
 - Invitation to negotiate
- September 2009
 - Beginning of the project
 - Duration : 40 months

Consortium

- Leadership : ANSALDO (ATSF – IT)
- 30 partners
 - AT, BE, DE, FR, IT, IL, LT, NL, PL, SK, TR, UK
 - Industry:
 - Alstom, Areva, Bombardier, Sagem, Smiths, Thales, TNO...
 - Research institute:
 - CEA, Eppra, Kingdom University, SODERN,...
 - Rail companies :
 - LITRAIL, PKP , RCA, RFI, SNCF, TCDD, ZSSK
 - Associations :
 - UIC, UNIFE

Scope of PROTECTRAIL

- The scope of PROTECTRAIL is to develop an integrated system to
 - improve the security of rail transportation through better protection of railways (infrastructures) and trains,
 - reduce disparity in security between European railway systems
- The protection of railways will include the following sub-missions:
 - fixed assets
 - stations & buildings
 - structures (tunnels, bridges, embankment, yards)
 - tracks
 - signalling, interlocking, control & command
 - power distribution
 - communications & information systems
 - rolling stock clearance
 - staff clearance
 - transported assets
 - passengers clearance
 - luggage clearance
 - freight clearance

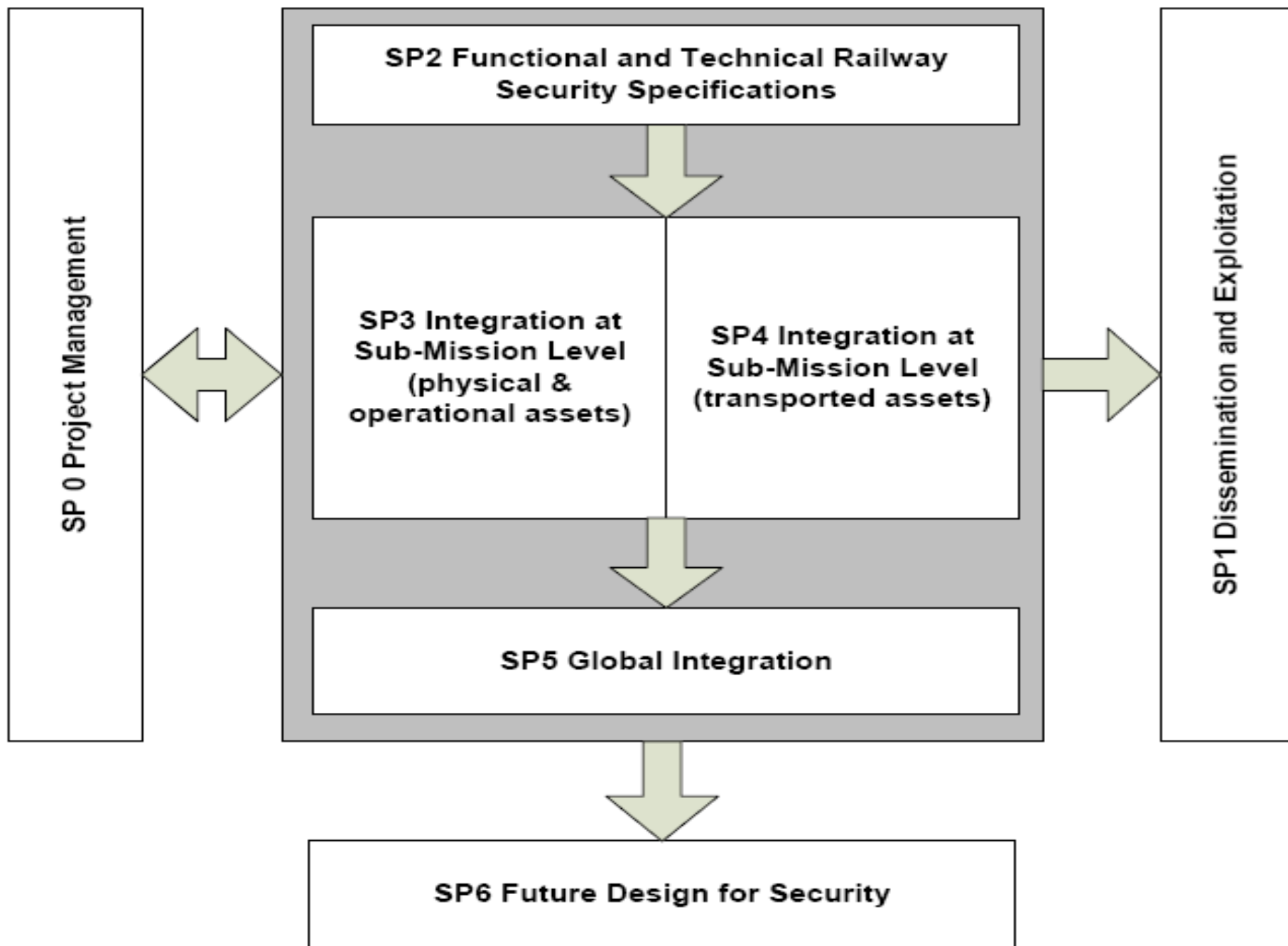


Figure 3 - PROTECTRAIL SP structure

SP leaders and co-leaders

SP	leader	co-leader	size (m/m)	Budget (M€)	EU Budget (M€)
SPO Project management	ASTS	DAPP	150		
SP1 Dissemination and exploitation	UIC	UNIFE	25		
SP2 Security requirements specification	ASTS	THALES	181		
SP3 Integration at Sub-Mission Level (physical & operational assets)	ALSTOM	TNO	352		
SP4 Integration at Sub-Mission Level (transported assets)	THALES	<i>ELSAG DATAMAT</i>	212		
SP5 Global integration	BOMBARDIER	SSI	335.5		
SP6 Future design for security	TNO	SARAD	99.5		
TOTAL			920	2 200	1 314

Rail participation

- UIC
 - Security competence center as leader of dissemination packages
 - Security platform working groups as end users
- Polish railways
 - Final demonstration
- Lituanien railways
- RFI
- Slovak railways
- SNCF

Protectrail benefits for rail

The ProtectRail project offered us the opportunity:

- To get state-of-the-art of latest security technologies
- To study applicability to railway infrastructure
- To provide the industry with railway recommendations & definition of needs
- To bring the “operational” point of view and to enhance accuracy between industry developments and railway needs
- To obtain funding to study some existing and potential railway security issues

RAILPROTECT

➤ **Framework**

DG-TREN/J: Security-Protection of persons, assets and facilities

Unit: Security of surface transports and transport of dangerous goods

➤ **Objective**

Make available a simulation tool to investigate the vulnerability of train/metro vehicles and infrastructures

Assure the European public that security measures are also being taken in the rail transport

possibly provide the European construction and rail manufacturing industry with a competitive edge

Thank you for your attention

All information available on
<http://extranet.uic.asso.fr/>