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HIGH PROBABILITY LOW IMPACT (HPLI) EVENT CALL FOR DEMONSTRATION

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C. Dambra, ASTS, C. Crawford, BT, M. Buchhorn, BT	V. Siciliano, ASTS	V. Siciliano, ASTS
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¹ V - Valid, NV - Not Valid, R - Revision

PROTECTRAIL CONSORTIUM

No.	Beneficiary organisation name	Country	Acronym
1	Ansaldo STS S.p.A.	IT	ASTS
2	Nederlandse Organisatie voor toegepast-natuurwetenschappelijk onderzoek TNO	NL	TNO
3	Selex Elsag S.p.A. (now Selex SE S.p.A.)	IT	SE
4	Union Internationale Des Chemins De Fer	FR	UIC
5	Selex Sistemi Integrati S.p.A. (now Selex SE S.p.A.)	IT	SSI
6	Bombardier Transportation GMBH	DE	BT
7	Alstom Transport SA	FR	ALS
8	Thales Communications & Security SA	FR	TCS
9	Sarad GmbH	DE	SARAD
10	UNIFE – The European Rail Industry	BE	UNIFE
11	Morpho SA	FR	MOR
12	Ductis GmbH	DE	DUCTIS
13	Železničná spoločnosť Slovensko a.s.	SK	ZSSK
14	Joint Stock Company Lithuanian Railways	LT	LITRAIL
15	Rete Ferroviaria Italiana RFI S.p.a.	IT	RFI
16	PKP Polskie Linie Kolejowe SA	PL	PKPPLK
17	D'Appolonia S.p.A.	IT	DAPP
18	Elbit Systems Ltd.	IL	ESL
19	Facultés Universitaires Notre-Dame de la Paix	BE	FUNDP
20	EPPRA	FR	EPPRA
21	Kingston University Higher Education Corporation	UK	KU
22	SODERN S.A.	FR	SODERN
23	Smiths Heimann S.A.S.	FR	SMITHS
24	Instytut Kolejnictwa	PL	IK
25	CEA Commissariat à l'Énergie Atomique	FR	CEA
26	Institut Franco-Allemand de Recherches de Saint-Louis	FR	ISL
27	TCDD - Turkish State Railways	TR	TCDD
28	MER MEC S.p.A.	IT	MERMEC
29	Société Nationale des Chemins de Fer	FR	SNCF

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1 INTRODUCTION

1.1 PURPOSE OF THE DOCUMENT

Call for demonstration text to support the HPLI contest.

1.2 EXECUTIVE SUMMARY

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1.3 DEFINITIONS AND ACRONYMS

Acronym	Meaning
AOB	Any Other Business
CA	Consortium Agreement
DoW	Description of Work
EC	European Commission
FAQ	Frequently Asked Question
HPLI	High Probability Low Impact

2 CALL FOR DEMONSTRATION

2.1 CONTEXT

The PROTECTRAIL project (GA242270, <http://www.protectrail.eu>) intends to expand its focus from the protection of railway from terrorist attack (that was the focus of the call) to the wider objective of protecting the railway from High Probability Low Impact (HPLI) security events.

HPLI security events are defined as those events happening frequently but having each one a relative low impact on the railway but, when considered together, have serious impacts on railway costs. Examples of HPLI security events are: graffiti, copper thefts, etc.

To this end the Steering Board of the project has decided to publish this Call for Demonstration to solicit any international organisation to propose one or more innovative solutions to demonstrate their effectiveness in protecting railway assets against HPLI events.

2.2 HPLI TOPICS TO BE ADDRESSED

The High Probability Low Impact² (HPLI) topics addressed by this call for demonstration:

- TO.1. Copper (and other valuable metals) thefts
- TO.2. Graffiti
- TO.3. Vandalism (e.g. scratches on glasses)
- TO.4. Theft from passengers
- TO.5. Verbal abuse against passengers & railway staff
- TO.6. Physical aggression
- TO.7. Trespassing/restricted area encroachment
- TO.8. Door Blocking
- TO.9. Tailgating
- TO.10. Ticket Evasion – Jumping overt Turnstiles
- TO.11. Passengers Flow Control
- TO.12. Any other security event affecting the railway domain with HPLI characteristics (for this topic relevance for the railway domain has to be justified)

2.3 WHO CAN PARTICIPATE

Any legal entity may participate to this Call for Demonstration.

2.4 BENEFITS FOR THE PARTICIPANTS

The benefits for the Participating Organisations can be summarised as follows:

- the opportunity to show the proposed solution to the main railway stakeholders and to directly interact with them;
- the opportunity to show the proposed solution at the PROTECTRAIL final event that will take place at the International Union of Railways (UIC) premises;
- the publication of demonstration results in a public deliverable of the PROTECTRAIL project.

2.5 COSTS AND FUNDING

There is no funding available from the project to cover the costs of participating organisations. All the costs incurred to allow a proper demonstration will be in charge of the participating organisation.

2.6 REQUIREMENTS FOR THE PARTICIPANTS

The participants shall satisfy the following requirements:

- the proposed solution shall be targeted to protect against at least one of the HPLI security events listed in section 2.2;

² The Low Impact refers to the single event only

- the proposed solution shall be innovative for the railway sector and be at the prototype level (i.e. no commercially off-the-shelf products are accepted except for those solutions never tested in the railway domain);
- the solution shall be integrated into the PROTECTRAIL system according to the PROTECTRAIL Interoperability Framework described in section 2.9;
- the proposed solution shall not create health and safety risks for the public;
- the proposed solution(s) shall be demonstrated at the International Union of Railways (UIC) premises³ in 16 Rue Jean Rey 75015 Paris (France) on 13-14 May 2014 during the PROTECTRAIL final event.

2.7 SUBMISSION OF PROPOSALS

The proposals for demonstration shall be electronically submitted at the hplicontest@protectrail.eu e-mail address using the Microsoft Word template attached to this call and saved in Acrobat PDF format according to the following two cut-off dates:

- Friday, 21 February 2014 end of the day
- Friday, 28 March 2014 end of the day (proposals received at this cut-off date will be considered only in case of uncovered topics from those submitted at the first cut-off date).

2.8 SELECTION PROCESS

The proposals for HPLI demonstration will be selected by the PROTECTRAIL Steering Board according to the following criteria:

1. degree of innovation of the proposed solution(s)
2. relevance of the addressed HPLI topic
3. proposed level of integration in the PROTECTRAIL interoperability framework
4. in case of equally ranked proposal, coverage of the HPLI topics will be considered

Selected organisations will be invited to discuss practical implementation matters at a meeting that will take place in February 2014.

2.9 PROTECTRAIL INTEROPERABILITY FRAMEWORK

The PROTECTRAIL Interoperability Framework has been adopted by the consortium members to facilitate the speed and ease of integrating new functions/capacities into an overall system of systems. The framework is based on open standards, and uses a very simple Event-Driven architecture based on Web Services.

For the High Probability Low Impact (HPLI) event Call for Demonstration, the PROTECTRAIL's Interoperability Framework base-level of integration will be used to quickly enable the various consumers (e.g. Security Operational Control Centre's) with the ability to receive events from the HPLI capacities. The base-level of integration into this framework requires that a HPLI capacity generate an Event. An Event consists of key information such as: time, geolocation, event type, etc.

More information on the PROTECTRAIL Interoperability Framework will be published soon on: <http://www.protectrail.eu/PROTECTRAIL-Call-for-demonstration>

2.10 INTELLECTUAL PROPERTY RIGHTS (IPRs)

The Intellectual Property Rights (IPRs) of the proposed solutions will remain property of the proposing organisation.

2.11 CONTACTS

For any further information please contact Carlo Dambra at the following email address hpliinfo@protectrail.eu, adding to the email subject: PROTECTRAIL HPLI contest.

³ In case of solution(s) requiring more specific areas (e.g. a railway track) exceptions can be made

Summaries of Frequently Asked Questions (FAQs) will be published periodically.