



DIRECTORATE-GENERAL HOME AFFAIRS
Directorate A: Internal Security
Unit A4: Financial support - Internal Security

PROGRAMME

"PREVENTION OF AND FIGHT AGAINST CRIME"

TARGETED CALL FOR PROPOSALS CHEMICAL, BIOLOGICAL, RADIOLOGICAL AND NUCLEAR MATERIALS - CBRN ACTION GRANTS 2012

HOME/2012/ISEC/AG/CBRN

Part A - Application Form

The Authorised Signatory of the Applicant/coordinator organisation certifies:

- that the information contained in this Application Form as well as in all its annexes is complete, true and verifiable;
- that none of the partners participating in the project has received any other Union funding to carry out the action or part of the action which is the subject of this grant application;
- that the partners participating in the project have the operational and financial capacity to carry out the project activities described in this Application Form and its annexes;
- that all the partners participating in this project have agreed to the content of the application and have confirmed their intention to carry out the tasks described accordingly.

Please read and complete this Application Form with due care, in accordance with the Guide for Applicants CIPS/ISEC 2012

Please note that only the text visible on the screen will be visible when printed, therefore please fit the text into the text boxes.

Applicants should reply to all the questions of the Application Form.

Please note that you will not be able to upload the form if the fields signed by * are not completed.

0. GENERAL INFORMATION

Reference Call For Proposals:

HOME/2012/ISEC/AG/CBRN

Targeted Call 'CBRN'

Application Number : HOME/2012/ISEC/AG/CBRN / 4000003812

1. INFORMATION CONCERNING THE APPLICANT ORGANISATION/COORDINATOR

1.1 Identity of the Applicant organisation/coordinator (not a private person)

1.1.1 Full legal name of the Applicant organisation/coordinator (in original language):

PROVINCIA DI NOVARA

1.1.2 Short name:

PROVINCE OF NOVARA

1.1.3 Applicant organisation/coordinator's name in English:

PROVINCE OF NOVARA

1.1.4 Legal status:

Public organisation / company / foundation

1.1.5 VAT number:

1.1.6 Is your organisation profit- or non-profit making?

Non-Profit

1.1.7 Is your organisation of public or private law?

Public

1.1.8 Web site*:

www.provincia.novara.it

1.2 LEGAL REPRESENTATIVE of the Applicant organisation/coordinator - Authorised signatory

1.2.1 Full Name*:

NICOLETTA MOLFETTA

1.2.2 Position*:

CHIEF OF UNIT

1.3 CONTACT PERSON - person responsible for handling the application and to whom all correspondence will be addressed

1.3.1 Title:

Mr

1.3.2 Name:

BRUSTIA

1.3.3 First Name:

SILVANO

1.3.4 Gender:

MALE

1.3.5 Position:

RESPONSIBLE EU PROJECTS

1.3.6 Direct telephone +countrycode (areacode) number:

+39 (0321) 378875

1.3.7 Direct fax+countrycode (areacode) number:

+39 (0321) 378399

1.3.8 Email:

s.brustia@provincia.novara.it

1.4 CONTACT ADDRESS for the Commission - address for correspondence

1.4.9 Street:	PIAZZA MATTEOTTI		
1.4.10 House No.:		1	
1.4.11 Postal Code:		28100	
1.4.12 Town/City:	NOVARA		
1.4.13 Country:	IT		

1.5 ADDITIONAL INFORMATION about the Applicant organisation/coordinator

1.5.1. Summary of the Applicant organisation/coordinator's objectives and regular activities (max 2500 characters)

The Province of Novara is an intermediate local public authority (NUTS III level) with competences in many fields, a relevant part of which are related to transport infrastructures (roads) or to the planning of the territory as regards the human settlements (urban areas, industrial zones, agriculture, environment protection etc.).

It also has experience in the management of European projects, in particular belonging to the framework of European Territorial Cooperation. The Province has responsibility in the elaboration and implementation of civil protection plans, against any kind of catastrophe due both to natural or criminal reasons. With this task the Province takes part to the local "Safety Committee", where local authorities, environmental responsible organisations, police bodies and local representatives of the central Government are included.

In this perspective the Province can carry out the role of data collector at local level and coordinator of all interested organisations to improve and make more effective the intervention plan in case of disaster. The Province also has a police staff having the spacial task of extra urban territorial and environmental surveillance.

Furthermore, the Province of Novara, developing economic growth interventions on its own territory where chemical industry has a great importance as well as chemicals transportation and related logistics, has capitalised a relevant experience about the problems of safety in transports and safety in chemistry and chemical clusters. The Province is part of the local private / public consortium (IBIS srl) which has the task to carry out chemical research projects, financed by ERDF, involving numerous chemical companies as well as the most important public authorities and Universities . It participates to a regional authority network (ECRN) aiming at improving national and European public policies affecting chemistry, chemicals transportation and safety in both sectors. In this perspective, the Province developed and realised most of its European projects, in part listed below, that are in fact dedicated to chemical clusters or to the transports of chemicals and hazardous goods (ECRN, CHEMLOG, CHEMCLUST, LOSAMEDCHEM, CHEMLOG capitalisation, CHEMLOG T&T).

1.5.2 Number of permanent staff of the Applicant organisation/coordinator:

259

1.5.3 Applicant organisation/coordinator's usual sources of finance (max 400 characters)

Budget total income of the Province of Novara for 2011: 66 million Euros.

INCOMES

From taxes	€ 27 million
From upper authorities (State, Piedmont Region)	€ 20 million
From bank loans (covered by the Government)	€ 14 million
From service fees	€ 5 million.

1.5.4 Shareholders of the Applicant organisation/coordinator. Please describe which groups/companies hold a share of the Applicant organisation/coordinator's capital and indicate their country of origin (if applicable - max 500 characters)

The Province of Novara has no shareholders.

1.5.5 Organisational structure of the Applicant organisation/coordinator.

Please describe how the Applicant organisation/coordinator is set up and indicate the decision-making mechanisms, sections / branch offices/ subsidiaries or any dependent entities and their country of origin, etc. (max 500 characters):

The Province has a political board which is competent for any general and thematic decision related to the issues included in its own tasks. Once decided this general lines of intervention, all specific implementation decisions are taken by the chiefs of units. Any thematic branch of the Province has a dedicated unit or sector.
This project will be implemented by the Unit Responsible for European Programs (General Affairs Sector) in collaboration with the Environmental Sector.

1.5.6 Please list the EU grants (both operating and action grants) and EU procurement contracts obtained by the Applicant organisation/ coordinator in 2009, 2010 and 2011 as Applicant or Partner. List also the EU grant applications (both operating and action grants) and procurement bids submitted (or expected to be submitted, and/or obtained) in 2012 by the Applicant organisation/coordinator as Applicant or as Partner.

After submission of this application, the Applicant organisation/coordinator is required to inform without any delay DG HOME of any further application for funding made to other EU institutions or agencies, and of any funding approved by other EU institutions or agencies

Year of submission / award	EU programme / EU institution taking the award decision (name of Commission's DG + Unit/name of Agency)	Reference number of the grant agreement/ contract Title and duration of the grant agreement/ contract	Applicant or Partner (A/P)	Amount of the grant/contract (EUR) received / applied for by the Applicant organisation / coordinator
2009	European Territorial Cooperation - Strand C - Nord Pas de Calais Region	CHEMCLUST - 2010 /2012	P	117,750.00
2009	European Territorial Cooperation - Strand B - Central Europe - City of Vienna	YURA - 2010 / 2013	P	141,750.00
2010	European Territorial Cooperation - Strand B - MED - PACA Region	LOSAMEDCHEM - 2010 / 2013	A	168,427.00
2011	European Territorial Cooperation - Strand A - Italy Switzerland - Lombardy Region	INTRECCI SULL'ACQUA - 2011 / 2014	A	405,000.00
2012	European Territorial Cooperation - Strand B - Central Europe - City of Vienna	CHEMLOG capitalisation - 2012	P	10,275.00
2012	European Territorial Cooperation - Strand B - Central Europe - City of Vienna	CHEMLOG T&T - 2012 / 2015	P	100,350.00
2012	European Territorial Cooperation - Strand B - MED - PACA Region	OPEN InnovENERGY - 2012 - 2015 (submitted)	P	138,000.00
2012	European Territorial Cooperation - Strand B - MED - PACA Region	TRANSPORTS capitalisation - 2013 - 2014 (expected to be submitted)	A	

2. INFORMATION ABOUT THE PROJECT FOR WHICH THE FINANCIAL ASSISTANCE IS REQUIRED**2.1 General project information**

2.1.1 Project Title (in original language):

ThREAT Identification and Assessment against chemical supply chain

2.1.1.1 Project Title* (EN):

ThREAT Identification and Assessment against chemical supply chain

2.1.2 Acronym/Short title*:

TRIAL

2.1.3 Duration (MAX 24 MONTHS)*:

18

months

2.1.4 List of partners involved in this project

	Name of organisation	Contact person	Country	Address	Profit-oriented	Partnership declaration
Applicant organisation/coordinator:						
0	Provincia di Novara	Mr. Silvano Brustia	IT	Piazza Matteotti 1 - Novara	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Web site: www.provincia.novara.it						
Co-beneficiaries:						
1	Tecnalia Research&Innovation	Mr. Xabier Larucea	ES	Paseo Mikeletegi 2, San Sebastian	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Web site: www.tecnalia.com						
2	isw Institut für Strukturpolitik und Wirtschafts forderung gemeinnutzige - GmbH	Mrs. Daniela Klohs	DE	Hoher Weg 3, Halle	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Web site: isw-institut.de/						
3	CELI France	Mr. Luca Dini	FR	Avenue Philippe Auguste 33, Paris	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Web site: www.celi-france.com/fr/						
4	Novareckon s.r.l.	Mr. Christian Violi	IT	Via Bovio 6, Novara	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Web site: www.novareckon.it						
5					<input type="checkbox"/>	<input type="checkbox"/>
Web site:						
6					<input type="checkbox"/>	<input type="checkbox"/>
Web site:						
7					<input type="checkbox"/>	<input type="checkbox"/>
Web site:						

8					<input type="checkbox"/>	<input type="checkbox"/>
Web site:						
9					<input type="checkbox"/>	<input type="checkbox"/>
Web site:						
10					<input type="checkbox"/>	<input type="checkbox"/>
Web site:						
11					<input type="checkbox"/>	<input type="checkbox"/>
Web site:						
12					<input type="checkbox"/>	<input type="checkbox"/>
Web site:						
13					<input type="checkbox"/>	<input type="checkbox"/>
Web site:						
14					<input type="checkbox"/>	<input type="checkbox"/>
Web site:						

	Name of organisation	Contact person	Country	Address	Profit-oriented	Partnership declaration
Associate Partners/on a non EU-funded basis:						
i					<input type="checkbox"/>	<input type="checkbox"/>
Web site:						
ii					<input type="checkbox"/>	<input type="checkbox"/>
Web site:						
iii					<input type="checkbox"/>	<input type="checkbox"/>
Web site:						
iv					<input type="checkbox"/>	<input type="checkbox"/>
Web site:						
v					<input type="checkbox"/>	<input type="checkbox"/>
Web site:						
vi					<input type="checkbox"/>	<input type="checkbox"/>
Web site:						

vii					<input type="checkbox"/>	<input type="checkbox"/>
Web site:						
viii					<input type="checkbox"/>	<input type="checkbox"/>
Web site:						
ix					<input type="checkbox"/>	<input type="checkbox"/>
Web site:						
x					<input type="checkbox"/>	<input type="checkbox"/>
Web site:						

CONFORMITY CRITERION

2.1.5 To which specific objective of the ISEC Programme does this project refer? (max 2 selections)*

- To stimulate, promote and develop horizontal methods and tools necessary for strategically preventing and fighting crime and guaranteeing security and public order
- To promote and develop coordination, cooperation and mutual understanding among law enforcement agencies, other national authorities and related Union bodies
- To promote and develop best practices for the protection of and support to witnesses
- To promote and develop best practices for the protection of crime victims

2.1.6 To which expected result(s) of the targeted call does this project refer?*

- The proposed projects should provide for a concrete contribution to the implementation of the actions identified in the EU CBRN Action Plan, either in the form of direct implementation or in the form of activities aimed at the preparation of their implementation.
- The proposed projects should provide for a concrete contribution to the implementation of the actions identified in the EU Action Plan on Enhancing the Security of Explosives, as far as these have not yet been implemented.
- The proposed projects should provide for a concrete contribution to the implementation of the actions identified in the EU Air Cargo Security Action Plan, in particular as regards enhancement of MS capability to detect high-risk materials (C, B, RN, explosives and precursors).

2.1.7 Please explain how your project proposal corresponds to the selected expected result(s) (max 1500 characters):

The main objective of TRIAL is to develop a knowledge management system in order to prevent potential threats to chemical goods supply chain (production, storage, transportation). This aim is coherent with the following goals identified in the EU CBRN Action Plan:

- Develop EU lists of high-risk CBRN materials and risk-based approaches to security (TRIAL will establish a list of high-risk chemical goods, assessing its potential for being used for malicious purposes and the possible impact)
- Enhance the security of high risk CBRN materials and facilities (TRIAL will develop criteria on assessing security arrangements at high-risk chemical facilities)
- Enhance control over high risk CBRN materials (TRIAL will investigate on potential risks associated with trade of chemicals over the Internet, on potential security gaps in the supply chain)
- Improve the identification and reporting of suspicious transactions and behaviour (TRIAL will develop guidelines for the industry, the public authorities and the research community containing criteria identifying the forms of behaviour, in relation to transactions, which may give rise to suspicion)
- Enhance the security of transport (TRIAL will exchange good practices concerning the transport of chemical goods and identify security requirements for logistics enterprises for the transport of high-risk materials)

2.1.8 Type of activities (min 1 selection)*

- Operational cooperation and coordination
- Analytical, monitoring and evaluation activities
- Development and transfer of technology and methodology
- Training, exchange of staff and experts
- Awareness and dissemination activities
- Development and creation of network

2.1.9 **CHARACTERISTICS OF THE PROJECT** (max 1 selection)*

- Transnational project (if this box is ticked, please submit all documents requested in Sections 5.2 and 6.1 of the Calls for Proposals)
- National (if this box is ticked, the following section on NATIONAL projects must also be completed)

NATIONAL projects must: (min 1 selection)

- prepare transnational projects and/or Union actions ("starter measures")
- complement transnational projects and/or Union ("complementary measures")
- contribute to developing innovative methods and/or technologies with a potential for transferability to actions at Union level, or develop such methods or technologies with a view to transferring them to other Member States and/or other country which may either be an acceding or a candidate country

Please explain how your proposal for a national project complies with at least one of the above mentioned conditions (max 500 characters):

2.1.10 Summary of the project for which the ISEC financial assistance is requested. Please list the objective(s), activities, duration, methodology, partnership, target groups, expected results and deliverables, and dissemination strategy. This summary will be forwarded to Member States' representatives and published in case the proposal is awarded a grant (max 4000 characters).*

A vast number of hazards, both due to accidental causes and to intentional attacks, threatens critical infrastructures and may have disastrous effects on society from the social and economic point of view.

With regard to the chemical sector, the effects of malicious attacks and accidents, may even be more relevant, due to the nature of chemical goods. Exposure to malicious threats is growing, and intelligence sources estimate today a disruptive attack more likely to target Europe than the US. Although there is a lack of integrated data, most operators report that cyber pressure against the vulnerable parts of their monitoring and control systems keeps exponentially growing.

Assessment of the potential threats to the chemical supply chain and of the relevant defence strategies is an intricate task due to the technical complexity of plants and infrastructures, and to the various interactions among concerned stakeholders. The objective of TRIAL is to evaluate the potential of a knowledge based approach to point out, assess and rank potential threats to chemical supply chain (production, storage, transportation) and to identify action plans to reduce risk, preventing the occurrence of critical events or at least mitigating their effects through effective management of the subsequent emergency situations. TRIAL addresses the following main issues:

1. Identifying and analysing meaningful case studies in chemical goods supply chain and identifying the main requirements (application requirements) for a system capable of identifying possible threats from written natural language text messages about the most suitable countermeasures to be undertaken.
2. Conducting an extensive feasibility study on approaches, technologies and tools available for performing text analysis and information extraction in a threat identification and risk assessment context. Implementing a mock-up or a proof-of-concept to substantiate the methodologies and techniques identified and to test their validity in the specific application domain at hand. Eventually, on the basis of the results obtained in the previous activities, defining the requirements and the main design specifications (system requirements) for a system (TIS) capable of extracting threat-relevant information from text messages in natural language and of processing this information in order to identify and evaluate potential risks for a critical infrastructure, with reference to the selected case studies.
3. Conducting an impact analysis of the project results in several business sectors such as chemistry, transports, and logistics, so as to estimate relevant benefits in those sectors due to formal proof of properties on the legal and insurance respect. The replicability of the results in other sectors, such as the nuclear one, will be assessed.
4. Exchanging good practices, with regard to security issues, within the chemical community all over Europe, starting from ECRN (European Chemical Regions Network).

Please take note that only what is visible on the screen will be printed. Therefore, to maximize the available space, please avoid as much as possible carriage returns, line spacing, etc.

2.1.11 Experience of the Applicant organisation/coordinator in the selected priority area(s)

Application Number : 4000003812

Please summarise the activities/experience of the Applicant organisation/coordinator in this priority area and provide a short description of at least 3 successful projects (not necessarily with EU financial support) of comparable nature and volume to the project for which the ISEC financial assistance is requested (max 1000 characters).

In the field of transport infrastructure safety, two European projects involving the Province of Novara have to be mentioned: CHEMLOG where Novara is partner and LOSAMEDCHEM where it is leader. They are both financed by European Territorial Cooperation programs, the first one by Central Europe and the second one by MED. They tackle problems related to the transportation of chemicals, where safety and population safeguard are essential. CHEMLOG works mainly in the sector of land modalities while LOSAMEDCHEM can face the sea mode and the port problems too. The Province has a competence of control and authorisation of the new energy production plants established on its territory as well as about the approval of any municipal territorial plan. Carrying out this tasks, the Province has been involved in the process of the Territorial Integrated Plans, where a number of new energy production plants have been financed by the Region Piedmont ERDF with Novara's guidance and support.

2.2.1 What specific issue / question does your project address? (max 2000 characters)

The chemical industry is one among the largest and the most dynamic sectors in Europe. Consequently there are vast kind of facilities where chemicals are produced, processed, stored, distributed or used. European Union is continuing to discuss the risks and consequences of potential terrorist attacks on chemical facilities and possible actions public and private actors might take to prevent or reduce them. It considers the likelihood and severity of harm that might result from terrorist attacks on chemical facilities, as well as from illicit use of such facilities to gain access to hazardous chemicals (or to precursor chemicals that can be used to produce hazardous chemicals).

Accordingly, a gap in the protection of such critical infrastructures is one of the main problems for the European citizens. TRIAL, based on experience of industry players and specialized research centers, aims at establishing criteria to develop best practices and practical tools regarding the defence of chemical goods supply chain: improving information management and especially knowledge about early warnings about potential attacks and supporting decision makers in their activity. Project results will provide a strategic, operative and organizational vision not only about chemical sector but about critical infrastructures (such as nuclear power plants) on the whole.

2.2.2 Objectives of the project (in relation to the issue/ question mentioned above) (max 1000 characters):

The core objective of TRIAL is to evaluate the potential of knowledge based approaches to identify potential vulnerabilities and threats to chemical goods supply chain (production, storage, transportation). Specific objectives are:

1. extraction of risk-relevant information from natural language, both in large repositories of general information in digital format, such as web resources, and in expert documents produced by chemical facilities managers
2. identification and assessment of potential threats even through interactive maps to allow early recognition of risky situations
3. conceptual design and proof of concept for advanced tools for vulnerabilities and threat identification.

2.2.3 Please describe the participants (both target groups and beneficiaries) in the activities (max 1000 characters):

- Provincia di Novara, one of the leading public authorities in Europe in monitoring the chemical sector and its evolution under EU policies
 - Isw-GMBH, private non profit institute committed to user oriented and interdisciplinary research. The isw works closely with the chemical industry in the development of chemical parks, promotion of innovation and logistics and security
 - Novareckon srl, a spinoff company of the University of Piemonte Orientale, specialized in asset performance, knowledge brokerage and BI
 - Celi France, with extensive experience in natural language processing for several European languages about risk detection from texts concerning energy sector, i.e. the nuclear domain
 - Tecnalia, a large Spanish research facility with relevant expertise in transnational projects on security and particularly on CBRN transport security.
 Potential beneficiaries are chemical factories, laboratories, logistics and transport services providers.

2.2.3.1 Estimated total number of participants (persons)

	30
- from judicial authorities, legal practitioners	
- law enforcement	
- other public officials	
- civil society, associations, NGOs	
- professional organisations	
- research/university	5
- private sector	20
- total from other sector (please specify) (max 600 characters)	5

Local public authorities

2.2.3.2 Estimated total number of participants by Member State and other (e.g. candidate) countries (persons)

EU Countries

Country:	AT	BE	BG	CY	CZ	DE	DK	EE	ES	FI	FR	GB
Number:					2	7			7		3	2

Country:	GR	HU	IE	IT	LT	LU	LV	MT	NL	PL	PT	RO
Number:				7					2			

Country:	SE	SL	SK
Number:			

Candidate countries

Country:	HR	IS	ME	MK	TR
Number:					

Other

Country:												
Number:												

IMPACT CRITERION

2.2.4. What are the expected results of the project? What are the concrete deliverables and outputs of the activities? Please quantify the expected results/outputs/achievements /deliverables/end products of the planned activities (max 1000 characters):

The main results of TRIAL will be:

1. Requirements specification. Starting from the selected case studies in the chemical sector (production, storage, transportation), identify functional requirements for a system devoted to vulnerabilities and threat identification.
2. Conceptual design of a system for threat identification starting from information coded in natural language and outline relevant technological choices. Provide evidence through a proof of concept that advanced language processing technologies can be successfully deployed to extract information which is crucial to threat identification and risk detection. Produce a feasibility study that clearly identifies the technologies to be adopted for the delivery of a fully operational prototype.
3. Report on impact analysis and replicability to nuclear sector.
4. Recommendations for a pathway towards adoption of the study project findings by European chemical sector.

2.2.5 What is the expected impact of the proposed activities (in the short, medium and long term) on the ISEC programme's objectives and on the target groups? how do you intend to evaluate it? (max 1000 characters):

The outcome of TRIAL will impact on two potential end-user categories, namely infrastructure and plant operators as well as security agencies and public authorities. Both are represented in the Consortium. Moreover, a stakeholder board will be involved in appreciating the project progress and final outcomes and in promoting the application of its results in concrete contexts.

The system specifications produced by TRIAL will constitute the starting point for an action devoted to actually build, in a sound software factory, threat identification and decision support tools that may then be distributed to the European market.

As to EU policies about Open Access in R&D, the conceptual design and the recommendations will be distributed in the community.

2.2.6 Based on which indicators do you intend to evaluate the implementation of your activities? Who will do the evaluation of the impact and results of your project? (max 1000 characters):

TRIAL will use an evaluation mechanism basically relying on its Expert Advisory Panel (EAP). Partners will agree with the EAP terms for evaluation of the results early in the project life (workshop) and consolidate it in the earlier phases of impact evaluation. However we may anticipate some indicators TRIAL will be evaluated under:

- comparison with other contemporary EU projects results
- economic impact of implied applications
- achievement of given security levels requirements in the applications
- attendance to the final Conference

Financial and activity controls and project monitoring will be under responsibility of Provincia di Novara (Consortium coordinator).

Quality control will be based on the following mechanisms:

- Consortium internal quality control
- the mentioned EAP
- project results will be contrasted with National Security Authorities and the EU Commission

Project monitoring will be focused on:

- delays in deliverables
- budget deviations
- quality control

2.2.7.1 Why is the ISEC support needed to achieve the proposed results? How will the project activities complement other activities (past, present, future) in this field? Will your activities have a multiplier effect on the public? If yes, to what extent? (max 1500 characters):

The aim of TRIAL perfectly fits with the overall goals of the ISEC programme and first of all with the goals of CBRN Action Plan (see 2.1.7).

Public support is substantial to establish an objective view on the potential benefits of the adoption of an advanced knowledge-based approach to ensure protection of key assets, like chemical facilities and transport infrastructures. Only a serious, deep study project can provide the necessary evidence for deciding about the practical viability of high technology solutions for threat identification and decision support

From the research viewpoint, it gives an opportunity to apply to the important field of identification of threats to chemical supply chain the most recent results of such research fields as information extraction from natural language texts and knowledge-based decision support.

2.2.7.2 Please describe how you intend to sustain the project (its activities, results, impact, etc) in the medium and long term (max 1000 characters) after the period of ISEC financing has ended:

This project focuses on establishing a first assessment on the potential of knowledge-based techniques to assess and rank threats to critical infrastructures and identify appropriate action plans. If the technical results of the project will be encouraging and there is adequate support by the stakeholders, the Consortium forecasts to establish a broader project, with a larger partner basis, to develop its results further and develop a suite of pre-commercial knowledge-based tools for threat identification and decision support.

Thanks to the involvement as partner of a major provider of professional services, industry, utilities and other end users will apply the results obtained in the project to incorporate the best ideas and methodology procedures into their operative practices.

2.2.8.1 Please describe the planned dissemination strategy (how and to whom) for the results of your project (max 1000 characters):

TRIAL dissemination plan will be based on four main actions:

- A web site and a stakeholder mailing list will be implemented, in order to inform about project objectives and outcomes, all along its life.
- A Workshop will be organized among concerned stakeholders, including EU member state ministries and agencies, regulation authorities, utilities and transmission system operators and equipment manufacturers, in order to introduce TRIAL, discuss its objectives and collect useful hints and requirements.
- A Conference will be organised later in the project life, when the outcomes of the case studies are available and the project conclusion drafted. It is expected that this Conference will pave the way to wider adoption of security measures for critical equipment in Europe.
- A number of good practice exchange meetings will take place in several European regions, in order to share experiences with relevant stakeholders

2.2.8.2 Visibility of the EU funding - Please describe how and where the logo and indication that the activities are co-financed by the ISEC programme will be specifically mentioned (max 500 characters):

TIDES plans to organise:

- a Website to give wide visibility on the project, on its progress, and its results;
- two Public Events (an early Workshop and a final Conference), as mentioned in 2.2.8.1, where CIPS co-funding will be acknowledged.

The logo and the indication that TIDES is cofinanced by CIPS will duly be mentioned in all relevant publications, website, deliverables, and in any further now unforecast communication to the public and the Commission.

QUALITY CRITERION

2.2.9 Conception and risks

2.2.9.1 Please explain why this project idea came about? Why and how does this project address a real need at European level? (max 2000 characters):

Vulnerabilities of critical infrastructures occur in a landscape where such systems are highly connected and highly interdependent, thus failure of one such system may result in heavy economic losses and deep social impact.

As to chemical facilities, since the 1990s, both international and national terrorists have increasingly attempted to use explosives to release chemicals from manufacturing and storage facilities. In Europe the phenomenon started from Yugoslavia wars with attacks on plants producing pesticides, fertilizer, carbon black, and light fraction petroleum products and on a pharmaceutical factory using ammonia, chlorine, and other hazardous chemicals.

European Union has established as one of its main priorities the protection of citizens and their properties, and the guarantee of the basic services, such as energy and chemical apparatus (involved in almost all large consumer products). These are a necessary prerequisite to build the EU Integrated Market.

The project proposes:

- A common understanding and approach to the protection of chemical supply chain
- A methodology to support protection activities in EU chemical sector
- The definition of threat identification tools to help managers of the chemical sector in their activities, able to run in EU multiple languages
- The identification of best practices and practical tools replicable to the other CBRN fields of activities.

2.2.9.2 Please demonstrate your knowledge of the most recent developments on the subject of your proposal (bibliography, contact lists, needs' assessment, project preparatory work, references to EU strategies/action plans, etc.) (max 2000 characters):

As to threat identification, information may come from multiple sources, such as papers, emails, audio-video sources. A first step concerns the identification of adequate symptoms that are related to a threat. Off the shelf knowledge management tools include Autonomy, Lycos, Expert Systems, Invention Machine, eClaris. Machine Learning Frameworks as RapidMiner display relations in a network, Pentaho has decision support packages, KXEN has social networks analysis, identification of security profiles, an open source data mining suite for decision support. Up to now, applications for threat identification appears still quite limited. GATE [http://gate.ac.uk/ie/ie_systems.html] has success stories in the identification of terrorist attacks from the news. CELI France has delivered NLP based applications useful for this goal (TIS), such as hybridization techniques, by merging trends in statistical research (as Topic Models with Latent DA) with more classical FST based methods. It promoted a large scale initiative for exposing language service via a state-of-the-art web services platform, www.linguagrid.org.

As to chemical sector, the Province of Novara and isw carried out specific projects on the chemical supply chain and transport, such as CHEMLOG and LOSAMEDCHEM, even with regard to ICT tools (CHEMLOG T&T).

Tecnalia has carried out other relevant international projects on transport security of CBRN, such as DECOTESSc1 (development of a portfolio of countermeasures for CBRN along the chain from prevention to response and recovery), SECURESTATION (development of a handbook for station design and retrofitting in case of CBRN attacks).

2.2.9.3 What are the innovative aspects of your project? How? (max 1000 characters)

TRIAL will provide the design of an integrated architecture to support operators in view of and during potential attacks against their infrastructure.

Moreover TRIAL is expected to contribute to:

- extending awareness of the breadth and fast evolution of security threats
- establishing a common terminology and conceptual base on the matter and identifying concrete application requirements
- exchanging security relevant information.
- exploring the full integration of business intelligence technologies with Natural Language Processing approaches.
- proposed hybridization of machine learning oriented technologies with rule based ones.

2.2.9.4 In the implementation of your project, what are the potential risks, uncertainties and difficulties, as well as possible favourable factors? What is your risk mitigation strategy? Please answer both questions (max 1000 characters):

Potential risks

- novel profiles of threats
- lack of knowledge by private companies
- different nature of the various business processes
- difficulty on defining guidelines, criteria and best practices
- reluctance of stakeholders concerning adoption of further regulations
- EU level results

Consortium factors to strive against the existing potential risk

- Project members have expert staff in managing call issues
- 2 partners manage this kind of infrastructures every day
- project team members have played a relevant role in security departments
- technical capacity to carry on the tasks raised in the work-plan
- Pan-european consortium

Strategies to mitigate the potential threats in the project execution will be

- Depth analysis and benchmark
- Celebrate workshop & roundtable
- Create a Stakeholders network

2.2.10 Methodology and Organisational structure

2.2.10.1 Please describe the methodology to achieve the desired objectives (max 1000 characters):

The project encompasses four main phases:

1. A survey on the main requirements (application requirements) for a system capable of identifying possible threats from written natural language.
2. Case studies analysis: case studies concerning chemical goods production, storage and transportation.
3. Impact analysis. This will encompass several business sectors such as chemistry, transports, and logistics, so as to estimate relevant benefits in those sectors due to formal proof of properties on the legal and insurance respect. The replicability of TRIAL results will also be evaluated, first of all to nuclear sector.
4. Final result evaluation and international Conference. Comparison of the results the impact analysis, presented in a final technical report and in an international Conference so as to make the overall results of the study publicly available.

2.2.10.2 Timetable for implementation. Please provide comments on the Timetable Part C - Timetable (max 1500 characters):

The first survey phase will last from M1 to M5. During this phase the Experts Advisory Panel will be composed with participants selected within ECRN and relevant industrial end-users. At M5 the first meeting will take place and the case studies phase will start, following the criteria coming out from both survey phase and Panel considerations. This phase will last from M5 to M12 and it will be the core of the project. Threat identification tools will be implemented in different economic sectors (chemical production, storage and transport). Before the end of this phase the Expert Panel will be asked to provide, together with project partners, criteria for the impact evaluation phase. It will last from M12 to M17 and will evaluate the exploitation possibilities of the implemented systems in these sectors. M17 and M18 will be dedicated to the final report and to the final conference, in order to disseminate the project results. During all the project life the management and dissemination activities will be carried out above all by the coordinator.

Organisation

Application Number : 4000003812

Please describe here the organisational structure and key staff of the project. Please provide the following information for each project staff member: name, experience in the field, basic description of the person's activities and responsibilities, as well as information showing the suitability of the person for the function/position in the project, his/her availability for the project activities, the estimated number of days of work that he/she will dedicate to the project activities. Please indicate the contractual relation of the staff member to the organisation (permanent staff, temporary staff member, volunteer etc.)

Curriculum Vitae of key people performing work in connection with the project must be attached.

In case there is no person recruited for a specific function/position in the project at the time of lodging the application, please provide the description of the function itself within the overall structure of the project and the required qualification/experience.

N.B: the details provided below should correspond to entries in Heading A - Staff of Sheet 2 "Forecast Budget Calculation" of the Cost Claim.

2.2.10.3 Please describe the organisational structure and implementation procedures of the project, the distribution of tasks between Applicant and Partner organisations. Organisation chart of the project must be attached (max 1000 characters):

Partners report to a project manager provided by Province of Novara (see below). A management board will be created after the grant agreement, with a representative per partner, lead by the project manager. In case of parity in decision, the vote of the project manager will prevail. Profiles of the partner representatives are enclosed. At the first meeting the management board will choose four task coordinators. The main project results are discussed with an expert advisory panel including researchers, operators and manufacturers in the target sectors. The distribution of tasks between the partners is shown in the annex D.

2.2.10.4 Project Manager(s) - Profile of the person(s) who actually manage(s) the project and will be directly in charge of managing the contract if this project is awarded a grant: name, position (in the organisational structure of this project), experience in the field and tasks in this project. Relevant CVs must be attached (max 2000 characters):

Nicoletta Molfetta, doctoral degree in Political Sciences. She is working for the Province of Novara since 1993. She steered an office unit in the General and Legal Affairs Department of the Province since 1995. She managed several projects, both at national and European level and she's currently member of the Institutional Working Group dedicated to the PROJECT AURORA, with the scope to computerisation and the simplification of the public procedures of mail registration.

2.2.10.5 Other project staff - Profiles of other staff responsible for the project activities foreseen: name, position (in the organisational structure of this project), experience in the field and tasks in this project. Relevant CVs must be attached (max 2000 characters):

- Alberto Stefanini, full honours degree in Electronic Engineering. He currently holds a consultancy. Until Nov. 2009 he was with the JRC, Institute for the Protection & Security of the Citizen, where he was involved in studies on critical infrastructure protection, with specific focus on the power system. Previously he was with CESI, an electrical engineering company based in Milan, where he coordinated research on power system security and diffusion of R&D results.

- Luca Dini, PhD in General Linguistics at Scuola Normale Superiore di Pisa. He has been active since 1986 in the field of Natural Language technologies and has participated to several European Projects.

- Xabier Larrucea, has a PhD on Software Engineering and an Executive MBA. Currently project leader and product manager at Tecnalía Research and Innovation and part-time lecturer at University of Basque Country with more than 10 years of experience developing different kind of projects. Involved in safety critical systems and in different standardisation initiatives such as SPEM2.0 and SOAML at the OMG.

2.2.10.6. Financial management - Name and profile of the person responsible for overall financial management of this project. Please indicate also who will be responsible for the operational tasks of daily financial management of the project, if different from the person for overall financial management. Relevant CVs must be attached (max 1000 characters):

Silvano Brustia, civil servant working for the Province of Novara since 1975. Since the year 1996 he got the qualification of Director of Administrative Procedures, which means having the responsibility to steer a simple office of the Province. His work on European programs started in 1993 and is still running. Although he is also engaged in the elaboration and presentation of European projects, his main activity is dedicated to the management of approved projects, especially as regards the administrative and financial procedures. He has got his experience in more than 20 European projects and at the moment he is engaged in all the European projects mentioned in the present form.

VALUE FOR MONEY CRITERION

2.2.11.1 Please justify the project costs as foreseen in Sheet 2 "Forecast Budget Calculation" of the Cost Claim. Please explain to what extent does this Forecast Budget represent the most economic and efficient solution and/or the best value for money? (max 1000 characters):

The project assembles a bunch of different activities. The analysis part is based on primary experts in the matter, which will use their expertise to produce quick and clear evidence needed by the following scenario assessment phase. This last will be based on different on-the-field analysis, providing sound and reliable data for the final cost/benefit rating of the standards. Important private companies in relevant sectors (energy, chemical) and public local authorities across EU will be involved during the case studies phase. The necessary resources to be mobilised to meet the objectives of the project are predominantly research staff time. Other non-personnel costs budgeted are predominantly travel and subsistence costs for the regular consortium and meetings necessary to maintain ongoing cooperation. Another main cost of the project has been allocated for dissemination and results exploitation, especially for the final conference organisation and for good practices meetings.

2.2.11.2 Involvement of third parties/subcontracting/consultants: Describe and justify any arrangements for involvement of third parties/subcontracting/consultants, if applicable. Describe in details the work to be done by third parties (i.e. draft terms of reference).

Please demonstrate the need for involvement of third parties/subcontractors and explain how you will select them. Explain the basis of the calculation of the cost estimates for subcontracting.

NB: Subcontracting is not allowed within the Partnership (neither to Applicant organisation/coordinator nor to Co-beneficiaries or Associate Partners) and cannot exceed 30% of the total eligible costs of the project. (max 1000 characters):

Not foreseen by now.

2.2.12 What is the added value of your project at European level? Please demonstrate the European dimension of the activities and their geographical impact. (max 1000 characters):

The European dimension of TRIAL is ensured by involvement of partners from four EU countries (Italy, France, Spain and Deutschland), Potential case studies refer to various industrial areas, all having wide EU relevance: chemical facilities, logistics centers, transportation. Dissemination is also ensured by the involvement of ECRN.

EU has established as one of its main priorities the security of its critical infrastructures, and guarantee the basic services operative.

The project will open an international path to:

- Understand existent and new methodologies regarding threat identification for chemical supply chain in an international framework
- Evaluate these methodologies through the involvement of an Expert Advisory Panel (from ECRN)

A dissemination plan will be developed, including the EU & National concerned authorities, EU players and ECRN.

Moreover, best practices and tools developed by TRIAL may be exported in other fields, first of all in the nuclear sector.

2.2.13 Additional comments (max 2000 characters)

Security in chemical supply chain means to offer a proactive service. An effective proactive service includes scalable mixtures of interactive remote services, monitoring utilities, recurrent maintenance procedures and customizable assistance and knowledge base features.

Project scope goals include the elaboration a methodology, which allows to the end users to evaluate procedures regarding to the following topics:

- Prevention of attacks,
- Protection and security real time management,
- Real Time detection of attacks,
- Reaction against attacks (management of situation with damage to people, management of situations with serious damage to facilities, emissions of contaminant gases, leaks of toxic substances, prevention and identification of new attacks)
- Re-establish different services: energy supply (natural gas, fuel, electricity, communications and cyber-networks, water, ...), chemical production, after attacks to the infrastructure or interdependent infrastructures.

3. PROJECT BUDGET INFORMATION**3.1 Estimated Expenditure**

A. Staff 311.957,6 Euro

B. Travel 18.300 Euro

C. Equipment 0 Euro

D. Consumables 0 Euro

E. Other direct costs 41.160 Euro

3.1.1 Total direct costs (A+B+C+D+E)*: 371.417,6 Euro

F. Indirect costs 25.300 Euro

3.1.2 Total eligible costs: 396.717,6

3.2 Estimated Income

3.2.1 Financial contribution from the beneficiaries*: 40.245,5 Euro

3.2.2 Other contribution from third parties and/or generated by the activities*: 0 Euro

3.2.3 Project related income / direct revenues from the project*: 0 Euro

3.3 Grant requested from the ISEC Programme: 356.472,1 Euro

3.4 Grant requested / total eligible costs (max 90%): 89.85537823379 %

4. DECLARATION OF THE APPLICANT ORGANISATION

I, the undersigned, am authorised to represent the Applicant organisation/coordinator and hereby request a grant with a view to implementing the project on the terms indicated in this Application Form.

I certify that:

- all information given in this Application Form as well as in all its annexes is complete, true and verifiable
- the Applicant organisation/coordinator is not in one of the following situations, foreseen by the Financial Regulation of the European Communities:

Art 93 : Candidates [...] shall be excluded [...] if:

- (a) they are bankrupt or being wound up, are having their affairs administered by the courts, have entered into an arrangement with creditors, have suspended business activities, are the subject of proceedings concerning those matters, or are in any analogous situation arising from a similar procedure provided for in national legislation or regulations;
- (b) they have been convicted of an offence concerning their professional conduct by a judgement which has the force of res judicata;
- (c) they have been guilty of grave professional misconduct proven by any means which the contracting authority can justify;
- (d) they have not fulfilled obligations relating to the payment of social security contributions or the payment of taxes in accordance with the legal provisions of the country in which they are established or with those of the country of the contracting authority or those of the country where the contract is to be performed;
- (e) they have been the subject of a judgement which has the force of res judicata for fraud, corruption, involvement in a criminal organisation or any other illegal activity detrimental to the Communities' financial interests;
- (f) they are currently subject to an administrative penalty referred to in Article 96(1);

Art 94 : Contracts may not be awarded to candidates [...] who, during the [...] procedure:

- (a) are subject to a conflict of interest;
- (b) are guilty of misrepresentation in supplying the information required by the contracting authority as condition of participation in the contract procedure or fail to supply this information.

The Applicant organisation/coordinator and its partners have the operational and financial capacity to carry out the project activities described in this Application Form and its annexes.

Date*: 02/08/2012

Authorised Signatory of the Applicant organisation/coordinator

Full name:	NICOLETTA MOLFETTA
Position in the Applicant organisation/coordinator*:	CHIEF OF UNIT

All personal data (such as names, addresses, CVs, etc.) mentioned in your Application Form will be processed in accordance with Regulation (EC) No 45/2001 of the European Parliament and of the Council of 18 December 2000 on the protection of individuals with regard to the processing of personal data by the Union institutions and bodies and on the free movement of such data. Your replies to the questions in this Application Form are necessary in order to assess your grant application and they will be processed solely for that purpose by the department responsible for the Union grant programme concerned. On request, you may be sent personal data to correct or complete it. For any questions relating to this data, please contact the Commission department to which the form must be returned. Beneficiaries may lodge a complaint against the processing of their personal data with the European Data Protection Supervisor at any time (Official Journal L 8, 12.1.2001).