

Summary description of project context and objectives

The **OSMOSIS objective** is to foster the involvement of **SMEs in the security technology supply chain**, facilitating the collaboration between SMEs and the key stakeholders in the European Security domain (System Integrators, End Users and technology providers).

The project activities will create a nurturing environment for the involvement of SMEs in the overall Security Market, through a set of services including:

- ✓ Identification of untapped market potentials in the technology security market supply chain
- ✓ Liaison with large organisations to foster the involvement of SMEs in the security technology supply chain, including the involvement in joint R&D activities
- ✓ The creation of a database of qualified SMEs that will create “meta-clusters” where Large Enterprises could identify partners for their engineering and/or R&D projects
- ✓ Full support to SMEs to favour their involvement in the security supply chain
- ✓ Dissemination and networking events to create a collaborative environment among key stakeholders.

The identification of the weak spots and the related market opportunities in the security supply chain will be investigated during the OSMOSIS project to create a clear and complete overview of the security’s market situation in some specific key security areas considered as fundamental for the European Security market, in particular:

1. **Critical infrastructure security:** consist of those physical and information technology facilities, networks, services and assets which, if disrupted or destroyed, would have a serious impact on the health, safety, security or economic well-being of citizens or the effective functioning of governments in the Member States. OSMOSIS will target Critical Infrastructure security technologies, mainly focusing on Airport Security, Transport security, Energy Utilities Security, and the overall “Building Security” (including the security of industries, government, etc.)
2. **Security of large events:** Large events (think as Olympic Games, Music Concert, Political Events, Religious Events, Sport Events etc.) are characterised by dealing with difficult security situation due to the wide areas to be secured, the high number of people, inhomogeneous crowded areas (large amount of people in a place a side streets with few potential malicious people to be monitored), need of monitoring pedestrian as well as vehicles along the areas, etc. Such events could be target of terroristic attack, political or religious problems, violence, etc. and need to be secured and monitored by police departments. Such situation need to be monitored using bi-directional communication and semi-automatic (rule driven) system management, having several distributed agents (humans and/or sensors) on the ground, detection problems, providing alert, supporting decision and coordinating intervention.
3. **Emergency management (first responders):** The emergency management is a very demanding task, where a variety of parties need to coordinate their actions in a timely and effective manner – in a dramatically increasing complexity for large scale events, terroristic attacks or natural disasters. Search and rescue of victims in large-scale disasters is a very relevant social problem that poses several challenges from a scientific standpoint. Technologies applied to such task need to address a set of very demanding requirements: they should be designed to acquire continuously information about the changes of the situation, they need to integrate the information available to the different parties involved in the operation; another technological issue is the difficulty of integrating different forecast models connected to different phenomena.

The project methodology is driven by the following three main actions:

A) **Actions towards Key Stakeholders** operating in the Security Technology supply chain, to stimulate and support such organisations in involving SMEs in engineering projects as well as in research projects, and to gather relevant information on untapped market potentials.

B) **Actions towards SMEs**, to create awareness on technology supply chain opportunities (as identified in the actions towards key stakeholders) and provide specific services favouring SMEs in entering in the overall market supply chain

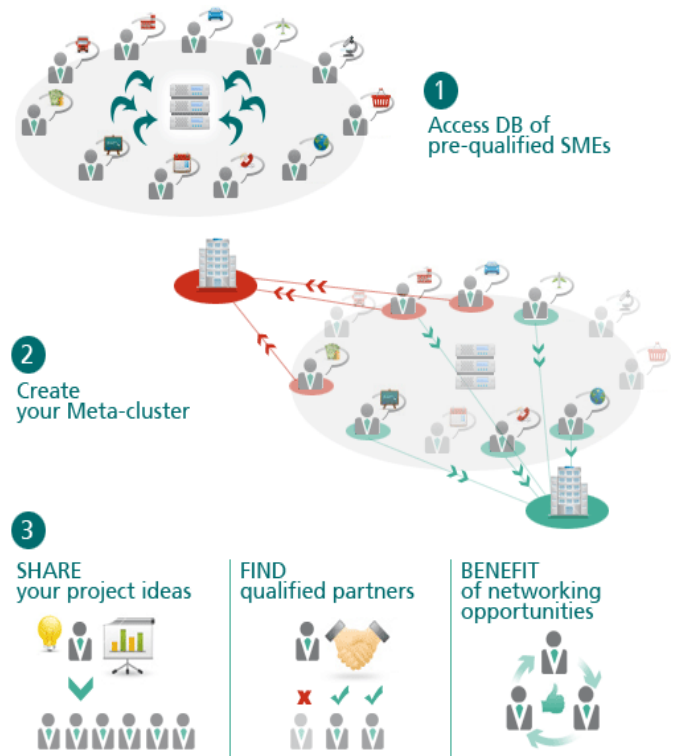
C) **Actions aimed at setting up means to facilitate communication and networking** among key stakeholders and organizations (mainly SMEs)

The above actions are principally realized and offered through the services available in the web community developed:

www.osmosisecurity.eu

The main services/information accessible to registered users in the website are:

- ➔ DB of relevant SMEs, classified following a specific taxonomy
- ➔ DB of RTD project ideas to encourage collaboration between different organizations profiles
- ➔ List of research opportunities, in the security field, that could be exploited by SMEs to collaborate with Large Organizations
- ➔ Information on security-related grants
- ➔ Interactive communication tools, as participation in Security Interest Group (SIG), creation and visualization of eBusiness Cards, subscription to OSMOSIS eNewsletter, possibility to create the own meta-cluster, etc., to allow the communication of the identified opportunities and the transfer of knowledge among registered users



Work performed since the beginning of the project and the main results achieved so far

OSMOSIS focuses on the provision of services to different organizations, mainly SMEs, facilitating their integration in European Security market. The project aims at reaching its main objectives through the following main activities:

1. Stimulating and facilitating key stakeholders in the involvement of SMEs in their engineering and research projects
2. Supporting SMEs in being aware of the market opportunities related to the security technology supply chain
3. Setting up the communication means, networking opportunities and support services to facilitate key stakeholders and SMEs in realise joint projects/activities

During the first project year, OSMOSIS consortium achieved interesting results based on the objectives defined and the actions carried out by the consortium, mainly:

Objective # 1: Identify weak spots and opportunities in the Security technology supply chain, and key areas of competences needed to address such opportunities

To achieve such objectives, key stakeholders will be contacted and an open discussion set up in order to interactively define capabilities required and gaps to be filled in.

Ob. #1 Measurable Results:

Expected results @ M24:

More than 50 Key Stakeholders involved in the action (comprising End Users, System Integrators and Technology Providers)

Results achieved @ M12:

35 stakeholders involved in OSMOSIS project and registered in the Db online, from which:

- 13 Large Organisations
- 14 Research centers / Universities
- 5 Public Authorities
- 3 Clusters of organisations/SMEs

Objective # 2: Identifying SMEs (and other organisations) not involved in European technology supply chain and setting up of meta-clusters

- ⇒ To identify and contact organizations (mainly SMEs) that possess the scientific, technological or engineering skills needed to access the security domain
- ⇒ To provide specific support services fostering their direct involvement in joint R&D and/or engineering activities with the main players of security EU market
- ⇒ To set up Meta-Clusters around specific domain and technological capabilities which offer a high potential to deliver EU added value

Ob. # 2 Measurable objectives:

Expected results @ M24:

The Database built on the taxonomy created to favour the involvement of organisations in the identified weak spots will be properly working, populated with data and accessible through the web site interface.

More than 250 pre-qualified SMEs (high quality organizations that will be met, interviewed and supported) will be included in the DB, and their scientific, technology and engineering skills assessed, as well as technology development plans (including R&D projects).

Results achieved @ M12:

- DB built on the taxonomy online. The registration form for OSMOSIS website is based on the taxonomy, all the organisations registered have been pre-classified following the taxonomy
- 108 SMEs are registered in the OSMOSIS database

Objective # 3: Setting up of a nurturing environment to favour networking among Security market players (key stakeholders, RTD organisations and SMEs)

- ⇒ Create awareness among key stakeholders and SMEs, to favour a continuous updated of the organisations that can be potentially involved in the security supply chain
- ⇒ Favour networking through the realisation of 2 international events (in synergy, if possible, with some specific international event related to security)
- ⇒ The set up of the OSMOSIS web site, that will provide access to a valuable information such as the DB of SMEs, needs and trends of the EU Security's Domain, communication and knowledge sharing tools, etc.

Ob. # 3 Measurable objectives:

Expected results @ M24:

Realisation of two international workshops

Information campaign (through mailing, publications and other means of communication) reaching more than 5.000 SMEs and other organisations.

More than 5.000 visitors in the OSMOSIS web site

Results achieved @ M12:

- The information campaign has reached more than 2.000 organisations
- The number of visitors to OSMOSIS website is 3.048 and the number of pages visualised is 14.736

Objective # 4: Facilitate the setting up of RTD and Take Up actions in the security sector where SMEs could join stakeholders and integrators of the security supply chain

The OSMOSIS planned activities will create basis for collaboration between SMEs and key Stakeholders in R&D projects and take up actions. Intelligence actions will be carried out with Key Stakeholders (also through the direct commitment of stakeholders) in knowing R&D projects where specific skills are required, and specific support will be provided to SMEs in joining such projects.

Ob. # 4 Measurable objectives:

Expected results @ M24:

Support the start up of 20 collaborations (engineering, R&D and mobility for the share of knowledge) among organisations not previously involved in the security technology supply chain with key stakeholders

Results achieved @ M12:

5 proposal submitted during first project period in the FP7 calls, with the involvement of different organisations.

One proposal, ADVISE - Advanced Video Surveillance archives search Engine for security applications (submitted in the call FP7-SEC-2011-1) can be considered a best practice. The proposal, coordinated by Engineering Ingegneria Informatica SpA (Italian large organisation), have been invited to negotiation. In this proposal, the Italian SME, Innovation Engineering Srl has been involved thanks to OSMOSIS support.

Description of the expected final results and their potential impacts and use (including socio-economic impact and the wider societal implications of the project so far).

OSMOSIS will become a centre of reference for organisations involved in the Security Market chain, where information on projects, investments, requirements, technological trends, project ideas and competences could be shared and promoted.

The organisations involved in OSMOSIS are inserted in meta-clusters where it will be easy to find expertise requested to carry out a specific project/activity, to share knowledge and thus exploit and enhance the industrial potential and increase the overall competitiveness in the sector.

OSMOSIS partners promote specific call for actions to share knowledge and create the basis for possible proposition, of RTD foresight projects with an horizon beyond the current state of the art with the active involvement of SMEs in the project design phase as well as in the implementation phase.

Furthermore, the OSMOSIS portal will become a reference point in the sector for developing market synergies, activities and links, research activities, thus it is likely that key actors, large organisations, SMEs, Innovation Agency, end users, will be interested in making their business, initiative or research activities visible thus promoting their results to a huge qualified audience or using the portal as a tool to find partners for such actions. So, the portal will be useful as a dissemination tool as well as a mean for further improving the connections among stakeholder within the security domain.

Potential impact and use

For **industries**, the **objectives achievable on a medium/long term** related to the continuity of the OSMOSIS actions and to the further widening of created meta-clusters, can be listed in:

- ✓ Easy finding of specific expertise required to carry out complex projects, thanks to the setting up of meta-cluster;
- ✓ Easy finding of RTD projects partners and end- users;
- ✓ Easy finding of outstanding competences at European level (maybe formerly hidden);
- ✓ Acquiring technological know-how through engineering integration in research team;
- ✓ Establishing a network of contacts, at the level of key suppliers, for defence and security products
- ✓ Establishing strong partnerships with target companies;
- ✓ higher level of competitiveness and capabilities at European and world wide level;
- ✓ Easier identification of niche markets where new products can be developed and placed in the market.

The **industrial interest** for this type of initiatives in **collaboration with research centres**, has also the relevant purpose to pursue a series of **strategic objectives**:

1. To develop competences and knowledge by increasing the collaboration with University and Research Centres, by activating innovation plans on national and international scale, increasing the net of collaborations with other industries.
2. To stimulate through the presence of professionals within Industries, new research, not only industrial, but also capable to investigate emerging topics.
3. To develop a knowledge acquisition plan customized on innovation, in order to enrich the skills of the human resources who will be involved in the development activities.

The **themes with which the project deals are evidently European-wide problems, not single-countries problems**. The following points outline the European dimension of the problems addressed by OSMOSIS:

- The growing importance of Security sector in the European policies has been detailed in precedent sections. Integrating the relevant European market to face global competition is certainly a European problem, not a single country problem;
- The project will provide European SMEs with valuable tools to face competition in a growing market: this will cope with the overall European problem of increasing SMEs competition and increasing employment opportunities;
- The project will support also the inclusion of SMEs in high quality RTD projects lead by Large Industries, contributing to speed up innovation processes;
- Technological complexity in the Security sector need a strong co-operation between SMEs and research entities at European level: only joining European knowledge and resources, important results and effective technological enhancement will be achieved.

OSMOSIS partners:

CIAOTECH S.r.l. (Project coordinator - Italy)

SESM S.c.a.r.l. (Italy)

GMVIS Skysoft, S.A. (Portugal)

Consorzio Interuniversitario Nazionale per l'Informatica (Italy)

Technische Universität München (Germany)

Honeywell, spol. s r.o. (Czech Republic)

Instituto Nacional de Tecnica Aeroespacial (Spain)

Fundación madrimasd para el Conocimiento (Spain)

ELSAG Datamat S.p.A. (Italy)

PNO Consultants S.A.S. (France)