

# IMSK – Integrated Mobile Security Kit

EU Security Research - Achievements & Lessons Learned



# Project details

- **Project Start:** 1st of March 2009
- **Project End:** 28th of February 2013
- **Number of partners in the project:** 26 partners
- **Total Cost approximately:** € 23 500 000
- **EU Contribution requested approximately:** € 14 900 000
- **Duration:** 48 months
- **Project Goal:** Enhance the security of the citizens in the scope of events
- **Project high light:** Demonstration of the system in September 2012
- **Web-site:** [www.imsk.eu](http://www.imsk.eu)

# Consortium



- **Industries (9 members)**
  - Coordinator: [Saab AB \(SE\)](#)
  - [Selex Galileo Ltd. \(UK\)](#)
  - [Selex Communications S.p.A. \(IT\)](#)
  - [Telespazio S.p.A. \(IT\)](#),
  - [CILAS \(FR\)](#)
  - [Diehl BGT Defence GmbH & CO KG \(DE\)](#)
  - [Thales Security Systems SA \(FR\)](#)
  - Thales Research and Technology Ltd (UK)
  - Bruker Daltronik GmbH (DE)
- **End users (3 members)**
  - Ministère de l'intérieur- Service des Technologies de la Sécurité Intérieure (FR)
  - Rikskriminalpolisen, Swedish National Police Board, Nationella Insatsstyrkan (SE)
  - Regione Lombardia (IT)
- **Research Institutes & Universities (8 members)**
  - Totalförsvarets Forskningsinstitut, (FOI), Swedish Defence Research Agency (SE)
  - Valtion Teknillien Tutkimuskeskus (VTT) (FI)
  - Commissariat à l'Energie Atomique (CEA ) (FR)
  - Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR) (DE)
  - Fraunhofer-Gesellschaft zur Foerderung der angewandten Forschung e.V (DE)
  - Commission of the European Communities - JOINT RESEARCH CENTRE (IT)
  - Università Degli Studi di Catania, Ingegneria Informatica e Telecomunicazioni (IT)
  - University of Oxford (UK)
- **Small and Medium sized Enterprises (6 members)**
  - Thyia Tehnologije d.o.o.(SI)
  - AS Regio (EE)
  - EPPRA S.A.S (FR)
  - Qascom S.r.l (IT)
  - TriVision ApS (DK)
  - AirshipVision International S.A (FR)



# IMSK objectives

- **Main goal:** enhancement of citizens security in the scope of events
- Event characteristics
  - large or medium scale, **national or international**
  - gathering of a **large number of people**
  - **massive security effort** required
  - **cooperation between different operational forces**
  - **wider surrounding area** (e.g. stations, streets, car parking) and **city** (hotels, critical infrastructure) to be secured
- Representative events
  - sports, cultural or political events
- Examples
  - Olympic Games, high risk football games, political sensitive sport events
  - G8 summits, elections, large demonstrations, royal weddings

# Role in crisis management

- **Crisis prevention**

- Data gathering and data fusion
- Information analysis and early detection
- Enhanced situation awareness
- Decision making

- **Operational preparedness**

- Strategic advanced planning
- Training

- **Management of declared crisis**

- Response and recovery

IMSK main focus

IMSK includes training and simulation tools to increase operational readiness

Contribute to improved crisis response by providing first responders with an accurate situation display

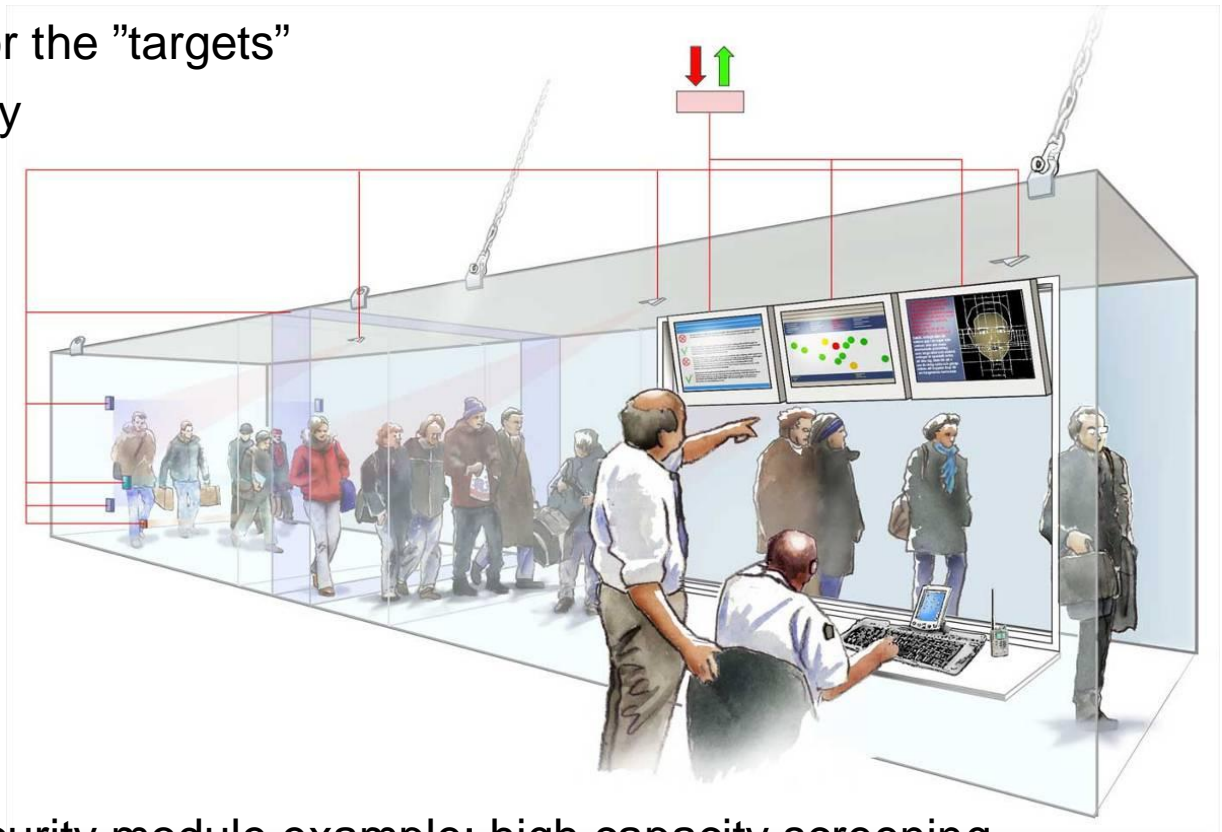


# Project guidelines

- The **operational needs of security professionals** shall be followed
- IMSK shall rely on **innovative security modules**
- The system shall be **adaptable to local security forces**
- IMSK's **capabilities shall be demonstrated** during live trials
- Project results shall be broadly disseminated, accredited by end users.

# Use of innovative security modules

- Continuous, efficient and complete threat evaluation
- Minimized inconvenience for the "targets"
- Preserving personal integrity



Innovative security module example: high capacity screening

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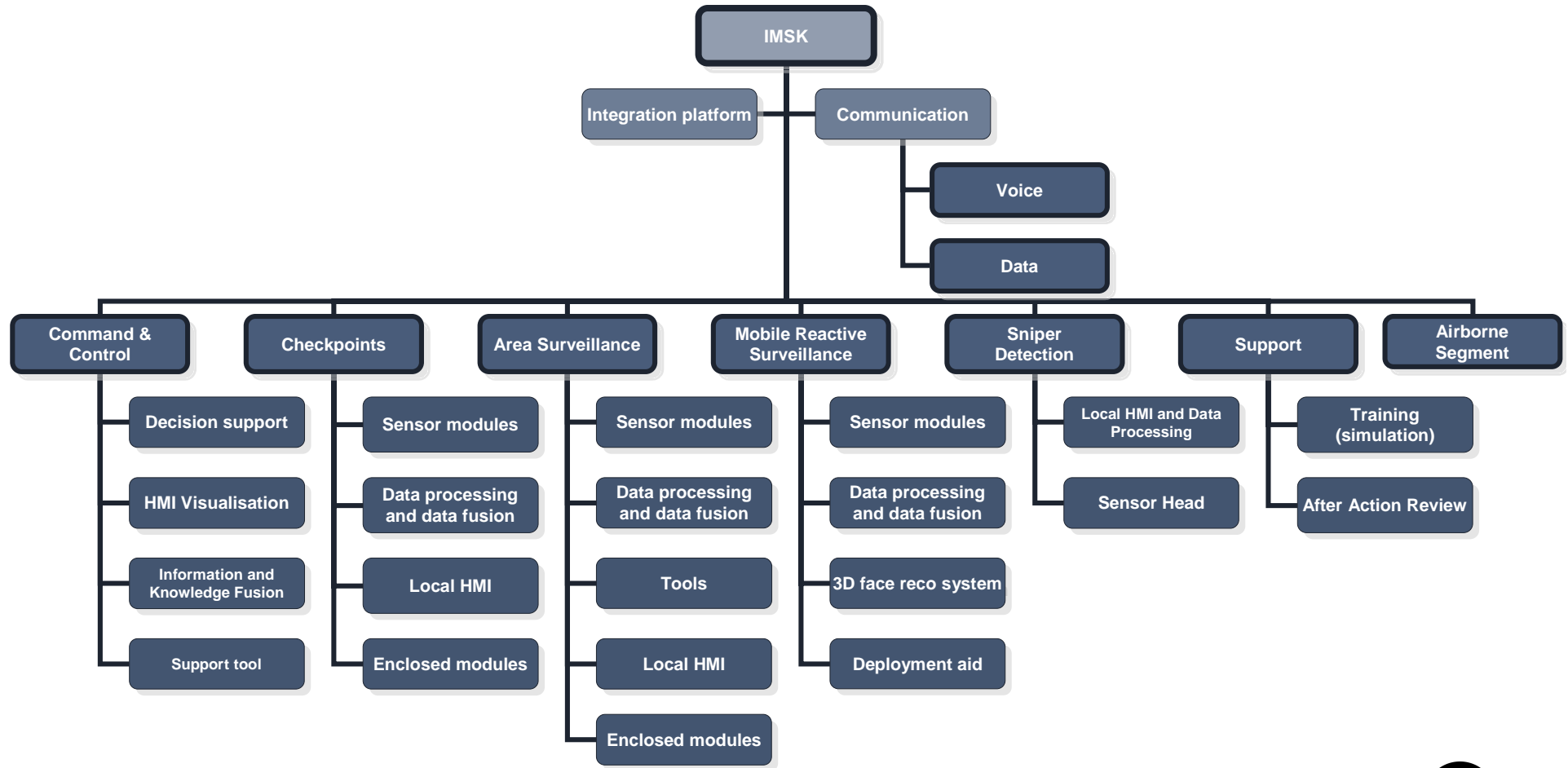


# Interoperability

- How the IMSK project will help to integrate a range of technologies into a common platform (which is consistent with the standardization and interoperability agenda)

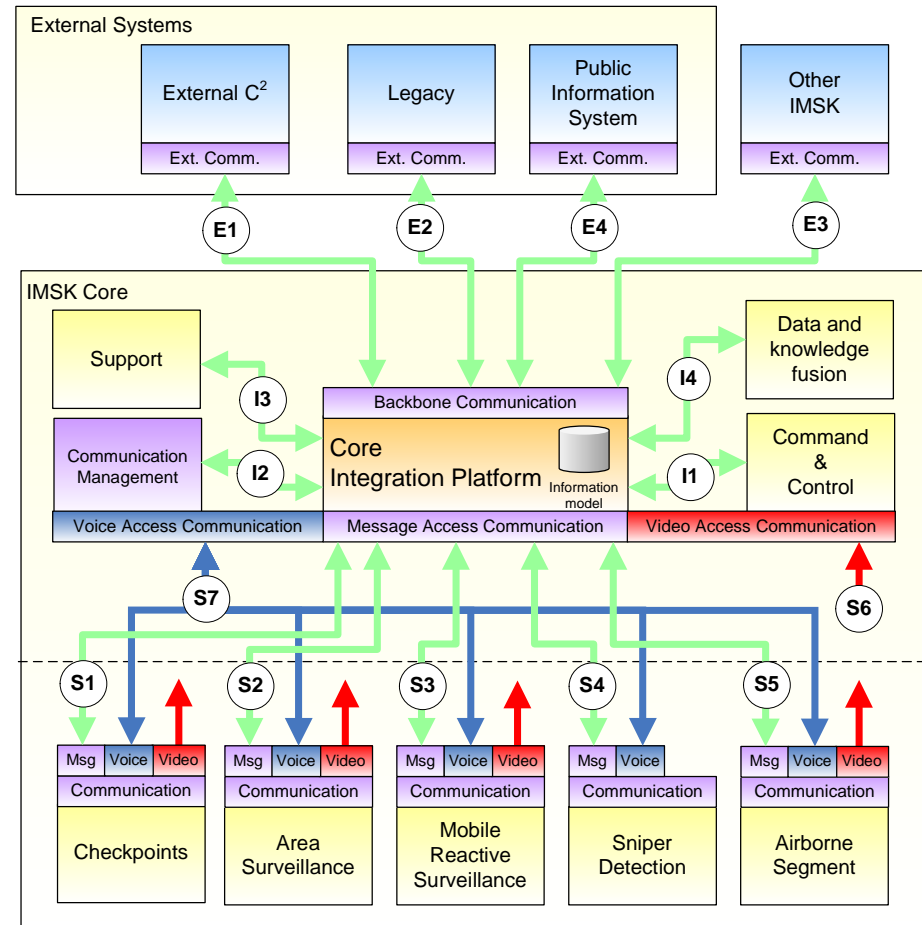


# System layout



# Logical architecture

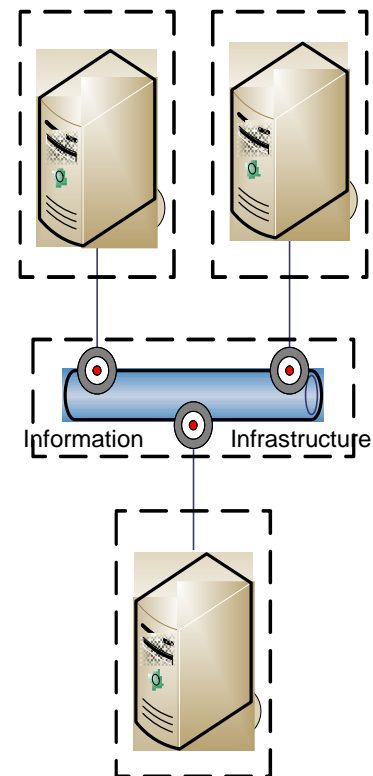
- All messages accessed through the Integration Platform
- Common Information Model adopted to TSO (FP6-Oasis)
- Message, voice and video transmission on same physical network, bandwidth demands differ
- Sub-systems integrate sensors and provide data to the Integration Platform
- External and legacy systems may be integrated on demand



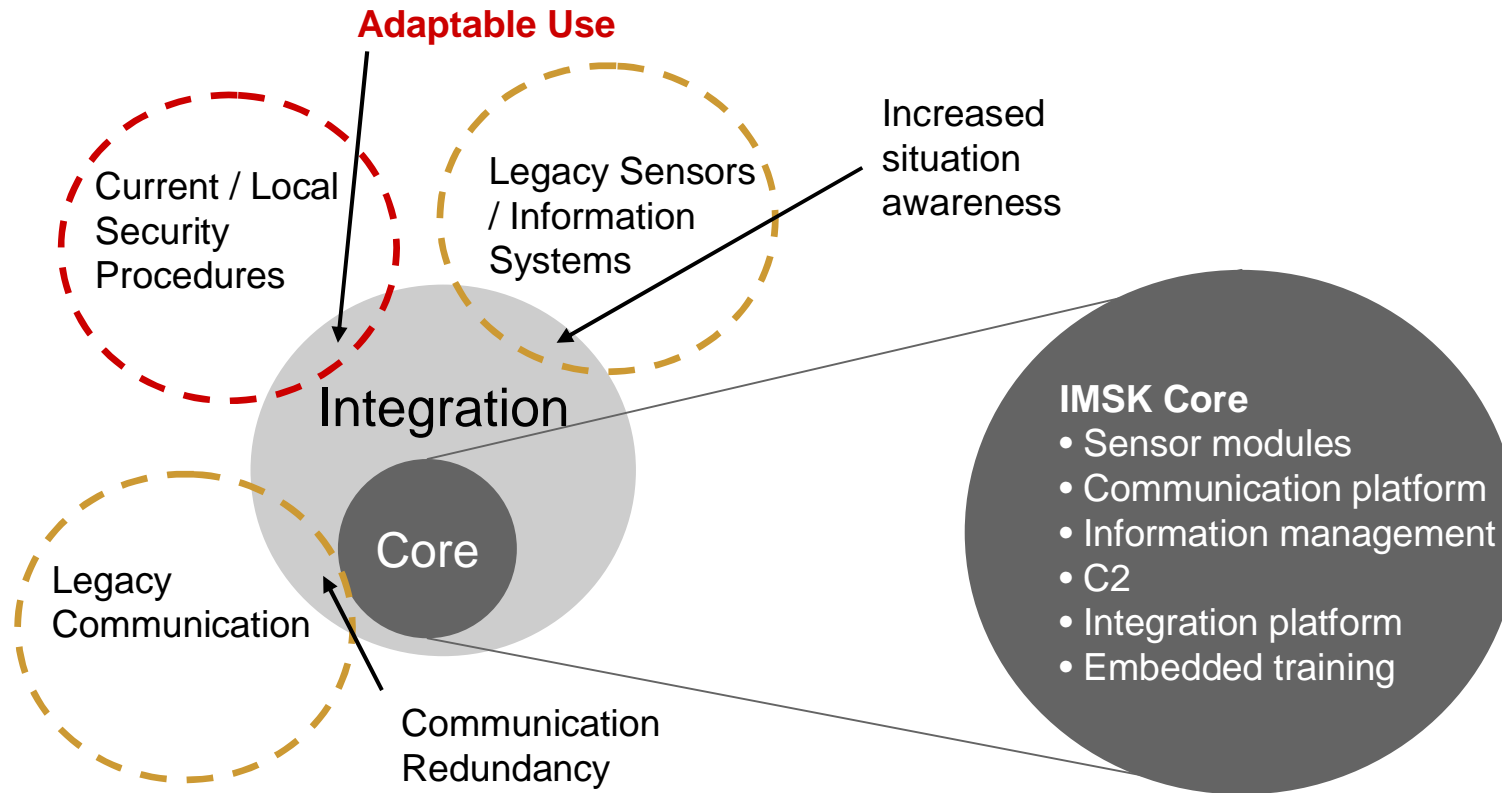
# IMSK Integration strategy

- A system of systems with black box thinking
- A common protocol to be used
  - The possibilities to write drivers for new or not yet integrated sensors
- Integration with the protocol not to the other systems
- Possibility to add sensors into an already existing network without the need to integrate the existing sensors

## Information Centric



# Adaptability



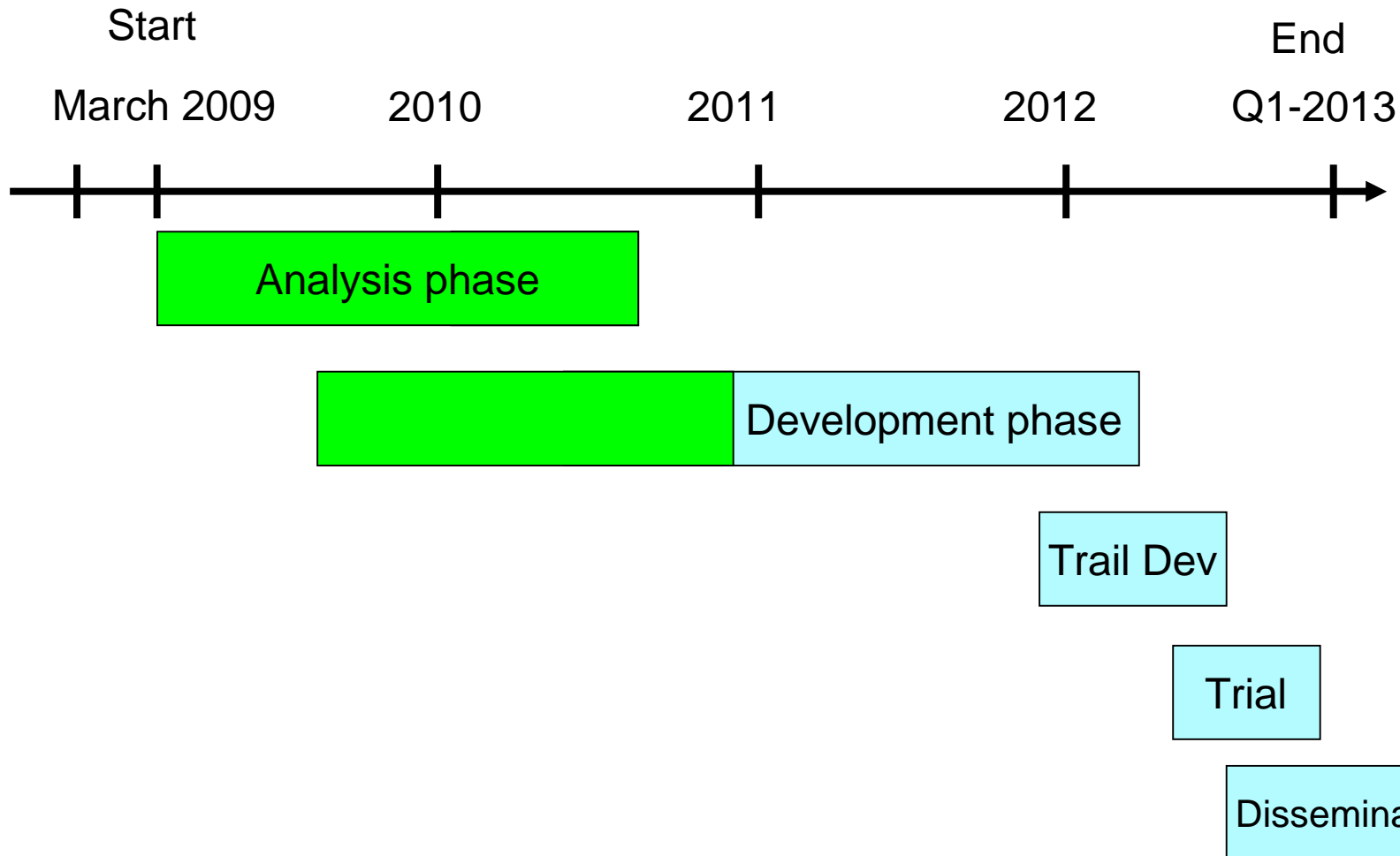
- Enhancement of security by integration of additional functions filling the required gaps
- Cost effective enhancement of security by integration of existing capabilities

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# Time schedule



# Benefits from a large firm perspective and SME added value





# Benefits from a large firm perspective

- The financial help to test and develop new products, markets
- Marketing possibilities
- Networking and development of relationships with SME and other Industry.
- Networking with customers/stake holders on a partnership basis
- Networking with universities and research organisations
- New business opportunities as spin-off of the networking
- Financing of research

# Added value from SME

- Fast to decisions
- Close to the market in their segment
- Enthusiastic
- Interested and knowledgeable in their area
- Interested to do the research effective

Important to have in mind for industry regarding the SME

- When the money is out they stop working
- Make sure to give the SME dedicated tasks

# Benefits to be balanced against:

1. Long time from proposal work to project start
2. Bureaucracy and administration for the reporting is heavy
3. Financing before or after the project
  1. Financing of the proposal work
  2. Financing of the reporting after the project end
4. Ineffective use of resources
5. Possibilities to shutdown or change the scope

# Summary

- Main project goal: enhancement of citizens security in the scope of events
- Main focus: on crisis prevention
- Approach
  - Analysis of operational requirements
  - System design relying innovative security modules
  - Demonstration of the system
  - Proof of adaptability
  - Dissemination of project results
- Possibility to add almost any sensor in a later stage



[www.imsk.eu](http://www.imsk.eu)

