

The INNO-UTILITIES consortium brings together complementary transnational expertise incorporating partners from four European countries.

Moreover, the consortium has secured the involvement of ETNO (European Telecommunication Network Operators Association) and EFTA (the Hellenic Fraud Forum).

Innovation in procurement and procurement of innovation

INTRODUCTION

Essential resources like telecommunications, electricity, water and gas that are taken for granted in 21st-century Europe are provided by utilities. In order to provide these life-goods continuously, utilities must innovate relentlessly.

However, in order to innovate, utilities must follow strict procurement procedures that have their origin in public procurement provisions.

At the same time new procurement models, for example electronic procurement and electronic auctions, are introducing a further complexity parameter into the already complex procurement environment.

In addition utilities must innovate not only to meet demand for better services but also increasingly to protect their infrastructure from malign attacks that become more and more frequent due to the omnipresence of information technology. There are two challenges: (i) how to make public procurement procedures more innovation friendly and (ii) how to protect utilities from modern technology attacks against their infrastructure. The combination of these two important points gave birth to the INNO-UTILITIES project.

The project is focused on telecommunications utilities, which are on the forefront of both challenges.

However, other utilities can benefit from the project results as well.



INNOVATION FOR UTILITIES

The strong interrelation between the two components of INNO-UTILITIES is based on the fact that innovative systems like the one that is being implemented by the technical component are outsourced to contractors selected through public procurement procedures that are studied through the non-technical component.

The non-technical part

Telecommunication utilities were the first to be deregulated - privatised and are currently the most innovative compared to other utilities. The non-technical component includes:

- Suggestions for adaptations of to the overall public procurement procedures.
- Studies of the procurement framework and procedures that are used by telecom operators in order to carry out innovative projects.
- Development of recommendations on how the rest of the utilities can make their procurement procedures more innovation-friendly, benefiting from the experience gained with telecom utilities.

Public sector purchases represent about 11% of the European Union's GDP, equivalent to half of Germany's GDP. The public sector can probably give the biggest boost to innovation in the EU, if the public procurement procedures become more "innovation friendly". The non-technical component of INNO-UTILITIES has as its central objective to develop "public technology procurement" as an innovation policy instrument.

The technical part

Telecommunication utilities are the first to face large-scale fraud and malign attacks. To give an example, we refer to a sophisticated DoS (Denial of Service) attack that affected several European networks recently, when the SS7 signaling telephone network was overloaded with artificially generated SMS messages (short messages related to mobile phones). As a result the entire telephone infrastructure was completely out of service for a day. FIINA (Forum for International Irregular Network Access) estimates a total figure of around 56 billion Euro of losses worldwide due to telecom fraud

and security-related problems. The technical component aims to implement **an innovative secure high-performance automated system** that will contain structured information and will permit the secure exchange of information related to telecommunications fraud and security threats. The system will be initially used by the shareholders of Eurescom, major European telecom operators and members of ETNO the European Telecommunication Network Operators Association.



The Project Consortium

The Project Consortium consists of the following members:

- The overall coordinator of the consortium is **Eurescom** (European Institute for Research and Strategic Studies in Telecommunications GmbH, situated in Heidelberg, Germany), a leading European R&D organisation with strong expertise in all telecommunications related topics.
- **Virtual Trip**, a highly innovative SME specialising in security software and cryptographic solutions, is the technology provider and scientific manager for the technical component.
- The Department of Electrical and Computer Engineering of the **University of Patras**, Greece, contributes its expertise on architecture and implementation of security systems and assists Virtual Trip in the implementation of the demonstrator.
- The Department of Design Sciences at **Lund University**, Sweden, through its Division of Innovation, brings in its leading edge knowledge of innovation processes and public technology procurement and is the scientific manager of the non-technical component.
- **Erevnon**, a Greek company awarded for bringing innovative ideas into the market, is the exploitation manager of the project results.
- End-users are participating directly through the involvement of **Portugal Telecom**, the shareholders of Eurescom, and indirectly through ETNO.

The Project Management Committee

The Project Management Committee holds the joint responsibility for the overall project progress and results. It consists of one representative for each consortium member and is chaired by the Project Co-ordination Manager.

Eurescom	Anastasius Gavras
Virtual Trip	Dimitrios Tsigos
University of Patras	Dimitrios Serpanos
University of Lund	Charles Edquist
Erevnon	Constantin David
Portugal Telecom	Luis Sousa Cardoso



The participants of the project kick-off meeting at Eurescom headquarters, Heidelberg, Germany 15-17 October 2003

Amongst the organisations that will benefit from the INNO-UTILITIES project results are:



The European Telecommunication Network Operators Association



The Hellenic Fraud Forum EFTA - in Athens, Greece

EXPECTED RESULTS

Innovation-friendly public procurement

The non-technical part of the project investigates the innovation-friendly public procurement techniques and develops recommendations on how other utilities can best benefit from the telecom operators' experience.

The outcomes are focused on:

- Analysis of the procurement models used by telecommunications operators.
- Adaptation of the overall public procurement procedures.
- Formulation of policy recommendations for innovation-friendly procurement.



Combating procurement fraud

The technical part demonstrates a state-of-the-art secure high-performance system for rapid information propagation on incidents of fraud in procurement and associated telecommunications security related threats. The system is "hacker-proof", because it may be the first target of criminals, who want to continue their activities without letting telecom operators know that the same fraud or attack has already been used (and perhaps successfully resolved) in another European country. The criminals may also want to know how telecom operators are defending themselves against specific fraud types and network attacks.

The system will be used by ETNO members and is expected to be designed in such a way that it can provide a future-proof platform adaptable to future threats.

The results comprise:

- Assessment of the system's technical architecture requirements.
- Development of a demonstration prototype.
- Intrusion testing and evaluation.

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The European Commission

Community Research

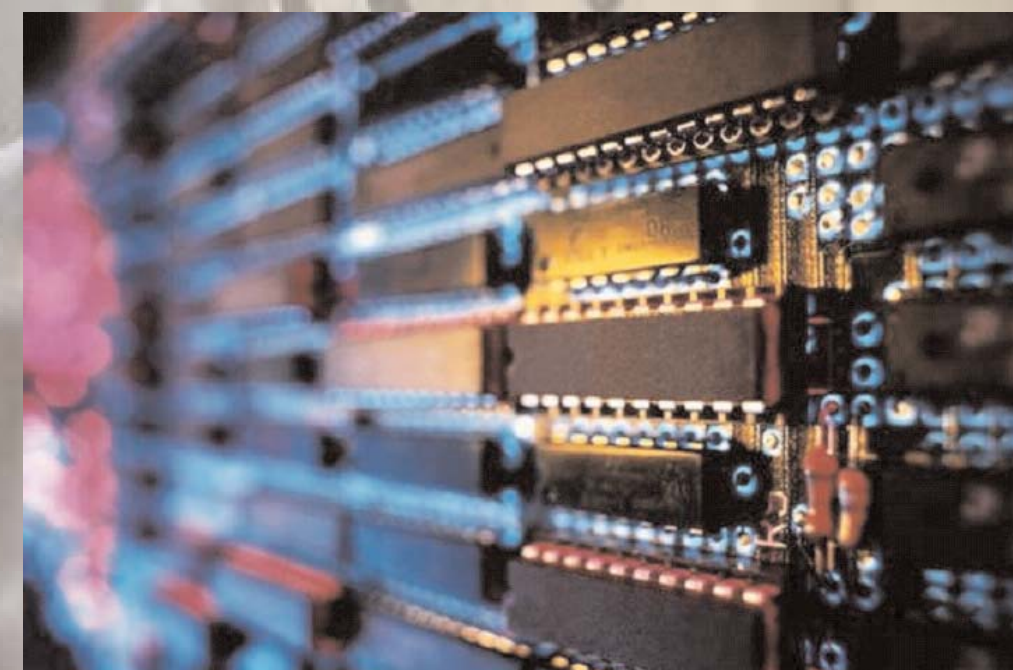


Promotion of Innovation and
Encouragement of SME Participation

November 2003 - EC 5th Framework Programme

INNO-UTILITIES

Making public procurement innovation-friendly
& combating telecommunications fraud and
security threats



Innovation in procurement and
procurement of innovation