



## Standardization in research and innovation projects

Success story: **security**

### SECUR-ED

**Secured Urban Transport – European Demonstration (SECUR-ED)** is a 3-year FP7 (7th European Research Framework Programme) research project. It seeks to create a European improvement in mass transportation security by developing and demonstrating a set of tools and processes. The project began in 2011 and currently embarks on demonstrations to validate solutions. It will be completed by mid-2014. Existing standards have formed the basis for project terminology and provided minimum requirements for the developing architecture – helping to ensure interoperability and uptake of project outputs. The consortium plans to support the ongoing evolution of standards, and is engaged in an iterative process with various standardization bodies. This ensures that best practices and interoperable solutions are at the heart of the project's work.

[www.secur-ed.eu](http://www.secur-ed.eu)

### THE PROJECT

The FP7 Security Programme focuses on building up the necessary capabilities for safeguarding European security, by funding research that delivers the technologies and knowledge required. Its largest project, SECUR-ED, has set out to improve security in urban public transport, whilst also supporting the enlargement of the mass transport security market for European industry.

SECUR-ED is attempting to bring together various technologies and processes, covering all aspects from risk assessment to complete training programmes, with the aim of enhancing urban transport security for all. Packaged modular solutions are being developed and demonstrated, before being made available to all public transport operators. These solutions will be suitable for implementation in medium and large cities throughout Europe.

### STANDARDS: A SOLUTION FOR MARKET UPTAKE

The EU's Counter-Terrorism Action Plan highlights that research projects are an efficient tool for overcoming market fragmentation and ensuring better standardization in the security sector. The call that led to the SECUR-ED proposal was also clear that it should aid the standardization of solutions to allow for the creation of a common market for mass transport security solutions.

The SECUR-ED consortium responded with a project that makes full use of existing standards as a basis for its work, is committed to supporting ongoing standardization efforts, and will make formal recommendations for further standardization to improve security in public transport systems.

 Standards are an essential part of what the project is trying to achieve. They provide an important basis for developing solutions, and are essential for uptake and use in the market. 

Jean-Francois Sulzer, SECUR-ED Coordinator

## HOW WERE STANDARDS USED

One early project activity was a state-of-the-art review, which identified and screened existing standards in order to assess their relevance. SECUR-ED has already identified and begun making use of these standards. For example, the European Standard EN 14383<sup>1</sup> is being used to help build a common understanding of terms across the project, while other standards on minimum technical requirements are supporting the interoperability of specific solutions in development.

SECUR-ED is developing a fixed and onboard consistent CCTV (Closed-circuit television) and communication architecture to improve security on trams and trains, as well as in depots and stations. In order to make this architecture open, interoperable and future-proof, SECUR-ED relies on two international standards: ISO 22311 and IEC 62676<sup>2</sup>. These have been used to define minimum requirements applicable to the different CCTV systems and to form the basis for the development of architectures that will be deployed in the demonstrations.

1 EN 14383-1:2006 'Prevention of crime - Urban planning and building design - Part 1: Definition of specific terms'

2 ISO22311:2013 'Video-surveillance export interoperability', IEC62676-2:2013 'Video-surveillance for use in security applications'

## HOW WILL THE PROJECT CONTRIBUTE TO STANDARDIZATION?

The SECUR-ED consortium also sees an important role for itself in the further evolution and development of relevant standards, both during and after the project, as part of a long-term effort between the worlds of R&D and standardization. This is important for the uptake of project solutions.

### IMMEDIATE BENEFIT

A major challenge for SECUR-ED is to define a consistent and interoperable mix of technologies. The project has brought together various stakeholders involved in urban transport security, encouraged them to communicate by making use of existing terminology standards, and enabled them to reach an agreement on some best practices and optimal solutions based on existing standard requirements. Where standards already exist they have eased the path of the project, providing a basis for choices and designing an interoperable mix of technologies and solutions. Where they don't, the consortium has faced the more difficult (and potentially risky) path of making trade-offs between different proprietary solutions and reaching decisions with regard to the identification of best practices and selecting which approaches to integrate.

The team was already able to provide inputs to final drafting of the two international standards, and has been closely involved in efforts to establish European security standards in response to Mandate M487 from the European Commission, offering knowledge on current gaps in the sector.

### LONG-TERM IMPACT

Upon completion, SECUR-ED will have integrated a mix of technologies and processes, covering all aspects of urban transport security. Importantly, these solutions will be interoperable with existing and future systems. A number of relevant standards will have formed the basis for this interoperability, helping to ensure uptake and impact of results.

The tools, processes and solutions developed in the framework of the SECUR-ED project are based on existing standards. They will help to improve urban transport security across Europe, by supporting the transport security industry to provide effective and efficient security services, thereby meeting the needs of public transport operators and their customers.



We need to create solutions that can 'plug and play', or that at least require the minimum number of new common interfaces when adding the technologies to existing systems. This is why standardization (both using what already exists, and seeking to improve and expand this further) is so important to the project, and the applicability, usability and success of its results.

Jean-Francois Sulzer, SECUR-ED Coordinator

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Every project is different. The CEN-CENELEC Research Helpdesk can provide you with advice on how to include standardization in your project. Please feel free to contact us!

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