

## The Societal Dimensions

On the highest aggregation level there are four societal dimensions that form the core of SIAM's security technology assessment procedures: Security, Trust, Efficiency and Freedom Infringements. Each of these dimensions pertains to a number of existing and related notions that show a certain semantic proximity or 'family resemblance'.

The first dimension is **Security**. It entails a set of interrelating concepts including risk, vulnerability, deviance, resilience and order.

**Trust**, the second dimension, relates to both trustworthiness and to the way people perceive and experience security measures and technologies. This will be specified in relation to what people trust: the technical reliability, the actual safety it provides, the level of confidence they have and the trust they have that such measures respect their rights and freedoms.

The third dimension is labelled **Efficiency**. Taking the specific processes of a site into account it focuses on efficiency and combines it with economic considerations.

The last dimension is **Freedom Infringements**. Usually seven types of Freedoms are identified: Bodily integrity; Equal treatment and non-discrimination; Freedom of movement; Freedom of unlawful detention; Presumption of innocence; Fair trial and due process; Privacy and data protection.

All four families – Security, Trust, Efficiency and Freedom Infringements – will organise the assessment procedure of SIAM. The concepts of each family will be described in detail, broken down into diverse performance indicators, which again will be represented by a number of questions a stakeholder has to answer in the course of an assessment procedure.

## Contact and Project Coordination



LSTS  
LAW, SCIENCE,  
TECHNOLOGY &  
SOCIETY STUDIES  
VRIJE UNIVERSITEIT BRUSSEL  
BELGIUM



Kingston University London

## Information

### Project coordinator:

Dr. Leon Hempel  
Centre for Technology and Society  
Technische Universität Berlin  
Phone: +49/30/314 25373  
Email: [hempel@ztg.tu-berlin.de](mailto:hempel@ztg.tu-berlin.de)

### Dissemination:

BBAA e.V.  
Email: [info@siam-project.eu](mailto:info@siam-project.eu)

Internet: [www.siam-project.eu](http://www.siam-project.eu)



SECURITY IMPACT ASSESSMENT MEASURES

## Security Impact Assessment Measures (SIAM)

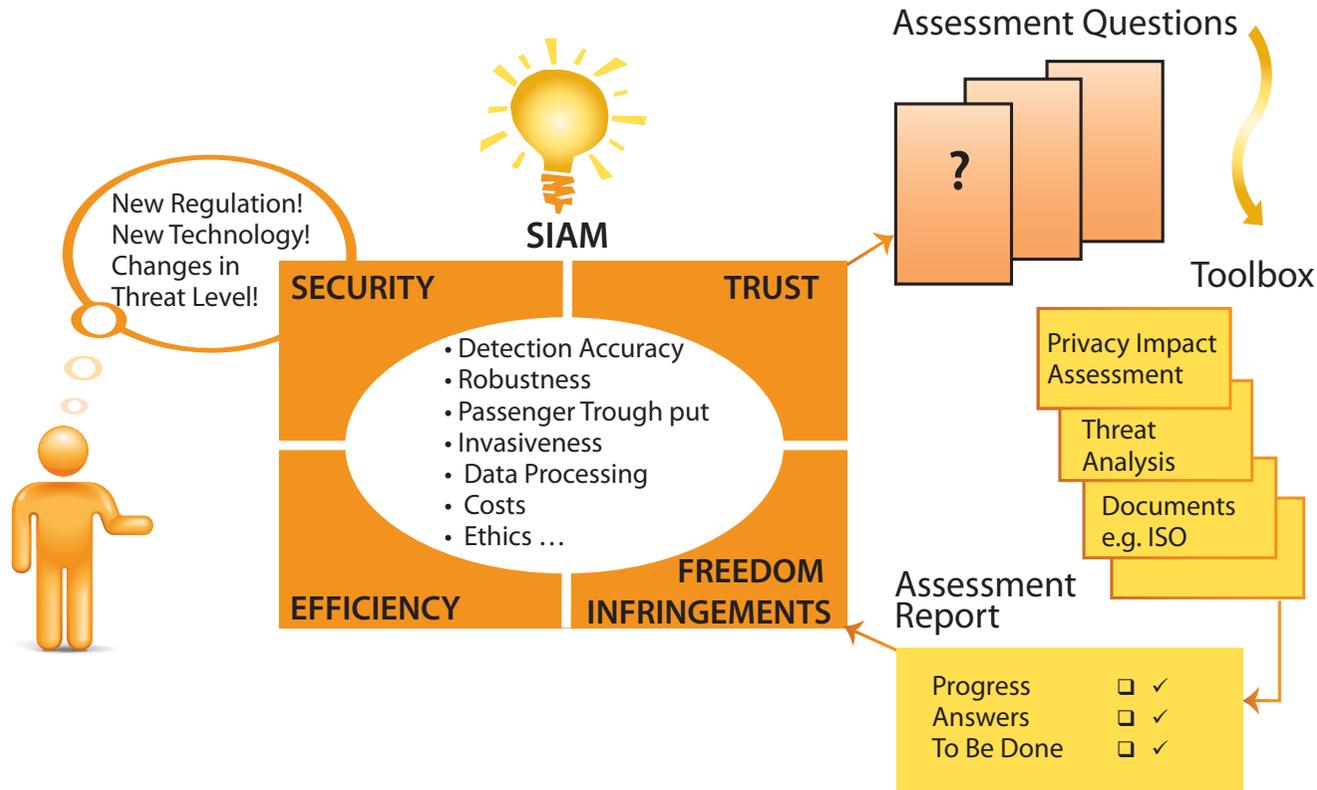
An assessment support system for security technology investments

SIAM is an EU-funded research project that provides support to end-users in the assessment process of security measures and technologies (SMT). The overall objective is to create an assessment support system that takes the complexity of technologies, economic aspects, cultural differences and societal dimensions into account. SIAM works to help end-users to cope with the complexity of assessments by providing a systematic approach of assessment guidelines and a comprehensive overview of all relevant aspects.

SIAM is developed by an international consortium which integrates the partners' practical experience in **SMT** research into the assessment support system. It is flanked by the consultation of leading European security, crime and civil rights experts, in-depth case studies and state of the art knowledge.

Promoting inclusive security technology assessment procedures, SIAM is initializing the relationships needed for sustained cooperation and future fruitful interaction in the field of security. Participative elements such as conferences and user forums enable an early involvement of the critical perspectives of all relevant actors.





### The SIAM Assessment Process

The purpose of the SIAM Assessment Support System is to guide the users in their assessment of security measures and technologies. This will be realised by means of structured questions about issues of security, trust, efficiency, and freedom infringements. In its function as a database, the system will store these questions and their associated assessment paths and make them available to different kinds of users.

### A Database of Assessment Questions

In a guided assessment the user will be presented with a pre-defined sequence of questions corresponding to his or her role in the assessment procedure. As a result, the user will receive some indication of open issues that are related to other assessment perspectives. This will be realized as a work list or in the manner of a ticketing system where open tickets represent issues that require further attention.

### SIAM Assessment Toolbox and Reports

The SIAM software tool will implement the assessment support system by providing various functions related to the phases of a security technology acquisition process. Users will be enabled to describe in detail the situation and technology options considered, involve other actors in the assessment process, negotiate relevant assessment criteria, and deal with a wide range of assessment questions. The tool will guide the users and provide advice and links to additional information which may be relevant for performing the various tasks described above. Such information is often publicly available (e.g., threat assessments, crime statistics, legal documentation). The output of the tool will be an assessment report that summarises the information collected, indicates overall progress and gives an overview of issues that still need to be addressed.

### The SIAM Assessment Support System

Today security is managed by an increasing range of diverse technological systems and measures. Given the variety of spaces, contexts and actors in which these technologies are deployed an adequate assessment methodology requires a whole range of questions and perspectives to be taken into account. Where, by whom, for what purpose is a technology introduced in a certain field or area? Does employment of the measure achieve the intended effects? What is the impact on security? What are the costs? Will the investment be appropriate for handling the issue in the long run? What are the unintended effects? Who are the people that will be affected? Are people treated fairly and decently and are their rights respected? How will people cope with the security measures and will they accept them? Security technologies are widely used, creating the need to raise and include questions of ethical and social implications into the assessment.

### Assessment and Approaches

With an eye to the diversity of security measures and technologies different assessment approaches are required. What characterizes them is their mutual delineation of each other. There are approaches that measure the technological functionality and effectiveness against the promised security gain. There are others that take health effects into account, and again others that focus on illegitimate discrimination. But to highlight one focus could mean to dismiss others and thus to produce outcomes which lead to wrong conclusions. SIAM aims to integrate and improve the existing approaches by

- providing stakeholders with an assessment support system that allows an in-depth understanding of diverging perspectives of stakeholders that are involved, affected by and concerned with security technologies.
- increasing reflexivity of the individual and enabling social learning among different stakeholders through active participation.
- supporting a holistic assessment of security technologies in a model that encompasses as many perspectives as possible in a well-structured and easily understandable manner.