# PRIME

## Privacy and Identity Management for Europe

PROJECT IDENTIFIER

**IST-2002-507591**

**Vision:** Users can act securely and safely in the Information Society while keeping sovereignty of their private sphere.

**Objectives:**

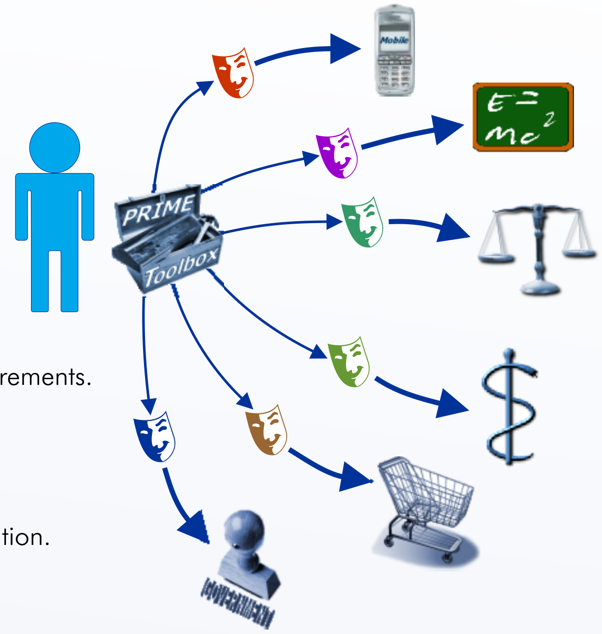
- *Develop solutions to empower individuals to control their private sphere and manage their identities.*
- *Trigger persuasive deployment of privacy-enhancing identity management solutions.*

**Results:**

- Legal, socio-economic, usability, and application requirements.
- Public integration framework.
- Public architecture & specifications.
- Application-driven prototypes.

**Exploitation:** Providing novel solutions for practical use and standardisation.

**Duration:** 4 years.



### Consortium:

| | |
|---|---|
| IBM France (Co-ordinator) | F |
| IBM Research, Zürich Research Lab | CH |
| Unabhängiges Landeszentrum für Datenschutz | D |
| Technische Universität Dresden | D |
| Katholieke Universiteit Leuven | B |
| Universiteit van Tilburg | NL |
| Hewlett-Packard | UK |
| Karlstads Universitet | S |
| Università di Milano | I |
| Joint Research Centre / IPSC Ispra | I |
| Centre National de la Recherche Scientifique / LAAS | F |
| Johann Wolfgang Goethe-Universität Frankfurt am Main | D |
| Chaum LLC | USA |
| RWTH Aachen | D |
| Institut EURECOM | F |
| Erasmus Universiteit Rotterdam | NL |
| Fondazione Centro San Raffaele del Monte Tabor | I |
| Deutsche Lufthansa | D |
| Swisscom | CH |
| T-Mobile | D |

### Reference Group:

Members from:

- Data Protection Authorities
- Industry
- Academia & Research
- Law Enforcement

### Standardisation Involvement:

- W3C
- OASIS/WSI
- Liberty Alliance
- Microsoft/IBM
- IETF

### Granted EC Contribution:

M€ 10

### Status:

Start Date: March 1st, 2004, in the Information Society Technologies Priority of the EU 6th Framework Programme, Call FP6-2002-IST-1.

Contact of PRIME: Gérard Lacoste, Compagnie IBM France, lacoste@fr.ibm.com May 18th, 2004

## Abstract

Information technologies are becoming pervasive and powerful to the point that privacy of citizens is now at risk. In the Information Society, individuals want to keep their autonomy and retain control over personal information, irrespective of their activities. The widening gap on this issue between laws and practices on the networks undermines trust and threatens critical domains like mobility, health care and the exercise of democracy.

**PRIME** addresses this issue via an integrative approach of the legal, social, economic and technical areas of concern to build synergies about the research, development and evaluation of solutions on privacy-enhancing identity management (IDM) that focus on end-users. The work plan supports this integration over the project lifetime through multiple iterations of increasing complexity.

**PRIME** elaborates a framework to integrate all technical and non-technical aspects of privacy-enhancing IDM. During and after the project, the framework will act as a lingua franca between all actors and reinforce their roles and responsibilities for full effectiveness.

**PRIME** advances the state of the art far beyond the objectives of existing initiatives to address foundational technologies (human-computer interface, ontologies, authorisation, cryptology), assurance and trust, and architectures. It validates its results on the basis of prototypes and experiments with end-users, taking into account legacy applications and interoperability with existing and emerging IDM standards.

**PRIME** creates awareness and timely disseminates its results, in particular through computer-based education.

**PRIME** involves leading experts from application and service providers, data protection authorities, academic and industrial research, and invites all major stakeholders to join its Reference Group. **PRIME** participation prepares the transfer of its results to industry and standardisation to strongly support European privacy regulations and reinforce European leadership.

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## Detailed Objectives

- Develop a set of detailed application scenarios.
- Select a number of privacy-enhancing IDM solutions and develop comprehensive sets of requirements on these from a technical, usability, legal, social and economic point of view.
- Select 1-2 of these specific solutions and prototypically implement them.
- Develop HCI models that make privacy-enhancing IDM understandable by and easily accessible to users and service providers.
- Performing research in the related areas of ontologies, authorisation and trust models, cryptographic mechanisms, secure and privacy-enhancing end-to-end communication, technologies that enable trust in privacy-enhancing IDM solutions, and in assurance through formal evaluations and seals.
- Combine the various technical and non-technical requirements and results into a technical **PRIME** architecture and interdisciplinary **PRIME** framework for privacy-enhancing IDM.
- Conduct an extensive outreach and training programme covering the production of tutorial materials, the establishment of a **PRIME** knowledge base, the co-ordination with standards and regulatory bodies to support project dissemination and exploitation.

## PRIME Principles

- Design must start from maximum privacy.
- Explicit privacy rules govern system usage.
- Privacy rules must be enforced, not just stated.
- Privacy enforcement must be trustworthy.
- Users need easy and intuitive abstractions of privacy.
- Privacy needs an integrated approach.
- Privacy must be integrated with applications.

Contact of PRIME: Gérard Lacoste, Compagnie IBM France, lacoste@fr.ibm.com May 18th, 2004