Horizon 2020 - Innovation Action

PRIVACY FLAG

Enabling Crowd-sourcing based privacy protection for smartphone applications, websites and Internet of Things deployments.

Grant agreement for: Collaborative project

Grant agreement No.: 653426

Start date of project: *May 1st, 2015* (36 months duration)

Deliverable D7.1: Project Presentation

Contractual Due Date	31/05/2015
Version	1.0
Responsible Partner	MI
Author	Sébastien Ziegler
Dissemination level	PU
Keywords	Project presentation, Privacy Flag, Personal data protection, Crowd sourcing

Project Coordinator: OTE

Abstract:

This deliverable is a public description of the Privacy Flag project, in terms of main objectives, technical approach, key issues and expected impact. It is intended for use in publications of the European Commission and the project.

Privacy Flag - Enabling Crowd-sourcing based privacy protection for smartphone applications, websites and Internet of Things deployments.

Privacy Flag

Enabling Crowd-sourcing based privacy protection for smartphone applications, websites and Internet of Things deployments

Project Coordinator
Hellenic Telecommunications Organization S.A. (OTE)
Dr. Ioannis Chochliouros
Tel: +30-210-6114651
Email: ichochliouros@oteresearch.gr

Scientific and Technical Coordinator
Mandat International
Sébastien Ziegler
Email: sziegler@mandintorg

Project website: *www.privacyflag.eu*

Partners: *Hellenic Telecommunications Organization S.A. - OTE (GR), Mandat International (CH), International Association of IT Lawyers (DK), HW Communications Ltd. (UK), Velti (GR), DunavNET d.o.o. (RS), Istituto Italiano per la Privacy (IT), Luleå Tekniska Universitet (SW), Université du Luxembourg (LU), Computer Technology Institute and Press "Diophantus" (GR), Archimede Solutions SARL (CH).*

Duration: *May 2015 - April 2018*

Funding scheme: *Collaborative Project*

Total Cost: *€ 4'538'438*
EC Contribution: *€ 3'143'000*
Contract Number: 653426

Main Objectives

Privacy Flag is a European *Horizon 2020* Innovation Action. It will research and combine the potential of crowdsourcing, ICT technologies and legal expertise to protect citizens' privacy when visiting websites, using smartphone applications, or living in a smart city. It intends to enable citizens to monitor and control their privacy with a user friendly solution made available as a smart phone application, a web browser add-on, and a public website,- *all connected to a shared knowledge database*. It will benefit from the outcomes of over 18 related research projects,- in order to provide a new paradigm of privacy protection combining "endo-protection" with locally deployed privacy enablers protecting the citizens privacy from unwanted external access to their data, and "exo-protection" with a distributed and crowd-sourced monitoring framework able to provide a collective protection framework together with increased citizen awareness and implicit incentive for companies to improve their privacy compliance.

Privacy Flag will:

1. **Develop a highly scalable privacy monitoring and protection solution** based on:
   - Crowd sourcing mechanisms to identify, monitor and assess privacy-related risks;
   - Privacy monitoring agents distributed on users' smart phones and web browsers, to identify privacy threatening activities and applications;
   - Universal Privacy Risk Area Assessment Tool (UPRAAT) and methodology, tailored on European and international legal norms on personal data protection;
   - Personal Data Valuation mechanism for citizens;
   - Privacy enablers for citizens to retain control over their privacy with optimized anonymisation techniques against traffic monitoring and finger printing;
   - User friendly interface informing the users and raising citizen awareness on their privacy risks when using a smart phone application or visiting a website.

2. **Develop a global knowledge database of identified privacy risks** with websites, smart phone applications and smart cities deployments, together with on-line services to support companies and other stakeholders in becoming privacy-friendly.

3. **Develop a set of complementary tools and services**, including:
   - In-depth privacy risk analytical tool and services;
   - In-depth privacy risk analytical tool and services;
   - Voluntary legally binding mechanism for companies located outside of Europe to abide to European standards in terms of personal data protection;
   - Services for companies interested in being privacy friendly;
   - Labelling and certification process and service;

Privacy Flag intends to actively disseminate and promote its platform towards the public and specialized communities, including ICT lawyers, policy makers and academics. It will ensure a long term exploitation, sustainability and maintenance of the *Privacy Flag* platform and services.

Technical Approach and Outcomes

Our key ambition is to utilize the power of the crowd combined with ICT technology and legal expertise to enable users to monitor, control and increase their level of privacy in three targeted application domains: websites, smartphones applications, and Internet of Things deployments in smart cities.

More specifically, the *Privacy Flag* project aims to develop and deliver the following outcomes:

- Three user-friendly tools for citizens: a smartphone application, an add-on for Internet browsers and a public website. The two former ones will enable the users to monitor and identify threats on their privacy, when browsing on a website or using smart phone applications. They will inform them through a user friendly interface and enable them to contribute to the crowd sourcing platform. The latter will provide access to complementary information on privacy protection and resources, and will be accessible through the two former ones.

- Distributed crowd-sourcing privacy monitoring platform enabling the crowd to mutualize their efforts and resources by running a local *Privacy Flag* application on their smart phone and/or an add-on in their Internet browser. The application will monitor and identify privacy breaches, informing the user about the alert and uploading the information in a central database to tag the application or website as suspicious and share this information with others.

- Universal Privacy Risk Area Assessment Tool which will provide a clear methodology and suite of assessment tool for evaluating the level of risk on privacy and personal data protection. It will be designed in order to precisely match the European and international norms and standards related to personal data protection and privacy, while providing a simple and user-friendly interface adapted to a large audience of non-specialists. The UPRAAT methodology will translate complex legal obligations into a user-friendly evaluation tools. It will enable the crowd to use the UPRAAT methodology through a set of user-friendly questions to objectively assess the level of risk for their privacy and to contribute to enrich a shared knowledge database.

- Privacy enablers integrated into the *Privacy Flag* application and browser add-on for privacy risk assessment and traffic analysis and protection. These tools include crowd-sourcing tools, distributed agents to monitor privacy breaches and in depth evaluation tools.

- Global knowledge database on privacy risks indexing websites, smart phone applications and IoT deployments, fed by the crowd (applying the UPRAAT), by alerts received from the *Privacy Flag* distributed monitoring agents, and by experts performing in-depth risk evaluations.

- Voluntary compliance commitment tool enabling any company or public administration to formally and publicly commit and abide to respect the European standards even if located outside of Europe.

- On-line resources to improve privacy, including legal search engine on privacy norms, templates of legal clauses for privacy friendly applications and user agreement, etc.

- In-depth privacy risk analysis on-line tool for experts. *Privacy Flag* will propose to SMEs and interested companies a voluntary in depth privacy risk analysis of their solutions with a report and recommendations for optimizing their practices in terms of privacy protection.

Finally, a labelling and certification process will be considered in parallel to cooperation with standardization development organizations.

Expected Impact

By combining the UPRAAT methodology, distributed privacy monitoring agents and crowd sourcing, the platform will enable a large scale privacy risk assessment process, which would not be possible with a regular top down assessment approach. Moreover, by mutualizing the skills and capacities of the crowd, it will reverse and rebalance the asymmetric relationship between individual users in front of large and powerful companies with a clear incentive to comply with privacy protection. More generally, *Privacy Flag* intends to provide a set of tools and services to improve personal data protection and privacy of European citizens.

Consortium

Privacy Flag gathers 11 European partners, including SMEs and a large telco operator that will ensure the alignment of the research with the market and an effective sustainable exploitation of the results. The partners combine complementary technical, legal, societal, business expertise, including in crowd sourcing, personal data protection, security, data valuation and end-user acceptance.