



empoWering prlvacy and securiTy in non-trusteD enviroNMENTS

Fact Sheet

Project Information

WITDOM

Grant agreement ID: 644371

[Project website](#) 

DOI

[10.3030/644371](https://doi.org/10.3030/644371) 

Project closed

EC signature date

9 December 2014

Start date

1 January 2015

End date

31 December 2017

Funded under

INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies - Information and Communication Technologies (ICT)

Total cost

€ 4 020 281,25

EU contribution

€ 2 764 031,25

Coordinated by

ATOS SPAIN SA



Spain

This project is featured in...



17 December 2018



Objective

The advent of the Future Internet prompts fundamental transformations in whole ICT ecosystems, while bringing new opportunities to stakeholders in the availability and rational use of physical resources with large-scale savings in IT investments. It will also pose new security challenges especially for ensuring robust protection of privacy and integrity of personal information, which are a fundamental part of the societal acceptance of new ICT schemes, services and solutions. The consolidation of highly complex Cloud computing paradigms materializes the long-held dream of computing as an on-demand automatically managed utility, but at the same time it calls for the materialisation of technologies to enable tangible levels of trustworthiness and end-to-end security in the new ICT platforms and architectures.

While currently there are solid bases for homomorphic cryptography and secure processing of data, research in WITDOM will go further, aiming at truly efficient and practical privacy enhancing techniques and efficient signal and data processing in the encrypted domain, and develop a holistic security-by-design framework for quantitative evaluation of end-to-end security and privacy, aiming at guaranteeing efficient and verifiable provision of privacy in the context of ICT services owned by third-party providers of distributed processing and storage, thereby maximizing independence from stated security and privacy commitments by respective providers. Focusing on specific added-value scenarios, we will deliver automatic and efficient privacy provisioning solutions, which will cover varying needs of privacy for data that must be handled by non-trusted third parties, providing a greater malleability by dynamic adaptation to user needs and privacy preferences. In summary, privacy is preserved by keeping data confidential (encrypted and privacy-protected) in the un-trusted environment, while the data owner can operate with and make use of the data in the encrypted domain.

Fields of science (EuroSciVoc)

[natural sciences](#) > [computer and information sciences](#) > [internet](#)

[natural sciences](#) > [computer and information sciences](#) > [computer security](#) > **[cryptography](#)**

[natural sciences](#) > [biological sciences](#) > [ecology](#) > **[ecosystems](#)**

[natural sciences](#) > [computer and information sciences](#) > [data science](#) > **[data processing](#)**



Keywords

[Trustworthiness](#)

[confidentiality](#)

[security-by-design](#)

[process integrity](#)

[privacy-enhancing solutions](#)

[efficient homomorphic encryption](#)

[enabling tools and technologies](#)

[cloud computing](#)

Programme(s)

[H2020-EU.2.1.1. - INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies - Information and Communication Technologies \(ICT\)](#)

MAIN PROGRAMME

Topic(s)

[ICT-32-2014 - Cybersecurity, Trustworthy ICT](#)

Call for proposal

[H2020-ICT-2014](#)

[See other projects for this call](#)

Sub call

H2020-ICT-2014-1

Funding Scheme

[RIA - Research and Innovation action](#)

Coordinator



ATOS SPAIN SA

Net EU contribution

€ 701 500,00

Total cost

€ 701 500,00

Address

CALLE DE ALBARRACIN 25

28037 Madrid

Spain

Region

Comunidad de Madrid > Comunidad de Madrid > Madrid

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#) [Website](#)

[Participation in EU R&I programmes](#)

[HORIZON collaboration network](#)

Participants (7)



UNIVERSIDAD DE VIGO

Spain

Net EU contribution

€ 538 687,50

Address

LG CAMPUS LAGOAS MARCOSENDE

36310 Vigo Pontevedra

Region

Noroeste > Galicia > Pontevedra

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 538 687,50



KATHOLIEKE UNIVERSITEIT LEUVEN

 Belgium

Net EU contribution

€ 589 843,75

Address

OUDE MARKT 13
3000 Leuven 

Region

Vlaams Gewest > Prov. Vlaams-Brabant > Arr. Leuven

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 589 843,75



IBM RESEARCH GMBH

 Switzerland

Net EU contribution

€ 0,00

Address

SAEUMERSTRASSE 4
8803 Rueschlikon 

Region

Schweiz/Suisse/Svizzera > Zürich > Zürich

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 986 250,00



XLAB RAZVOJ PROGRAMSKE OPREME IN SVETOVANJE DOO

 Slovenia

Net EU contribution

€ 416 500,00

Address

POT ZA BRDOM 100

1000 Ljubljana 

SME 

Yes

Region

Slovenija > Zahodna Slovenija > Osrednjeslovenska

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 416 500,00



FONDAZIONE CENTRO SAN RAFFAELE

 Italy

Net EU contribution

€ 281 750,00

Address

VIA OLGETTINA 60
20132 Milano 

Region

Nord-Ovest > Lombardia > Milano

Activity type

Research Organisations

Links

- [Contact the organisation](#) 
- [Website](#) 
- [Participation in EU R&I programmes](#) 
- [HORIZON collaboration network](#) 

Total cost

€ 517 500,00

 THIRD-PARTY 

OSPEDALE SAN RAFFAELE SRL

 Italy

Net EU contribution

€ 235 750,00

Address

VIA OLGETTINA 60
20132 Milano 

Region

Nord-Ovest > Lombardia > Milano

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

- [Contact the organisation](#) 
- [Website](#) 
- [Participation in EU R&I programmes](#) 
- [HORIZON collaboration network](#) 

Total cost

€ 235 750,00



BANCO BILBAO VIZCAYA ARGENTARIA SA*

 Spain

Net EU contribution

€ 0,00

Address

PLAZA SAN NICOLAS 4
48005 Bilbao 

Region

Noreste > País Vasco > Bizkaia

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 270 000,00

Last update: 24 July 2023

Permalink: <https://cordis.europa.eu/project/id/644371>

European Union, 2025