D11.7

Bulletin -- A Report on dissemination, exploitation and list of technical outcomes (4)

Document Identification	
Date	31.08.2017
Status	Final
Version	Version 1.00

Related WP	WP11	**Related Deliverable(s)**	D11.4 - 11.15
Lead Authors	Lorraine Spector	**Dissemination Level**	PU
Lead Participants	EEMA	**Contributors**	FHG
Reviewers	USTUTT		

1.   Executive Summary

This document is a copy of the report on dissemination, exploitation and list of technical outcomes, in the form of a news bulletin.

2. Document Information

Contributors

Name	Partner
Lorraine Spector	EEMA
Heiko Roßnagel	FHG

History

Version	Date	Author	Changes
V 0.99	22/08/2017	LS	Initial Document
V1.00	30/08/2017	LS	Final Document

3. Table of Contents

4. Project Description

LIGHTest project to build a global trust infrastructure that enables electronic transactions in a wide variety of applications

An ever increasing number of transactions are conducted virtually over the Internet. How can you be sure that the person making the transaction is who they say they are? The EU-funded project LIGHTest addresses this issue by creating a global trust infrastructure. It will provide a solution that allows one to distinguish legitimate identities from frauds. This is key in being able to bring an efficiency of electronic transactions to a wide application field ranging from simple verification of electronic signatures, over eProcurement, eJustice, eHealth, and law enforcement, up to the verification of trust in sensors and devices in the Internet of Things.

Traditionally, we often knew our business partners personally, which meant that impersonation and fraud were uncommon. Whether regarding the single European market place or on a Global scale, there is an increasing amount of electronic transactions that are becoming a part of peoples everyday lives, where decisions on establishing who is on the other end of the transaction is important. Clearly, it is necessary to have assistance from authorities to certify trustworthy electronic identities. This has already been done. For example, the EC and Member States have legally binding electronic signatures. But how can we query such authorities in a secure manner? With the current lack of a worldwide standard for publishing and querying trust information, this would be a prohibitively complex leading to verifiers having to deal with a high number of formats and protocols.

The EU-funded LIGHTest project attempts to solve this problem by building a global trust infrastructure where arbitrary authorities can publish their trust information. Setting up a global infrastructure is an ambitious objective; however, given the already existing infrastructure, organization, governance and security standards of the Internet Domain Name System, it is with confidence that this is possible. The EC and Member States can use this to publish lists of qualified trust services, as business registrars and authorities can in health, law enforcement and justice. In the private sector, this can be used to establish trust in inter-banking, international trade, shipping, business reputation and credit rating. Companies, administrations, and citizens can then use LIGHTest open source software to easily query this trust information to verify trust in simple signed documents or multi-faceted complex transactions.

The three-year LIGHTest project starts on September 1st 2016 and has an estimated cost of almost 9 Million Euros. It is partially funded by the European Union's Horizon 2020 research and innovation programme under G.A. No. 700321. The LIGHTest consortium consists of 14 partners from 9 European countries and is coordinated by Fraunhofer-Gesellschaft. To reach out beyond

Europe, LIGHT^{est} attempts to build up a global community based on international standards and open source software.

The partners are ATOS (ES), Time Lex (BE), Technische Universität Graz (AT), EEMA (BE), G-D (DE), Danmarks tekniske Universitet (DK), TUBITAK (TR), Universität Stuttgart (DE), Open Identity Exchange (GB), NLNet Labs (NL), CORREOS (ES), IBM Denmark (DK) and UbiSecure (FI).

The Fraunhofer IAO provides the vision and architecture for the project and is responsible for both, its management and the technical coordination.

5. Project Reference

A report on dissemination, exploitation and list of technical outcomes.

These deliverables are a series of bulletins describing relevant current dissemination outcomes and technical updates thus promoting internal communications.

The reports will be circulated as newsletter.

6. LIGHTest Bulletin (4)

Newsletter
Edition 4
August 2017

This Project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 700321

LIGHTest and the principle of privacy by design: how technological innovation can make you safer

Online transactions are a part of everyday life, and most citizens engage in them without many second thoughts regarding their security and the impact on their privacy. And yet, we know that every transaction also comes with a cost. Every time we communicate online, there's a possibility of our behaviour being monitored and analysed. Furthermore, we know that there are security risks to be managed: we need to keep our usernames and passwords safe, to minimise the risk of our identities being stolen or abused.

But the onus is not solely on the end user. There's also increasingly an expectation that the technologies we use are designed with security and privacy in mind. The upcoming General Data Protection Regulation (GDPR), which will become Europe's keystone legislation on privacy and data protection as of May 2018, enshrines this expectation into law. It creates an explicit principle of privacy by design,

meaning that appropriate technical and organisation measures have to be baked into data processing technologies from the outset. Privacy and security rules have to be inherently supported by technologies, thus making sure that the likelihood and impact of incidents are minimised.

LIGHTest, fundamentally, is all about privacy by design in trust management. Our approach is firstly to use the DNS and its integrated security features as a way to reliably and securely discover trustworthy information. But secondly, we also created guidelines on how the technology should be used without compromising privacy. This includes the requirement not to make personal data directly discoverable via the DNS when using LIGHTest. It's a simple good practice, but by making it explicit, LIGHTest not only supports innovation, but also ensures that our project outcomes don't come with a privacy price tag. In this way, LIGHTest facilitates compliance with the GDPR for the users of its technologies, and helps to make everyday transactions just a little safer.

Hans Graux, Founding Partner at LIGHTest project partner – time.lex

Project partner profile - time.lex

time.lex is a boutique law firm based in Brussels, specialising in information and technology law in the broadest sense, including privacy protection, data and information management, e-business, intellectual property and telecommunications.

The team is internationally recognised, being both a Legal 500 Top Tier firm in Information Technology, and a Chambers Europe Recommended Firm for TMT - Information Technology, Intellectual Property, Data Protection and Entertainment.

The time.lex team provides support from a pragmatic perspective as lawyers at the bar of Brussels, and from a policy perspective as advisors to various governments, public administrations and legislative bodies.

Furthermore, within EU research projects such as LIGHTest, time.lex provides the necessary legal support in identifying legal challenges and finding appropriate ways to manage them, both during the project and with long-term sustainability in mind.

For more information about about time.lex visit: http://timelex.eu

Bulletin – A report on dissemination, exploitation and list of technical outcomes (4)

K(NO)W Conference in Washington

The Open Identity Exchange (OIX) had another busy few months travelling around the world to present LIGHTest at conferences and events. In May, OIX and USTUTT presented LIGHTest in the context of identity frameworks and how these interoperate for seamless customer experiences, at the first K(NO)W Conference in Washington. This was followed by the second International Identity Management Law and Policy meeting co-hosted by the OIX and the World Bank. At this event, OIX presented LIGHTest in the context of trust frameworks and standards, with USTUTT introducing LIGHTest to this group of influential, global policy and legal decision makers from both the public and private sector.

Whilst in Washington, OIX took advantage of consortium experts from time.lex and USTUTT to hold the first International LIGHTest forum meeting. This group of global experts, mainly outside of Europe, met for a deep dive into LIGHTest, with technical, business and legal presentations from USTUTT and legal presentations from time.lex. This more intimate meeting had ample time, allowing for bi-directional curation of valuable feedback to and from the LIGHTest consortium partners as to global concerns and issues.

In June, OIX presented LIGHTest at the IDM Whitehall Media conference in London to an audience of 350 IAM specialists, as well as attending the renowned Cloud Identity Summit in Chicago, participating in a panel to discuss trust frameworks and their critical role in governing identity systems and allocating liability; around 1,400 delegates attended this event.

LIGHTest at the K(NO)W Conference in Washington

At the first International LIGHTest forum meeting
Hans Graux (time-lex, LIGHTest); Rachel Sellung (USTUTT, LIGHTest); Jon Shamah (EEMA, LIGHTest); Tom Smedinghoff (ABA, Counsel at Locke Lord LLP); Sue Dawes (OIX, LIGHTest)

LIGHTest

WP2 Summary

Title: **Requirements, Concepts and Evaluation**

Lead Partner: **DTU, Denmark**
Contact: **Sebastian Moedersheim**

Task 2.1 Inventories have been largely concluded, with the second version of the Inventories deliverable D2.2, and similarly T2.2 requirements analysis: describing the goals that the final system needs to fulfil. Task 2.4 architecture is basically finished: While it is still possible to make changes to the architecture, if necessary. Deliverable D2.14 marks the establishment of the foundation and reference for the project.

T2.3 Formal Description: the formal basis of the project, in particular, we define here the trust policy language TPL for specifying trust schemes, trust translation schemes, and delegation schemes. The first deliverable D2.3 was due in month 12 of the project.

T2.5 DNSSec summarises the most important standard the project works on, and finished in August 2017.

Deliverable 2.9 (Societal requirements), Deliverable 2.10 (Legal requirements) complements our set of requirements by the non-technical aspects, also here there were deliverables in August 2017.

WP3 Summary

Title: **Infrastructure for the Publication and Querying of Trust Schemes**

Lead Partner: **FHG, Germany**
Contact: **Dr. Heiko Roßnagel**

Active tasks:

Task 3.1: Design of a Conceptual Framework for Trust Schemes.

Task 3.2 Design of DNS-based Publication of Trust Schemes.

Task 3.5: Ensuring Cross-Border Legal Compliance and Validity of Trust Scheme Publication.

D3.1 designing a preliminary Conceptual Framework for Trust Schemes was submitted on time in month 12 of the project. It includes a concept of the Trust Scheme Publication Authority (TSPA) and a data model for a unified representation of Tuple-Based Trust Schemes.

Task 3.2 Design of DNS-based Publication of Trust Schemes.

This task is in its initial phase. D3.3 will kick-off in September 2017. Preliminary work on DNS and DNSSEC expertise has already been conducted.

T3.5: The structure and contents of D3.6 have been defined, in alignment with the other three legal deliverables due in M12. These consist of an analysis of the

built-in governance mechanisms and assurances of DNS delivery, and of the legal tools that LIGHTest uses to permit third parties to use the trust information which is discoverable via LIGHTest. The deliverable will close with a structure for contractual terms that can be used by parties that wish to make their trust policies discoverable within LIGHTest.

D3.1 was submitted on time in M8 and D3.6 was due in M12 and has been submitted on time.

WP4 Summary

Title: **Infrastructure for Translations across Trust Domains**

Lead Partner: **ATOS, Spain**
Contact: **Javier Presa**

Preparation for the T4.2: Design of DNS-based Publication of Trust Translation Schemes for the General meeting, as this is the main task of the design phase.

Supporting other WPs in relation to trust translation schemes.

A radio interview with the Head of Atos Research & Innovation Department, Alicia Garcia, took place on 24th May 2017   http://www.rtve.es/alacarta/audios/marca-espana/marca-espana-atos-empresa-encabeza-revolucion-digital/4034694/.

D4.6, where TIL has the lead, has been submitted on time.

WP5 Summary

Title: **Infrastructure for the Publication and Querying of Delegations**

Lead Partner: **TU Graz, Austria**
Contact: **Dr. Peter Lipp**

The focus of our work in this WP is the design of a conceptual framework for delegations. In this conceptual framework, we provide a solution to the question - How can a delegation be represented using DNS? Further, we look into the representation of delegation content and how we can use DNS to publish delegations.

The Kick Off Meeting in Task 5.2 took place in August 2017. Moreover a paper entitled with "Harmonizing Delegation Data Formats" was accepted for the OID conference in October 2017.

WP6 Summary

Title: **Trust Policy and Automatic Trust Decisions**

Lead Partner: **TU Graz, Austria**
Contact: **Dr. Peter Lipp**

Based on the inventory and the set of requirements, we are working on abstract and generalised concepts of electronic transactions, as well as policies that describe their trustworthiness.
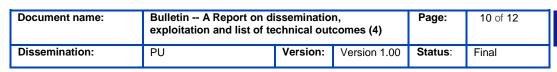
For the interaction and usability design

of the trust policy tool, we have started to define the technical limitations.

The Task 6.1 - Requirements and Design of a Conceptual Framework for Trust policies is due by the end of November 2017 (M15). The task has been kicked-off in July 2017.

WP7 Summary

Title: **Trust Propagation of Derived mobile IDs**

Lead Partner: **G+D Mobile Security GmbH, Germany**
Contact: **Dr. Frank-Michael Kamm**

WP7 has successfully completed task 7.2 and submitted deliverable D7.2 on time. The deliverable outlines a concept of a strong link between FIDO credentials and an identity derived by a secondary ID issuer. Due to the special properties of scoped credentials in the user-centric and privacy friendly FIDO concept some technical hurdles had to be overcome. The proposed concept is a balance between usability (number of authentications required by the user) and ease of integration for the

relying party and ID provider (number of protocols and interfaces). The technical aspects of implementation will need to be refined further during the implementation phase.

In addition, work on software-based security environments for storing mobile ID credentials is progressing further.

The next upcoming deliverable is D 7.3 regarding the demo implementation of the defined mobile ID scheme. Further details on this are expected to be discussed during the general meeting in Graz.

WP8 Summary

Title: **Integration and Testing**

Lead Partner: **TÜBITAK, Turkey**
Contact: **Dr. Muhammet Yildiz**

WP8 started in M7 with a kick-off teleconference with the relevant partners. We have initiated the work of setting up the technical infrastructure for the development and testing of the LIGHTest components. Our partner TUG has created a GitLab server for code

hosting and continuous integration. Additionally, NLNet will provide the infrastructure for the DNS and TÜBİTAK will establish a Minder testbed instance for the testing of the LIGHTest components.

Our closest deliverable is D8.6 on M16 which will provide information about the LIGHTest testing architecture, based on the application of Minder into the architecture. We have also started our work. This is a part of T8.3 and has already started.

WP10 Summary

Title: **Transfer to Market**

Lead Partner: **ATOS, Spain**
Contact: **Alberto Miranda**

The business plan, D10.1 has been submitted on time in M12. Moreover we are in the preparation for Task 10.2, which will be discussed at the General Meeting in Graz.

Atos has been assisting the Standardisation Report D10.8, where G&D was in the lead.

WP11 Summary

Title: **Dissemination and Communication**

Lead Partner: **EEMA, Belgium**
Contact: **Jon Shamah**

EEMA has been continuing to promote LIGHTest throughout the EU and beyond. The LIGHTest-Community website continues to be populated and mature. The WP has held workshops across Europe and the USA.

WP11 has also been working with WP10 to produce a robust sustainable business plan and WP11 messaging is geared in order to optimise that plan in parallel to growing overall awareness.

Presentations in M13-M15 include:

- ARIES project Conference on Identity Fraud (Italy)

- European Association for Biometrics (Germany)

- OID Summit (Sweden)

- World eID (France)

- ISSE 2017 (Belgium)

Newsletter Edition 4 August 2017

THE LIGHTest COMMUNITY WEBSITE

This Website has been created to allow interested parties to stay involved with the project as it develops and evolves.
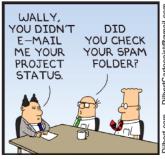
The website covers all the latest news and events as well as a closed forum where partners can share ideas and best practice.

To find out more, please visit our community website at
www.LIGHTest-community.org

You can also find us on **Twitter**
@LIGHTest_trust

LinkedIn
www.linkedin.com/groups/12017516

ACTIVITIES & EVENTS

20 SEPTEMBER 2017
IDM Europe
Amsterdam, Netherlands

27 SEPTEMBER 2017
IAM
London, UK

7 OCTOBER 2017
OID
Karlstad, Sweden

9-11 OCTOBER 2017
Certified InfoSec Conference
Washington, USA

14-15 NOVEMBER 2017
EEMA – ISSE Conference
Brussels, Belgium

17 NOVEMBER 2017
OIX Economics of Identity III
London, UK

LIGHTest GENERAL MEETING

All partners are invited on 12-14 September in Graz, Austria

@LIGHTest_trust   LinkedIn click here   www.lightest.eu   Produced by EEMA - WP11 Lead, LIGHTest