



D11.14: Report on Dissemination, Exploitation, and List of Technical Outcomes (11)

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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.

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2. Document Information

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4. 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 newsletters.

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5. LIGHTest Bulletin (11)



View from the Advisory Board: Enabling Digital Identity as a Human Right



Author:
Timothy S. Reiniger, LIGHTest Advisory Board Member

Leveraging the DNS infrastructure for distributed and networked trust management enables the promise of digital identity as a human right. As seen in two emerging use cases, LIGHTest unleashes the ability for NGOs to become providers of a trust infrastructure to achieve financial inclusion for stateless persons and individuals from developing world countries.

The United Nations has long

recognized identity as a human right. Article 8 of the Convention on the Rights of the Child declares identity as a human right that must be recognized from the time of birth. Yet, approximately 1.1 billion people currently do not possess a legal identity or birth registration with which they can participate in the global information economy. Recognizing that the lack of a legal identity is a barrier to accessing basic health and financial services, the UN included target 16.9 in the UN Sustainable Development Goals: "to provide legal identity for all, including birth registration by the year 2030." A Working Group of the UNCITRAL, in developing a model law for cross-border recognition of identity management, has asserted that "[in] the digital economy, this becomes the right to a digital identity."

First, the LIGHTest infrastructure for trust translation and validation is now poised to be used by the UNHCR. UNHCR officials plan to deploy the use of LIGHTest to enable data protection and consent-based sharing with respect to personal information collected for UN-issued identity credentials. Thus, LIGHTest promises to provide refugees an essential tool that enables them to control their UNHCR-provided

digital identities and attributes.

Second, in April, St. Luke's Cathedral in Maine (of the Anglican Communion network) for purposes of enabling financial inclusion in the digital economy, approved steps to grow an existing educational partnership in rural Haiti to provide digital identity capabilities and trust services that will leverage LIGHTest.

Should these two models prove successful, other NGOs will take great interest in using LIGHTest as a method for enabling the right to a digital identity, the right that is foundational to achieving financial inclusion throughout the developing world.

These NGO programs show the need for the EC to extend the duration of the LIGHTest Project. LIGHTest is proving to be well-suited for extending the EU information trust management model (as developed in the eIDAS and GDPR) in contexts where trust is distributed/decentralized.

Timothy Reiniger is an attorney in Maine (USA) and a LIGHTest Advisory Board member. He is an author of the Virginia online notarization law as well as the Virginia Digital Identity Management Law. Tim can be reached at: tim@reinigerllc.com.



On 5th March, Chair of EEMA, Jon Shamah (pictured right with EEMA's Roger Dean), was at the eWorld Procurement & Supply conference in London to present how the LIGHTest project can positively impact the global supply chain.

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Fair and Balanced Contracts for LIGHTest – Supporting Innovation and User Friendliness



Author:
Hans Graux, Attorney-at-law and Partner, Timelex

As a highly innovative project, LIGHTest continuously needs to address the challenge of providing sufficient legal certainty to aspiring users, while building on a technology and on a trust model that has no specific legislation. On the surface, the toolkit on which LIGHTest relies is familiar enough: it relies on DNS as an established mechanism for discovering trust policies, and uses electronic signatures, electronic seals and validation services to authenticate individual transactions against these policies.

But while both the DNS itself and trust services in general have a legal framework underpinning them, LIGHTest itself uses them in a very

innovative way that has no direct precursors, neither from a business perspective, nor from a legal perspective. Of course, trust services in the EU are regulated through the eIDAS Regulation which provides specific rules on electronic signatures and electronic seals, among other services. Similarly, the e-Commerce Directive has provided a basic legal framework that permits contracts to be concluded electronically, at least in most cases. But LIGHTest plays on a slightly different field: its ambitions are global so that the applicability of an EU level legal framework is not an adequate answer, and some of its concepts are entirely new and unregulated.

As a key example, the notion of formalised trust policies which can be automatically processed and validated – in a way a form of ‘smart contract’ – is not subject to specific legal rules beyond those that apply generally to electronic agreements. Similarly, LIGHTest introduces several entities in its ecosystem, such as trust policy publishers (making available the rules under which transactions can be permitted or stopped), delegation providers (storing information on persons authorised to act on behalf of another entity), and trust translation authorities (who can determine equivalence between certain trusted entities or services). While their functions as such are not entirely new, these concepts and the corresponding rights and responsibilities have no

established legal framework.

LIGHTest resolves this by providing model contracts that can be used both by these new entities and by their customers and end users. These model contracts take into account the existing legal frameworks, both at the EU and international level, and try to plug the gaps in a balanced way, so that end users can feel reasonably well protected while also leaving a reasonable margin of flexibility for the business community itself. In that way, LIGHTest not only aims to provide a technologically state of the art solution, but also provides a legal toolkit that allows its solutions to be deployed in practice.

Cross Border Trust: Trust Infrastructures and tools from Blockchain to LIGHTest

On Tuesday 30th April, Rachelle Sellung of the University of Stuttgart presented a webinar on behalf of LIGHTest entitled: ‘Cross Border Trust: Trust Infrastructures and tools from Blockchain to LIGHTest’. The webinar gave a fascinating insight into the role of LIGHTest and how it can be used to complement and enhance Blockchain (sharing the same high-level goals), as well as presenting

a highly usable alternative to it.

Rachelle explained how LIGHTest is perfect for sharing trusted information and as a use case of its potential she described her own experiences as a US citizen looking to attend a German University. She explained that the university authorities in Germany wanted proof of her academic credentials and that to manually process this was slow and inconvenient for all concerned.

Being able to share a trusted electronic signature from the US university or US Government to prove the validity of data would resolve this. Rachelle added that there are other issues to overcome in this example, such as ranking scales, which need intelligent automation to process correctly. She explained that LIGHTest provides an open-source tool that verifies and translates different transactions, comparing it to the eIDAS scheme and the ability to provide transparency of electronic transactions and optimisation of existing trust schemes.

The presentation also examined how LIGHTest provides a ‘lightweight’ alternative to Blockchain as it doesn’t store large amounts of data directly, yet still provides a standardised way to publish trusted lists and schemes.

To show the audience just how far LIGHTest has already reached, Rachelle illustrated how it currently has 14 partners across nine countries since its

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inception in 2016. She also discussed the imminent showcasing of two pilots which will demonstrate LIGHTest in action.

In conclusion, Rachelle suggested to the audience that Blockchain needs assistance to be applied in many use cases and that LIGHTest is the perfect way to compensate for many of the weaknesses in Blockchain.



Speaker: Rachelle Sellung, University of Stuttgart

Events & Activities

LIGHTest International Forum
May 27 - 30, 2019
Baku, Azerbaijan
Two day workshop with experts from Azerbaijan from both the private and public sector.

Identity Week 2019
June 11 - 13, 2019
London, UK
Don Thibeau, Chairman of OIX will present LIGHTest
<https://www.terrapinn.com/exhibition/identity-week/index.stm>

EEMA Annual Conference 2019
June 18 - 19, 2019
London, UK
LIGHTest will host 'Transforming the Way we see Trust: the LIGHTest Project'
<https://annualconference.eema.org>

e-Governance Conference
May 21 - 22, 2019
Tallinn, Estonia
Jon Shamah, Chair of EEMA will represent LIGHTest at the event
<https://2019.egovconference.ee>

EFPE Conference
May 21 - 22, 2019
Szczecin, Poland
Jon Shamah, Chair of EEMA will represent LIGHTest at the event
<https://www.efpe.eu>

The LIGHTest Project Partners



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6. Project Description

LIGHT^{est} 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 LIGHT^{est} 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 LIGHT^{est} 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 LIGHT^{est} open source software to easily query this trust information to verify trust in simple signed documents or multi-faceted complex transactions.

The three-year LIGHT^{est} project started 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 LIGHT^{est} 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.

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The partners are ATOS (ES), Time Lex (BE), Technische Universität Graz (AU), EEMA (BE), G+D (DE), Danmarks tekniske Universitet (DK), TUBITAK (TR), Universität Stuttgart (DE), Open Identity Exchange (GB), NLNet Labs (NL), CORREOS (ES), University of Pireaus Research Center (GR), 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.

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