Impulse

Identity Management in PUbLic Services

Impact of **Blockchain** and **Artificial Intelligence** to Improve **Electronic Identities**

CONSORTIUM

A team of 16 entities from 9 different countries using Artificial Intelligence and Blockchain in order to improve online identification processes.

PARTNERS

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THIRD PARTIES

City of Reykjavík · UNIONCAMERE · CyberEthicsLab. · Alice · Fraunhofer ISI · TREE TECHNOLOGY · InfoCert TINEXTA GROUP · DIN · IC InfoCamere

Demand for more secure digital services

- **Digital Single Market (DSM)**
  - · Personal and non-transferable access
  - · Unambiguous identification
- **Secure and privacy-preserving eID as enabler**
  - · Trust and confidence
  - · Data treated in full respect of existing data protection legislation
  - · No overlapping or contradictory versions of the same identity
- **Benefit from disruptive technologies**
  - · New segments of population
  - · Ubiquity
  - · Robust, trustful and more friendly eServices

Opportunity to use disruptive technologies

Impulse focuses on:
- **Artificial Intelligence**
  - · Biometrics authentication
  - · Document verification
  - · Digital onboarding
- **Blockchain**
  - · A well-known implementation of Distributed Ledger Technology (DLT)
  - · Shift the ownership of personal data from government to citizens
  - · Smart contracts to share the rules under which the parties agree to interact

Challenges

- **Technical**
  - · Development and deployment
  - · Operational constraints
- **Non-technical**
  - · Ethical & Legal
  - · Policy and standards
  - · Socio-economic and political
- **Gain acceptance**
- **Promote the adoption of disruptive eID concepts**

Research will result on specific and actionable outcomes in a twofold form:

A framework for a holistic integration of AI and blockchain technology to support secure and privacy-preserving eID management by public services, having been deployed and valuated in different public services (and countries) to complement existing EU identity schemas.

Actionable roadmaps for the adoption, escalation and sustainability of advanced eID technology by public services in the European ecosystem, in different countries and at different levels (local, regional, national, and cross-border) and supported by Digital Innovation Hubs (DIHs) all around Europe.

CASE STUDIES

IMPULSE brings together a **set of representative and innovative processes as case studies in 5 countries,** providing a variety of contexts and **addressing the whole cycle**: input, business workflow, output and archiving.

City of Reykjavík

Better Reykjavík participatory democracy portal
Reykjavik, Iceland

CITY OF AARHUS

NemID card retrieval from lockers
Aarhus, Denmark

ERTZAINTZA

Online complaints filing service
Ertzaintza, Spain

UNIONCAMERE / IC InfoCamere

Enterprise digital drawer
UnionCamere & InfoCamere, Italy

Gijón

Gijón public services app
Gijón, Spain

Civil registration & certification
Peshtera, Bulgaria

GOAL 1

Specify the requirements, acceptance and impact on the use of eID technology from regulatory, technical, operational and societal standpoints through the engagement of stakeholders in a co-creative demand-driven research process, including pilots in 5 different countries.

GOAL 2

Perform an in-depth multidisciplinary analysis of the legal normative and regulation, existing standards and ethical implications derived from the use of the selected technologies (i.e., blockchain and smart contracts, AI-based biometrics and document verification techniques) in public services for eID management.

GOAL 3

Assess the socio-economic and policy impacts, both benefits and risks, for public administrations, public servants, citizens and other stakeholders, as well as define the mid- and long-term business models to assure sustainability of the disruptive eID management concepts in public services.

GOAL 4

Evaluate the performance of the selected and promising disruptive technologies (AI-based biometrics and document verification techniques, blockchain and smart contracts) as part of the proposed holistic eID technology solution for public services.

GOAL 5

Define clear, tangible and specific roadmaps for the introduction, adoption, escalation and long-term sustainability of the holistic eID framework, supporting public services at different levels.

GOAL 6

Foster the dissemination of results, knowledge and experiences as well as a close and effective communication with stakeholders, ensuring the sustainable exploitation of the outcomes with the involvement of relevant actors in the field of ICT and public services through different means, including standardization activities.