
B.1 General

The following normative disclaimer shall be included on the front page of a PoC report:

"Submission of this PDL ISG PoC Report as a contribution to the PDL ISG does not imply any endorsement by the PDL ISG of the contents of this report, or of any aspect of the PoC activity to which it refers."

B.2 PDL ISG PoC Report

B.2.1 PoC Project Completion Status

Indicate the PoC Project Status. Can the PoC be considered completed? If this is a multi-stage PoC project, indicate the Reported Stage status and plans for future Project Stages/Milestones.

- Overall PoC Project Completion Status: complete
- PoC Stage Completion Status (Optional - for Multi Stage projects only):
 - P.D1 PoC Demo 1 – PDL service operation: complete
 - P.D2 PoC Demo 2 – PDL-based UCDID service: complete
 - P.D3 PoC Demo 3 – PDL-based UCDID selected use case: complete

B.2.2 PDL PoC Project Participants

Specify PoC Team; indicate any changes from the PDL ISG PoC Proposal:

- PoC Project Name: Telecom-native PDL-based UCDID system for providing differential ICT network services- PDL service capability enhancement to telecom network architecture
- Application/Resource Provider: HUAWEI TECH. GmbH Contact: xun.xiao@huawei.com
- Infrastructure/Application provider: Motorola (Lenovo) Contact: smaty@lenovo.com
- Network Operator: Telefonica Contact: diego.lopez@telefonica.com
- Additional Members: Tongji University Contact: hxu@tongji.edu.cn
- Additional Members: China Mobile Contact: yanzhijun@chinamobile.com
- Additional Members: Sejong University Contact: jssong@SEJONG.AC.KR
- Additional Members: PCCW Global Contact: ssteiff@consoleconnect.com

B.2.3 Confirmation of PoC Event Occurrence

PoC Demonstration Event Details: On 14th to 17th October, 2024, The PoC team presented this PoC in ETSI Security Conference 2024 at Sophia Antipolis, France. The demonstration plan can be found in official website of this conference.

About	Day 1	Day 2	Day 3	Day 4	Posters / Demos	Biographies	Presentations	Programme Committee
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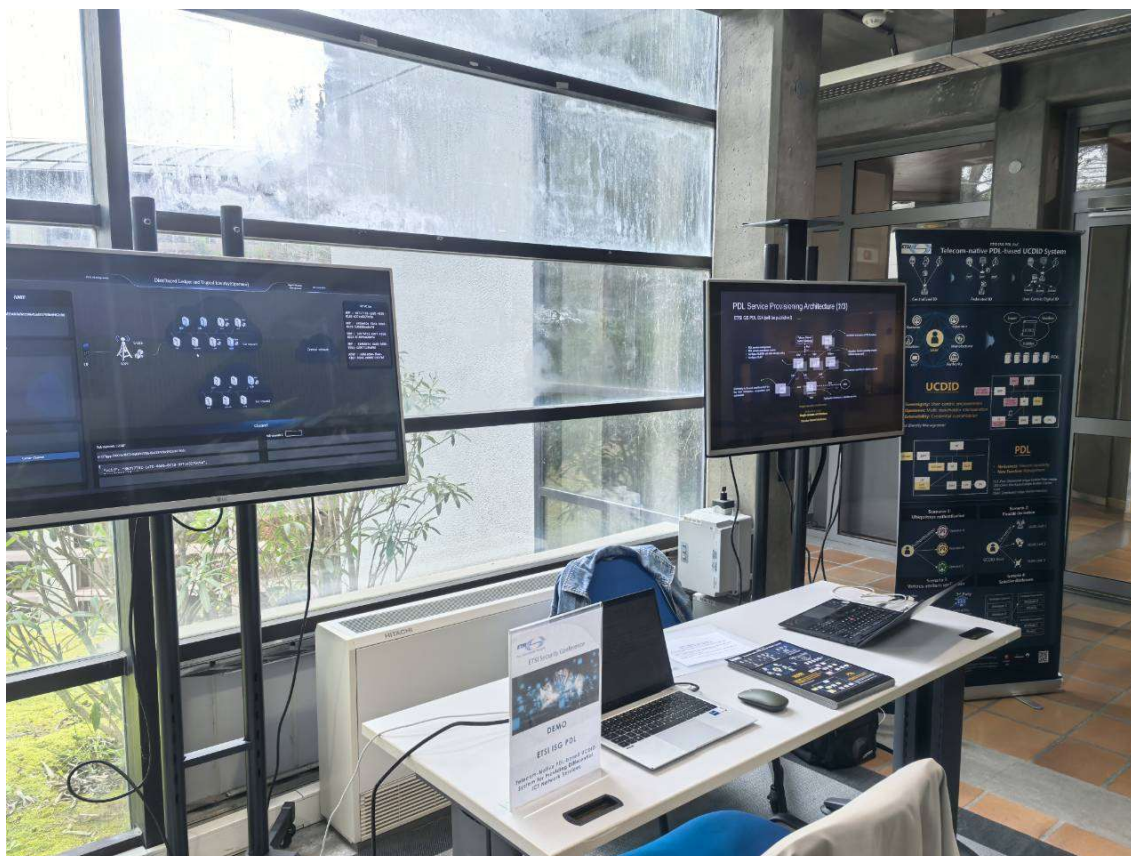
Posters

1. **DYNABIC: Dynamic Business Continuity and Response of Critical Systems against advanced cyber-physical threats**
University Côte d'Azur - Nicolas Ferry
2. **ROBUST-6G: Smart, Automated, and Reliable Security Service Platform for 6G**
University College Dublin - Madhusanka Liyanage
3. **Enhanced Cybersecurity Through Integrative Open Source Technology: OpenVAS, OpenKAT, and Aranei in Pharma and Healthcare**
OpenNovations - Hans de Raad
OpenKAT - Brenno de Winter
4. **Securing 6G Networks in the Quantum Era**
Turkcell - Zehra Yigit
5. **Application of Homomorphic Encryption in Private IP Search over Encrypted Database**
Centre For Development Of Telematics - Ranjan Sameer - Bidisha Mandal
6. **Integrating Network Digital Twinning into Future AI-based 6G Systems (6G-TWIN, SNS JU**
Regis Decorme, R2M

Demos

1. **Telecom-Native PDL-based UCDID System for Providing Differential ICT Network Services**
ISG PDL Participants
2. **CyberPass | Elevate Your Cybersecurity Procurement with ETSI EN 303 645**
Red Alert Labs, Ali Khalil
3. **Adversarial AI in ICT**
TNO - Piotr Zuraniewski

This is the demonstration spot with 2 screens and 1 poster. The demonstration included PDL service operation(e.g. activate/deactivate DLE, create/update/delete PDL service) and UCDID service operations(e.g. deploy smart contract about UCDID, issue UCDID, issue/verify/revoke verifiable credentials).



B.2.4 PoC Goals Status Report

PoC Project Goal #1: Based on ETSI GS PDL-024, a service architecture consisting of new PDL service functions proposed; and how PDL service capability can be provisioned in a telecom network system, where features and procedures of DLE instantiation, activation, update and deletion will be implementation

Goal Status (Demonstrated/Met?) **Demonstrated**

PoC Project Goal #2: Based on ETSI GS PDL-023 and PDL-027, a service architecture enabling UCDID service based on PDL capability provided by ETSI GS PDL-024; and features and procedures for enabling UCDID for both UE and the network operator sides

Goal Status (Demonstrated/Met?) **Demonstrated**

List additional (optional) PoC Project Goals (follow the same format):

PoC Project Goal #3: Procedures of enabling UCDID service based on PDL capability for auxiliary devices of a user to expand the use case of UCDID in the telecom network

Goal Status (Demonstrated/Met?) **Met**

B.2.5 PoC Feedback Received from Third Parties (Optional)

- In ETSI Security Conference 2024, PoC demonstration got feedbacks as follows:
 - 1) **Thales:** Whether digital identity can be used on NFs? How to extend digital identity attributes?
 - We demonstrated the test case about UCDID for NF.
 - We demonstrated the test case about applying for credentials and explained that the claims in credential can be defined by UE itself.
 - 2) **Turkcell:** Interested in application scenarios of digital identity.
 - 3) **Umlaut:** Highly appreciate our demo. Focused more on the implementation details of the demo. We say that the combination of network and blockchain needs further research after 5GC and fabric.
 - 4) **Toshiba:** Where are the blockchain nodes deployed? Where to store the digital identity information? Whether digital identity information is linked?
 - We explained the blockchain nodes deployed in telecom network in two forms, individual nodes, and modules inside an NF. UCDID information is stored in the ledger. The UCDID of the auxiliary device is linked to the UCDID of the user.
 - 5) Others include **consulting companies, military personnel**, and visitors who did not have time to record the company. Most of them were consulted on application scenarios, relationships with EU wallets, and roles of operators.

History

Document history		
V1.0.0	March 2025	Draft version ready
V1.0.1	May 2025	Final version ready