

## ETSI / CEN Workshop on EU Digital Identity Framework Standards

# EWC: Exploring Trust Models in the EUDI ecosystem

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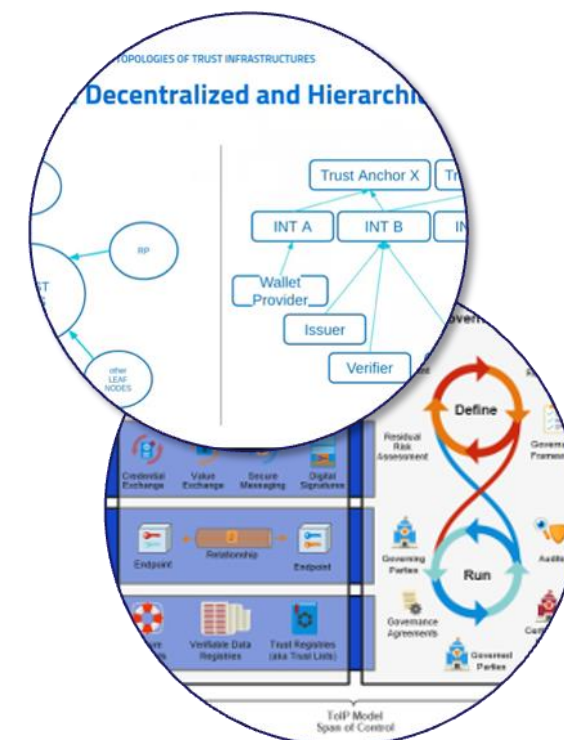


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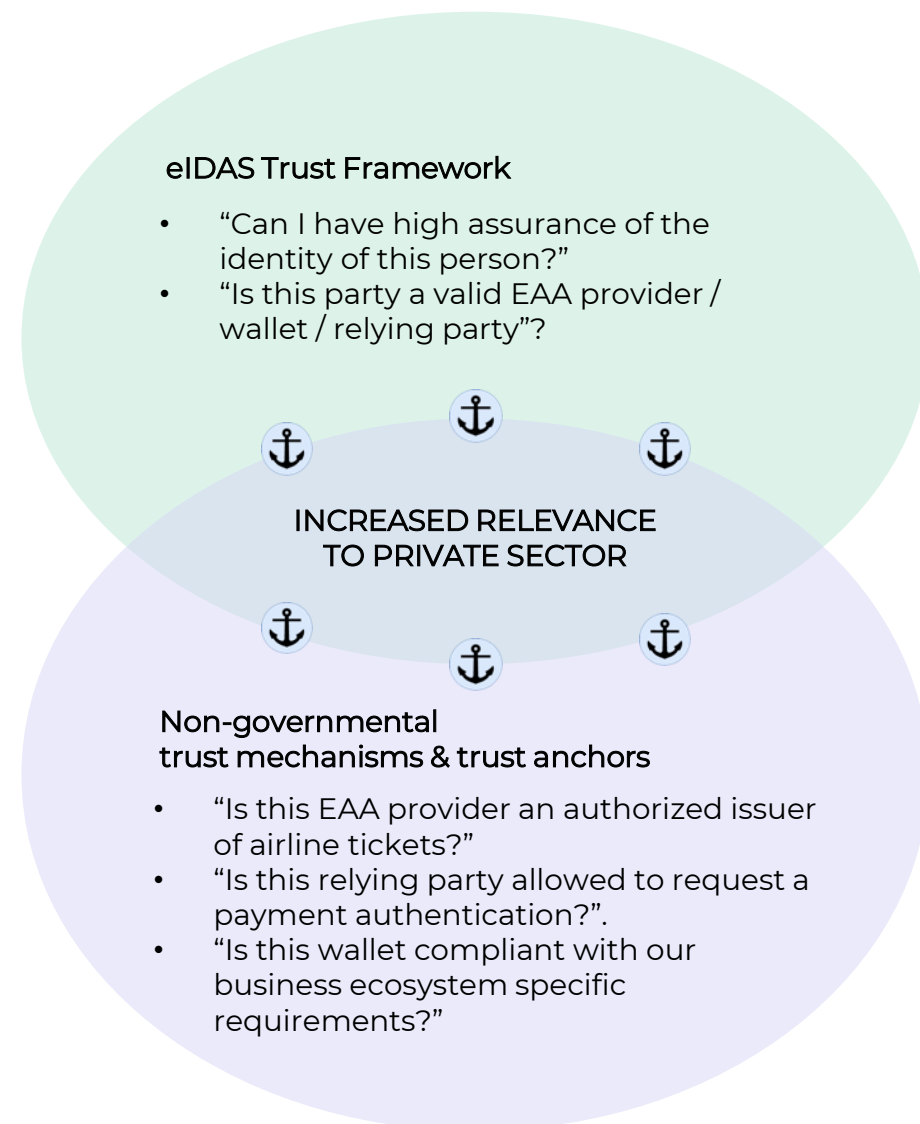
# EWC Trust Model exploration

- EWC arranged exploration sessions around Trust models during spring 2024.
- The purpose of the sessions was to gain more understanding on the technical standards, implementations and private sector needs on trust models
- Topics
  - eIDAS Trust Framework / List of Trusted Lists (LOTL)
  - OpenID Federation (OIDF) specification
  - European Blockchain Services Infrastructure (EBSI) + other DLT trust mechanism
  - Trust models in Travel Industry
  - Trust models in Payment industry
- Exploration work continues by mapping use case ecosystems and identifying gaps and overlaps using the Trust over IP framework.



# Findings

- The eIDAS Trust Framework with List of Trusted Lists and QTSP's provides a great **trust mechanism** for governmental **trust anchors** in public sector use cases and High Assurance electronic identification.
- For usage in the private sector domain, there's a strong need to be able to use existing **trust mechanisms** with non-governmental **trust anchors**
- As eIDAS doesn't govern trust anchors of non-governmental domains, we need a way to work with different **trust mechanisms** that enable these, for example:
  - **EBSI has developed** a robust and flexible trust mechanism with trust anchors, already in use in various use cases, including Supply Chains, Education, Social Security, Digital Product Passports, etc.
  - **OpenID Federation specification** provides an extendable **trust mechanism** supporting different types of **trust anchors**.
- The EUDI ecosystem becomes more relevant to private sector with the ability to use High Assurance eID and public sector attestations, together with non-governmental trust models.



# Each trust model solves use case specific trust on top of the eIDAS trust framework

	PID/EAA Provider	Wallet provider	EUDI Wallet	Wallet User	Relying Party	QTSP	
<b>Registered in LOTL</b> <ul style="list-style-type: none"> <li>• Wallet providers</li> <li>• PID Providers</li> <li>• WRPAC providers</li> <li>• QTSPs</li> </ul>	Valid PID provider	Valid EUDI Wallet provider  Certificate used to sign or seal the wallet unit attestation				Qualified Trust Service Providers (esp. QES provider)	PUBLIC & PRIVATE SECTOR USE CASES
<b>EUDI Trust Model Attestations &amp; certificates issued by providers in LOTL</b>	Wallet relying party access certificate (WRPAC) <ul style="list-style-type: none"> <li>• Issuer identification</li> </ul>		Wallet Unit Attestation <ul style="list-style-type: none"> <li>• Valid Wallet Unit</li> <li>• Component authentication</li> <li>• Binding to Wallet Secure Cryptographic Devices</li> <li>• WUA Revocation information reference</li> </ul>	PID <ul style="list-style-type: none"> <li>• Person identification according to eIDAS High</li> <li>• PID bound to wallet unit</li> </ul>	Wallet relying party access certificate (WRPAC) <ul style="list-style-type: none"> <li>• Relying party identification</li> </ul>		
<b>Non-governmental trust models</b>							
<b>Examples on authorizations provided by additional trust models</b>	Authorized EAA provider for specific attestation types.	Authorized wallet provider in a specific industry ecosystem	Authorized wallet attestations (e.g. 'industry compliant wallet')		Authorized relying party in a specific industry ecosystem		PRIVATE SECTOR USE CASES

Depending on the ecosystem and use case, almost all EUDIW ecosystem roles may need to interface with non-EUDI trust models.

# Summary

- EUDIW ecosystem members should be able to utilize non-governmental trust models in addition to the eIDAS Trust Framework.
- Without a flexible way to include non-governmental trust mechanisms and trust anchors, private sector's adoption interest outside of mandatory use cases will decrease significantly.
- Guidance and harmonization is needed on how to include non-governmental trust models in EUDI wallet interactions.
- Private sector interest fuels the ecosystem, as it increases business potential for wallet providers and other market operators investing in EUDI service creation.

