



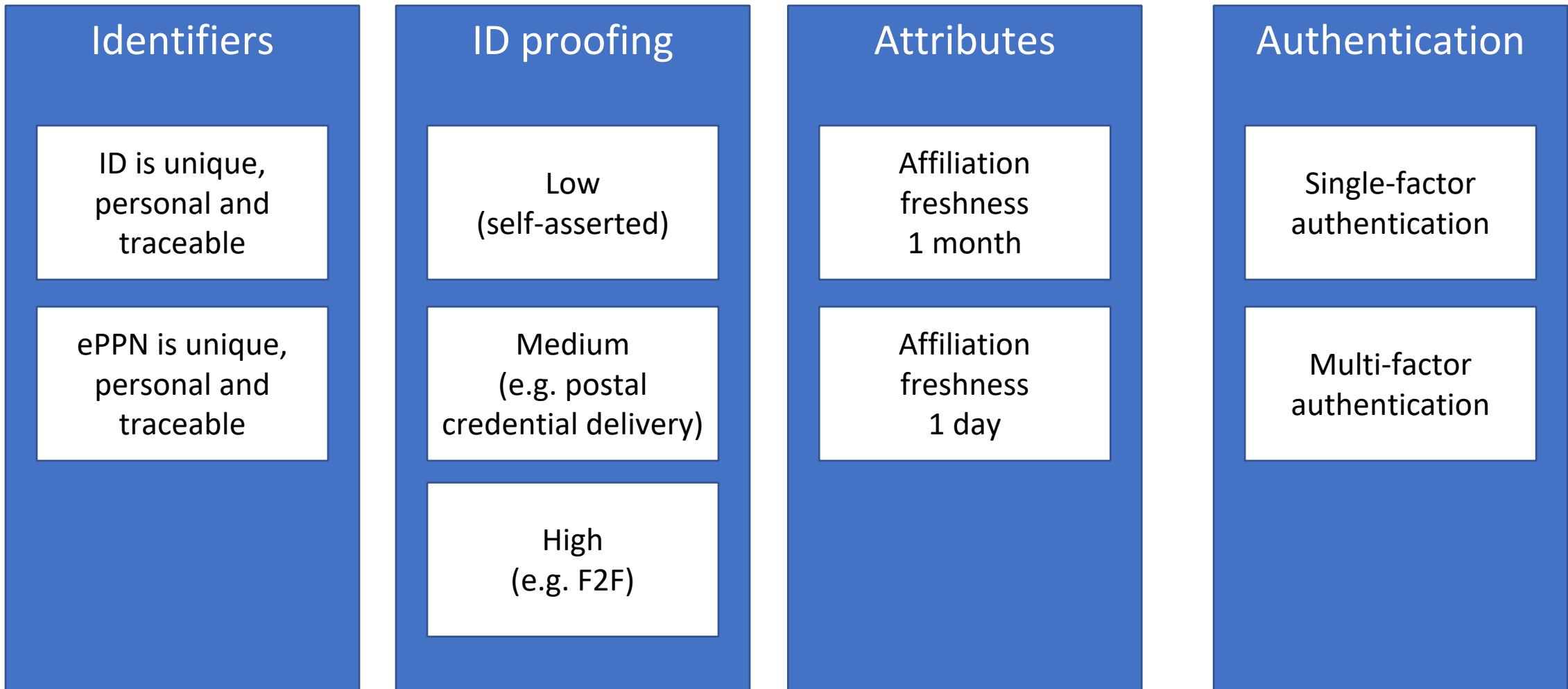
REFEDS Assurance Framework

AARC AHM 11 Apr 2018 in Athens
Mikael Linden, REFEDS assurance wg chair
mikael.linden@csc.fi

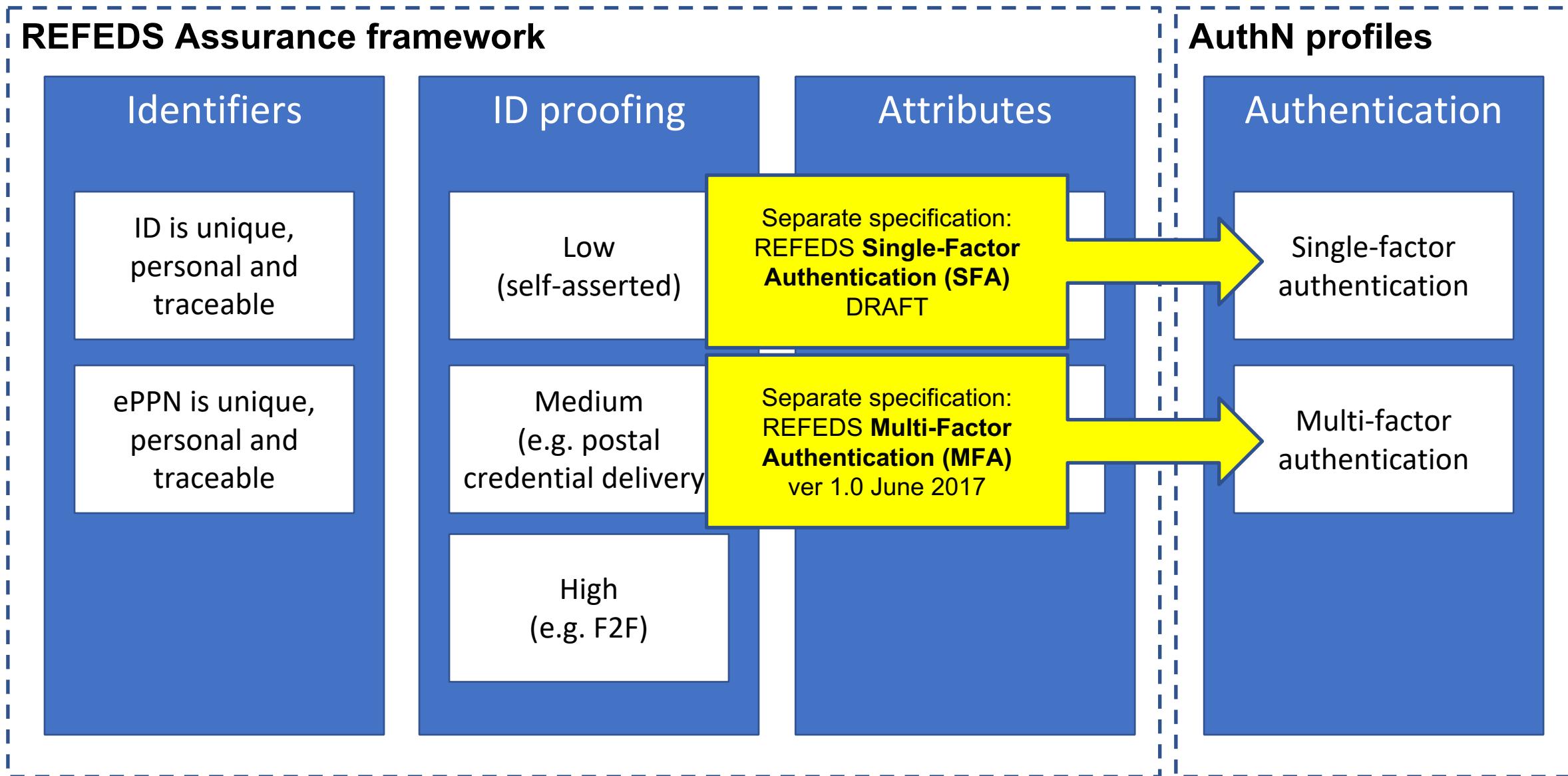
Short history and future

- 11/2015 AARC publishes minimal LoA requirements for low-risk research
- 6/2016 REFEDS establishes the Assurance working group
 - To write a specification to meet the requirements
- 4-6/2017 Public consultation on the 1st draft of the REFEDS Assurance Framework (RAF)
- Going to expose RAF to second public consultation soon
 - Together with REFEDS Single-Factor Authentication (SFA) profile
- Currently having a pilot on RAF/SFA
 - SPs: ELIXIR, BBMRI, CILogon, EGI Check-in
 - IdPs: Chicago, XCEDE, Aalto, CSC
 - Missing more IdP products (SimpleSAMLphp, ADFS, ...)

The big picture of assurance

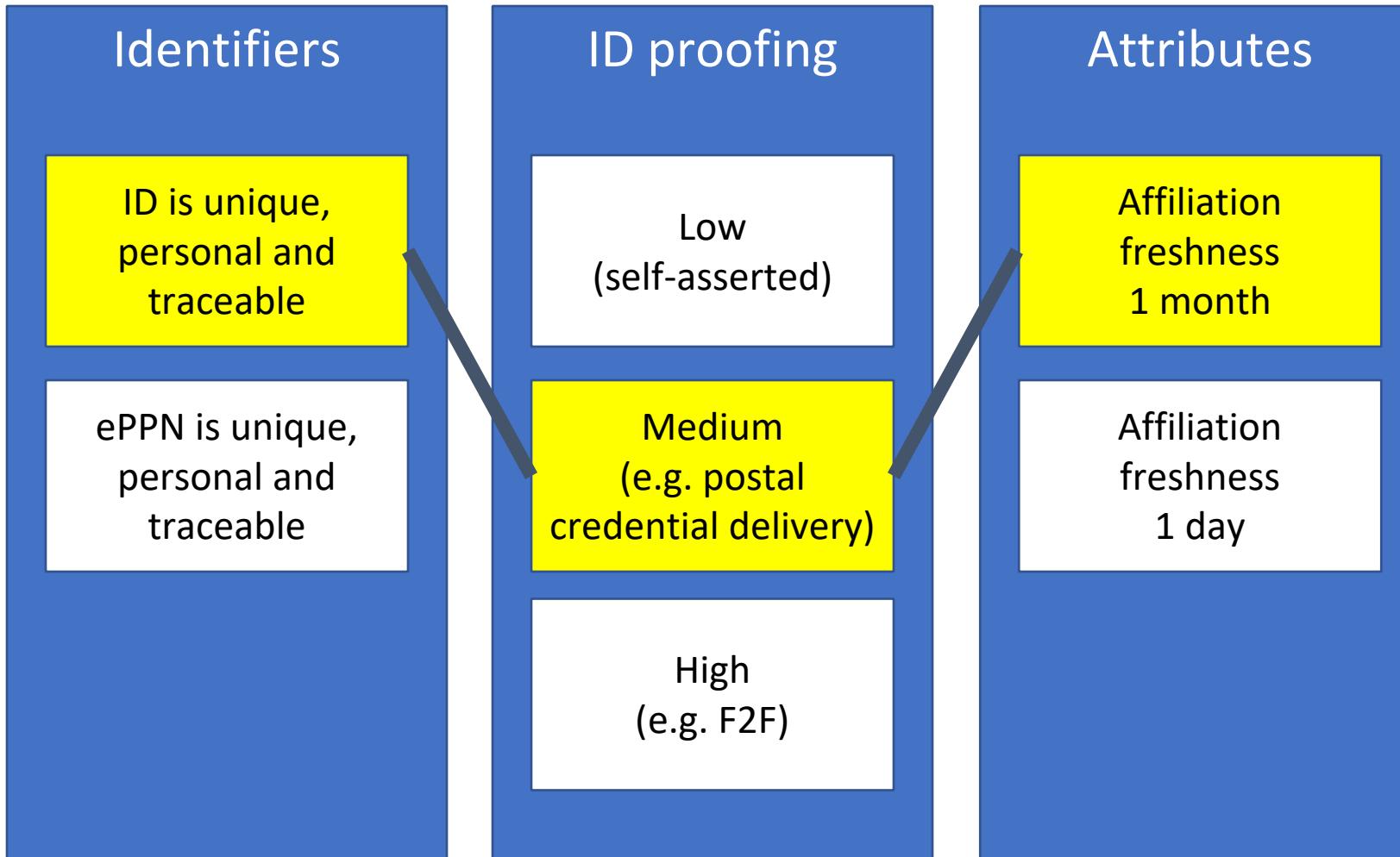


Split of responsibility clarified

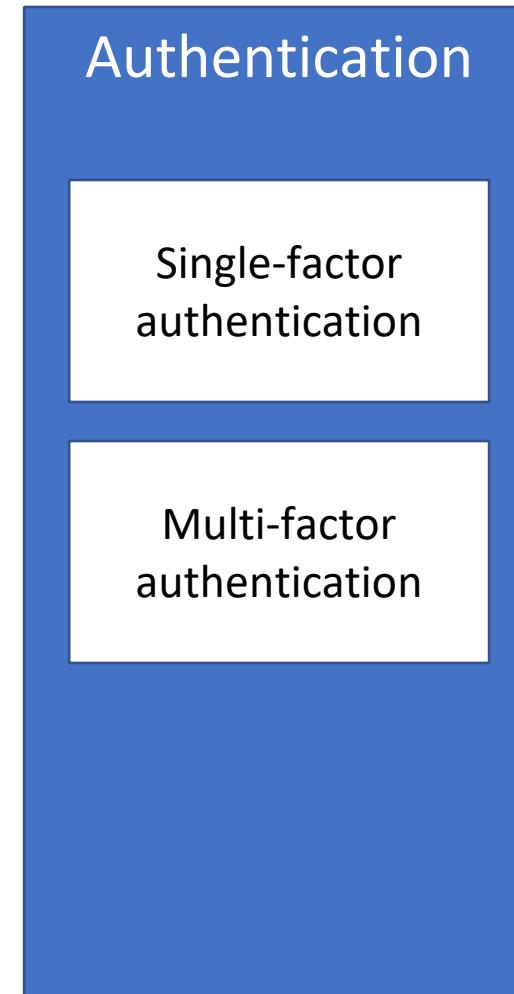


“Cappuccino” for low-risk research use cases

REFEDS Assurance framework

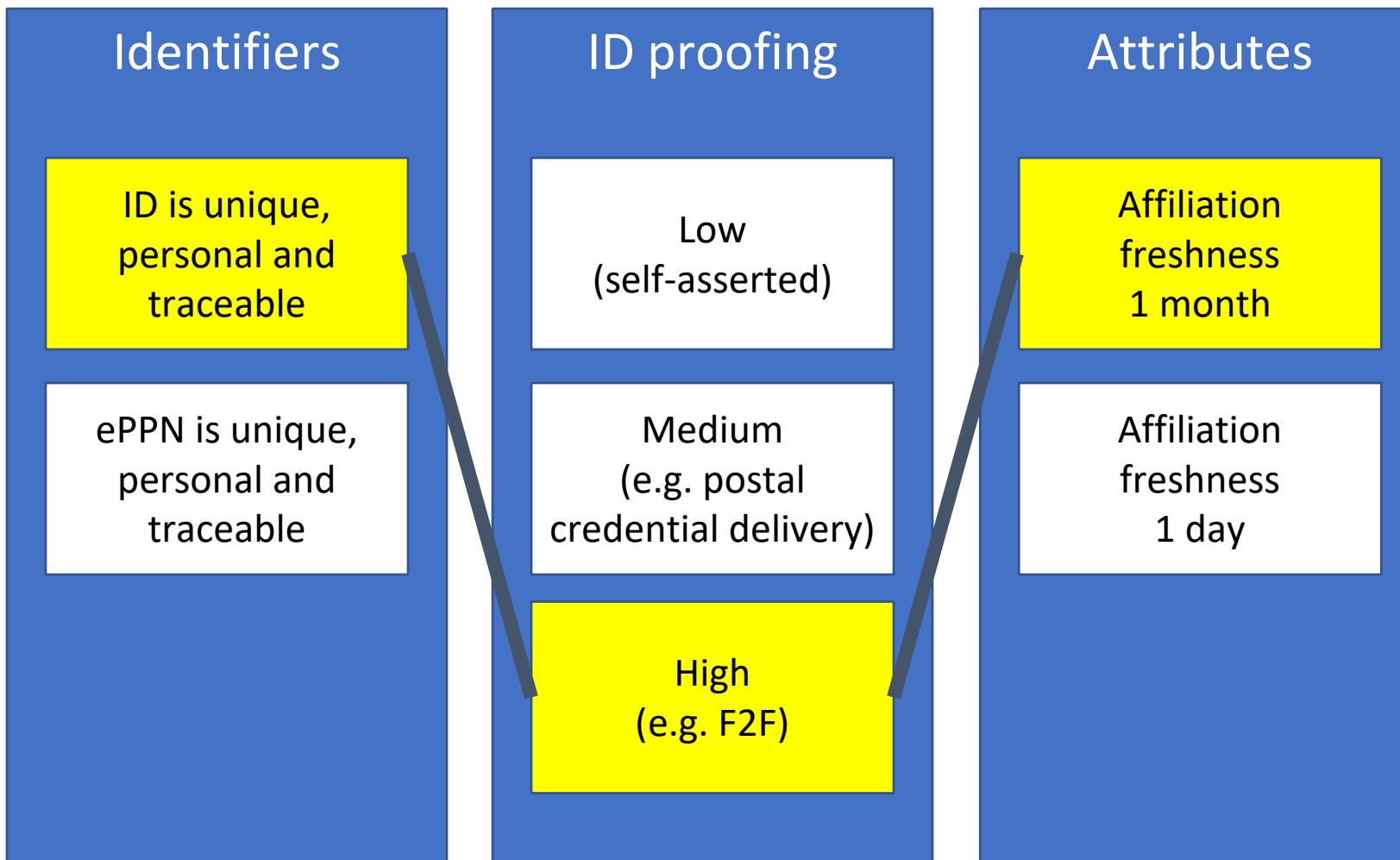


AuthN profiles

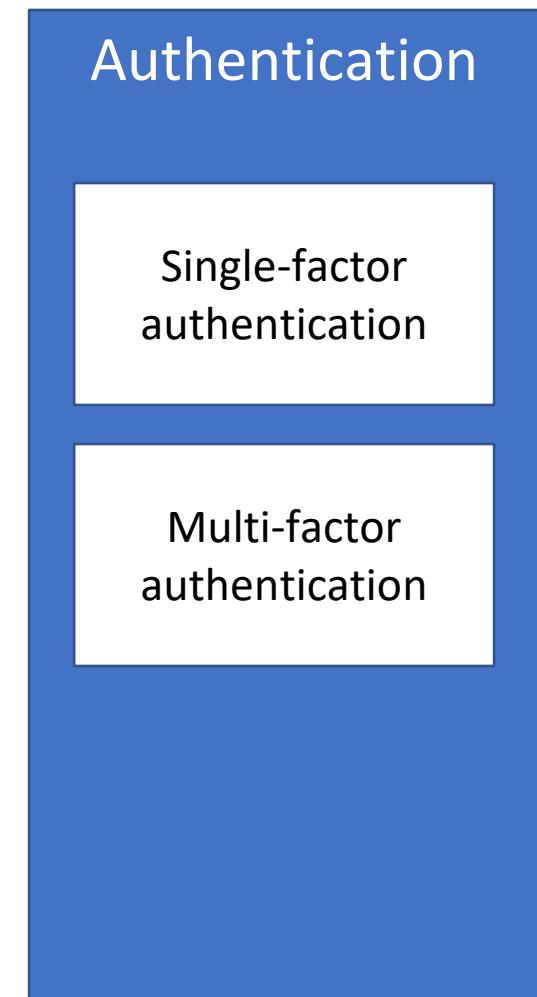


“Espresso” for more demanding use cases

REFEDS Assurance framework



AuthN profiles

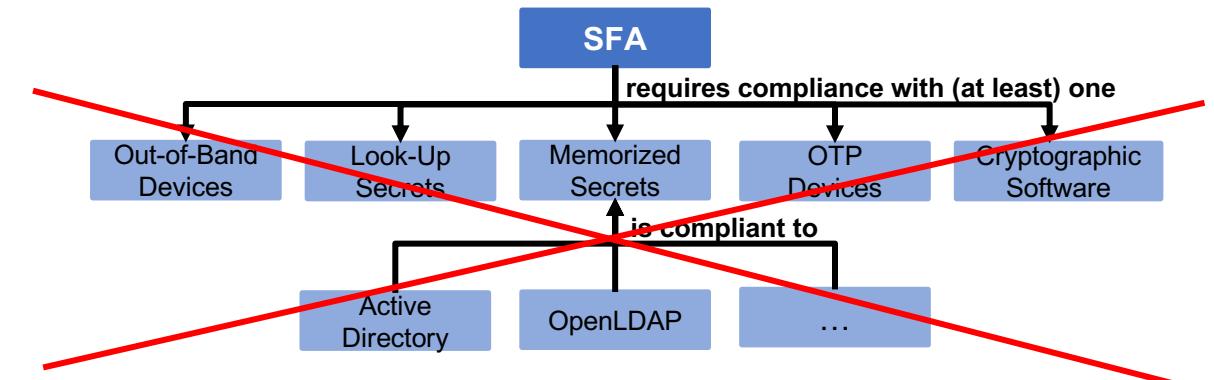


More information

- REFEDS assurance wg: <https://wiki.refeds.org/x/MgDI>
- mikael.linden@csc.fi

REFEDS Single-Factor Authentication Profile

- New approach: SFA v0.2
- Basic structure/hierarchy (Profile–Minimum Requirements–Recipes) dropped
 - **One** generic document covering **all** types of authentication factors
- Risk-based approach (controls) dropped



REFEDS Single-Factor Authentication Profile

- SAML and OIDC authentication context
- Terminology used in this document based on NIST 800-63B
- Defines a security baseline for AuthN using a single factor
- Two main criteria:
 - 1) Requirements for authentication factors
 - Properties of the factor itself:
Minimum secret length, Basis for secret generation
 - Threat protection:
Prevent online guessing, Protect the secret cryptographically
 - 2) Requirements for replacement of a lost authentication factor