



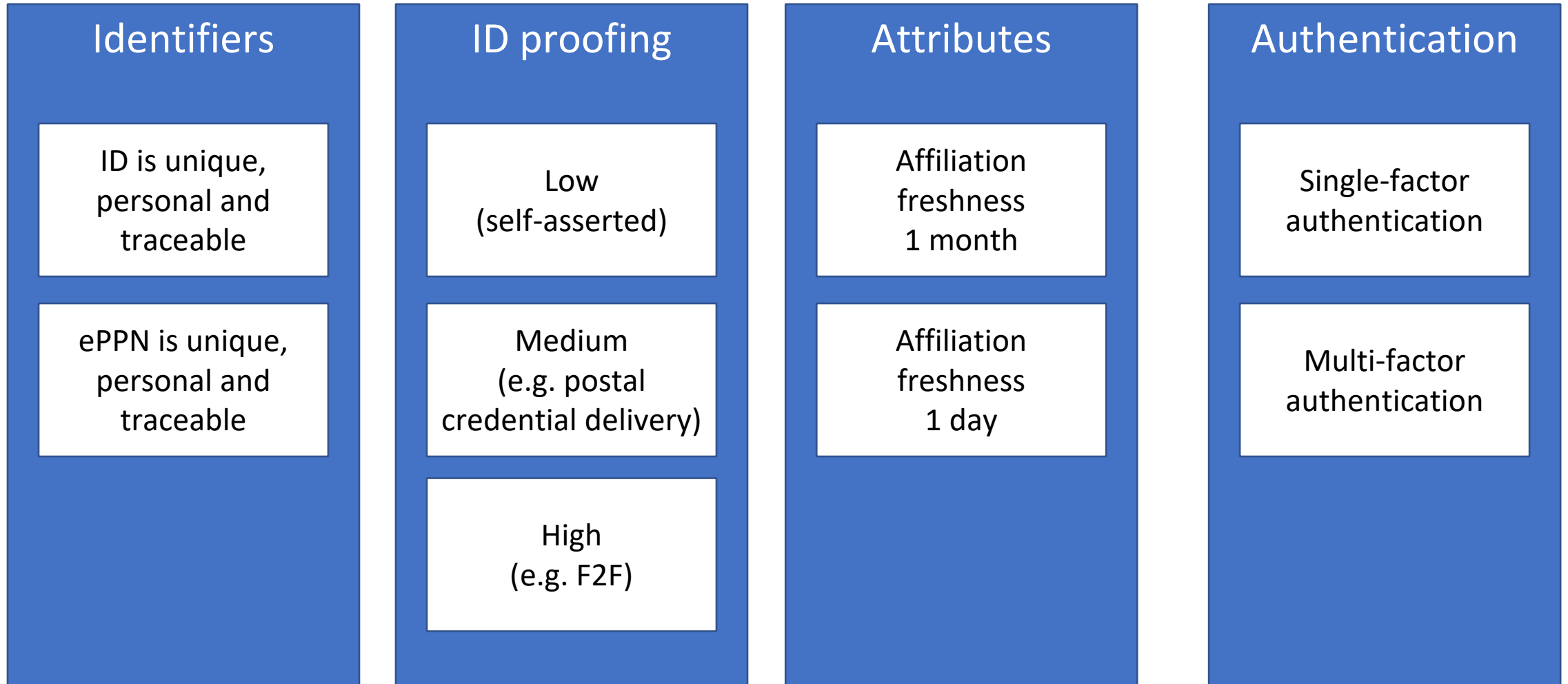
# REFEDS Assurance Framework

AARC AHM 11 Apr 2018 in Athens  
Mikael Linden, REFEDS assurance wg chair  
[mikael.linden@csc.fi](mailto:mikael.linden@csc.fi)

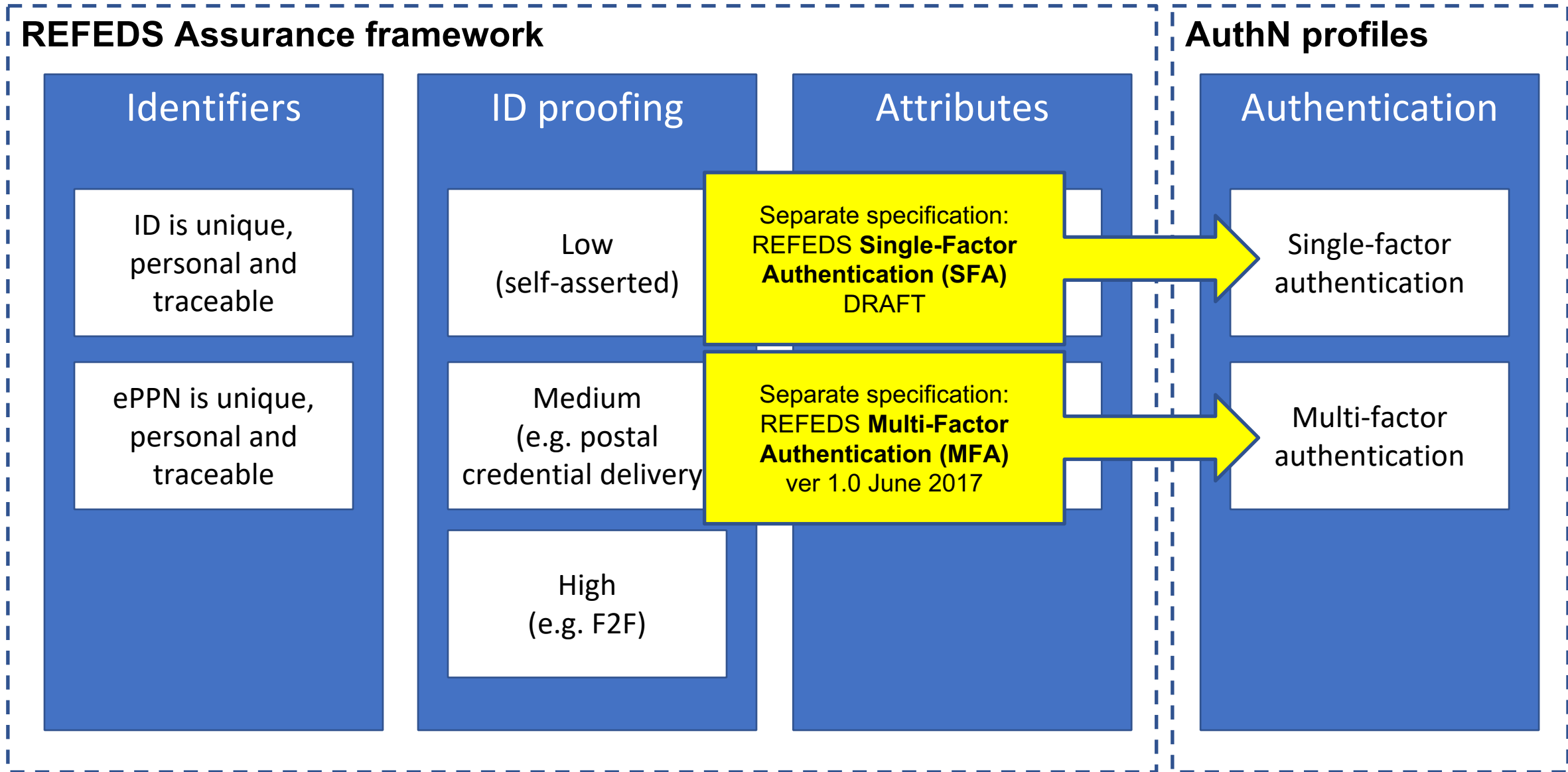
# Short history and future

- 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 1<sup>st</sup> 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

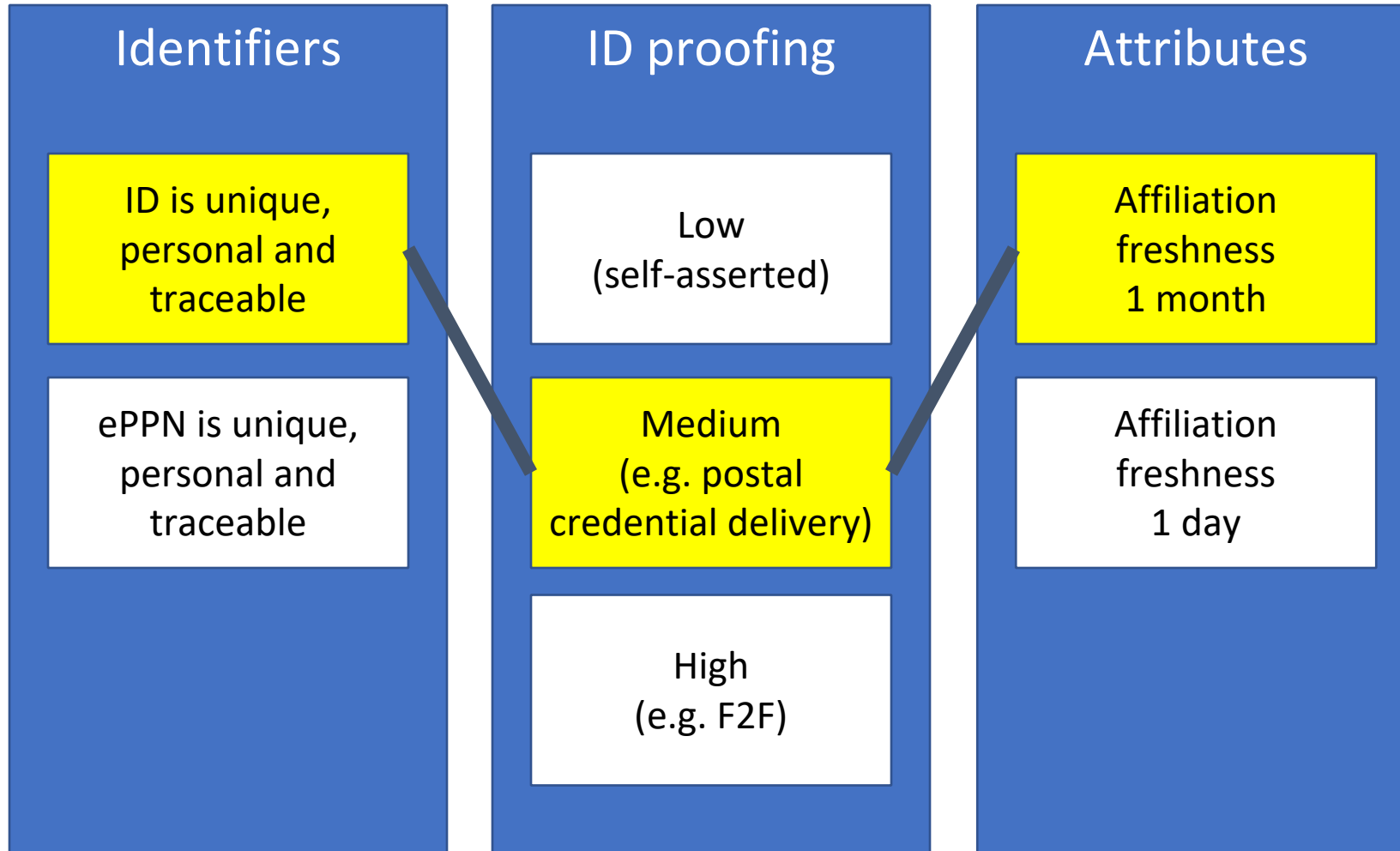


# Split of responsibility clarified

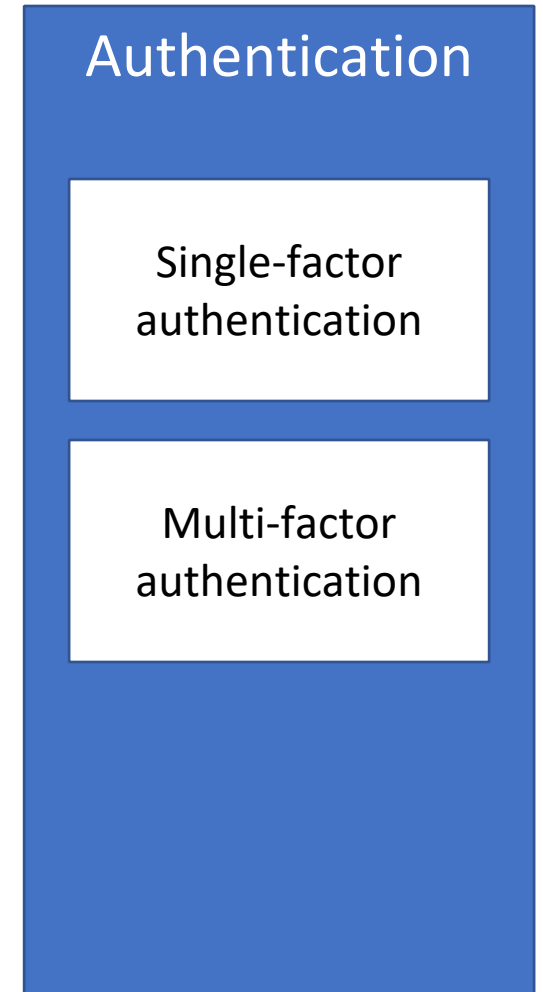


# “Cappuccino” for low-risk research use cases

## REFEDS Assurance framework

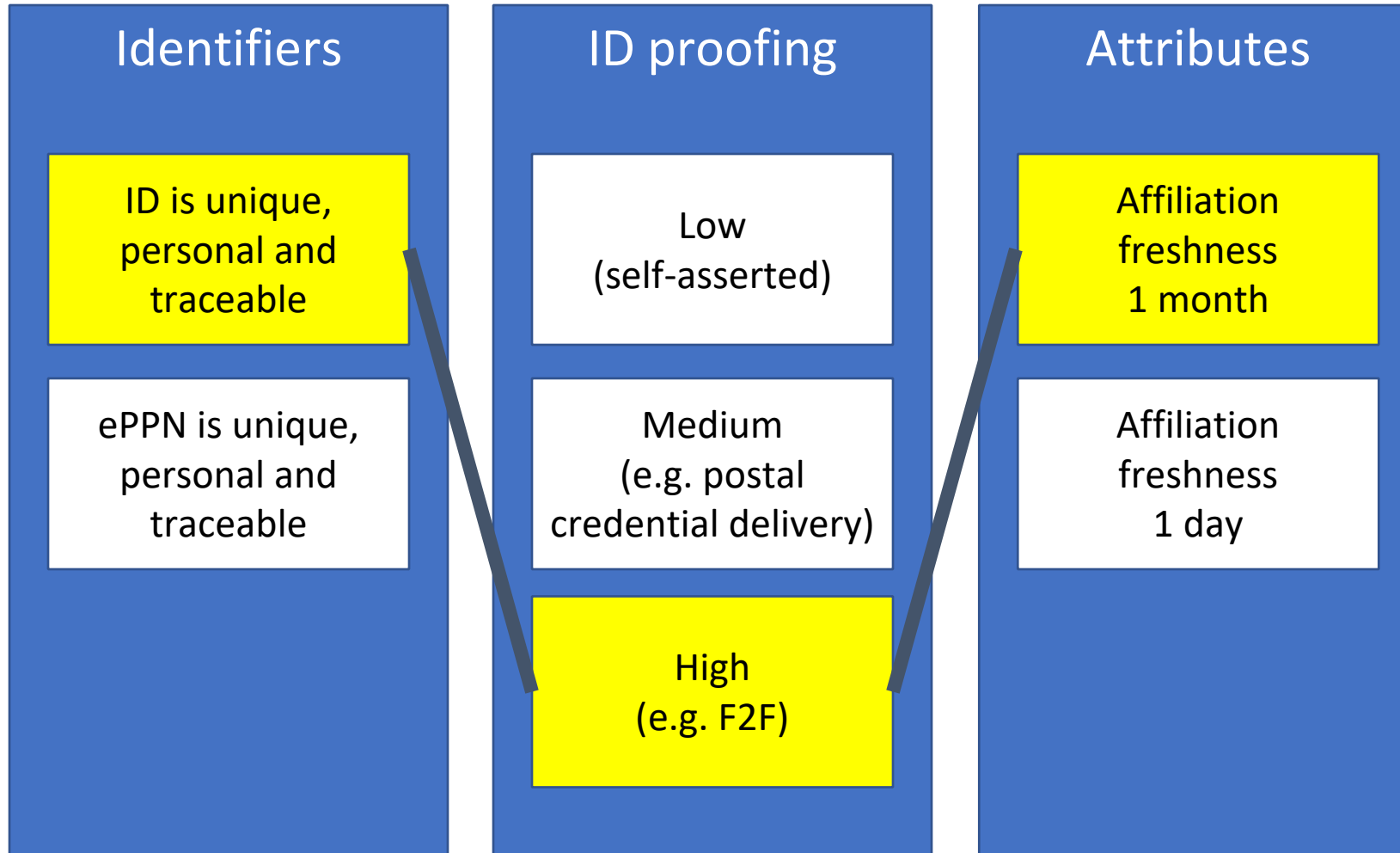


## AuthN profiles

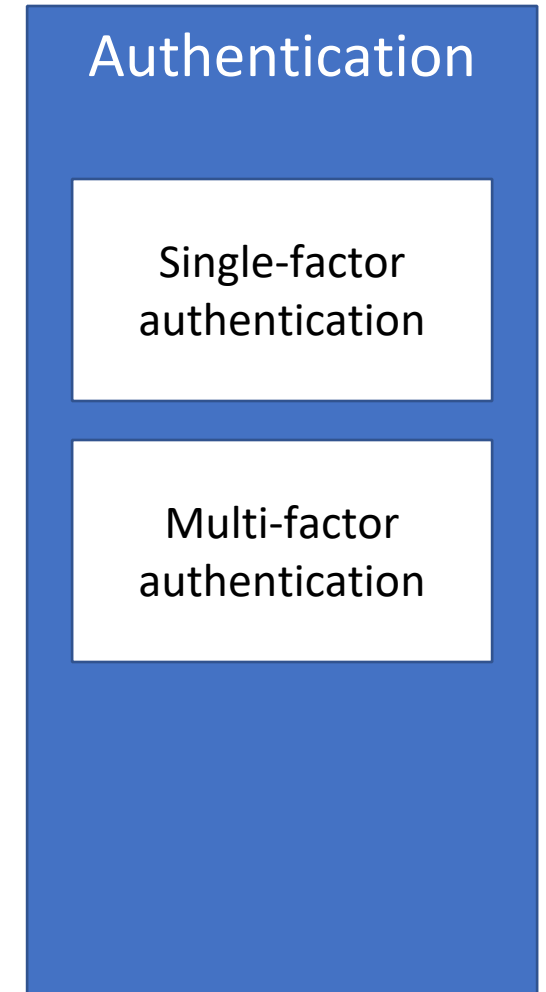


# “Espresso” for more demanding use cases

## REFEDS Assurance framework



## AuthN profiles

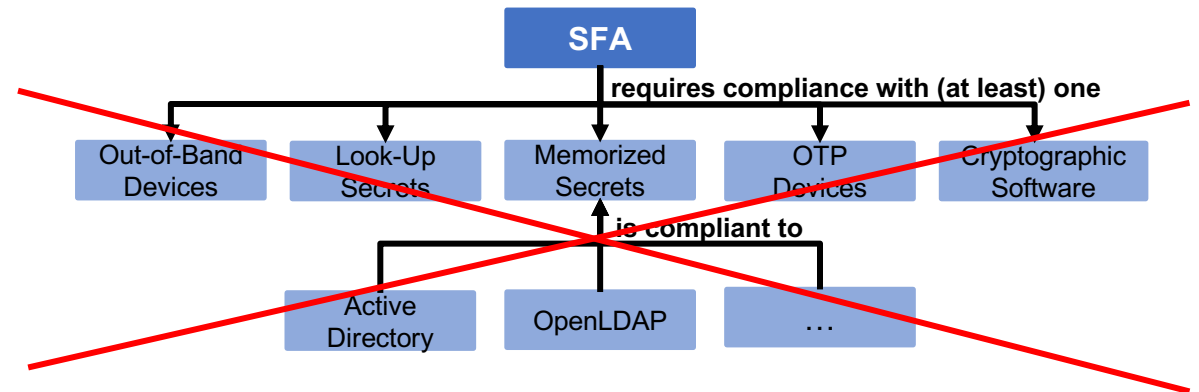


# More information

- 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