



eduGAIN's Future is now

Pål Axelsson

SWAMID, member of eduGAIN Future WG

eduGAIN Townhall, Stockholm, October 2023

www.geant.org

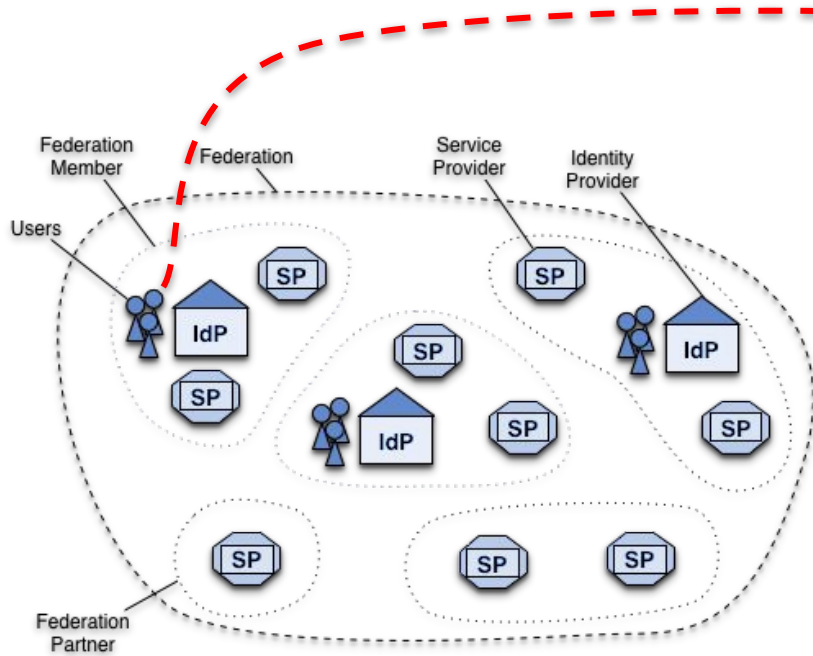
Agenda

- eduGAIN's Overview
- Current model Challenges
- Community Recommendations
- What is going to change
- Some conclusions

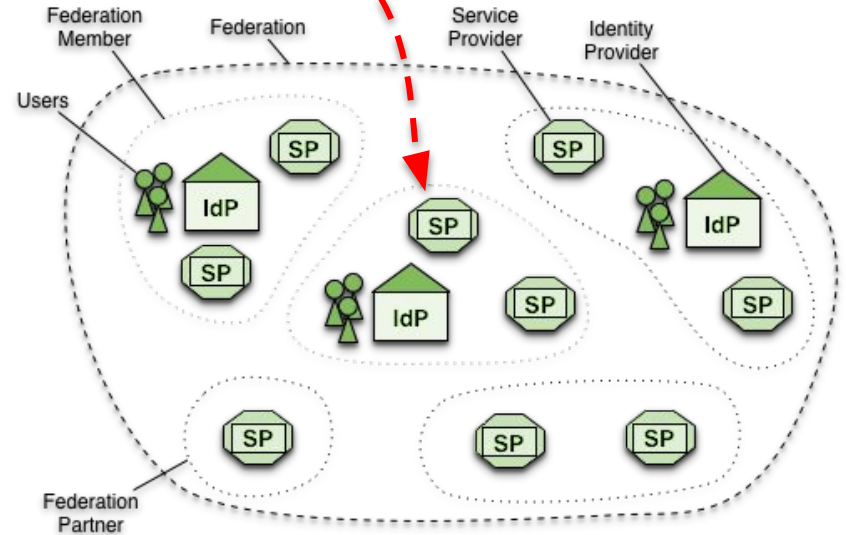


*“eduGAIN **interfederation service** connects identity federations around the world, simplifying **access** to content, services and resources for the **global** research and education community”*

Inter-federated Access

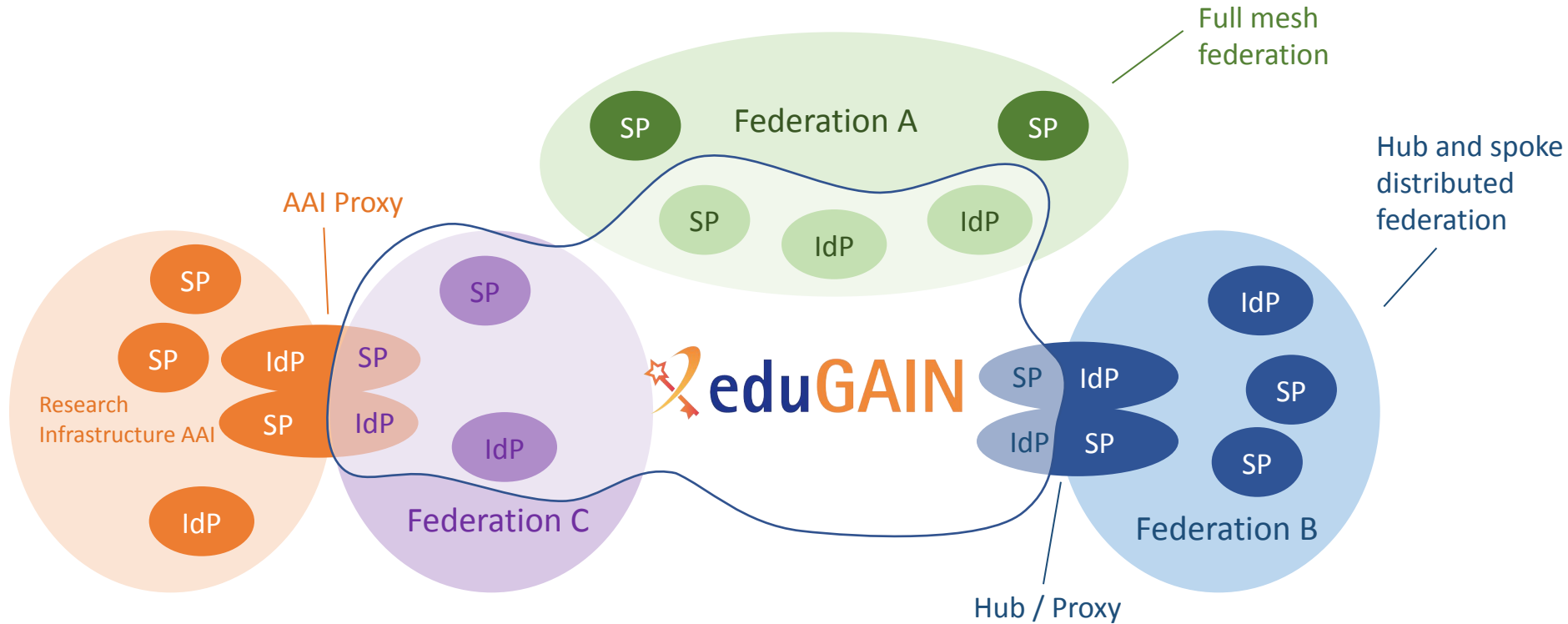


Federation Blue

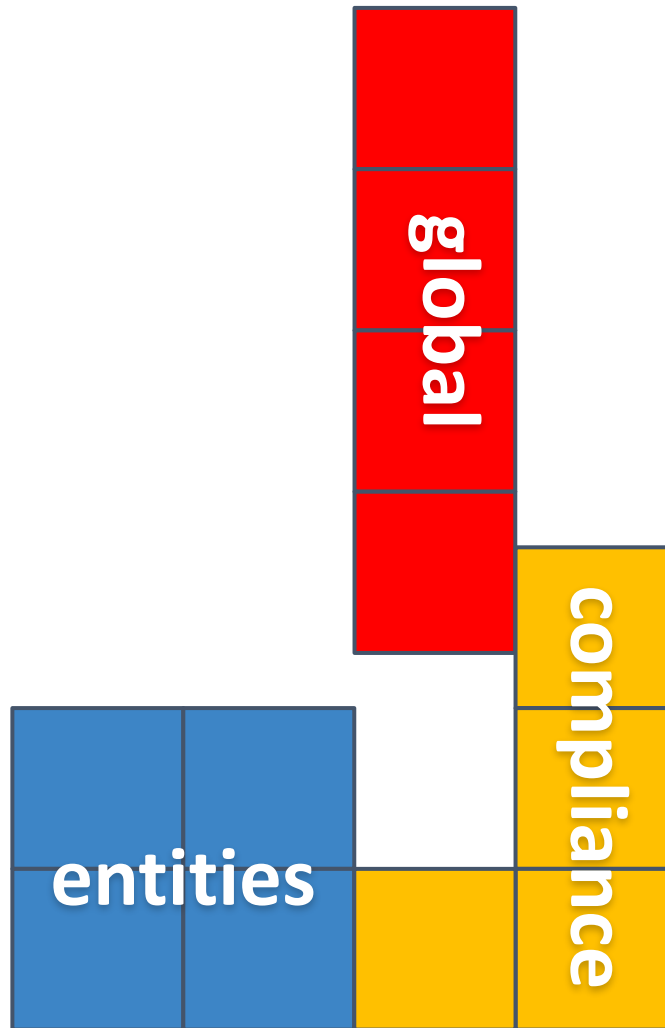


Federation Green

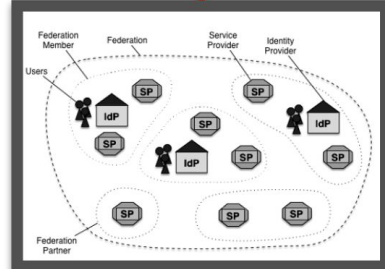
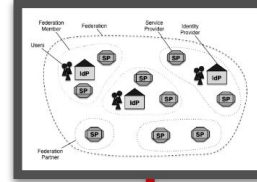
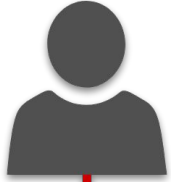
A complex ecosystem



Does it work?



eduGAIN Trust model



Users trust Home Organisation

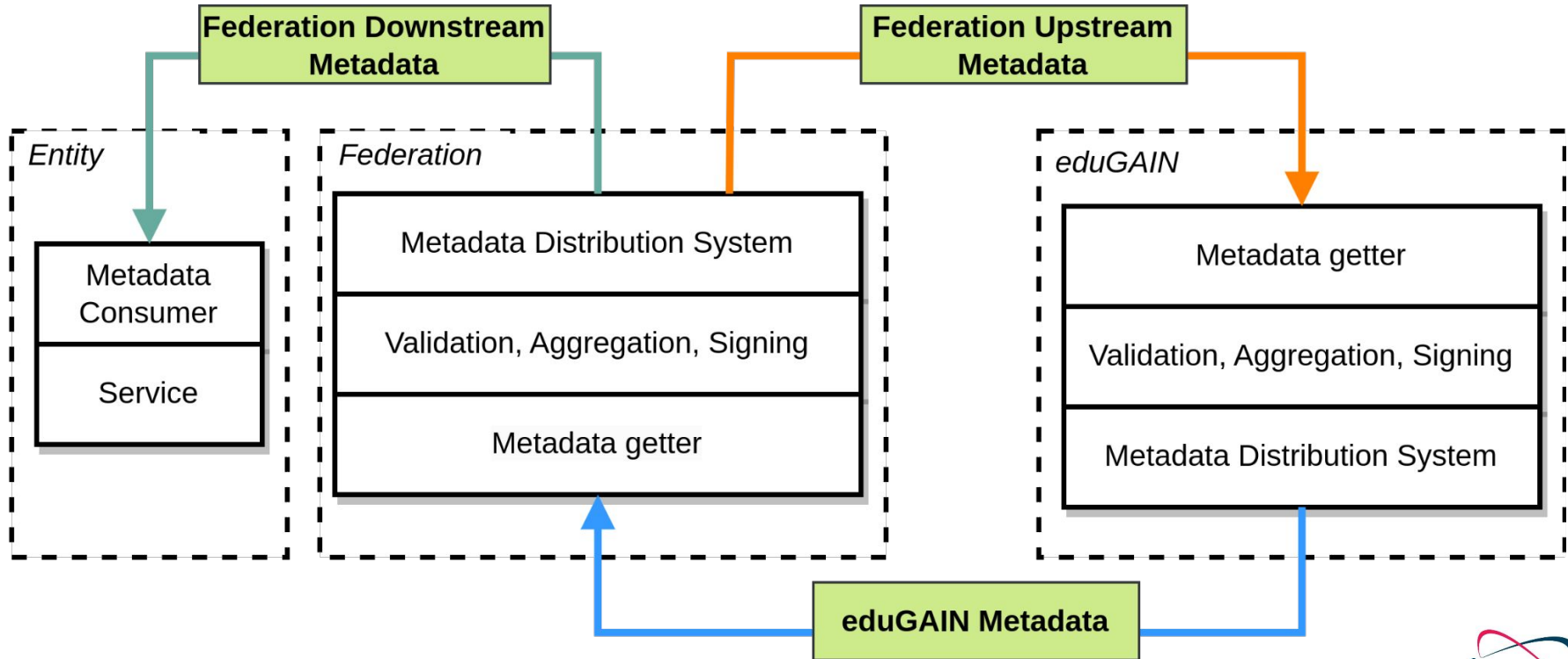
HomeOrg/Providers trust Federations

Federations trust eduGAIN

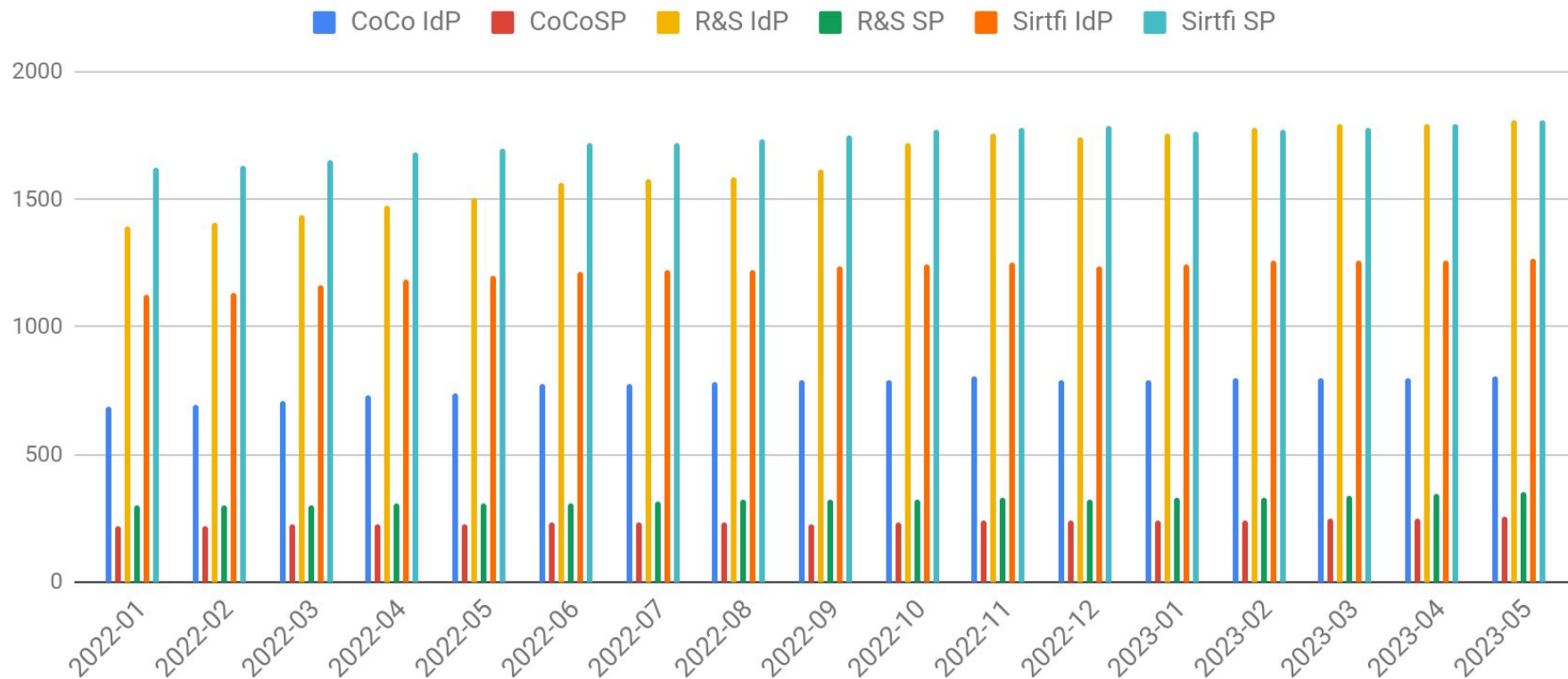
Do users trust eduGAIN?

Do users even know eduGAIN?

eduGAIN Metadata Creation and Distribution



Entities' Compliance to Standards





Complex environment

User expectations

New technologies adoption

Slow governance model

**What could
Possibly go
wrong?**

eduGAIN Futures Working Group



REFEDS

Baseline Expectations



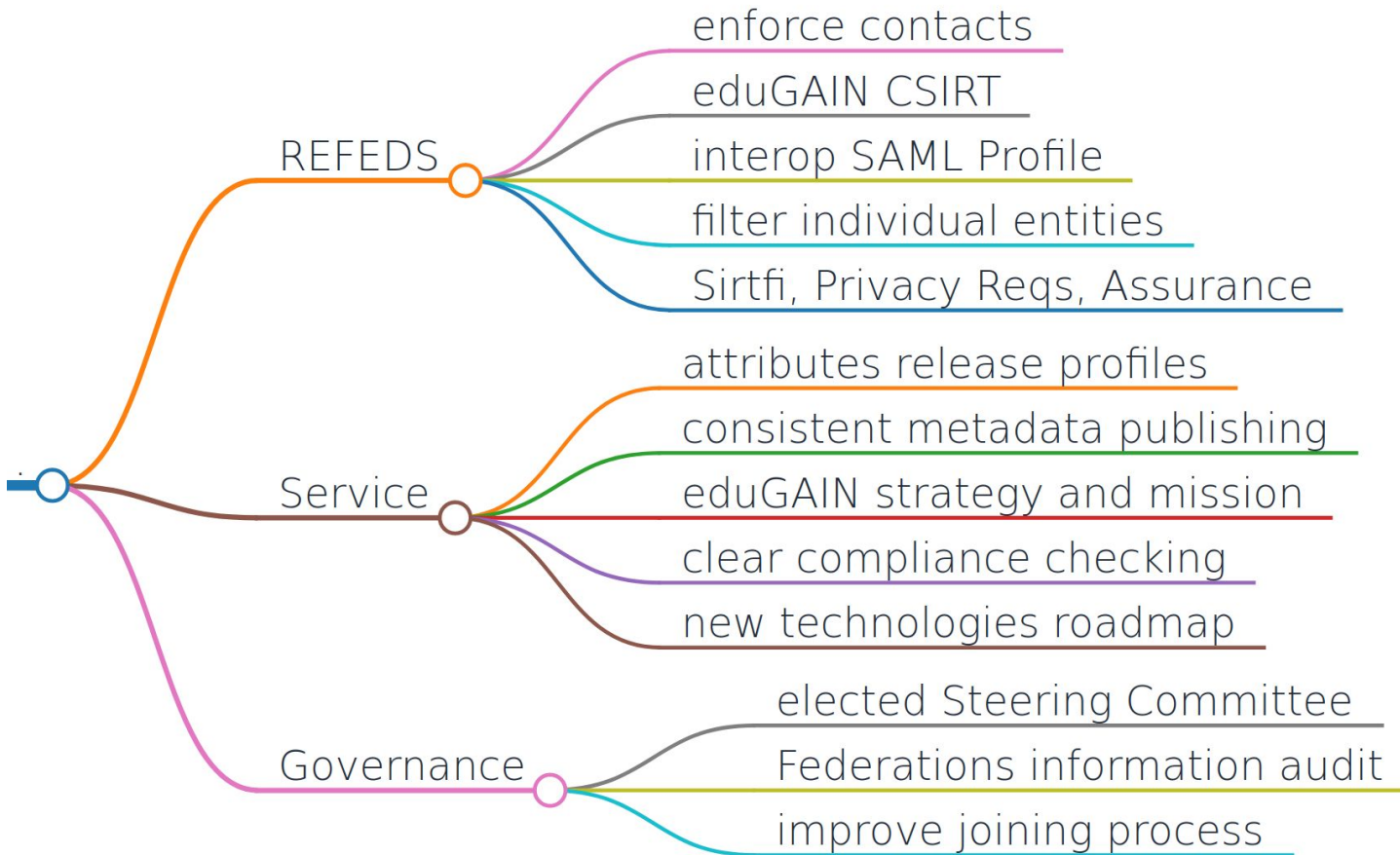
Identify key issues with current eduGAIN service



Review the governance model

eduGAIN Futures WG Problem Statements

01	Complex service experience	<ul style="list-style-type: none">• Almost 9000 entities• Service experience varies wildly
02	Unpredictability	<ul style="list-style-type: none">• Information exchanged between IdP A and SP B?• Hard to rely on eduGAIN without predictable outcome
03	Diverse policies and processes	<ul style="list-style-type: none">• Federations have their own policies and processes• Interaction with eduGAIN/participants is often inconsistent
04	Variable service offerings	<ul style="list-style-type: none">• Differences in funding, staffing and service level• Service offerings varying accordingly
05	Slow response to change	<ul style="list-style-type: none">• Entities and Federation Operators are often slow to adopt changes to security standards and policy requirements
06	Delays in decision making and new Technologies	<ul style="list-style-type: none">• EduGAIN itself is slow in taking decisions and embracing new technologies
07	Unclear mission and branding strategy	<ul style="list-style-type: none">• Mission, role and brand of eduGAIN are unclear, leading to different expectations



Actual changes

Governance

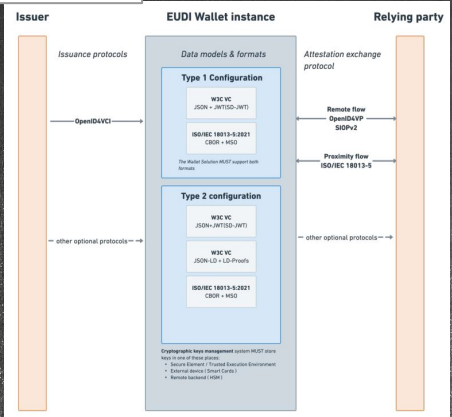
- **Constitution update**
- **eduGAIN Steering Committee**
- eSC Election
- eSC Chair appointment

Policy

- **eduGAIN Interoperable SAML Profile**
- New requirements for Federations and Entities
- eduGAIN Declaration and MRPS updates

Technology

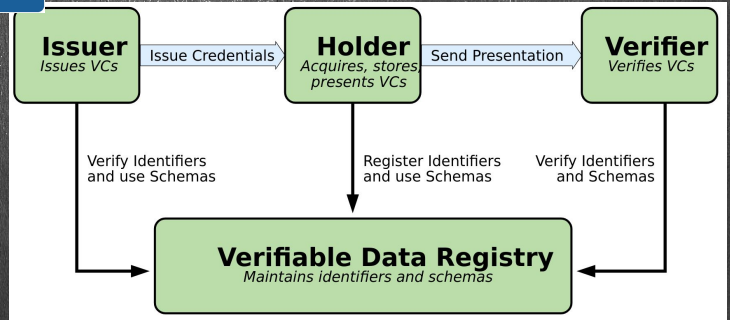
- **Support entity-level metadata updates (filtering)**
- New compliance checking system
- Activate community Pilots/Labs on new technology stacks



```

{
  "iss": "https://rp.umu.se",
  "sub": "https://rp.umu.se",
  "iat": 1516239022,
  "exp": 1516298022,
  "metadata": {
    "openid_relying_party": {
      "application_type": "web",
      "redirect_uris": [
        "https://rp.umu.se/rp/callback"
      ],
      "grant_types": [
        "authorization_code",
        "implicit"
      ],
      "jwks_uri": "https://rp.umu.se/static/jwks.json"
    }
  },
  "jwks": {
    "keys": [
      {
        "kid": "key1",
        "kty": "RSA",
        "use": "sig",
        "e": "AQAB",
        "n": "pnXB0ueEANuug6wez9J..."
      }
    ]
  },
  "authority_hints": [
    "https://Federation.umu.se"
  ]
}
    
```

Additional technology stacks and profiles for eduGAIN?



Conclusions



eduGAIN is a great success



Main challenges

High complexity/Low consistency/Slow governance/Legacy Technology



Change process

Futures WG Recommendation on Governance/Service/Tech



Adoption of new technologies involves new trust model

Thank you

Any questions?

www.geant.org

