



« *networking the networkers* »

FIM4R Meeting

Villigen, 20-21 March 2013

Licia Florio

[florio@terena.org](mailto:florio@terena.org)

# Advancing Federated Technologies for Different Communities

TRANS-EUROPEAN RESEARCH AND EDUCATION NETWORKING ASSOCIATION



# Agenda

- Summary of AAA Study
- Proposals to address e-Research communities
- Discussion 😊



# AA(A) Study



- Led by TERENA
  - ✧ LIBER, UvA, Uni Debrecen
  - ✧ Many external experts
- Final report published in Dec 2012

<http://www.terena.org/publications/files/2012-AAA-Study-report-final.pdf>

[http://cordis.europa.eu/fp7/ict/e-infrastructure/publications\\_en.html](http://cordis.europa.eu/fp7/ict/e-infrastructure/publications_en.html)



# Goals of the Study

Evaluate the feasibility to harmonise existing AAI's to deliver an enhanced infrastructure able to support the variety of scientific data

Provide recommendations to inform a EU strategy to deliver an AA(A)I to "collect, curate, preserve and make available ever-increasing amounts of scientific data"



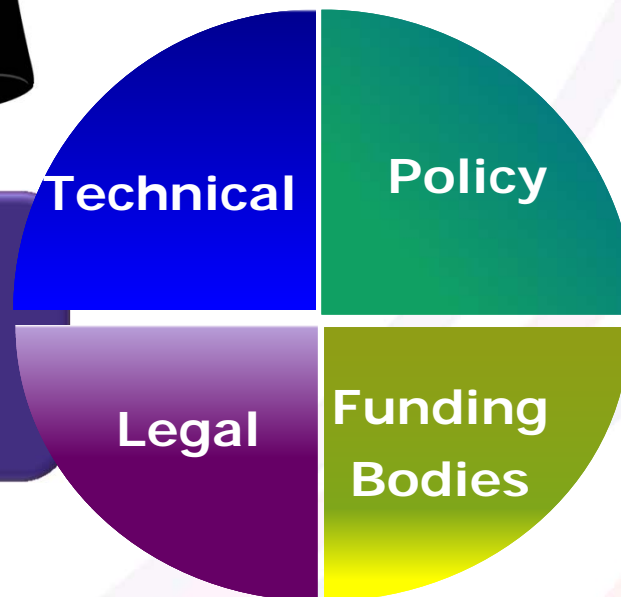
# Approach

Gathered sample of use-cases to understand AAA requirements

Surveyed existing and emerging AAls and identified gaps



Recommendations to overcome identified barriers



See also:

<https://confluence.terena.org/display/aaastudy/AAA+Study+Home+Page>



# Technical Recommendations

The core focus for technical development should be on:

- (i) Lowering the adoption threshold for new users and providers;
- (ii) Enhancing existing infrastructures in line with (emerging) requirements;
- (iii) Supporting development on interoperability of existing AAls and underling technologies;



## Policy and Practice Recommendations

Existing policies and practices do not always meet the needs of ever evolving technologies and more critically, are being interpreted and implemented differently across the EU member states. Harmonisation of trust frameworks and better collaboration among infrastructure providers and communities is needed



# Legal Recommendations

Developments in this area should focus on achieving clarity, consistency and user-friendly tools for implementation. The main law to be considered in this area is the European Data Protection Directive (95/46/EC) and its revision, the draft Data Protection Regulation (published in January 2012).





## Recommendations for Funding Agencies, EC and Member States

Funding should be allocated to develop and enhance the convergence of eInfrastructures. The deployment of an SDI can only be successful if Member States embrace it and provide the necessary funding to ensure that universities, libraries and research/IT/data centres can connect to it.



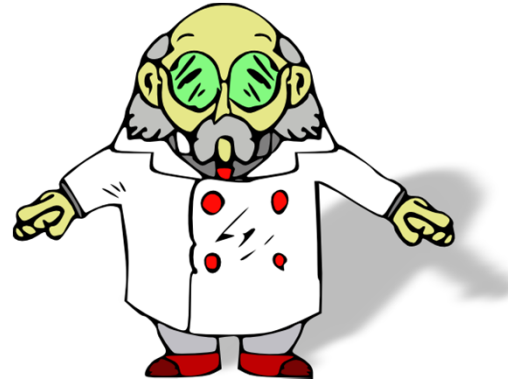
# Key Findings

- Existing AAls satisfy some some use-cases but are heterogeneous in services offered and capabilities;
- Existing AAls have a significant user base;
- There is no single AAl that can currently satisfy all requirements;
- There is consensus in various communities in the necessity of adopting identity management technologies;
- The delivery of a scientific infrastructure should be achieved by federating existing infrastructures
- A scientific infrastructure can only be effective if it is as inclusive and simple to use as possible;



# What's Next?

- EC has interest in the Research Data Alliance:
  - ✧ Kick off meeting 18 March
  - ✧ <https://ec.europa.eu/digital-agenda/en/content/consultation-research-data-infrastructures-framework-action>
  
- EC has launched a Consultation on Research Data Infrastructures
  - ✧ The study is one the input for this consultation
  - ✧ <https://ec.europa.eu/digital-agenda/en/content/consultation-research-data-infrastructures-framework-action>



# Addressing e-Research requirements

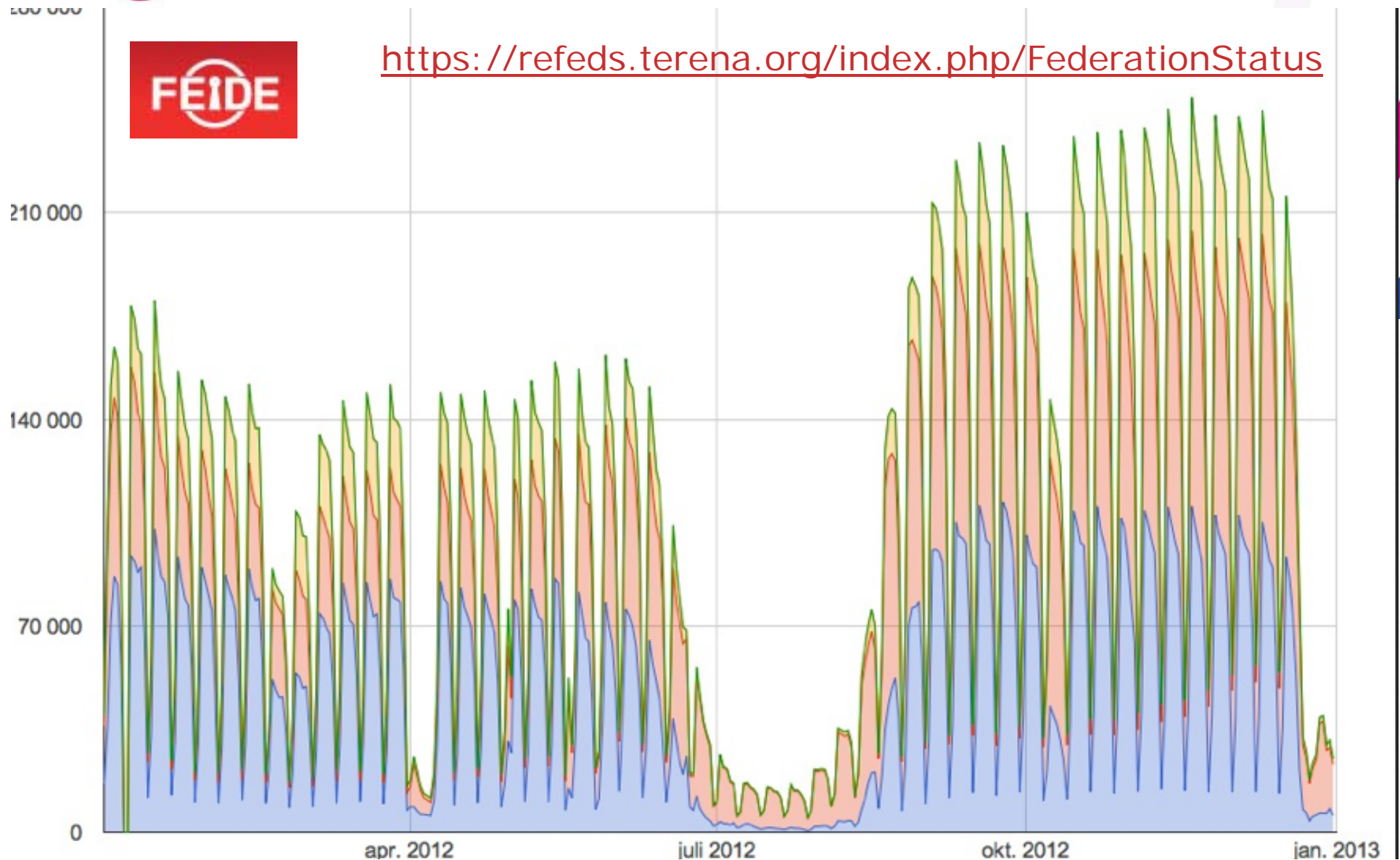




# Federations Do Work



<https://refeds.terena.org/index.php/FederationStatus>





**BUT..**



Despite their wide deployment, e-Researchers cannot  
widely benefit from ID Feds



# FIM Paper

- FIM Paper highlighted some of the issues that hinder the usage of federated access in the e-Research community:
  - ✧ Contains use-cases
  - ✧ Present common requirements
  
- *There is common consensus to work towards increased use of Federated Identity Management within the eScience communities:*
  - ✧ However there are a number of use-cases that are not well (or at all) supported by the ID Feds





# A Roadmap for collaboration



➤ REFEDS/eduGAIN produced a document to address FIM4R issues:

- ✧ Provides an initial list of prioritised requirements (thanks also to Bob Jones & co.)
- ✧ Addresses some perceived issues
- ✧ Presents proposals to solve some of the challenges

<http://indico.psi.ch/materialDisplay.py?contribId=14&sessionId=3&materialId=paper&confId=2230>





# Approach

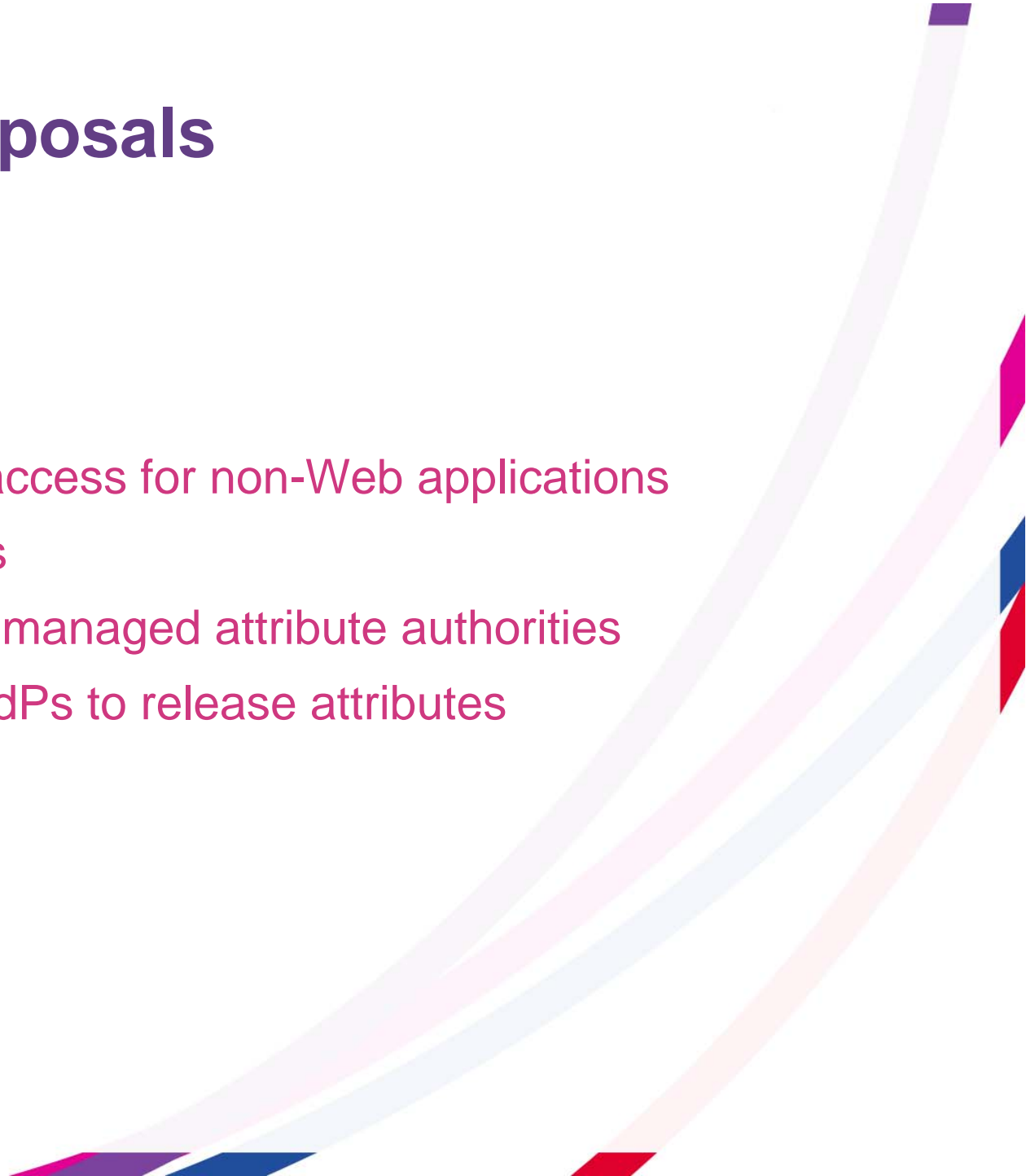
- The roadmap should be a joint work ID Fed and e-Researchers:
  - ✧ Identify key projects within the e-research community that REFEDS/GÉANT can liaise with
- Funding:
  - ✧ eduGAIN and GN3plus have dedicated budget to carry out some work and do some pilots (see Ann Harding's talk)
  - ✧ REFEDS can offer a limited budget
  - ✧ Participating e-Research projects may use some of their funding ?



# The Proposals

## ➤ My selection:

- ✧ Federated access for non-Web applications
- ✧ Guests IdPs
- ✧ Community managed attribute authorities
- ✧ Motivating IdPs to release attributes





# Non-Web Applications

## ➤ Proposal:

- ✧ Revisit use-cases
- ✧ Looking particularly at OAuth, SAML ECP and possibly OpenID Connect, Abfab (Moonshot)
  - › Moonshot pilot to start soon
- ✧ Analyse in more details the technologies listed above and provide a summary about their strengths and challenges. Small pilots could also be identified.

## ➤ Who: most of the work can take place under GN3plus:

- ✧ But a pilot should be tested by the FIM as well



## Guests IdPs

- Controversial topic
- Proposal:
  - ✧ Can we create a discussion group that involves e-Research projects, ID Feds and specific GN3plus groups to define the use-cases?
- Who: ?



# Attribute Authorities

- No real examples of attribute authorities managed by external communities supported by ID Feds:
  - ✧ ELIXIR EGA AAI pilot
  - ✧ Maybe DARIAH?
- Proposal:
  - ✧ Identify possible models to use external attributes providers
  - ✧ Select some models and test them
- Who:
  - ✧ Some work can happen under Gn3plus, but it how do we ensure the FIM involvement?



# Motivating IdPs to release attributes

- The Code of Conduct should help improve things:
  - ✧ There are also some pilot see Mikael Linden's talk
- Testing "Research & Scholarship Entity Attributes":
  - ✧ Categorise services
  - ✧ IdPs can release pre-defined set of attributes that are listed in a specific category.
  - ✧ More experience is needed



## Next Steps

- Feedback on the proposals (and the document)
  - ✧ Should we look at different pilots?
- REFEDS/Gn3plus will start to work on these topics but:
  - ✧ How do we ensure a real collaboration between ID Feds and e-Researchers?
  - ✧ How do we monitor progresses?
- Getting your feedback and some actions would make this a very fruitful event