AARC Authentication and Authorisation for Research and Collaboration

AARC

Christos Kanellopoulos
AARC Architecture WP Leader
GRNET

Open Day Event: Towards the European Open Science Cloud

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AARC Facts

Authentication and Authorisation for Research and Collaboration

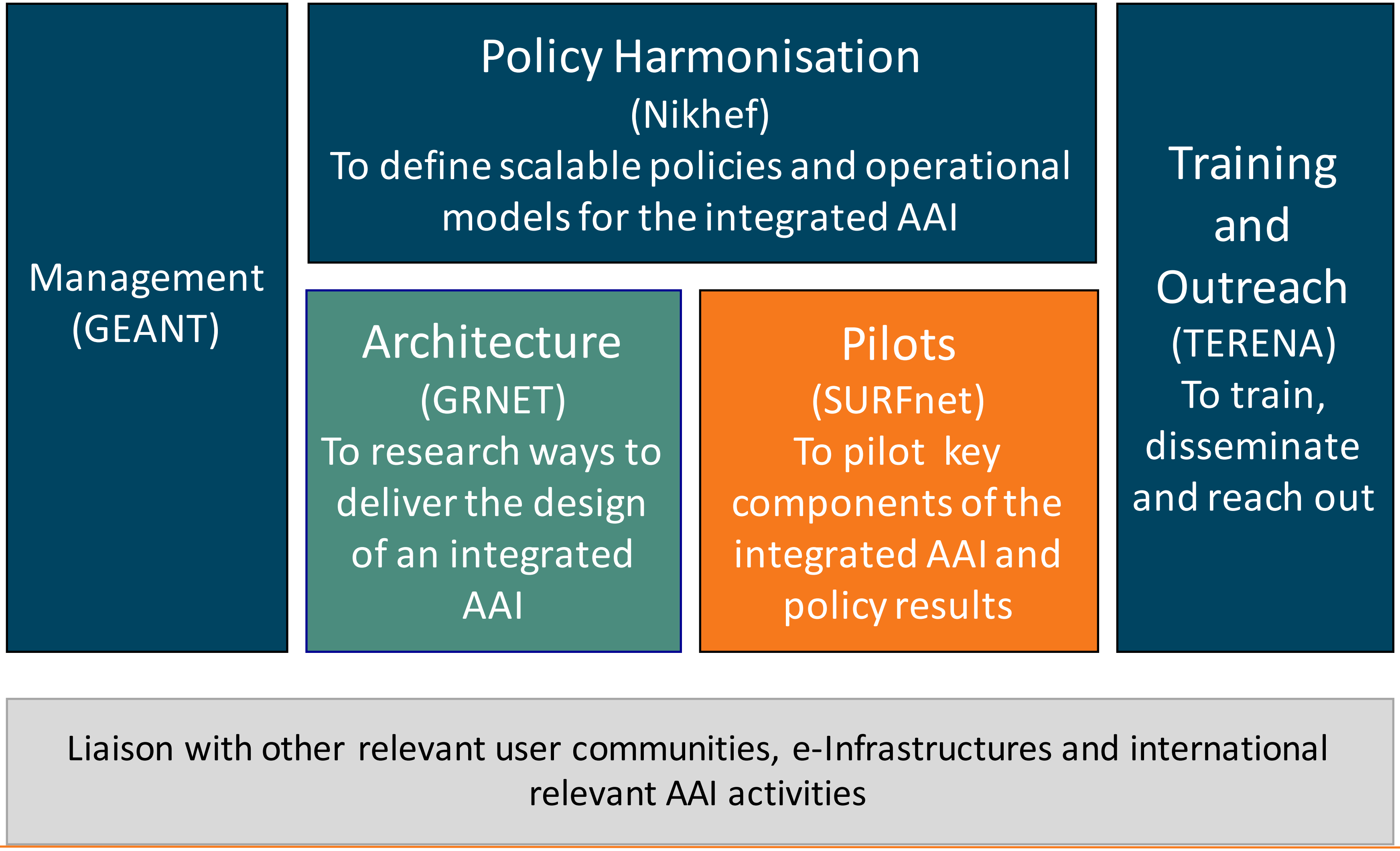
- Two-year EC-funded project
- 20 partners
  - NRENs, e-Infrastructure providers and Libraries as equal partners
- About 3M euro budget
- Starting date 1st May, 2015
- https://aarc-project.eu/

GÉANT
CERN
CESNET
CSC
DAASI International
DFN Deutsches Forschungsnetz
egi
Consortium GARR
grnet
Jisc
JÜLICH FORSCHUNGSZENTRUM
KIT Karlsruhe Institute of Technology
LIBER LIBER
MORAVIAN LIBRARY
NIKHEF
PSNC
RENATER
Science & Technology Facilities Council
SURF NET
SURF SARA

What AARC does

- Help research communities to use federated access
- Address some of the FIM4R requirements
- Deliver a blueprint architecture to enable users to access services operated by different e-Infrastructures
- Prepare documentation and training on AARC and REFEDS results, key aspect of federated access and eduGAIN etc

AARC Structure



Management (GEANT)

Policy Harmonisation (Nikhef)
To define scalable policies and operational models for the integrated AAI

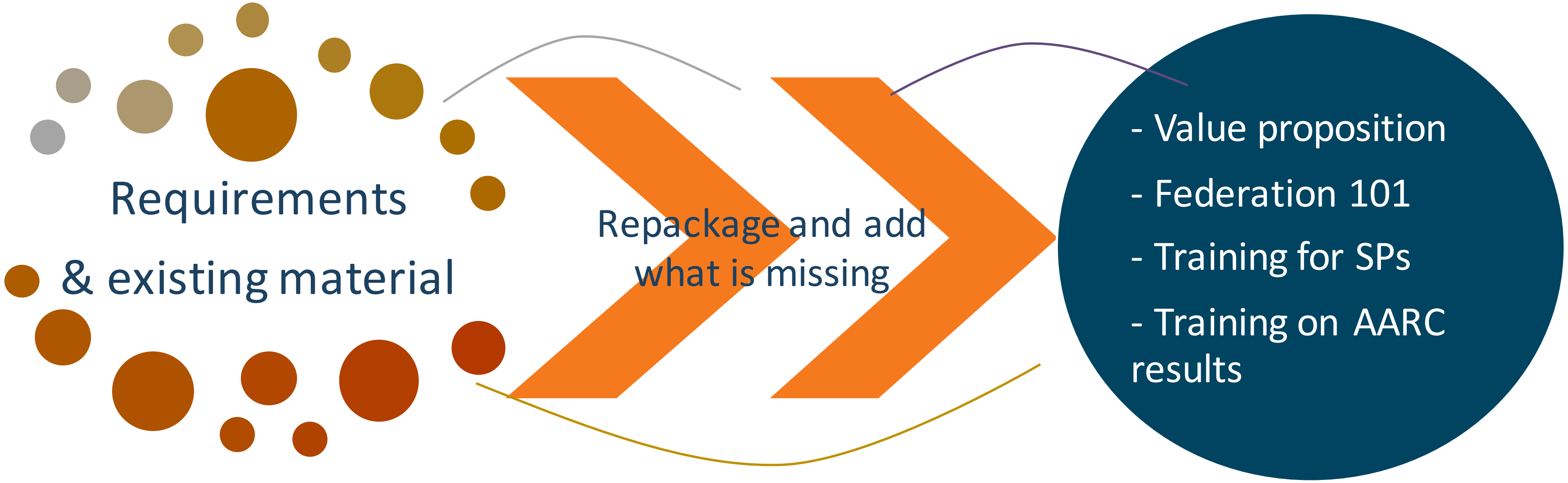
Architecture (GRNET)
To research ways to deliver the design of an integrated AAI

Pilots (SURFnet)
To pilot key components of the integrated AAI and policy results

Training and Outreach (TERENA)
To train, disseminate and reach out

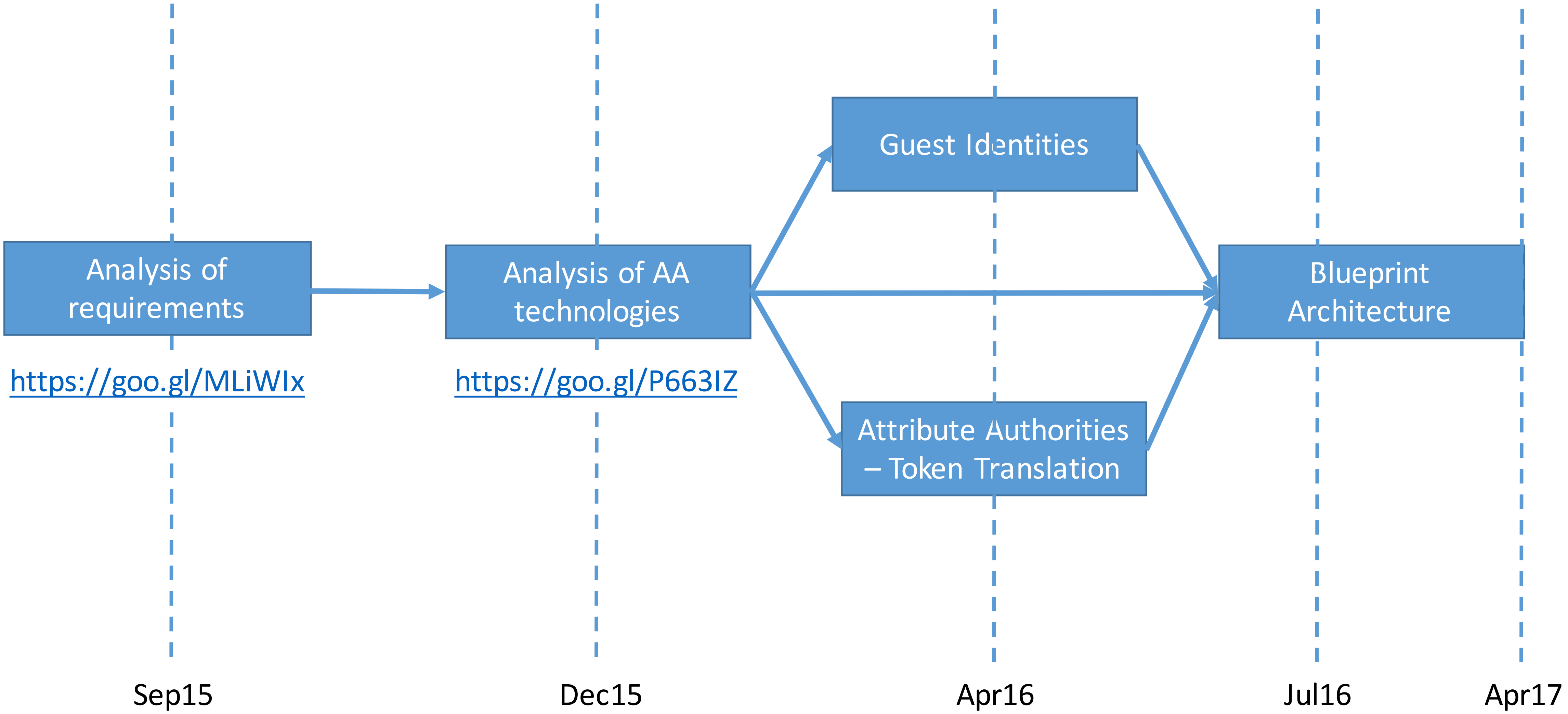
Liaison with other relevant user communities, e-Infrastructures and international relevant AAI activities

Training and Outreach

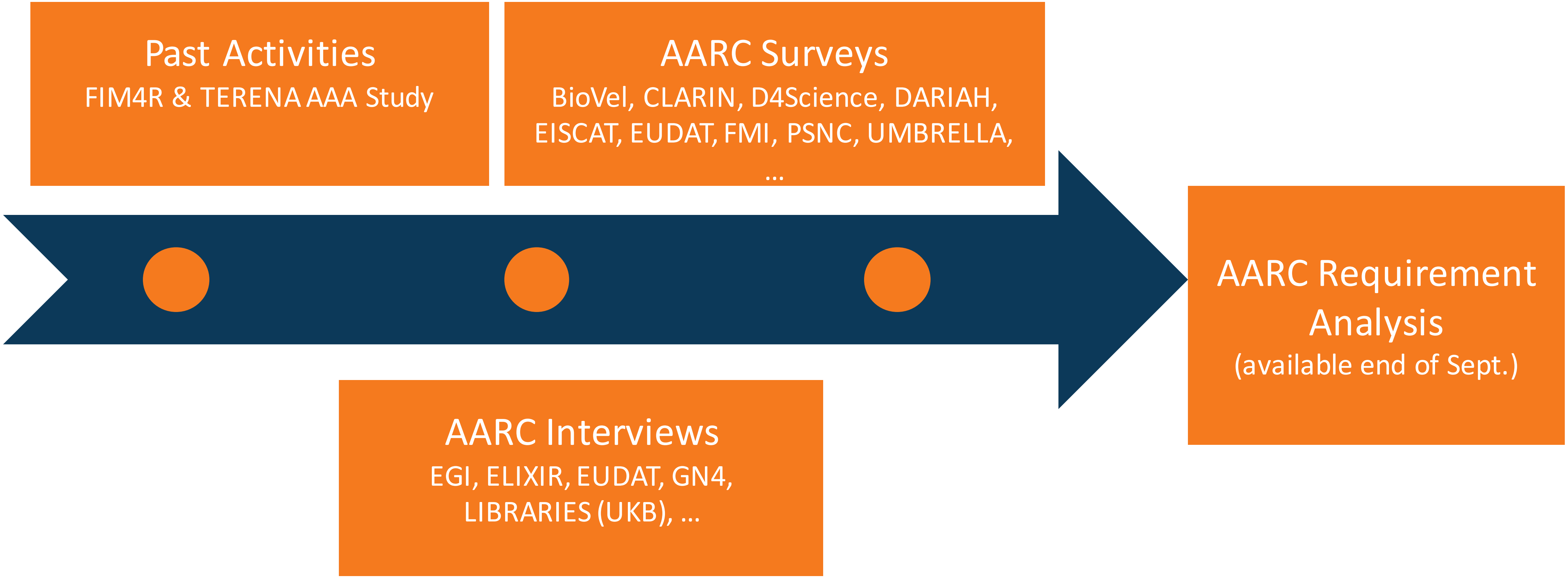


- First document describing the approach to the training:
  - https://aarc-project.eu/documents/milestones/
- Report on the identified target groups for training and their requirements
  - https://aarc-project.eu/wp-content/uploads/2015/04/AARC-DNA2.1.pdf
- First online module on federated access
  - https://aarc-project.eu/documents/training-modules/federations-101/

Architecture Design



Architecture Design – Analysis of requirements



Past Activities

FIM4R & TERENA AAA Study

AARC Surveys

BioVel, CLARIN, D4Science, DARIAH, EISCAT, EUDAT, FMI, PSNC, UMBRELLA, …

AARC Interviews

EGI, ELIXIR, EUDAT, GN4, LIBRARIES (UKB), …

AARC Requirement Analysis

(available end of Sept.)

Architecture Design – Analysis of requirements

1. User Friendliness
2. Homeless Users
3. Different Levels of Assurance
4. Community based authorization
5. Flexible and scalable attribute release policies
6. Attribute Aggregation & Account Linking
7. Federation solutions based on open and standards based technologies
8. Persistent & Unique User Identifiers
9. User managed Identity Information
10. Up to date identity information
11. User groups and roles
12. Step up authentication
13. Browser and non-browser based federated access
14. Delegation
15. Social media identities
16. Integration with e-Government infrastructures
17. Service Provider Friendliness
18. Effective Accounting
19. Policy Harmonization
20. Federated Incident report Handling
21. Sufficient Attribute release
22. Awareness about R&E Federations
23. Semantically harmonized identity attributes
24. Simplified process for joining identity federation
25. Best practices for terms and conditions

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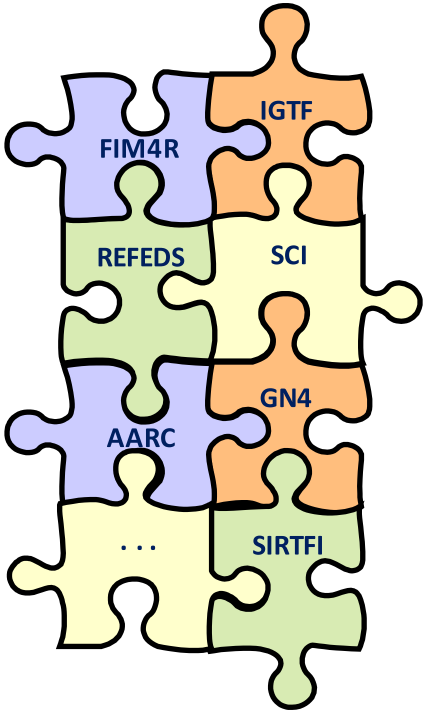
Architecture Design – Roadmap

- Continue the interviews with the AARC stakeholders and the parallel work on Guest Identities and Attribute Authorities (AA) & Token Translation Services (TTS)
- End of October first internal draft release of AARC High Level Architecture
- End of December: Analysis of available AA technologies
- February - April: Consultation with stakeholders around the AARC High Level Architecture
- Arpil: Release work on Guest Identities , AAs and TTS
- July: 1st version of the AARC AAI Architecture Framework

The Policy Puzzle

- Many groups and many (proposed) policies, but they leave also many open issues
- via AARC Policy and Best Practice Harmonisation we try tackling a sub-set of these
  - "Levels of Assurance" – a minimally-useful profile and a differentiated set, for ID and attributes
  - "Sustainability models and Guest IdPs" – how can assurance be offered in the long run?
  - "Scalable policy negotiation" – beyond bilateral discussion
  - "Protection of (accounting) data privacy" – aggregation of PI-like data in collaborative infrastructures
  - "Incident Response" – encouraging 'expression' of engagement by (federation) partners and a common understanding https://wiki.refeds.org/display/GROUPS/SIRTFI



Activities in SA1 Pilots: planning

DJRA1.1 Requirements

MJRA1.1 Existing AAI and available technologies for federated access.

DJRA1.2 Blue Print architecture

NA3.1 Differentiated LoA recomm.

DNA3.3 Recomm. Sustainable models

		guest access pilot M14	first report on pilots M15	attribute provider framework pilot M20	access to R&E resources pilot M23
Q4-2015	**Q1-2016**	**Q2-2016**	**Q3-2016**	**Q4-2016**	**Q1-2017**
Pre-pilot work: access to library resources	Guest access: Library proxy (?)	Guest access: Social IDs	Guest access: eGov IDs	Integration test: Community A	Inter-community sharing of resources
Pre-pilot work: e-gov/social ID	Guest access: Community IDs	Guest access: Reputation service?		Integration test: Community B	
Pre-pilot work: attribute management	orcid SP (SN + IDEM)	voPAAS (COmanage) on boarding		Integration test: Community C	
Pre-pilot work: token translation	Attributes: COmanage/other?	Attributes: Aggregation			
Pre-pilot work: commercial provider	Token translation: CI-logon	Attributes: SP consuming attributes?	Token translation & attributes: CI-logon + VOMS (other sources?)		
Pre-pilot work: ?	Commercial service: ?	Orcid as an AA	CI-logon2 + COmanage (aas)		

(pre-)pilot components

pilot integration of different components

AARC2

The call for AARC 2 and its implications

> “Development of a pan-European identity federation services for researchers, educators and students…Stimulate AAI services supporting communities involved in the emerging data-rich science era to manage and share their resources”

- (Some) AAI innovation with user communities can happen in AARC2 (TRL6 as starting point)
- More user-communities should be in AARC2
- There should be specific pilots to support user-community use-cases and/or to integrate AARC results into existing e-Infrastructures

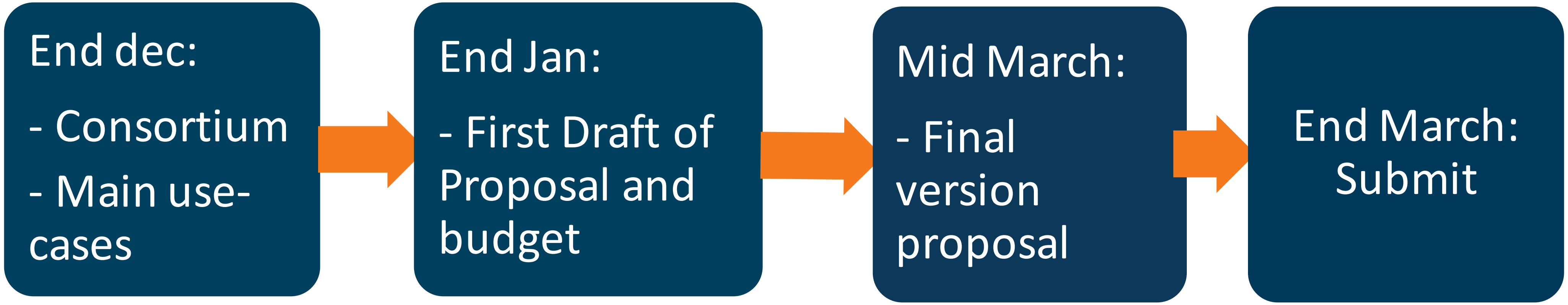
Partners and Budget

- Budget = 3 M Euro
- Partners = currently 20 (2 of which unfunded)
  - No more unfunded partners, they will become MoUs
  - No more than 25 partners
  - New partners should be research communities
- GEANT Ams to remain the leading partner
- Plans are to maintain the same activity leaders

Structure of AARC2

- NA1: Management
- NA2: Training and Outreach
  - To deliver training on AARC1 final results
  - To deliver training for user-communities
- NA3: Policy and Best Practice harmonisation
  - To work on reference policy templates
  - To define policies for IdPs-SPs proxies
  - To define policies for attribute providers
- JRA1: Integrated architectures for e-Infrastructure AAI
  - To address the integration and interoperability (based on the AARC pilots) of the e-Infrastructure AAIs, including the integration with international e-Infrastructures
  - To look at SP Architectures and Authorisation in multi-SP environments
  - To research the integration of non R&E identities into existing federations
- SA1
  - To pilot the integration of the blueprint architecture into existing AAIs
  - To support specific community use-cases

Deadlines



End dec:

- Consortium
- Main use-cases

End Jan:

- First Draft of Proposal and budget

Mid March:

- Final version proposal

End March: Submit

Thank you

Any Questions?

skanct@admin.grnet.gr

AARC

http://aarc-project.eu/

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