EOSCpilot: Architecture & Services
Jan Bot
Jan.Bot@SURFsara.nl
04/10/2017
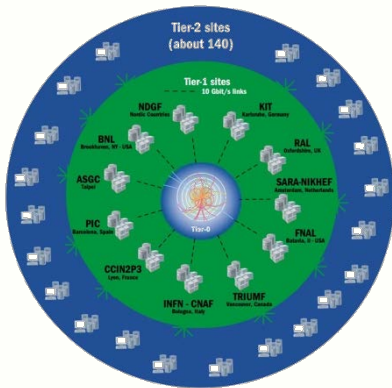
EOSCpilot

The European Open Science
Cloud for Research Pilot Project
www.eoscpilot.eu

WLCG

LOFAR

Human Brain Project

www.eoscpilot.eu

The European Open Science Cloud for Research pilot project is funded by the European Commission, DG Research & Innovation under contract no. 739563

2

🔗 International community supported by a variety of resource providers

- 🔗 [INFN-PADOVA](#) (Italy)
- 🔗 [RAL-LCG2](#) (UK)
- 🔗 [TW-NCHC](#) (Taiwan)
- 🔗 [SURFsara](#) (The Netherlands)
- 🔗 [NCG-INGRID-PT](#) (Portugal)
- 🔗 [NIKHEF](#) (The Netherlands)
- 🔗 [CESNET-MetaCloud](#) (Czech Republic)

🔗 Yearly 75M core hours & 50 TB storage
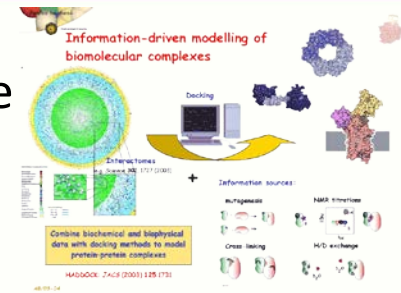
- Lack of confidence in provided service
  - Service longevity
  - Service stability
  - Lack of clear SLA
- Mismatch in requirements
  - Service scalability
- Lengthy acquisition process
- …

- → translate into requirements for EOSC portfolio inclusion

The purpose of a Service Portfolio is to understand, both internally and externally, what services **an organisation** provides. This is necessary for effective service management as much of it is arranged and managed by service. A Service Portfolio also help create an internal awareness within the organisation of the concept of a 'Service' from an ITSM point of view, rather than a more technology orientated point of view (which tends to refer to Service Components as Services).

The Service Catalogue is a customer view of the same set of information, showing potential customers what services are available. This aligns the internal and external view on what customers are offered, which eases customer relationship management.

Service description template e-InfraCentral &
EOSCpilot

Described services

- EGI, EUDAT, GÉANT, OpenAIRE, PRACE
  - Service descriptions should arrive soon
- GÉANT cloud catalogue
  - Dimension Data
  - Cloud Sigma
- ICOS
  - ICOS Carbon Portal
- LTER
  - DEIMS
- SeaDataNet
  - SeaDataNet
- SINE2020
  - e-neutrons.org
- ASTERICS
  - 12476 data resources & services
- PIN
  - ARIADNE Portal

- 4TU
  - 4TU.ResearchData
- DANS
  - DataverseNL
  - EASY
  - Narcis
- Nikhef
  - NDPF (compute, storage, co-location & peering)
- Bonvin lab
  - HADDOCK
  - CPORT
  - DisVis
  - PowerFit
  - Prodigy
  - SpotOn
  - 3D-DART
  - WHISKY

- SURFsara
  - Cartesius (HPC)
  - LISA (HTC)
  - IaaS Cloud (HTC)
  - Grid (HTC)
  - Big data infra (Hadoop, Spark)
  - Visualisation
  - Swift
  - BeeHub
  - Data archive
  - Data ingest
  - PID service
  - Jupyter
  - Consultancy
  - Training
- RUG
  - …

www.eoscpilot.eu

The European Open Science Cloud for Research pilot project is funded by the European Commission, DG Research & Innovation under contract no. 739563

7

- Be as inclusive as possible
    - No service left behind
- Describe rather then threshold service levels
    - Service consumers can determine what service level is acceptable
- Implement light-weight portfolio management processes
    - In line with expected impact of the service
- Flexible delivery model
    - Sponsored services, pay-as-you-go, …
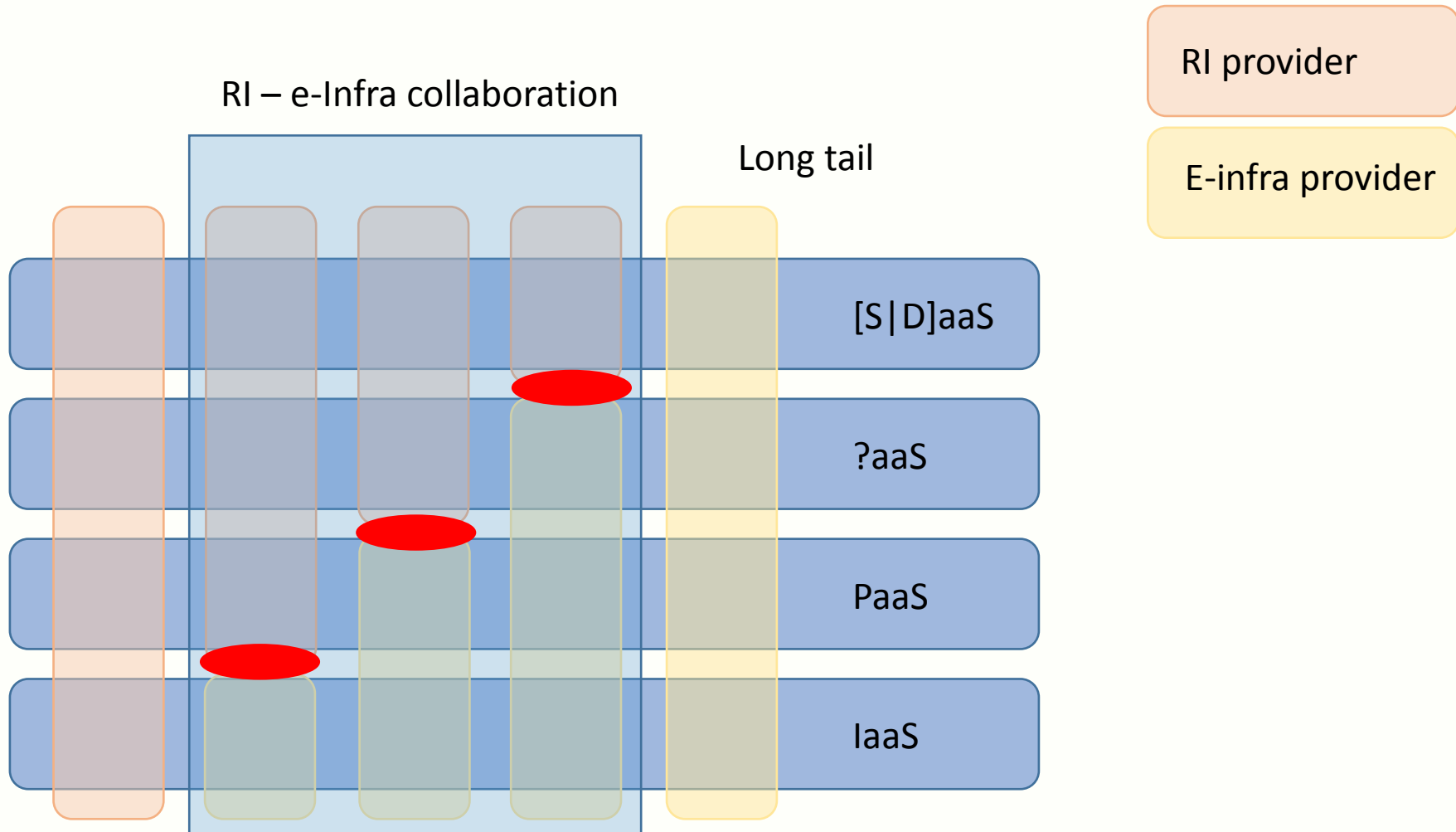
Abstract Class of Services

Original: Donatella Castelli
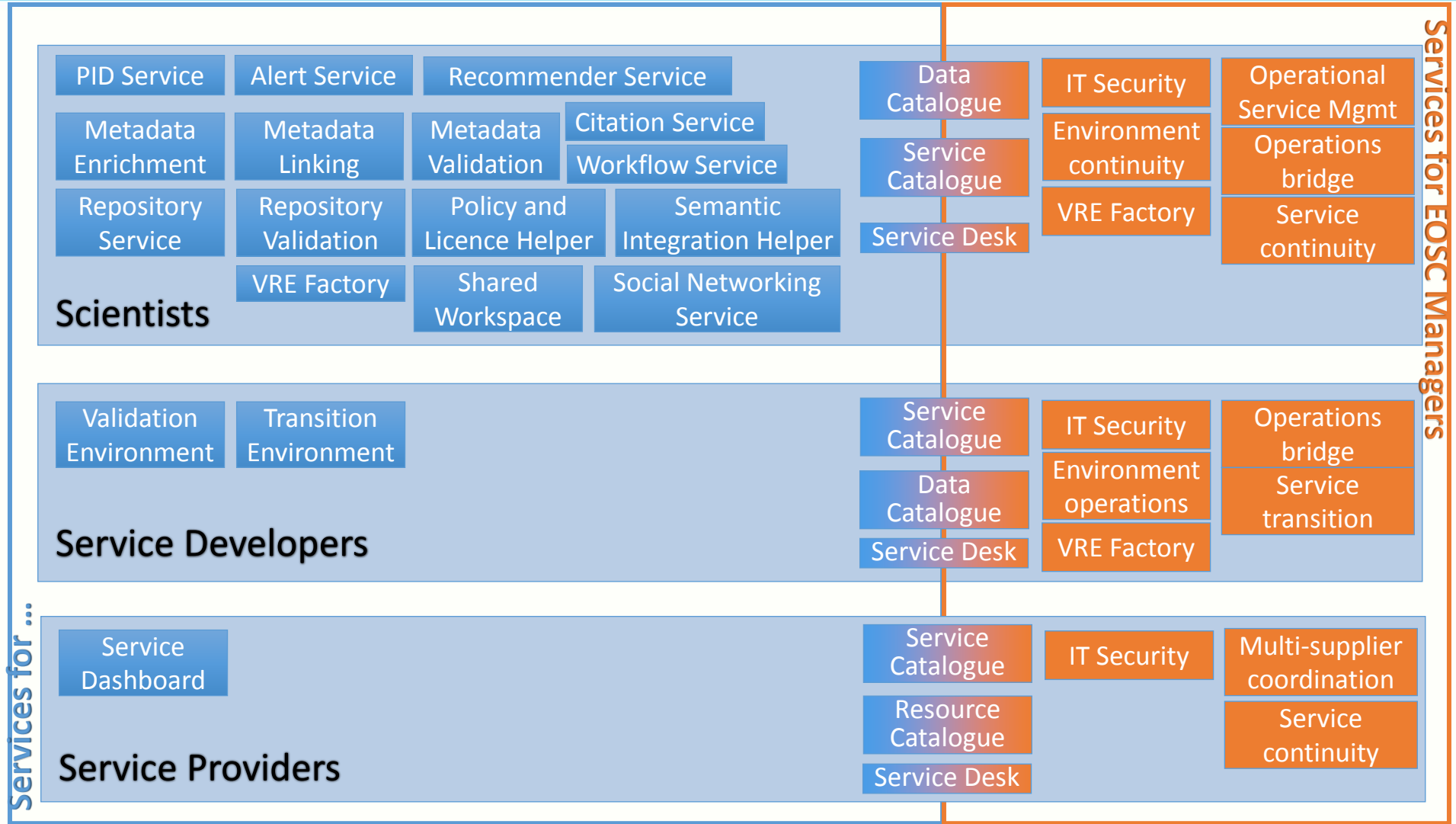
♟Individual users
- ♟Cloud (I/PaaS) resources
- ♟Data sharing facilities

♟Research Infrastructures
- ♟Support
- ♟Data sharing facilities
- ♟Analysis platform

Infrastructure diversification

e-infrastructure provider

Long tail of science
Standardisation

Service level agreements
Support

End-user

Community specific services
Support

Research Infrastructure
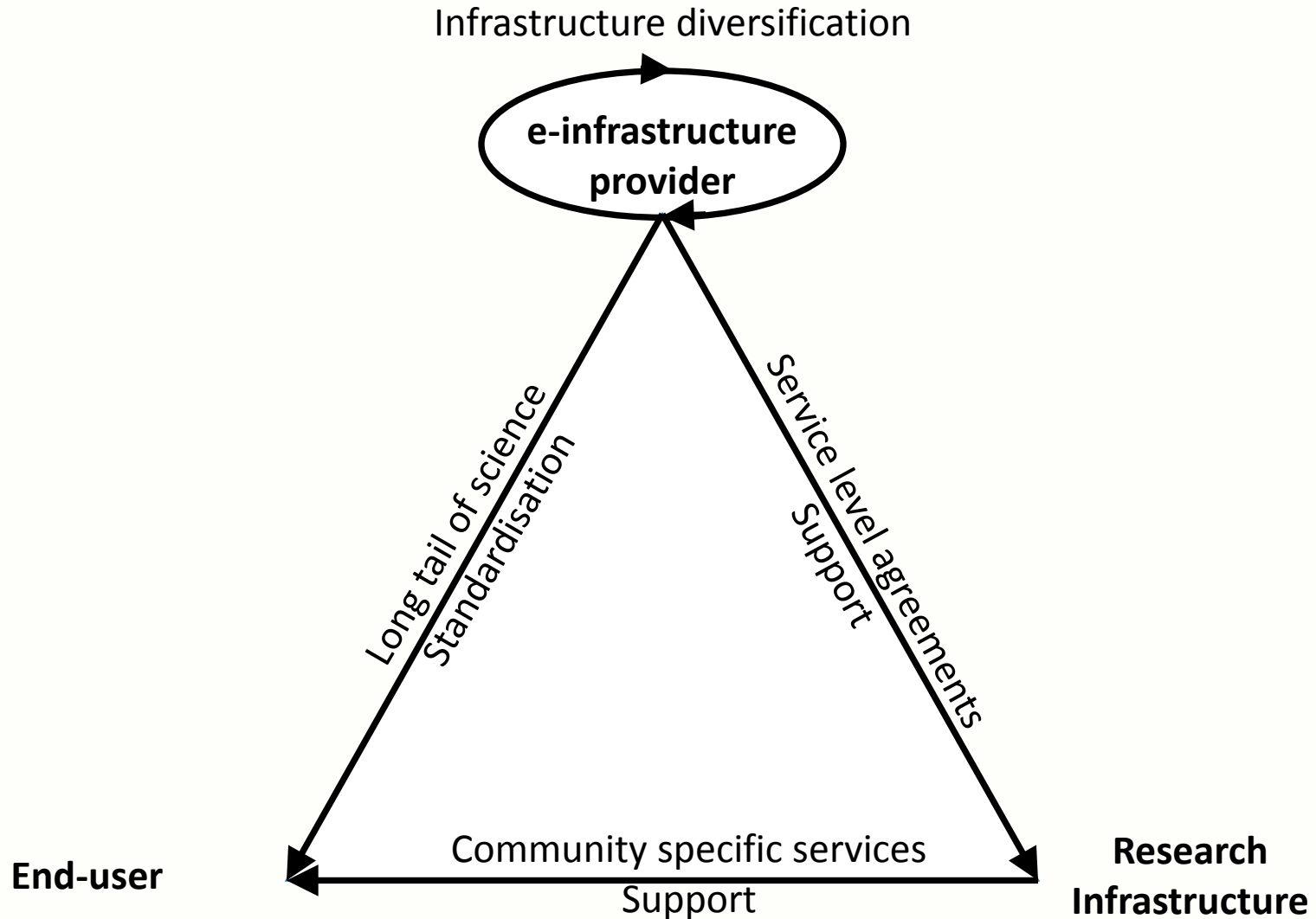
MERIL eligibility checklist	YES	NO
1. Does the RI have a policy of providing access to users outside of the country in which it is located or by which it is coordinated?		
2. Does the RI provide clear access rules (for example application forms, open calls and contact information) and an access point for users on a publicly available web page?		
3. Does the RI provide a website in English (including the access rules)?		
4. Does the RI receive national, regional or European public funding?		
5. Does the RI have an appointed contact or manager responsible for the RI?		
6. The RI is of *more than national relevance* because it…		
a) can provide evidence that it is used by non-national (European or international) users by for example providing the number of non-national users per year		
b) is part of a European or international network		
c) has formal arrangements or agreements with international partners, for example with similar RIs in other countries		

An RI is considered to be eligible to be included in MERIL if it can answer "yes" to all questions 1-5 and if at least one statement under 6 (a, b, or c) applies.

MERIL self-assessment form

1. SAB Review

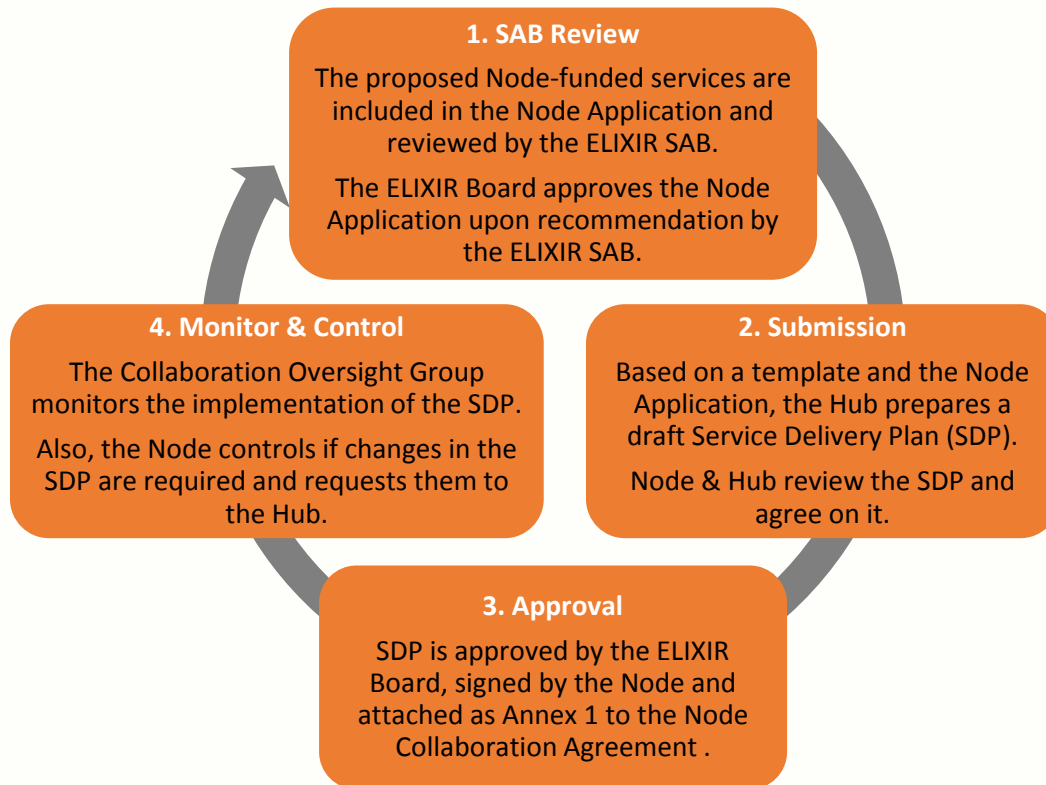The proposed Node-funded services are included in the Node Application and reviewed by the ELIXIR SAB.

The ELIXIR Board approves the Node Application upon recommendation by the ELIXIR SAB.

4. Monitor & Control

The Collaboration Oversight Group monitors the implementation of the SDP.

Also, the Node controls if changes in the SDP are required and requests them to the Hub.

2. Submission

Based on a template and the Node Application, the Hub prepares a draft Service Delivery Plan (SDP).

Node & Hub review the SDP and agree on it.

3. Approval

SDP is approved by the ELIXIR Board, signed by the Node and attached as Annex 1 to the Node Collaboration Agreement .

The full process for submitting and accepting ELIXIR Services consists in four steps

Member States

Institutional

Executive

"Other Resources"

"EOSC Compatible Resources"

"EOSC Compliant Resources"

"EOSC Managed Resources"

"Core Resources"

"Advisory" = Governance Ecosystem = Community

Original: Matthew Dovey

Jan Bot
Jan.Bot@SURFsara.nl

The European Open Science
Cloud for Research Pilot Project
www.eoscpilot.eu