

# e-infrastructure assessment strategy

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# eInfraCentral project Project overview

- 30 month H2020 CSA project
  - one of two 'foundation stones' of EOSC
- Developing a harmonised service catalogue and a 'one-stop shop' portal
  - Co-design with e-infrastructure service providers & users
- Monitoring service performance & quality
  - interface with e-IRG project work on KPIs









#### **eInfraCentral**



#### Contribution to monitoring e-infrastructure performance

- During service catalogue alignment process ensure a common approach to Service Performance Monitoring
  - KPIs on usage, users, capacity, etc.
  - Services catalogued will be expected to list available KPIs
- During portal development:
  - Providing a tool for seamlessly monitoring service performance and quality across multiple service providers
- KPI choice informed by user needs elicitation survey



# Catalogue of services Key Performance Indicators (KPIs)



- For whom
  - user/funder/policy maker?
- For what purpose
  - market visibility, choice of service, internal/external evaluation?
- Building on past examples:
  - e-IRG, e-nventory, etc.
- Input on KPI selection will be informed by the results of the user needs questionnaire

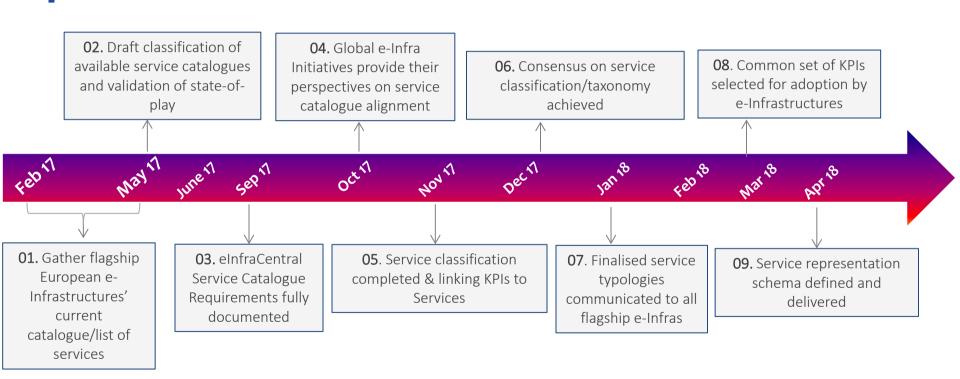




#### **Service Catalogue Alignment**

#### **Detailed timeline**









**elnfraCentral Portal**Service providers Functionalities

- Easy Registration of services
  - Prefilled fields and suggestions
  - Uniform service description & comparable service offerings across e-Infrastructures
- Management of service access requests
  - Customer feedback gathering
- Harvesting and Recording of service KPIs over time
  - Monitoring and Advanced Visualization of service KPIs





### eInfraCentral Portal



### Service consumers Functionalities

- Search services using keywords
- Explore/browse a catalogue of services
  - Browse through specific filters (faceted search)
  - View services organized per category
  - View details for a specific service
  - View key performance indicators (KPIs) for a specific service
- Compare service characteristics and KPIs
- Visually explore service stats & KPIs through different types of graphs
- Different views based on user group & interest (researcher, funder, etc)
  - Different filters on Service types and offerings
  - Different highlighted KPIs
  - Different rankings and characteristics for comparison



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### Survey on requirement elicitation

Aim and state of play



- Targeted questions to service providers and users/customers, as well as potential users/customers and interested stakeholders
- Survey is open until 19 June 2017 via following link
  - https://www.surveymonkey.com/r/e-infra\_service\_catalogue
- 209 replies received by 5 June 2017:
  - 48% service providers
  - 25% current users
  - 26% others



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### Survey on requirement elicitation

### **G**elnfra Central

### KPI questions to service providers 1/2

- Select from the following list those KPIs that you are currently providing to a) service users/consumers, b) policy makers/funders and c) wider public:
  - Service Level Agreements in place
  - User representatives in governing bodies
  - Number of up- and downtime
  - Number of users and its increase over time
  - Availability (24/7)
  - Number of service requests
  - Number of incidents/ mean time to repair
  - None of the above



# Survey on requirement elicitation KPI questions to service providers 2/2



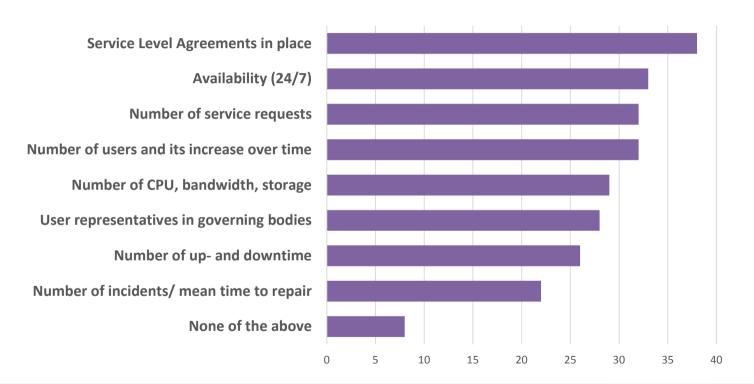
- List additional KPIs that you have for internal use or you are currently providing to service users/consumers, policy makers/funders and wider public and that have not been included in the above question: [open ended response]
- How can your service KPIs be accessed and updated?
  - Download URL
  - Web UI
  - Rest API
  - Dedicated application
  - SPARQL endpoint
- List KPIs for internal use or for users/consumers, policy makers/funders and wider public that you are planning to collect in the future? [open ended response]



### **G**elnfra Central

### **Answers to KPI questions 1/4**

KPIs that are currently provided [45 answers from 101]







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#### **Answers to KPI questions 2/4**



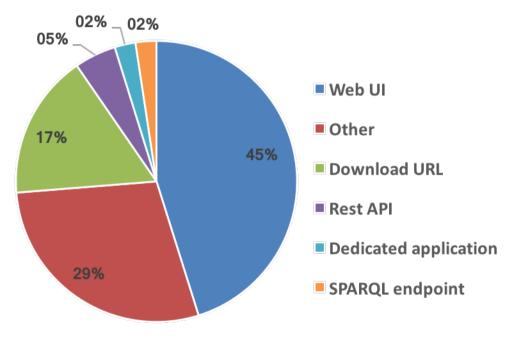
Additional KPIs that are not on the dropdown list [14 answers from 101]

- Usage/consumption of CPU cycles
- Storage per storage class per scientific domain
- Number of implemented projects (facilitated use cases)
- Growth in data resources
- Volume of data downloaded
- Increase in data published (by country, by node/partner organisation)
- Publications citing the used service and increase in data citation (by dataset/ by data node/ by each country)
- Different type of flagged data quality issues
- Number of providers supporting open standard interfaces
- Web statistics (hits, visitors)
- Graphical user interface (for users)



# Answers to KPI questions 3/4 Access to service KPIs [42 answers from 101]





Other ways to access and update KPIs:

- Quarterly reports (PDF files)
- Direct link on a website.
- •KPI info available only internally
- •Mix of the mentioned means + direct requests of specific KPI information





# Answers to KPI questions 4/4 KPIs to be collected in the future [13 answers from 101]



- Performance monitoring and benchmarking
- Dependencies by other resources
- Availability of helpdesk
- Researchers decide, if they are willing to spend their grant money for any given e-infrastructure
- Usage parameter characteristics, not only service features
- Reviewing indicators that provide better insight on impact of research





#### www.einfracentral.eu





Survey: <a href="https://www.surveymonkey.com/r/e-infra\_service\_catalogue">https://www.surveymonkey.com/r/e-infra\_service\_catalogue</a>













