Service Catalogue & User Portal

eInfra Central

European e-Infrastructure Services Gateway

e-IRG workshop, 3-4 October 2017, Estonia

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1. What is eInfraCentral?
2. Introduction to service catalogues and alignment
3. Prior efforts
4. Survey on e-Infrastructure service catalogues
5. State of affairs in the 5 flagship e-Infrastructures
6. State of affairs in other e-Infrastructures
7. Proposal for a service description template
8. A first attempt to a common service catalogue
9. Next steps
10. A review of the eInfraCentral gateway

What is eInfraCentral?

- Coordination and Support Action (CSA)

- 9 organisations
  including 5 major e-infrastructures

- January 2017 – June 2019 (30 month)

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Relation to H2020

Addressed the INFRASUPP-03-2016(b-3) call

Support the dissemination of the e-infrastructure programme (Dissemination and collaboration activities for information sharing among projects and stakeholders *through the development of a web-portal*)

Sister project to e-IRGSP5 for policy support to e-infrastructure programme (support of the e-IRG secretariat)

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Mission

Ensure that by 2020 a broader and more varied set of users discovers and accesses the existing and developing e-Infrastructure capacity

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Core objectives

1. Structure an open and guided discussion between e-Infrastructures to consensually define a **common catalogue for their services**.

2. Develop a **web platform** to act as the gateway for end-users to browse to the European e-Infrastructure catalogue of services.

3. Device **tools and draw policy and sustainability lessons** for the future development of a European e-infrastructure marketplace.

Timeline

Project set up and running — JANUARY 2017

Service Catalogue Portal Prototype — AUGUST 2017

eInfraCentral Portal Prototype — OCTOBER 2017

Public workshop on Service Catalogue — DECEMBER 2017

Partnering Event — DECEMBER 2018

eInfraCentral Portal Public launch — APRIL 2019

End of project — JUNE 2019

Introduction to service catalogues and alignment

Why, What, How, When, Challenges

Service Catalogue Alignment

Why

- In tune with "Open Science, Open Innovation and Open to the World"; advancement of knowledge, technology production - expanding the role of e-infrastructures in the innovation chain; Horizon 2020; "e-infrastructure Commons"; European Open Science Cloud, the European Strategic Forum for Research Infrastructure (ESFRI), etc
- **Need to harmonise the services** provided by European e-Infrastructures
- **Increase the user base** by making services discoverable & easier to relate to user needs
- **Widen the pool of users** with more scientific communities, industry, citizens, etc.
- Facilitate service providers and third parties with **a shared language and path to users**
- Become more **user-oriented, user-centric, business-focus**
- Support the **production and dissemination of research outputs**
- Identify **overlapping efforts or gaps and speed up innovation**
- **Lower costs for maintenance** of information
- …and last but not least **facilitate continuous improvements**

Service Catalogue Alignment

What

1. **Common Vocabulary**
   – Service, Product, Provider, Management, Catalogue, Portfolio, Role, Component, SLA, etc
2. **Structured information about Service Descriptions**
   – Information that may be presented to Users/Customers
3. **Harmonized information on Service Representations**
   – For listings, portals, repositories, etc
4. **Common approach to Service Performance Monitoring**
   – On usage, users, capacity, etc
5. **Common approach to harvesting of Service Descriptions**
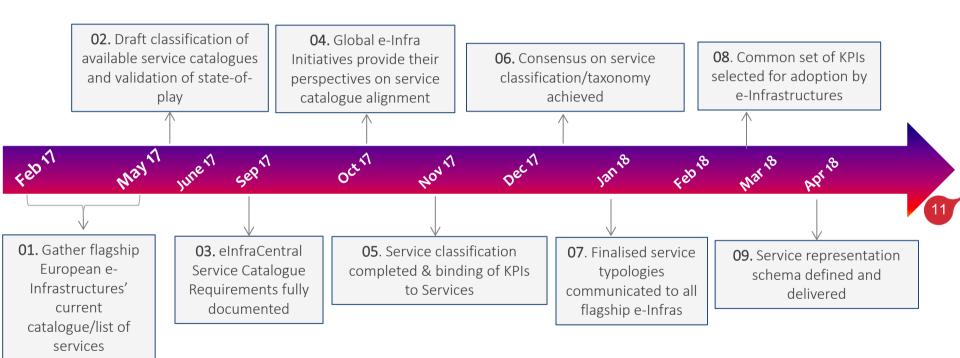
Service Catalogue Alignment

How and When

eInfra Central

02. Draft classification of available service catalogues and validation of state-of-play

04. Global e-Infra Initiatives provide their perspectives on service catalogue alignment

06. Consensus on service classification/taxonomy achieved

08. Common set of KPIs selected for adoption by e-Infrastructures

Feb 17 · May 17 · June 17 · Sep 17 · Oct 17 · Nov 17 · Dec 17 · Jan 18 · Feb 18 · Mar 18 · Apr 18

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01. Gather flagship European e-Infrastructures' current catalogue/list of services

03. eInfraCentral Service Catalogue Requirements fully documented

05. Service classification completed & binding of KPIs to Services

07. Finalised service typologies communicated to all flagship e-Infras

09. Service representation schema defined and delivered

Service Catalogue Alignment

Challenges

- **Different standards and frameworks** are available for Service Management.
- **Diverse vocabulary** about service management is used in the communities.
- **Different processes to manage service portfolios** are employed at different locations.
- **Different levels of adoption of Service Management practices** exist among the e-Infrastructures.
- **Different maturity in description of services offerings**, listings or catalogues are exhibited by e-Infrastructures.
- **Different ways of describing and representing services** by e-Infrastructures.
- There are **various potentially overlapping service offerings** from different e-Infrastructure providers.
- There are **service offerings at different levels**: centrally by an e-Infrastructure, at national or regional level (e.g. by an NREN) or even at local level (university).
- There is **little experience on a common service catalogue/marketplace** in the community.

Prior efforts

Catalogue of Services Working Group
e-IRG development of KPIs
FedSM/FitSM
eInfrastructure Observatory/e-nventory
tmforum

Past Work
Catalogue of Services Working Group

Term	Definition
Service	Means of delivering value for the customer by facilitating results the customer wants to achieve
Service Catalogue	User/customer facing list of all services available publicly offered
Service Portfolio	
Service Name	
Service ID	
Service description	
Value	
Service provider	

Term	Definition
Service Contact	E-mail contact to ask more information to the service provider about this service
Service webpage	URL to a webpage providing more information about the service
Service phase	
Service function	
Service area	
Service type	

Term	Definition
Customer group	Type of customers who are allowed to commission this service. Restrictions may apply according to various criteria like the location (e.g. country) or type of activity (e.g. research, commercial).
User group	Type of Individuals that primarily benefits from and uses a service
Service Condition	Restriction that applies to this service
Payment model	Supported payment models and restrictions that apply to each of them
Terms of use	URL to a document containing the rules which one must agree to abide by in order to use the service
SLA	URL to a document containing information about the levels of performance that a service provider is expected to achieve (service level agreement)

e-Infrastructure Catalogue of Services

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Past Work

e-IRG development of KPIs

Class	Category	Harmonised metrics
Class of political expectations		
	Federation/interoperability	Service Level Agreements in place; Standards used
	Long-term sustainability	Years of guaranteed funding
	Bottom-up governance	User representatives in governing bodies
	Leverage of member states investments	National research programs
	Trust	Transparency procedures; Communication with re
Class of e-Infrastructure provider's expectations		
	Technical indicators	Number of CPUs bandwidth; storage
	Operational indicators	Number of up- and downtime Availability (7/24)
	Scientific outcome	Number of MSc and PhD theses; scientific publicat
Class of (scientific) user's expectation		
	User satisfaction	Quotient of: active/passive users and long-/shor feedback; Number of incidents/mean time to repa
	User development	No of days of trainings and no of attendees; No of advanced users
	Service requests	No of service requests Basic/Advanced service usa
	e-Accessibility and barrier free indicators	Adaptability of infrastructure to modify accessibilit
Class of expectations of the general public		
	Knowledge transfer	No of knowledge transfer events
	Socio-economic impact	No of applications from and exploitation by indust
	Innovation aspects	No of innovation prizes (short-/middle-/long-term
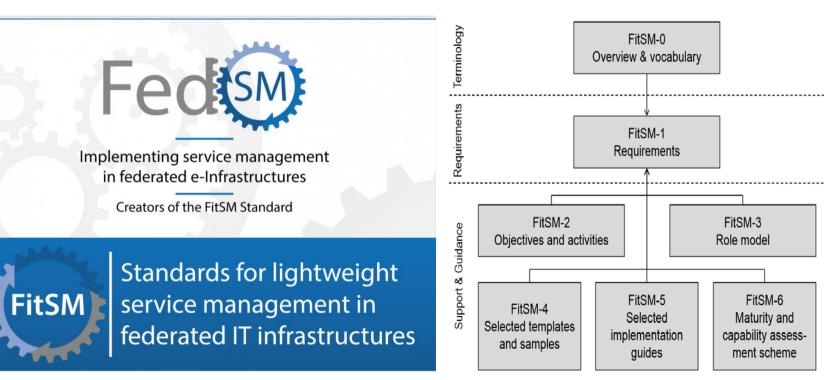
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Past Work

FedSM and FitSM standard

eInfrastructure Observatory/e-nventory

Class	Area	Proposed Indicator
Infrastructure		
	Networking	External connections capacity
		Backbone network size
		Usable backbone capacity
Usage		
	Grids	
	Supercomputing	
		Peak performance
		Number of jobs
		CPU efficiency
		Supercomputer staff
		Supercomputer budget

Class	Area	Proposed Indicator
	ICT Generic	Internet access tariffs
		International internet bandwidth
		Domestic internet bandwidth
		Internet users
		Broadband penetration rate
Affordability		
	Financial Generic	Gross Domestic Product
		Gross Domestic Expenditure of Research Development
Knowledge		
	Knowledge Generic	Adult literacy rate
		Gross enrolment ratio
		Researchers
		Patent applications
Supporting		
	Supporting	Population
		Surface area

Past Work

Frameworx Specification

**Product Catalog Management
API REST Specification**

TMF620
Release 14.5.1
June 2015

Latest Update: Frameworx Release 14.5	TM Forum Approved
Version 2.0.2	IPR Mode: RAND

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Frameworx Specification

**Product Catalog
API Conformance Profile**

TMF660
Release 16.5.0
December 2016

Latest Update: Frameworx Release 16.5	Member Evaluation
Version 1.0.0	IPR Mode: RAND

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eInfra Central

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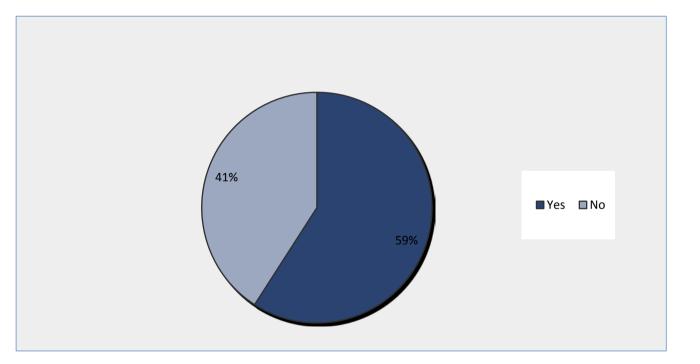
Survey on e-Infrastructure Service Catalogues

28 April until 30 June 2017

Survey

Have you faced any difficulties in the past in finding the right digital service to support your research?
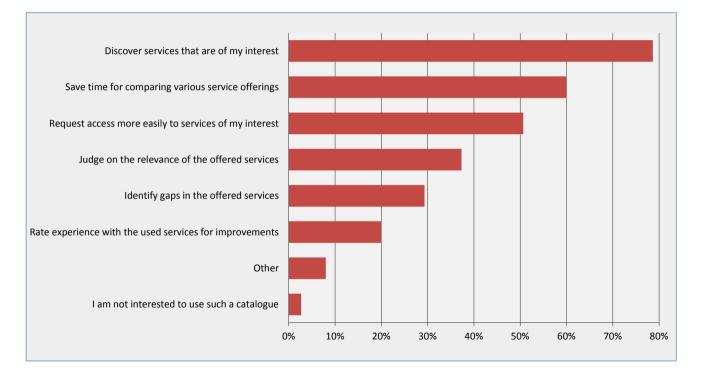
Survey

What would be your main motivation to use a common e-Infrastructure service catalogue?

Survey

Rating of a common e-infrastructure service catalogue functionality by users/consumers
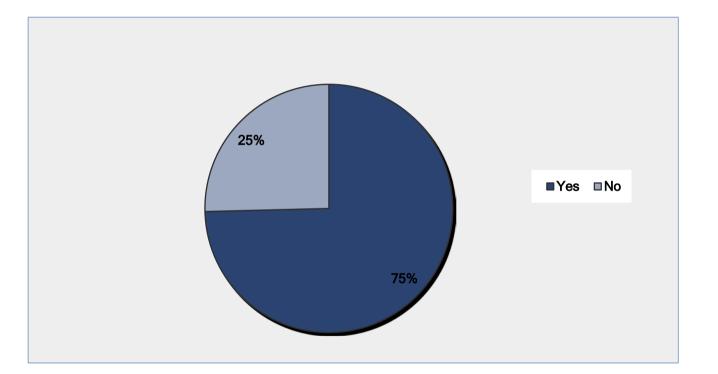
Answer Options	Not important	Somewhat important	Important	Very important	Extremely important	Rating Average
View characteristics of a specific service	3%	0%	28%	44%	25%	3,9
Search services using keywords	2%	9%	21%	39%	29%	3,9
Browse and search the services through specific filters (faceted search)	3%	6%	29%	42%	20%	3,7
Explore/browse a catalogue of services	3%	11%	26%	29%	31%	3,7
View services organised per categories	3%	9%	31%	29%	28%	3,7
Compare service characteristics and KPIs	6%	17%	33%	28%	16%	3,3
View key performance indicators (KPIs) of a specific service	5%	21%	35%	21%	18%	3,3
View KPIs of services in different types of graphs	15%	32%	35%	12%	5%	2,6

Survey

Do you face any challenges in increasing the visibility of your services?

25%

75%

■Yes ■No

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Survey

Are you trying to reach out to new customer segments?
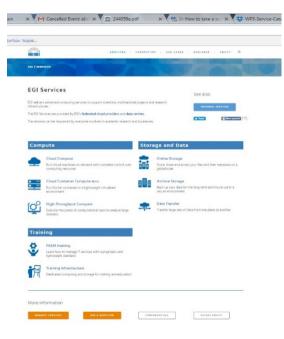
State of Affairs in the 5 Flagship eInfrastructures

EGI, EUDAT, GEANT, OPENAIRE, PRACE

Services provided by flagship e-Infras
EGI

Services provided by flagship e-Infras
EUDAT

Services provided by flagship e-Infras
GEANT

Services provided by flagship e-Infras

OpenAIRE

Services provided by flagship e-Infras
PRACE

State of Affairs in other eInfrastructures

AARC, BlueBRIDGE, EarthServer, EDISON, EVER-EST, INDIGO-DataCloud, LEARN, MuG, OpenDreamKit, OpenMinTeD, PhenoMeNal, SESAME NET, READ, THOR, VI-SEEM, VRE4EIC, West-Life

Services provided by flagship e-Infras

BlueBRIDGE
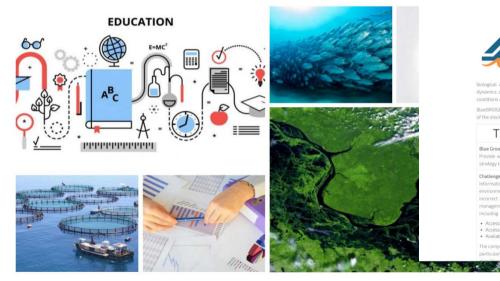
e-Infrastructure	Service list/catalogue	Link to Services in landing page	Service description
BlueBRIDGE	Yes	Yes	Intermediate to high level
EarthServer-2	Yes	Yes	Intermediate to high level
VI-SEEM	Yes	Yes	Intermediate to high level
INDIGO-DataCloud	Yes	Sort of	Intermediate to high level
PhenoMeNal	Yes	Sort of	Intermediate to high level
West-Life	Yes	Yes	Low level
OpenDreamKit	Yes	Sort of	Low level
OpenMinTeD	Yes	Sort of	Low level
SESAME NET	Yes	Sort of	Low level
READ	Yes	Sort of	Low level
AARC	No	No	Intermediate to high level
MuG	No	No	Intermediate level
EVER-EST	No	Yes	Low level
EDISON	No	No	Low level
THOR	No	No	Low level
LEARN	No	No	Low level
VRE4EIC	No	No	Low level

Services provided by flagship e-Infras

BlueBRIDGE

Assessment	BlueBRIDGE
Visible Link to the Services in the main page	01. Yes
Service List/Catalogue	01. Yes
Service Detailed Description	01. Intermediate to high level

Services provided by flagship e-Infras

EarthServer

Assessment	EarthServer-2
Visible Link to the Services in the main page	01. Yes
Service List/Catalogue	01. Yes
Service Detailed Description	01. Intermediate to high level

Services provided by flagship e-Infras
VI-SEEM

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Assessment	VI-SEEM
Visible Link to the Services in the main page	01. Yes
Service List/Catalogue	01. Yes
Service Detailed Description	01. Intermediate to high level

Overview of Commercial Marketplaces

Amazon Web Services, Oracle Cloud, Microsoft Azure, Google Play, iTunes Store, CNET Download

Service Catalogues at a global scale
Amazon Web Services

Service Catalogues at a global scale
Oracle Cloud

Service Catalogues at a global scale

Microsoft Azure

Service Catalogues at a global scale

Google Play

Service Catalogues at a global scale

iTunes Store

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Service Catalogues at a global scale

CNET Download

Progress on Service Alignment

Service Management Vocabulary v0.10
Service Management Standards Assessment v0.10
Service Description Template v1.00
Service Catalogue v0.30
List of Functional and Non-Functional Requirements v1.00

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Service Management Alignment

Service Management Vocabulary v0.10

Service Management Alignment

Service Management Standards Assessment v0.10

IT service management standards

COMPATIBILITY MATRIX			
FitSM	ITIL (Edition 2011)	ISO/IEC 20000:2011	COBIT 5
Service Portfolio Management (PR1)	Service Portfolio Management (ITIL SS)	Design and transition of new or changed services (Clause 5)	Manage portfolio (APO05)
	Design Coordination (ITIL SD, 4.1)		
	Transition Planning and Support (ITIL ST, 4.1)		Manage Solutions Identification and Build (BAI03)
Service Level Management (PR2)	Service Catalogue Management (ITIL SD, 4.2)	Service Level Management (Clause 6.1)	Manage Service Agreements (APO09)
	Service Level Management (ITIL SD, 4.3)		
Service Reporting Management (PR3)	Service Reporting (ITIL CSI, 5.7)	Service Reporting (Clause 6.2)	Monitor, Evaluate and Assess Performance and Conformance (MEA01)
Service Availability & Continuity Management (PR4)	Availability Management (ITIL SD, 4.4)	Service Continuity and Availability Management (Clause 6.3)	Manage Continuity (DSS04)
	IT Service Continuity Management (ITIL SD, 4.6)		Manage Availability and Capacity (BAI04)
Capacity Management (PR5)	Capacity Management (ITIL SD, 4.5)	Capacity Management (Clause 6.5)	
	Event Management (ITIL SO, 4.1)		
Information Security Management (PR6)	Information Security Management (ITIL SD, 4.7)	Information Security Management (Clause 6.6)	Manage Security (APO13)
	Access Management (ITIL SO, 4.5)		Manage Security Services (DSS05)
Customer Relationship Management (PR7)	Business Relationship Management (ITIL SS, 4.5)	Business Relationship Management (Clause 7.1)	Manage Relationships (APO08)
Supplier Relationship Management (PR8)	Supplier Management (ITIL SD, 4.8)	Supplier Management (Clause 7.2)	Manage Suppliers (APO10)
Incident & Service Request Management (PR9)	Incident Management (ITIL SO, 4.2)	Incident and Service Request Management (Clause 8.1)	Manage Service Requests and Incidents (DSS02)
	Request Fulfilment (ITIL SO, 4.3)		
Problem Management (PR10)	Problem Management (ITIL SO, 4.4)	Problem Management (Clause 8.2)	Manage Problems (DSS03)
Configuration Management (PR11)	Service Asset and Configuration Management (ITIL ST, 4.3)	Configuration Management (Clause 9.1)	Manage Assets (BAI09)
			Manage Configuration (BAI10)
Change Management (PR12)	Change Management (ITIL ST, 4.2)	Change Management (Clause 9.2)	Manage Changes (BAI06)
	Change Evaluation (ITIL ST, 4.6)		
Release & Deployment Management (PR13)	Release and Deployment Management (ITIL ST, 4.4)	Release and Deployment Management (Clause 9.3)	Manage Change Acceptance and Transitioning (BAI07)
	Service Validation and Testing (ITIL ST, 4.5)		
Continual Service Improvement Management (PR14)	The Seven-Step Improvement Process (ITIL CSI, 4.1)	Maintain and Improve the SMS (Clause 4.5.5)	

COBIT	Control Objectives fo... support tool for docu... controls guidance au... in an enterprise.	
FitSM	FitSM is a free and lig... scenarios. The main g...	
	Create a clear, prag...	
	Offer a version of I... situations.	
	Provide a baseline l... competing organiza...	
ISO/IEC 20000	ISO/IEC 20000 is the... Organization (ISO) ar... per cent of the initial... requirements on ITSI...	
ITIL	The IT Infrastructure... best practices, with c... become the de facto... best practices that ar...	

Service Description Alignment

Service Description Template v1.00

eInfra Central

Introductory note on Service Description Template v1.00

eInfraCentral is aiming to create a harmonised service catalogue view across a number of European eInfrastructures. Each of those eInfrastructures has their own service catalogue, perhaps with customer views and internal views, and, potentially, service portfolios. e-InfraCentral intends to harmonise the parts of the service description aiming to create a homogenised customer view of the individual service catalogues; so, information which might be considered internal view to a service catalogue or portfolio is not of interest to eInfraCentral.

Nonetheless, eInfracentral provides this complete Service Description Template for an entry in a Service Portfolio or Catalogue in case an eInfrastructure would like to use this template for all their Service Management Processes. Even though it is not the intention of eInfracentral to homogenise other Service Management Processes, it would be very effective if eInfrastructures adopt a common Service Description Template, a common vocabulary and a single service management standard.

The Service Description Information is organised in various blocks of information: *Basic Service Information, Service Classification Information, Service Support Information, Service Contractual Information, Service Performance Information, Service Operations Information, Advanced Service Information, Service Business Case information* .

The Service Description Template provides a definition, potential values and their format (if any) as well as information related to whether the information is related only to the catalogue or to the overall portfolio (Use column) as well as whether the attribute is mandatory or optional for the implementation of a number of features in the eInfracentral platform/common catalogue .

As it regards the "Visibility" column of the Service Description Template:
1) Visible to Customers (Catalogue/Portfolio) refers to the service information that may be presented to a potential customer/user in a "live" manner at the eInfracentral platform/common catalogue;
2) Internal to Service Provider (Portfolio) refers to additional service information which is only available to designated staff of the service provider required for the service management;
3) Other refers to all other service information required by other service stakeholders.

Furthermore, this file provides a Service Presentation Template. This is a mock-up of how the service information could be presented in a service portal/ listing/marketplace to a customer/user. This allows for visualising the interrelations and complementarity of the service information.

Finally, the actual form for the service description required by eInfraCentral platform/common catalogue is provided in the Service DescriptionforCatalogue worksheet.

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Based on: previous work of FedSM project co-funded by the European Commission/FP7 and the FitSM Standard.

Developed by: JNP Strategy and Management Consulting.

With the contribution of: Stichting EGI, the University of Edinburgh, the University of Athens, GEANT Ltd, Consiglio Nazionale delle Ricerche, the Partnership for Aedvanced Computing in Europe AISBL, Gottfried Wilhelm Leibniz Universitaet Hannover and the European Future Innovation System Centre.

In the framework of the eInfraCentral project that has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 731049.

Service Description for Catalogue

Basic Service Information

Service ID		Free text (May become a List)	Mandatory
Service URL		URL	Mandatory
Service Name		Free text	Mandatory
Service Tagline		Free text	Optional
Service Full Name		Free text	Optional
Service Description		Free text	Mandatory
Service Options		Free text	Optional
Target Customers/Users		Free text (May become a List)	Optional
Customer/User Value		Free text	Optional
Customer/User Base		Free text	Optional
Service Symbol/Visual Element		URL	Optional
Service Screenshots and Videos		URL	Optional

Service Classification Information

Service Provider Name		Free text (May become a List)	Mandatory
Service Provider Description		Free text	Optional
Service Version		Free text	Optional
Service Last Update		Date	Optional
Service Change Log		Free text	Optional
Service Valid for		Date	Optional
Service Life Cycle Status		List of values	Mandatory
Service TRL		List of values	Mandatory
Service Category		Free text (May become a List)	Mandatory
Service Type/Subcategory		Free text (May become a List)	Mandatory
Service Place		List of values	Mandatory
Service Language		List of values	Mandatory
Service Tags		Free text	Mandatory
Required Services		Free text (May become a List)	Optional
Related Services		Free text (May become a List)	Optional

Service Support Information

Service Request		URL	Mandatory

Service Type/Subcategory		Free text (May become a List)	Mandatory
Service Place		List of values	Mandatory
Service Language		List of values	Mandatory
Service Tags		Free text	Mandatory
Required Services		Free text (May become a List)	Optional
Related Services		Free text (May become a List)	Optional

Service Support Information

Service Request		URL	Mandatory
Service Helpdesk		URL	Optional
Service User Manual		URL	Optional
Service Training Information		URL	Optional
Service Feedback		URL	Optional

Service Contractual Information

Service Price		URL	Mandatory
Service Level Agreement		URL	Mandatory
Service Terms Of Use		URL	Optional
Service Funding		Free text	Optional

Service Performance Information

Service KPI 1 Name (Availability)		Free text	Optional
Service KPI 1 Value		Free text	Optional
Service KPI 2 Name (Requests)		Free text	Optional
Service KPI 2 Value		Free text	Optional
Service KPI 3 Name (Users)		Free text	Optional
Service KPI 3 Value		Free text	Optional
Service KPI 4 Name (Usage)		Free text	Optional
Service KPI 4 Value		Free text	Optional
Service KPI 5 Name (Capacity)		Free text	Optional
Service KPI 5 Value		Free text	Optional
Service KPI 6 Name (Coverage)		Free text	Optional
Service KPI 6 Value		Free text	Optional
Service KPI 7 Name (Other)		Free text	Optional
Service KPI 7 Value		Free text	Optional

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Service Description Alignment

Service Description Template v1.00

Service Description Alignment

Service Catalogue v0.30

Service Description Alignment

List of Functional and Non-Functional Platform Requirements v1.00

Column 1 (PL/CAT)

ID	Requirement	Priority
PL/CAT/01	View categories of services	High
All	All users can view services organized in categories.	
PL/CAT/02	View subcategories	High
All	All users can select a category and view all subcategories.	
PL/CAT/03	View a list of services for a specific category/subcategory	High
All	All users can select a category or subcategory and view a list of services belonging to the specific category or sub-category	
PL/CAT/04	Overview of services	High
All	All users have the option for an overview of the services in a specific list	
PL/CAT/05	Select and view detailed characteristics of a specific service	High
All	When selecting a specific service the user can view its characteristics, including full name, description, phase, TRL etc.	
PL/CAT/06	Navigate to the service at the remote service provider	High
All	The user will be able to access the service s/he is viewing at the service provider site.	
PL/CAT/07	View additional material on the services	High
All	The user can view additional material on the service which may include images and/or videos or any other material that can potentially help the user to understand and evaluate the service.	
PL/CAT/08	Search the catalogue of services through keywords	High
All	The user is able to search for specific services by providing keywords.	
PL/CAT/09	Faceted Search of the catalogue of services	High
All	The user is able to filter the search results. The filter properties will include language, service categories and sub-categories, providers, brand name, etc.	
PL/CAT/10	Compare Services characteristics	Medium
All	The user can choose two or more services and fields on which a comparison between services will take place.	
PL/CAT/11	Select different views of the services according to the user group	Medium
Authenticated user	Different views are offered according to the identified priorities of the various stakeholder groups as reflected in the authenticated user profile. Users may have particular interests in different service characteristics and different needs in terms of the comparisons they would like to have. The views will ensure a direct and quick way for them to access this content in the platform.	

Column 2 (PL/MON)

ID	Requirement	Priority
PL/MON/01	Add personal rating to a service	Medium
Authenticated user	The user can add a personal rating of the service. This can be for example in a five star rating scale.	
PL/MON/02	Add commentary on the service	Low
Authenticated user	The user can add comments on the service.	
PL/MON/03	View commentary on the service	Low
All	The user can see comments other users have made on the service.	
PL/MON/04	Approve comments on a service	Low
Administrator	The administrator is responsible to approve or reject comments before they are published.	
PL/MON/05	View service KPIs	Medium
All	The user will be able to see KPIs associated to a service in numeric format and charts.	
PL/MON/06	View service rating	Medium
All	The user will be able to see an average of the ratings that have been provided by the users for a service.	
PL/MON/07	View usage statistics about a service	Low
All	The user will be able to see various statistics about a service collected by the platform (e.g., number of times the service details have been accessed or added to favourites, etc.)	
PL/MON/08	Define a new KPI	
Service providers	The service provider can create a new KPI, by defining the type of the KPI measure (e.g., number of VMs used), the KPI time granularity (year, month, etc.), and the default visualization chart for this KPI (e.g. timeline)	
PL/MON/09	Associate a KPI with a service	Medium
Service providers	The service provider can associate a list of KPIs with a service	
PL/MON/10	Manual update of a KPI for a service through data entry	Medium
Service providers	The service provider can update a KPI associated with a service by filling in the values via a web form	
PL/MON/11	Manual update of a KPI for a service through a data file	
Service providers	The service provider can update a KPI associated with a service by uploading a data file (json, xml) with the KPI values	
PL/MON/12	Automatic update of a KPI for a service through a web service	Medium
Service providers	The service provider can enable the automatic update of a KPI associated with a service by defining a web service endpoint (API) that provides the values for the KPI	
PL/MON/13	Set Interval of updates	Low
Service providers	The service provider can set the time interval for automatic updates of a KPI associated to a service (On demand or in fixed intervals, for example once a month), when updated through a web service.	
PL/MON/14	Visualize KPIs and platform statistics for a service	Medium
Service providers	The service providers can visualize and interact (through a dashboard) with all KPIs associated with a service through various types of charts (timeline, bars, pies, maps in case geographical information is provided, etc.) as well as platform-collected statistics about the use of a service (average rating, time the service was accessed, type of users accessing this service, etc.).	

Column 3 (PL/REG)

ID	Requirement	Priority
PL/REG/01	Create a new service	High
Service providers	The service provider registers a new service and fills in the service information fields, required and optional.	
PL/REG/02	View list of services associated with the service provider	Medium
Service providers	The service provider user views the list of services created by the specific service provider organization he\she is affiliated with, through the service provider's registration dashboard	
PL/REG/03	Update a service	Medium
Service providers	The service provider updates the metadata of a service created by the specific service provider organization he\she is affiliated with	
PL/REG/04	De-activate \ activate a service	High
Service providers	The service provider flags a service as inactive \ active. The service stops being accessible via the eInfraCenral platform	
PL/REG/05	Delete a service	High
Service providers	The service provider can delete an inactive service. This function is provided only for wrongly created services. Services that are not accessible anymore via the eInfraCentral platform should be flagged as inactive.	
PL/REG/06	View all actions applied on a service	Medium
Service providers	The service provider can view details about the registration or the update of the service created by the specific service provider organization he\she is affiliated with, including creator, date of creation, date of last update, etc.	

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Engagement Plan

European Union
Worldwide

Service Description Alignment

European Union

Acronym	Full Title	Status	Start Date	End Date
EGI-Engage	Engaging the EGI Community towards an Open Science Commons	Engaged	1/3/2015	31/8/2017
EUDAT2020	EUDAT2020	Engaged	1/3/2015	28/2/2018
GEANT		Engaged		
OpenAIRE-Connect	OpenAIRE - CONNECTing scientific results in support of Open Science	Engaged	1/1/2017	30/6/2019
OpenAIRE2020	Open Access Infrastructure for Research in Europe 2020	Engaged	1/1/2015	30/6/2018
PRACE-4IP	PRACE 4th Implementation Phase Project	Engaged	1/2/2015	30/4/2017
PRACE-5IP	PRACE 5th Implementation Phase Project	Engaged	1/1/2017	30/4/2019
EOSCpilot	The European Open Science Cloud for Research Pilot Project.	Contacted	1/1/2017	31/12/2018
AARC	Authentication and Authorisation for Research and Collaboration	To be contacted	1/5/2015	30/4/2017
AARC2	Authentication and Authorisation For Research and Collaboration	To be contacted	1/5/2017	30/4/2019
BlueBRIDGE	Building Research environments for fostering Innovation, Decision making,	To be contacted	1/9/2015	28/2/2018
EarthServer-2	Agile Analytics on Big Data Cubes	To be contacted	1/5/2015	30/4/2018
EDISON	Education for Data Intensive Science to Open New science frontiers	To be contacted	1/9/2015	31/8/2017
EVER-EST	European Virtual Environment for Research - Earth Science Themes	To be contacted	1/10/2015	30/9/2018
INDIGO-DataCloud	INtegrating Distributed data Infrastructures for Global ExplOitation	To be contacted	1/4/2015	30/9/2017
LEARN	Leaders Activating Research Networks: Implementing the LERU Research Dat	To be contacted	1/6/2015	31/5/2017
MuG	Multi-Scale Complex Genomics	To be contacted	1/11/2015	31/10/2018
OpenDreamKit	Open Digital Research Environment Toolkit for the Advancement of Mathem	To be contacted	1/9/2015	31/8/2019
OpenMinTeD	Open Mining INfrastructure for TExt and Data	To be contacted	1/6/2015	31/5/2018
PhenoMeNal	PhenoMeNal: A comprehensive and standardised e-infrastructure for analys	To be contacted	1/9/2015	31/8/2018
SESAME NET	Supercomputing Expertise for SmAll and Medium Enterprise Network	To be contacted	1/6/2015	31/5/2017
READ	Recognition and Enrichment of Archival Documents	To be contacted	1/1/2016	30/6/2019
THOR	THOR – Technical and Human Infrastructure for Open Research	To be contacted	1/6/2015	30/11/2017
VI-SEEM	VRE for regional Interdisciplinary communities in Southeast Europe and the	To be contacted	1/10/2015	30/9/2018
VRE4EIC	A Europe-wide Interoperable Virtual Research Environment to Empower Mu	To be contacted	1/10/2015	30/9/2018
West-Life	World-wide E-infrastructure for structural biology	To be contacted	1/11/2015	31/10/2018

Service Description Alignment

Worldwide

eInfra Central

The Global e-Infra Initiatives Working Group is an external group of experts with the mission to provide high-level reflections and guidance on the subject of "eInfrastructure Service Catalogues" alignment, in terms of interoperability, adoption and ways of expression aiming to achieve a global alignment of service catalogues for eInfrastructures.

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Australian National Data Service
Australia

Prof. Xue-feng Yuan
Director
National Supercomputer Centre at Guangzhou
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Prof. Simon Lin
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Academia Sinica Grid Computing Centre
Taiwan

Dr. Florencio I. Utreras
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Latin American Cooperation of Advanced Networks
Latin America

Thank you for your attention!

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Services provided by flagship e-Infras

INDIGO-DataCloud

Assessment	INDIGO-DataCloud
Visible Link to the Services in the main page	02. Sort of
Service List/Catalogue	01. Yes
Service Detailed Description	01. Intermediate to high level

Services provided by flagship e-Infras

PhenoMeNal

Assessment	PhenoMeNal
Visible Link to the Services in the main page	02. Sort of
Service List/Catalogue	01. Yes
Service Detailed Description	01. Intermediate to high level
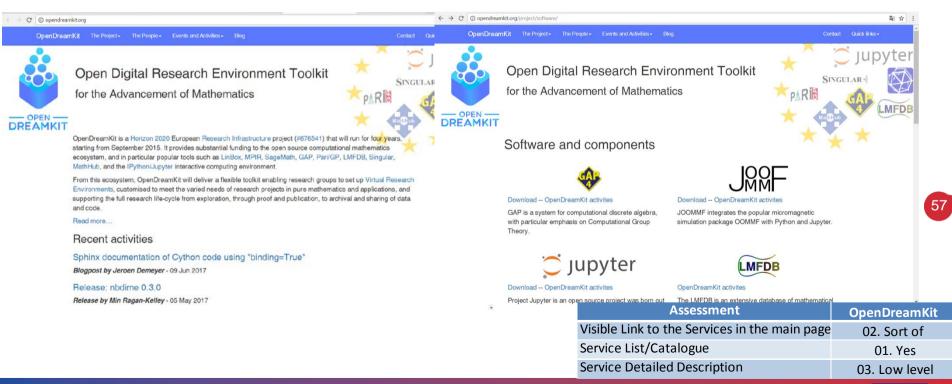
Services provided by flagship e-Infras

West-Life

Assessment	West-Life
Visible Link to the Services in the main page	01. Yes
Service List/Catalogue	01. Yes
Service Detailed Description	03. Low level
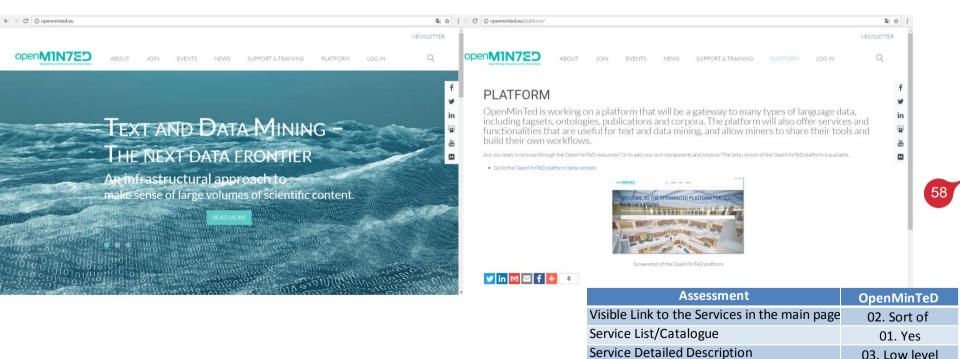
Services provided by flagship e-Infras

OpenDreamKit

Assessment	OpenDreamKit
Visible Link to the Services in the main page	02. Sort of
Service List/Catalogue	01. Yes
Service Detailed Description	03. Low level

Services provided by flagship e-Infras

OpenMinTeD

Assessment	OpenMinTeD
Visible Link to the Services in the main page	02. Sort of
Service List/Catalogue	01. Yes
Service Detailed Description	03. Low level
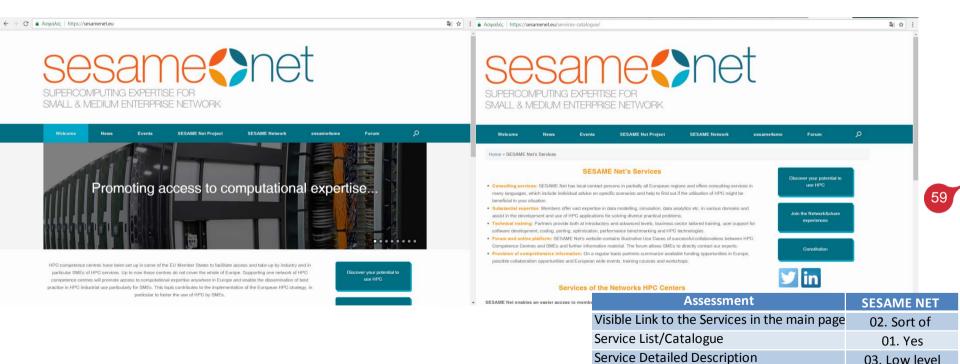
Services provided by flagship e-Infras
SESAME NET

| Assessment	SESAME NET
Visible Link to the Services in the main page	02. Sort of
Service List/Catalogue	01. Yes
Service Detailed Description	03. Low level

Services provided by flagship e-Infras
READ

Assessment	READ
Visible Link to the Services in the main page	02. Sort of
Service List/Catalogue	01. Yes
Service Detailed Description	03. Low level

Services provided by flagship e-Infras
AARC

Assessment	AARC
Visible Link to the Services in the main page	03. No
Service List/Catalogue	02. No
Service Detailed Description	02. Intermediate level

Services provided by flagship e-Infras

MuG

Assessment	MuG
Visible Link to the Services in the main page	03. No
Service List/Catalogue	02. No
Service Detailed Description	02. Intermediate level

Services provided by flagship e-Infras
EVER-EST

Assessment	EVER-EST
Visible Link to the Services in the main page	01. Yes
Service List/Catalogue	02. No
Service Detailed Description	03. Low level

Services provided by flagship e-Infras
EDISON

Assessment	EDISON
Visible Link to the Services in the main page	03. No
Service List/Catalogue	02. No
Service Detailed Description	03. Low level

Services provided by flagship e-Infras
THOR

Assessment	THOR
Visible Link to the Services in the main page	03. No
Service List/Catalogue	02. No
Service Detailed Description	03. Low level

Services provided by flagship e-Infras
LEARN

Assessment	LEARN
Visible Link to the Services in the main page	03. No
Service List/Catalogue	02. No
Service Detailed Description	03. Low level

Services provided by flagship e-Infras
VRE4EIC

Assessment	VRE4EIC
Visible Link to the Services in the main page	03. No
Service List/Catalogue	02. No
Service Detailed Description	03. Low level