EOSC Profiles

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References	https://confluence.egi.eu/x/K4PeAw
Acronyms	https://confluence.egi.eu/x/d4PeAw
Definitions	https://confluence.egi.eu/x/coPeAw
Report Bug, Imporvement	https://jira.egi.eu/projects/EOSCENIT/issues/EOSCENIT-1?filter=allopenissues or enhanceeosc@jnp.gr

Introduction

One of the major challenges that the European Open Science Cloud (EOSC) aims to address is the historical lack of **Interoperable Online Catalogues of Research Resources** that European Researchers could explore across Europe.
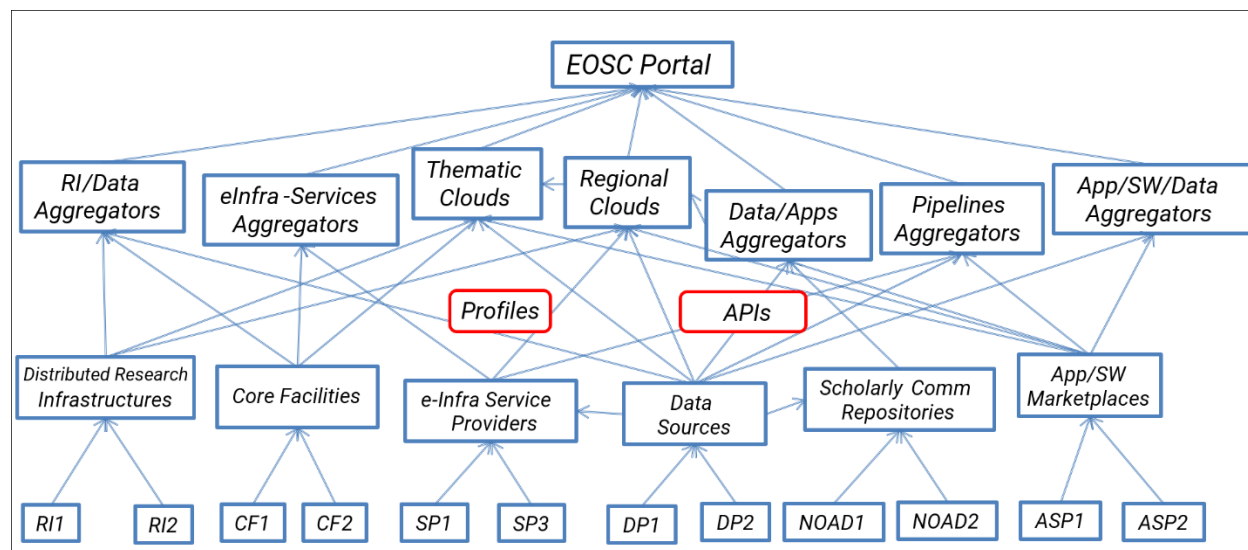
European Researchers increasingly live, work, and conduct research across borders. Their increased mobility must be supported by cross-border services and seamless exchange of data. Unfortunately, the environment in which data exchange takes place amongst EU Member States is complex, creating many semantic interoperability conflicts caused among others by the lack of commonly agreed data models, the absence of universal reference data, etc.

On the other hand many European Research Infrastructures and Resource Providers have their own public catalogues; many others are at very early stages of developing their catalogue; they are following diverse standards, frameworks and approaches; some describe their resources with varying level of detail and complexity, while others had no discoverable or accessible paths to their Resource offerings.

A Catalogue aims to present in a well-organised manner the available Resources that are on offer to a User/Customer by a Provider. It is the customer-facing list of all Resources offered. Similarly, to labels on goods or products, containing information on the good as well as pricing, Resources and their attributes should be explained in a clear and structured manner to guide the user to find the right Resource.

The development and implementation of a Catalogue is an essential step towards the transformation from technology-oriented organisations into customer-oriented organisations. It is a means to communicate and provide clarity to Users/Customers about the Resources available to them, to help improve customer relations by sharing information and managing customer expectations.

The eInfraCentral project recognised early enough that a common approach to describing (Goal-1) and exchanging (Goal-2) Resource-related information is the way forward to enhance discoverability, interoperability and thus potential uptake of Resources in a European single digital market for Research.

eInfraCentral worked on this harmonisation in partnership with five key e-infrastructures: GÉANT, OpenAIRE, PRACE, EGI and EUDAT. The approach was to extend best practices followed independently and to enable the harmonisation of Resource descriptions to allow interoperability and the possibility for a common catalogue or a catalogue of catalogues.

Goal-1 was addressed by the EOSC Profiles (previously known as Service Description Templates (SDT)) that are widely adopted as the de facto standard scheme for the representation of Service-related information in the EOSC Catalogue. Profiles are simplified, reusable and extensible data models that capture the fundamental characteristics of a data entity in a context-neutral and syntax-neutral fashion.

Goal-2 was addressed by a rich set of Open REST API methods for the exchange of information among Providers' systems and the EOSC Portal.

This approach bore fruit with the launch of the eInfraCentral Portal in 2017 and later on the EOSC-hub Portal and finally the EOSC Portal on November 2018 (with SDTv1.13). This work was extended within the EOSC Portal Collaboration Agreement of eInfraCentral, EOSC-hub and OpenAIRE-Advance and within CatRIS that is extending this work to offerings by Research Infrastructures (RIs), Core Facilities (CFs) and Shared Scientific Resources (SSRs) and is now transfered and developed further under EOSC Enhance in collaboration with EOSC-hub and in partnership with the ESFRI Cluster projects: ENVRI-FAIR, PaNOSC, ESCAPE, SSHOC and EOSC-Life.

The EOSC Profiles are evolving specifications, which will incorporate new features from the European research communities in the EOSC ecosystem.

The EOSC Profiles are part of the **EOSC Interoperability Framework** that comprises among others of:

- the [EOSC Profiles](#);
- the [EOSC Portal Application Programming Interfaces](#) (API);
- the [EOSC Portal Onboarding Process](#) (OP);
- the EOSC Rules of Participation (RoP).

The EOSC Interoperability Framework as a whole constitutes an important pillar to realise the EOSC vision and framework. It is an evolving specification, which will incorporate new features from the EOSC ecosystem as they emerge.

Version 3.00 of the EOSC Profiles include two profiles each addressing a different entity and a different phase of the onboarding, update, maintenance and monitoring processes of a Resource by a Provider: the **Provider Profile** and the **Resource Profile**.

The EOSC Profiles provide definition of their attributes, their format/type (if any) and multiplicity, as well as whether the attribute is mandatory or optional for the implementation of a number of features in Catalogues. They also provide validation rules for validation of input data.

The EOSC Profiles include also Provider and Resource Code lists, Taxonomies, Classifications that have been developed to provide a structured classification of Resources and a harmonized way for the description of various attributes. They also constitute the basis for the structure and the filtering functions of an EOSC Catalogue.

The EOSC Profiles Roadmap include the following

- UML, RDF, XML (June 2020)
- Extension of EOSC Resource Profile for Research Products (July 2020)
- Extension of EOSC Resource Profile for Data Sources (September 2020)
- Specification of EOSC Portal APIs v3.00 (October 2020)
- Update to v4.00 (December 2020)

EOSC Provider Profile

An EOSC Provider is an *EOSC System User* responsible for the provisioning of one or more *Resources to the EOSC*. *EOSC Providers* are organisations, a part of an organisation or a federation that manages and delivers Resources to End-Users. *EOSC Providers* can be: *Resource Providers, Service Providers, Data (Source) Providers, Service Developers, Research Infrastructures, Distributes Research Infrastructures, Resource Aggregators, Thematic Clouds, Regional Clouds*, etc. More definitions here.

Data Model

Basic Information						
Code	Attribute Name	Definition	Type	Multiplicity	Required	Public
EPP.BAI.0	**ID**	A persistent identifier, a unique reference to the Provider in the context of the EOSC Portal.	String (max 30)	1	**Mandatory**	Yes
EPP.BAI.1	**Name**	Full Name of the Provider offering the resource and acting as main contact point.	String (max 100)	1	**Mandatory**	Yes
EPP.BAI.2	**Abbreviation**	Abbreviation or short name of the Provider.	String (max 30)	1	**Mandatory**	Yes
EPP.BAI.3	**Website**	Webpage with information about the Provider.	URL	1	**Mandatory**	Yes
EPP.BAI.4	**Legal Entity**	A Y/N question to define whether the Provider is a Legal Entity or not.	Boolean	1	**Mandatory**	Yes
EPP.BAI.5	**Legal Status**	Legal status of the Provider. The legal status is usually noted in the registration act/statutes. For independent legal entities (1) - legal status of the Provider. For embedded providers (2) - legal status of the hosting legal entity. It is also possible to select Not a legal entity.	List of controlled values: EPP: EOSC Provider Profile#Provider Legal Status	1	Optional	Yes
Marketing Information						
Code	Attribute Name	Definition	Type	Multiplicity	Required	Public

EPP.MRI.1	**Description**	The description of the Provider.	String (max 1000)	1	**Mandatory**	Yes
EPP.MRI.2	**Logo**	Link to the logo/visual identity of the Provider.	URL	1	**Mandatory**	Yes
EPP.MRI.3	**Multimedia**	Link to video, slideshow, photos, screenshots with details of the Provider.	URL	Multiple	Optional	Yes

Classification Information

Code	Attribute Name	Definition	Type	Multiplicity	Required	Public
EPP.CLI.1	**Scientific Domain**	A named group of providers that offer access to the same type of resource or capabilities.	List of controlled values: EPP: EOSC Provider Profile#Provider Scientific Domain	Multiple	Optional	Yes
EPP.CLI.2	**Scientific Subdomain**	A named group of providers that offer access to the same type of resource or capabilities, within the defined domain.	List of controlled values: EPP: EOSC Provider Profile#Provider Scientific Domain	Multiple	Optional	Yes
EPP.CLI.3	**Tags**	Keywords associated to the Provider to simplify search by relevant keywords.	String (max 20)	Multiple	Optional	Yes

Location Information

Code	Attribute Name	Definition	Type	Multiplicity	Required	Public
EPP.L0I.1	**Street Name and Number**	Street and Number of incorporation or Physical location of the Provider or its coordinating centre in the case of distributed, virtual, and mobile providers.	String (max 50)	1	**Mandatory**	Yes
EPP.L0I.2	**Postal Code**	Postal code of incorporation or Physical location of the Provider or its coordinating centre in the case of distributed, virtual, and mobile providers.	String (max 20)	1	**Mandatory**	Yes

Code	Attribute Name	Definition	Type	Multiplicity	Required	Public
EPP.L0I.3	**City**	City of incorporation or Physical location of the Provider or its coordinating centre in the case of distributed, virtual, and mobile providers.	String (max 20)	1	**Mandatory**	Yes
EPP.L0I.4	**Region**	Region of incorporation or Physical location of the Provider or its coordinating centre in the case of distributed, virtual, and mobile providers.	String (max 50)	1	Optional	Yes
EPP.L0I.5	**Country**	Country of incorporation or Physical location of the Provider or its coordinating centre in the case of distributed, virtual, and mobile providers.	List of controlled values: EPP: EOSC Provider Profile#Provider Country	1	**Mandatory**	Yes

Contact Information

Main Contact/Provider Manager

Code	Attribute Name	Definition	Type	Multiplicity	Required	Public
EPP.COI.1	**First Name**	First Name of the Provider's main contact person/Provider manager.	String (max 50)	1	**Mandatory**	No
EPP.COI.2	**Last Name**	Last Name of the Provider's main contact person/Provider manager.	String (max 50)	1	**Mandatory**	No
EPP.COI.3	**Email**	Email of the Provider's main contact person/Provider manager.	Email	1	**Mandatory**	No
EPP.COI.4	**Phone**	Phone of the Provider's main contact person/Provider manager.	String (max 20)	1	Optional	No
EPP.COI.5	**Position**	Position of the Provider's main contact person/Provider manager.	String (max 50)	1	Optional	No

Public Contact

Code	Attribute Name	Definition	Type	Multiplicity	Required	Public

Code	Attribute Name	Definition	Type	Multiplicity	Required	Public
EPP.COI.6	**First Name**	First Name of the Provider's contact person to be displayed at the portal.	String (max 20)	1	Optional	Yes
EPP.COI.7	**Last Name**	Last Name of the Provider's contact person to be displayed at the portal.	String (max 20)	1	Optional	Yes
EPP.COI.8	**Email**	Email of the Provider's contact person to be displayed at the portal or general email to contact Provider.	Email	1	**Mandatory**	Yes
EPP.COI.9	**Phone**	Phone of the provider's contact person to be displayed at the portal or general phone to contact Provider.	String (max 20)	1	Optional	Yes
EPP.COI.10	**Position**	Position of the Provider's contact person to be displayed at the portal.	String (max 50)	1	Optional	Yes
Maturity Information						
Code	Attribute Name	Definition	Type	Multiplicity	Required	Public
EPP.MTI.1	**Life Cycle Status**	Current status of the Provider/Research infrastucture life-cycle.	List of controlled values: [EPP: EOSC Provider Profile#Provider Life Cycle Status](#)	1	Optional	Yes
EPP.MTI.2	**Certifications**	List of certifications obtained for the Provider (including the certification body and any certificate number).	String (max 250)	Multiple	Optional	Yes
Other Information						
Code	Attribute Name	Definition	Type	Multiplicity	Required	Public

EPP.OTH.1	**Hosting Legal Entity**	Name of the organisation/institution legally hosting (housing) the provider/research infrastructure or its coordinating centre. A distinction is made between: (1) research infrastructures that are self-standing and have a defined and distinct legal entity, (2) research infrastructures that are embedded into another institution which is a legal entity (such as a university, a research organisation, etc.). If (1) - name of the research infrastructure, If (2) - name of the hosting organisation.	String (max 80)	1	Optional	Yes
EPP.OTH.2	**Participating Countries**	Providers/Research Infrastructures that are funded by several countries should list here all supporting countries (including the Coordinating country).	List of controlled values: EPP: EOSC Provider Profile#Provider Country	Multiple	Optional	Yes
EPP.OTH.3	**Affiliations**	Providers that are members or affiliated or associated with other organisations should list those organisations here	String (max 30)	Multiple	Optional	Yes
EPP.OTH.4	**Networks**	Select the networks the Provider is participating in.	List of controlled values: EPP: EOSC Provider Profile#Provider Networks	Multiple	Optional	Yes
EPP.OTH.5	**Structure Type**	Defines the Provider structure type (single-sited, distributed, mobile, virtual, etc.)	List of controlled values: EPP: EOSC Provider Profile#Provider Structure Type	Multiple	Optional	Yes
EPP.OTH.6	**ESFRI Domain**	ESFRI domain classification.	List of controlled values: EPP: EOSC Provider Profile#Provider ESFRI Domain	Multiple	Optional	Yes

EPP.OTH.7	**ESFRI Type**	If the research infrastructure is (part of) an ESFRI project indicate how the RI participates: a) is a node of an ESFRI project, b) is an ESFRI project, c) is an ESFRI landmark, d) is not an ESFRI project or landmark.	List of controlled values: EPP: EOSC Provider Profile#Provider ESFRI Type	1	Optional	Yes
EPP.OTH.8	**MERIL Scientific Domain**	MERIL scientific domain classification	List of controlled values: MERIL Scientific Domain	Multiple	Optional	Yes
EPP.OTH.9	**MERIL Scientific Subdomain**	MERIL scientific subdomain classification	List of controlled values: MERIL Scientific Domain	Multiple	Optional	Yes
EPP.OTH.10	**Areas of Activity**	Basic research, Applied research or Technological development	List of controlled values: EPP: EOSC Provider Profile#Provider Areas of Activity	Multiple	Optional	Yes
EPP.OTH.11	**Societal Grand Challenges**	Provider's participation in the grand societal challenges as defined by the European Commission	List of controlled values: EPP: EOSC Provider Profile#Provider Societal Grand Challenges	Multiple	Optional	Yes
EPP.OTH.12	**National Roadmaps**	Provider being part of a national roadmap for research infrastructures	String (max 80)	Multiple	Optional	Yes

Onboarding Guide

Basic Information

Code	Attribute Name	Example Value	Guidelines for the Providers	Machine-based validation	Human-based validation
EPP.BAI.0	**ID**	openaire	The Provider ID is currently maintained by the EOSC Portal. It is assigned during onboarding of the Provider. It is suggested to use the Provider's abbreviation (see EPP.BAI.2). Two providers cannot have the same id; therefore the EOSC Portal will resolve this when it happens during the registration of a provider. In next releases of the model, the id will correspond to a PID issued and resolved by PID providers (like ORCID, doi-like, etc).		
EPP.BAI.1	**Name**	Open Access Infrastructure for Research in Europe			Verify via internet searching if the Provider name is a valid organisation name and has a Website with the same FQDN.
EPP.BAI.2	**Abbreviation**	OpenAIRE			Verify via internet searching that this is the relevant abreviation (no typos or mispellings)

EPP.BAI.3	**Website**	https://www.openaire.eu	Provide the landing page (i.e. domain name or FQDN) of the sevice provider	Validate nominal FQDN, reject IP or other formats	
EPP.BAI.4	**Legal Entity**	Y			
EPP.BAI.5	**Legal Status**	Non-Profit Partnership (NPP)			
Marketing Information					
Code	Attribute Name	Example Value	Guidelines for the Providers	Machine-based validation	Human-based validation
EPP.MRI.1	**Description**	OpenAIRE represents a pivotal phase in the long-term effort to implement and strengthen the impact of the Open Access policies of the European Commission, building on the achievements of the OpenAIRE projects. OpenAIRE support and accelerate Open Science and Scholarship, of which Open Access is of fundamental importance.	Describe shortly the objective and background of your organisation.		Compare briefly to provider website to ensure content consistency, but generally take as is.

Code	Attribute Name	Example Value	Guidelines for the Providers	Machine-based validation	Human-based validation
EPP.MRI.2	**Logo**	https://www.openaire.eu/images/OpenAIRE_branding/Logo_Horizontal.png	Provide a URL pointing to the organisation's logo at high quality, in the form of the shortest possible alias	Validate nominal URL, reject IP or other formats For the resource located at the URL validate as follows: -Formats: png, gif, jpg, jpeg, pjpeg, tiff, vnd.adobe, vnd.microsoft -Minimum dimensions 180x120px	
EPP.MRI.3	**Multimedia**	https://vimeo.com/108790101	Provide a URL pointing at a high quality video or slideshow, in the form of the shortest possible alias	Validate nominal URL, reject IP or other formats	

Classification Information

Code	Attribute Name	Example Value	Guidelines for the Providers	Machine-based validation	Human-based validation
EPP.CLI.1	**Scientific Domain**	Information Science and Technology			
EPP.CLI.2	**Scientific Subdomain**	Complex Data Facilities			
EPP.CLI.3	**Tags**	Open data, open science, publications, research papers	Add keywords about the provider. For multi-word keywords, please use '-' to concatenate words	Validate keywords, by inserting '-' to concatenate words not separated by commas and identify as separate keywords words that are separated by commas	

Location Information					
Code	Attribute Name	Example Value	Guidelines for the Providers	Machine-based validation	Human-based validation
EPP.L0I.1	**Street Name and Number**	Christou Lada			
EPP.L0I.2	**Postal Code**	10561			
EPP.L0I.3	**City**	Athens			
EPP.L0I.4	**Region**	Attica			
EPP.L0I.5	**Country**	Greece			
Contact Information					
Main Contact/Provider Manager					
Code	Attribute Name	Example Value	Guidelines for the Providers	Machine-based validation	Human-based validation
EPP.COI.1	**First Name**	Minos			
EPP.COI.2	**Last Name**	Hantzopoulos			Check for obvious typos in the name. Confirm with a google search of the name and provider
EPP.COI.3	**Email**	minos@uniath.gr		Validate e-mail address	
EPP.COI.4	**Phone**	3021077755500		Validate for number (use separate input field for country prefixes)	
EPP.COI.5	**Position**	Coordinator			
Public Contact					

Code	Attribute Name	Example Value	Guidelines for the Providers	Machine-based validation	Human-based validation
EPP.COI.6	**First Name**	Natalia			
EPP.COI.7	**Last Name**	Pappa			Check for obvious typos in the name. Confirm with a google search of the name and provider
EPP.COI.8	**Email**	pappa@uniath.gr		Validate e-mail address	
EPP.COI.9	**Phone**	293084436		Validate for number (use separate input field for country prefixes)	
EPP.COI.10	**Position**	Manager			
Maturity Information					
Code	Attribute Name	Example Value	Guidelines for the Providers	Machine-based validation	Human-based validation
EPP.MTI.1	**Life Cycle Status**	Operational			

Code	Attribute Name	Example Value	Guidelines for the Providers	Machine-based validation	Human-based validation
EPP.MTI.2	**Certifications**	ISO-27001			The certifications provided can be generic or community specific. We do not qualify the quality of a certification, the only qualification is that the certification is described on a public webpage. Verify via easy internet searches if the provided names give a valid result describing the certification. If not, request clarification and an URL reference describing the certification. Check whether the certification body is real and appears to offer certification.
Other Information					
Code	Attribute Name	Example Value	Guidelines for the Providers	Machine-based validation	Human-based validation
EPP.OTH.1	**Hosting Legal Entity**	OpenAIRE			Verify the existence, name of the provided entity via an internet search

EPP.OTH.2	**Participating Countries**	Germany, Italy, Poland, Switzerland, Portugal, Netherlands, Belgium, Norway, Uruguay			
EPP.OTH.3	**Affiliations**	EGI, EUDAT, GEANT, OpenAIRE, etc			
EPP.OTH.4	**Networks**	Open Access Infrastructure for Research in Europe (OpenAIRE)			
EPP.OTH.5	**Structure Type**	Virtual			
EPP.OTH.6	**ESFRI Domain**	Data, Computing and Digital Research Infrastructures			
EPP.OTH.7	**ESFRI Type**	Not and ESFRI project or landmark			
EPP.OTH.8	**MERIL Scientific Domain**	Humanities & Arts			
EPP.OTH.9	**MERIL Scientific Subdomain**	Collections			
EPP.OTH.10	**Areas of Activity**	Other			
EPP.OTH.11	**Societal Grand Challenges**	Other			
EPP.OTH.12	**National Roadmaps**	No			

Transition Guide

Basic Information							
Code	Attribute Name	Changes v1.13 to v3.00 (eInfraCentral)	Registry Transition v1.13 to v3.00	Changes v1.30 to v3.00 (EOSC-hub)	Registry Transition MP v1.30 to v3.00	Changes v2.00 to v3.00 (CatRIS)	Registry Transition v2.00 to v3.00
EPP.BAI.0	**ID**	No Change	*Copy*	New	*ID should be compliant to the Providers' IDs*	No Change	*Copy*
EPP.BAI.1	**Name**	No Change	*Copy*	Change Attribute Name (old Service Provider Name) Change Type (old Single Line)	*Copy*	Change Attribute Name (old Full Name) Change length (old max 80)	*Copy*
EPP.BAI.2	**Abbreviation**	**New**	Default value empty(null)	**New**	Default value empty(null)	Change Attribute Name (old Acronym) Change length (old max 20)	*Copy*
EPP.BAI.3	**Website**	Change Attribute Name (old URL)	*Copy*	Change Attribute Name (old Service Provider URL)	*Copy*	No Change	*Copy*
EPP.BAI.4	**Legal Entity**	**New**	Default value "Y"	**New**	Default value "Y"	**New**	Default value "Y"

Code	Attribute Name	Changes v1.13 to v3.00 (eInfraCentral)	Registry Transition v1.13 to v3.00	Changes v1.30 to v3.00 (EOSC-hub)	Registry Transition MP v1.30 to v3.00	Changes v2.00 to v3.00 (CatRIS)	Registry Transition v2.00 to v3.00
EPP.BAI.5	**Legal Status**	**New**	Default value "Other"	**New**	Default value "Other"	Moved from Other Information Block	Copy
Marketing Information							
EPP.MRI.1	**Description**	**Change to Mandatory**	*Copy* or if empty Default value empty(null)	Change Attribute Name (old Service Provider Description) Change Type (old Freetext) **Change to Mandatory**	*Copy or if empty Default value "-"*	No Change	*Copy*
EPP.MRI.2	**Logo**	**Change to Mandatory**	*Copy* or if empty URL to default EOSC Provider Logo	Change Attribute Name (old Service Provider Logo)	*Copy or if empty URL to default EOSC Provider Logo*	No Change	*Copy or if empty URL to default EOSC Provider Logo*
EPP.MRI.3	**Multimedia**	**New**	Default value empty(null)	**New**	Default value empty(null)	No Change	*Copy*

Classification Information

Code	Attribute Name	Changes v1.13 to v3.00 (eInfraCentral)	Registry Transition v1.13 to v3.00	Changes v1.30 to v3.00 (EOSC-hub)	Registry Transition MP v1.30 to v3.00	Changes v2.00 to v3.00 (CatRIS)	Registry Transition v2.00 to v3.00
EPP.CLI.1	**Scientific Domain**	**New**	Default value "Other"	**New**	Default value "Other"	**Change to Optional**	*Copy*
EPP.CLI.2	**Scientific Subdomain**	**New**	Default value "Other"	**New**	Default value "Other"	Change Name (old Category) **Change to Optional**	*Copy*
EPP.CLI.3	**Tags**	**New**	Default value empty(null)	Change Attribute Name (old Service Tags)	Default value empty(null)	No Change	*Copy*

Location Information

Code	Attribute Name	Changes v1.13 to v3.00 (eInfraCentral)	Registry Transition v1.13 to v3.00	Changes v1.30 to v3.00 (EOSC-hub)	Registry Transition MP v1.30 to v3.00	Changes v2.00 to v3.00 (CatRIS)	Registry Transition v2.00 to v3.00
EPP.L0I.1	**Street Name and Number**	**New**	Default value "-"	**New**	Default value "-"	Change length (old max 20) Change Attribute Name (old Location Street + Location Number)	*Copy*

Code	Attribute Name	Changes v1.13 to v3.00 (eInfraCentral)	Registry Transition v1.13 to v3.00	Changes v1.30 to v3.00 (EOSC-hub)	Registry Transition MP v1.30 to v3.00	Changes v2.00 to v3.00 (CatRIS)	Registry Transition v2.00 to v3.00
EPP.L0I.2	**Postal Code**	**New**	Default value "-"	**New**	Default value "-"	Change Attribute Name (old Location Postal Code)	*Copy*
EPP.L0I.3	**City**	**New**	Default value "-"	**New**	Default value "-"	Change Attribute Name (old Location City)	*Copy*
EPP.L0I.4	**Region**	**New**	Default value empty(null)	**New**	Default value empty(null)	Change length (old max 20) Change Attribute Name (old Location Region) **Change to Optional**	*Copy*
EPP.L0I.5	**Country**	**New**	Default value "Other"	Change Type (old Single Line)	*Copy*	Change Attribute Name (old Coordinating Country)	*Copy*
Contact Information							
Main Contact/Provider Manager							
Code	Attribute Name	Changes v1.13 to v3.00 (eInfraCentral)	Registry Transition v1.13 to v3.00	Changes v1.30 to v3.00 (EOSC-hub)	Registry Transition MP v1.30 to v3.00	Changes v2.00 to v3.00 (CatRIS)	Registry Transition v2.00 to v3.00

EPP.COI.1	**First Name**	No Change	*Copy*	Change Attribute Name (old Service Provider Contact Name) Change Type (old Single Line)	*Copy only First Name*	Change length (old max 20) Change Attribute Name (old Contact-1 First Name)	*Copy*
EPP.COI.2	**Last Name**	No Change	*Copy*	Change Attribute Name (old Service Provider Contact Name) Change Type (old Single Line)	*Copy only Last Name*	Change length (old max 20) Change Attribute Name (old Contact-1 Last Name)	*Copy*
EPP.COI.3	**Email**	No Change	*Copy*	Change Attribute Name (old Service Provider Contact Email)	*Copy*	Change Attribute Name (old Contact-1 Email)	*Copy*
EPP.COI.4	**Phone**	No Change	Default value empty(null)	**New**	Default value empty(null)	Change to Optional Change Attribute Name (old Contact-1 Telephone)	*Copy*
EPP.COI.5	**Position**	**New**	Default value empty(null)	**New**	Default value empty(null)	Change length (old max 20) Change Attribute Name (old Contact-1 Position)	*Copy*

Public Contact

Code	Attribute Name	Changes v1.13 to v3.00 (eInfraCentral)	Registry Transition v1.13 to v3.00	Changes v1.30 to v3.00 (EOSC-hub)	Registry Transition MP v1.30 to v3.00	Changes v2.00 to v3.00 (CatRIS)	Registry Transition v2.00 to v3.00
EPP.COI.6	**First Name**	**New**	Default value empty(null)	**New**	Default value empty(null)	Change Attribute Name (old Contact-2 First Name)	*Copy*
EPP.COI.7	**Last Name**	**New**	Default value empty(null)	**New**	Default value empty(null)	Change Attribute Name (old Contact-2 Last Name)	*Copy*
EPP.COI.8	**Email**	**New**	Default value info@[Provider Domain] or if difficult "-"	**New**	Default value info@[Provider Domain] or if difficult "-"	Change Attribute Name (old Contact-2 Email) **Change to Mandatory**	*Copy or if null insert info@[Provider Domain] or if difficult "-"*
EPP.COI.9	**Phone**	**New**	Default value empty(null)	**New**	Default value empty(null)	Change Attribute Name (old Contact-2 Phone)	*Copy*
EPP.COI.10	**Position**	**New**	Default value empty(null)	**New**	Default value empty(null)	Change length (old max 20) Change Attribute Name (old Contact-2 Position)	*Copy*

Maturity Information

Code	Attribute Name	Changes v1.13 to v3.00 (eInfraCentral)	Registry Transition v1.13 to v3.00	Changes v1.30 to v3.00 (EOSC-hub)	Registry Transition MP v1.30 to v3.00	Changes v2.00 to v3.00 (CatRIS)	Registry Transition v2.00 to v3.00
EPP.MTI.1	**Life Cycle Status**	**New**	Default value "Other"	**New**	Default value "Other"	**Change to Optional**	*Copy*
EPP.MTI.2	**Certifications**	**New**	Default value empty(null)	Change Attribute Name (old Service Provider certifications) Change Type (old Freetext)	*Copy or Default value empty(null)*	**New**	Default value empty(null)

Other Information

Code	Attribute Name	Changes v1.13 to v3.00 (eInfraCentral)	Registry Transition v1.13 to v3.00	Changes v1.30 to v3.00 (EOSC-hub)	Registry Transition MP v1.30 to v3.00	Changes v2.00 to v3.00 (CatRIS)	Registry Transition v2.00 to v3.00
EPP.OTH.1	**Hosting Legal Entity**	**New**	Default value empty(null)	**New**	Default value empty(null)	No change	*Copy*
EPP.OTH.2	**Participating Countries**	**New**	Default value "Other"	**New**	Default value "Other"	Moved from Classification Information Block	*Copy*
EPP.OTH.3	**Affiliations**	**New**	Default value empty(null)	Change Type (old Freetext)	*Copy or Default value empty(null)*	**New**	Default value empty(null)

EPP.OTH.4	Networks	New	Default value "Other"	New	Default value "Other"	No change	*Copy*
EPP.OTH.5	Structure Type	New	Default value "Other"	New	Default value "Other"	Change Attribute Name (old Type) Moved from Classification Infromation Block **Change to Optional**	*Copy*
EPP.OTH.6	ESFRI Domain	New	Default value "Other"	New	Default value "Other"	Moved from Classification Information Block	*Copy*
EPP.OTH.7	ESFRI Type	New	Default value "Other"	New	Default value "Other"	Change Attribute Name (old ESFRI)	*Copy*
EPP.OTH.8	MERIL Scientific Domain	New	Default value empty(null)	New	Default value empty(null)	Moved from Classification Information Block	*Copy*
EPP.OTH.9	MERIL Scientific Subdomain	New	Default value empty(null)	New	Default value empty(null)	Moved from Classification Information Block	*Copy*
EPP.OTH.10	Areas of Activity	New	Default value "Other"	New	Default value "Other"	No change	*Copy*

EPP.OTH.11	**Societal Grand Challenges**	**New**	Default value "Other"	**New**	Default value "Other"	No change	*Copy*
EPP.OTH.12	**National Roadmaps**	**New**	Default value empty(null)	**New**	Default value empty(null)	Change Type (old controlled	

Code Lists, Taxonomies, Classifications

Provider Legal Status

No.	Provider Legal Status	Changes v1.13 to v3.00	Changes v1.30 to v3.00	Changes v2.00 to v3.00
1	Association	New	New	
2	Consortium			
3	Corporation			
4	European Research Infrastructure Consortium (ERIC)			
5	European Economic Interest Grouping			
6	Foundation			
7	Grouping			
8	International or Intergovernmental Organisation or Framework			
9	Non-Governmental Organisation			
10	Non For Profit Company			
11	Partnership			
12	Private Company			
13	Public Company			
14	Public Legal Entiry			
15	Public Legal Entiry under Private Law			
16	Self Employed			
17	Society			

No.						
18	Trust					
19	Union					
20	Not a Legal Entity					Added
21	Other					

Provider Scientific Domain / Subdomain

From the Revised Field of Science and Technology (FOS) Classification in the Frascati Manual by the Working Party of National Experts on Science and Technology Indicators (2007), OECD.

No.	Scientific Domain	No.	Scientific Subdomain	Changes v1.13 to v3.00	Changes v1.30 to v3.00	Changes v2.00 to v3.00
1	Natural Sciences	1	Mathematics	New	New	Change to FOS 2017
		2	Computer and information sciences			
		3	Physical sciences			
		4	Chemical sciences			
		5	Earth and related environmental sciences			
		6	Biological sciences			
		7	Other natural sciences			
2	Engineering & Technology	1	Civil engineering			
		2	Electrical, electronic and information engineering			
		3	Mechanical engineering			
		4	Chemical engineering			
		5	Materials engineering			

		6	Medical engineering			
		7	Environmental engineering			
		8	Environmental biotechnology			
		9	Industrial biotechnology			
		10	Nano-technology			
		11	Other engineering and technology sciences			
3	Medical & Health Sciences	1	Basic medicine			
		2	Clinical medicine			
		3	Health sciences			
		4	Medical biotechnology			
		5	Other medical sciences			
4	Agricultural Sciences	1	Agriculture, forestry, and fisheries			
		2	Animal and dairy sciences			
		3	Veterinary sciences			
		4	Agricultural biotechnology			
		5	Other agricultural sciences			
5	Social Sciences	1	Psychology			
		2	Economics and business			
		3	Educational sciences			
		4	Sociology			
		5	Law			
		6	Political sciences			

		7	Social and economic geography			
		8	Media and communications			
		9	Other social sciences			
6	Humanities	1	History and archaeology			
		2	Languages and literature			
		3	Philosophy, ethics and religion			
		4	Arts			
		5	Other humanities			
7	Generic	1	Generic			Change from Interdisciplinary to Generic
8	Other	1	Other			

Provider Country

From ISO 3166 standard – Codes for the representation of names of countries and their subdivisions, except for Greece and the United Kingdom (use EL and UK respectively instead of GR and GB) from Eurostat code lists.

No.	Country	Changes v1.13 to v3.00	Changes v1.30 to v3.00	Changes v2.00 to v3.00
1	Afghanistan (AF)	New		
2	Åland Islands (AX)			
3	Albania (AL)			
4	Algeria (DZ			
5	American Samoa (AS)			

6	Andorra (AD)			
7	Angola (AO)			
8	Anguilla (AI)			
9	Antarctica (AQ)			
10	Antigua and Barbuda (AG)			
11	Argentina (AR)			
12	Armenia (AM)			
13	Aruba (AW)			
14	Australia (AU)			
15	Austria (AT)			
16	Azerbaijan (AZ)			
17	Bahamas (BS)			
18	Bahrain (BH)			
19	Bangladesh (BD)			
20	Barbados (BB)			
21	Belarus (BY)			
22	Belgium (BE)			
23	Belize (BZ)			
24	Benin (BJ)			
25	Bermuda (BM)			
26	Bhutan (BT)			
27	Bolivia (BO)			

28	Bonaire, Sint Eustatius and Saba (BQ)		
29	Bosnia and Herzegovina (BA)		
30	Botswana (BW)		
31	Bouvet Island BV)		
32	Brazil (BR)		
33	British Indian Ocean Territory (IO)		
34	Brunei Darussalam (BN)		
35	Bulgaria (BG)		
36	Burkina Faso (BF)		
37	Burundi (BI)		
38	Cabo Verde (CV)		Cape Verde replaced by Cabo Verde
39	Cambodia (KH)		
40	Cameroon (CM)		
41	Canada (CA)		
42	Cayman Islands (KY)		
43	Central African Republic (CF)		
44	Chad (TD)		
45	Chile (CL)		
46	China (CN)		
47	Christmas Island (CX)		
48	Cocos (Keeling) Islands (CC)		

49	Colombia (CO)		
50	Comoros (KM)		
51	Congo (Democratic Republic) (CD)		
52	Congo (CG)		
53	Cook Islands (CK)		
54	Costa Rica (CR)		
55	Côte d'Ivoire (CI)		
56	Croatia (CR)		
57	Cuba (CU)		
58	Curaçao (CW)		
59	Cyprus (CY)		
60	Czechia (CZ)		Czech Republic replaced by Czechia
61	Denmark (DK)		
62	Djibouti (DJ)		
63	Dominica (DM)		
64	Dominican Republic (DO)		
65	Ecuador (EC)		
66	Egypt (EG)		
67	El Salvador (SV)		
68	Equatorial Guinea (GQ)		
69	Eritrea (ER)		
70	Estonia (EE)		

71	Eswatini (SZ)			Swaziland replaced by Eswatini
72	Ethiopia (ET)			
73	Falkland Islands (FK)			
74	Faroe Islands (FO)			Faeroe Islands replaced by Faroe Islands
75	Fiji (FJ)			
76	Finland (FI)			
77	France (FR)			
78	French Guiana (GF)			
79	French Polynesia (PF)			
80	French Southern Territories (TF)			
81	Gabon (GA)			
82	Gambia (GM)			
83	Georgia (GE)			
84	Germany (DE)			
85	Ghana (GH)			
86	Gibraltar (GI)			
87	Greece (EL)			EL instead of GR
88	Greenland (GL)			
89	Grenada (GD)			
90	Guadeloupe (GP)			
91	Guam (GU)			
92	Guatemala (GT)			

93	Guernsey (GC)		
94	Guinea (GN)		
95	Guinea-Bissau (GW)		
96	Guyana (GY)		
97	Haiti (HT)		
98	Heard Island and McDonald Islands (HM)		
99	Holy See (VA)		
100	Honduras (HN)		
101	Hong Kong HK)		
102	Hungary (HU)		Republic of Hungary replaced by Hungary
103	Iceland (IS)		
104	India (IN)		
105	Indonesia (ID)		
106	Iran (IR)		
107	Iraq (IQ)		
108	Ireland (IE)		
109	Isle of Man (IM)		
110	Israel (IL)		
111	Italy (IT)		
112	Jamaica (JM)		
113	Japan (JP)		

114	Jersey (JE)			
115	Jordan (JO)			
116	Kazakhstan (KZ)			
117	Kenya (KE)			
118	Kiribati (KI)			
119	Korea (Democratic People's Republic) (KP)			
120	Korea (Republic) (KR)			
121	Kuwait (KW)			
122	Kyrgyzstan (KG)			
123	Lao People's Democratic Republic (LA)			
124	Latvia (LV)			
125	Lebanon (LB)			
126	Lesotho (LS)			
127	Liberia (LR)			
128	Libya (LY)			
129	Liechtenstein (LI)			
130	Lithuania (LT)			
131	Luxembourg (LU)			
132	Macao (MO)			
133	Madagascar (MG)			
134	Malawi (MW)			

135	Malaysia (MY)		
136	Maldives (MV)		
137	Mali (ML)		
138	Malta (MT)		
139	Marshall Islands (MH)		
140	Martinique (MQ)		
141	Mauritania (MR)		
142	Mauritius (MU)		
143	Mayotte (YT)		
144	Mexico (MX)		
145	Micronesia (FM)		
146	Moldova (MD)		
147	Monaco (MC)		
148	Mongolia (MN)		
149	Montenegro (ME)		
150	Montserrat (MS)		
151	Morocco (MA)		
152	Mozambique (MZ)		
153	Myanmar (MM)		
154	Namibia (NA)		
155	Nauru (NR)		
156	Nepal (NP)		

157	Netherlands (NL)			
158	New Caledonia (NC)			
159	New Zealand (NZ)			
160	Nicaragua (NI)			
161	Niger (NE)			
162	Nigeria (NG)			
163	Niue (NU)			
164	Norfolk Island (NF)			
165	North Macedonia MK)			Former Yugoslav Republic of Macedonia replaced by North Macedonia
166	Northern Mariana Islands (MP)			Northern Marianas replaced by Northern Mariana Islands
167	Norway (NO)			
168	Oman (OM)			
169	Pakistan (PK)			
170	Palau (PW)			
171	Palestine, State of (PS)			
172	Panama (PA)			
173	Papua New Guinea (PG)			
174	Paraguay (PY)			
175	Peru (PE)			
176	Philippines (PH)			
177	Pitcairn (PN)			

178	Poland (PL)			
179	Portugal (PT)			
180	Puerto Rico (PR)			
181	Qatar (QA)			
182	Réunion (RE)			
183	Romania (RO)			
184	Russian Federation (RU)			
185	Rwanda (RW)			
186	Saint Barthélemy (BL)			
187	Saint Helena, Ascension and Tristan da Cunha (SH)			Saint Helena replaced by Saint Helena, Ascension and Tristan da Cunha
188	Saint Kitts and Nevis (KN)			
189	Saint Lucia (LC)			
190	Saint Martin (MF)			
191	Saint Pierre and Miquelon (PM)			
192	Saint Vincent and the Grenadines (VC)			
193	Samoa (WS)			
194	San Marino (SM)			
195	São Tomé and Príncipe (ST)			
196	Saudi Arabia (SA)			
197	Senegal (SN)			
198	Serbia (RS)			

199	Seychelles (SC)			
200	Sierra Leone (SL)			
201	Singapore (SG)			
202	Sint Maarten (SX)			
203	Slovakia (SK)			
204	Slovenia (SI)			
205	Solomon Islands (SB)			
206	Somalia (SO)			
207	South Africa (ZA)			
208	South Georgia and the South Sandwich Islands (GS)			
209	South Sudan (SS)			
210	Spain (ES)			
211	Sri Lanka (LK)			
212	Sudan (SD)			
213	Suriname (SR)			
214	Svalbard and Jan Mayen (SJ)			
215	Sweden (SE)			
216	Switzerland (SH)			
217	Syrian Arab Republic (SY)			
218	Taiwan (Province of China) (TW)			
219	Tajikistan (TJ)			

220	Tanzania (TZ)		
221	Thailand (TH)		
222	Timor-Leste (TL)		East Timor replaced by Timor-Leste
223	Togo (TG)		
224	Tokelau (TK)		
225	Tonga (YO)		
226	Trinidad and Tobago (TT)		
227	Tunisia (TN)		
228	Turkey (TR)		
229	Turkmenistan (TM)		
230	Turks and Caicos Islands (TC)		
231	Tuvalu (TV)		
232	Uganda (UG)		
233	Ukraine (UA)		
234	United Arab Emirates (AE)		
235	United Kingdom of Great Britain and Northern Ireland (UK)		UK instead of GB
236	United States Minor Outlying Islands (UM)		
237	United States of America (US)		
238	Uruguay (UY)		
239	Uzbekistan (UZ)		
240	Vanuatu (VU)		

241	Venezuela (VE)			
242	Viet Nam (VN)			
243	Virgin Islands (British) (VG)			
244	Virgin Islands (U.S.) (VI)			
245	Wallis and Futuna (WF)			
246	Western Sahara (EH)			
247	Yemen (YE)			
248	Zambia (ZM)			
249	Zimbabwe (ZW)			
250	Other			

Provider Life Cycle Status

No.	Provider Life Cycle Status	Description
1	Under Construction	The Research Infrastructure is under construction.
2	Operational	The Research Infrastructure is constructed and all operations are being offered.
3	Being Upgraded	The Research Infrastructure is currently being upgraded. It is probable that many services are in containment or unavailable.
4	Other	

Provider Network

This list is based on a MERIL result.

No.	Provider Networks	Changes v1.13 to v3.00	Changes v1.30 to v3.00	Changes v2.00 to v3.00
1	4M Association (4M)			Updated
2	African Archeologists Association (AAA)			Updated
3	Academic Careers Understood through MEasurement and Norms (ACUMEN)			
4	Accessibility Assessment Simulation Environment for New Applications Design and Development (ACCESSIBLE)			
5	European Research Infrastructure for the observation of Aerosol, Clouds and Trace Gases (ACTRIS)			Updated
6	Advancing 3Rs and International Standards in Biological and Biomedical Research (EUPRIM-Net)			
7	AErosol Robotic NETwork (AERONET)			
8	African Studies in Europe (AEGIS)	**New**	**New**	
9	Alianza por la Investigación y la Innovación Energéticas (ALINNE)			
10	ALISTORE European Research Institute (ALISTORE ERI)			Updated
11	Advanced MEMS For RF and Millimeter Wave Communications (AMICOM)			Updated
12				Deleted
13	Analysis and Experimentation on Ecosystems (ANAEE)			Updated
14				Deleted
15	Animal Health and Welfare ERA-Net (ANIHWA)			
16	Alliance for Permanent Access to the Records of Science Network (APARSEN)			Updated
17	Asociación de Empresas de Energías Renovables (APPA Marina)			Updated

18	AQUAculture infrastructures for EXCELlence in European fish research towards 2020 (AQUAEXCEL)			Updated
19	Support the sustainable development of aquaculture in the Mediterranean region (AQUAMED)			Updated
20	CEH Aquatic Mesocosm Facility (CAMF)			Updated
21	International network for capacity building for the control of emerging viral vector borne zoonotic diseases (ARBO-ZOONET)			Updated
22	Asia-Europe Sustainable Connectivity Scientific Conference (ASEM)			Updated
23				Deleted
24	Association of European Marine Biological Laboratories Expanded (ASSEMBLE)			Updated
25	Advanced Methods and Tools for Handling and Assembly in Microtechnology (ASSEMIC)			Updated
26	Association of International Research and Development Centers for Agriculture (AIRCA)			Updated
27	Assessment, STrategy And Risk Reduction for Tsunamis in Europe (ASTARTE)			Updated
28	Astrodynamics Network (ASTRONET)			Updated
29	Astroparticle Physics European Coordination (ApPEC)			
30	Atlantic Network of Geodynamical and Space Stations (REAGE)			
31	Austrian Centre for Scientific Comuting (ACSC)			
32	Baseline Surface Radiation Network (BSRN)			
33	Berlin-Brandenburg Institute of Advanced Biodiversity Research (BBIB)			Updated
34	Biobanking and BioMolecular resources Research Infrastructure – European Research Infrastructure Consortium (BBMRI-ERIC)			Updated
35				Deleted
36				Deleted

37	Bio-based Industries Consortium (BIC)			
38	Biocenter Finland (BF)			Updated
39	Biodiversity Research Network (ALTER-Net)			
40	Biological Alert Laboratories Network, Spain (RELAB)			
41	Biomass Research Infrastructure for Sharing Knowledge (BRISK)			
42				Deleted
43	Biological Nuclear Magnetic Resonance (Bio-NMR)			Updated
44	Biobank Standardisation and Harmonisation for Research Excellence in the European Union (BioSHaRE-EU)			Updated
45	Transnational access and enhancement of integrated Biological Structure determination at synchrotron X-ray radiation facilities (BioStruct-X)			Updated
46	European Botanic Gardens Consortium International (BGCI)			Updated
47				Deleted
48	Budapest Neutron Centre (BNC)			Updated
49	Cloud-Aerosol Lidar and Infrared Pathfinder Satellite Observation (CALIPSO)			Updated
50	Connecting Archaeology and Architecture in Europe (CARARE)			Updated
51	Coordinating Systems Medicine across Europe (CASyM)			Updated
52	Census Data Open Linked (CEDAR)			
53				Deleted
54	Center for Organelle Research (CORE)			
55	Central European Research Infrastructure Consortium (C-ERIC)			Updated
56				Deleted
57	European Research Infrastructure for Language Resources and Technology (CLARIN)			Updated

58	Development of european pilot network of stations for observing cloud profiles (CLOUD-NET)			Updated
59	Cross National Equivalent File (CNEF)			Updated
60	Cohort and Longitudinal Studies Enhancement Resources (CLOSER)			Updated
61	Collaboration to Clarify the Costs of Curation (4C)			
62	Collections Policy Board (CPB)			
63	Comité Polar Español (CPE)			
64	Cancer Organoids Multiplexed Screening in Microfluidic Textile chips (COMMIT)			Updated
65	Committee Research with Neutrons (KFN)			
66	Common Access to Biotechnological Resources and Information (CABRI)			
67				Deleted
68				Deleted
69	Consortium of European Social Science Data Archives (CESSDA)			
70	Consortium of European Taxonomic Facilities (CETAF)			
71	Cooperative Research Ships (CRS)			
72	Coordinated Access to Lightsources to Promote Standards and Optimization (CALIPSO)			
73	Coordinated Research Infrastructures Building Enduring Life-Science Services (CORBEL)			
74				Deleted
75	Communication and Policy development for Research Infrastructures in Europe (CoPoRI)			Updated
76	The inter-university core facility network (IcoFNET)			Updated
77	Council for the Development of Social Science Research in Africa (CODESRIA)			
78	Council of Managers of National Antarctic Programs (COMNAP)			

79	Citizenship, Recovery and Inclusive Society Partnership (CRISP)				Updated
80	Cultural Heritage Advanced Research Infrastructures (CHARISMA)				
81	European Data Centre Association (EUDCA)				Updated
82					Deleted
83	German Scientific Library Services and Information Systems (DFG LIS)				Updated
84	Digital Research Infrastructure for Arts and Humanities (DARIAH)				
85					Deleted
86					Deleted
87	Dutch Techcentre for Life Sciences (DTL)				Updated
88	Enhancing Access and Services To East European users towards an efficient and coordinated panEuropean pool of NMR capacities to enable global collaborative research & boost technological advancements (EAST-NMR)				Updated
89	European Advanced Translational Research Infrastructure in Medicine (EATRIS)				Updated
90	Creating conditions for persistence of biodiversity in the face of climate change (EcoChange)				Updated
91	European Clinical Research Infrastructures Network - Integrating Activity (ECRIN-IA)				Updated
92	Biology and control of vector-borne infections in Europe (EDENEXT)				Updated
93	European Facility for Advanced Seismic Testing (E-FAST)				Updated
94	European Fusion Development Agreement (EFDA)				Updated
95	European Holocaust Research Infrastructure (EHRI)				Updated
96	European Science Teachers Initiative (ESTI - EIROforum)				Updated
97					Deleted
98	European Marine Biological Resource Centre (EMBRC)				Updated
99	European Magnetic Field Laboratory (EMFL)				Updated

100	European Network for Diagnostics of Imported Viral Diseases (ENIVD)				Updated
101	Entreprise Europe Network (EEN)				Updated
102	Environmental Research Infrastructures (ENVRI)				Updated
103	EPIZONE European Research Group (ERG)				
104					Deleted
105	European Technology Platform on Smart Systems Integration (EpoSS)				Updated
106	Association of European Research Establishments in Aeronautics (EREA)				Updated
107	European Research Infrastructure for Heritage Science Preparatory Phase (E-RIHS)				Updated
108	European Research Infrastructure on Highly Pathogenic Agents (ERINHA)				Updated
109	European Reference Network for Critical Infrastructure Protection (ERNCIP)				Updated
110	European Sequencing and Genotyping Infrastructure (ESGI)				Updated
111	European Society for the study of Human Evolution (ESHE)				Updated
112	Advanced Energy STorage and Regeneration System for Enhanced Energy Management (ESTEEM)				Updated
113	European Strategic Wind Tunnels Improved Research Potential (ESWIRP)				Updated
114	Enabling the European Nanomedicine Area (NANOMED)				Updated
115					Deleted
116	Supporting environmental, nature conservation and climate action projects throughout the EU (EU-Life)				Updated
117	e-Infrastructure in the Mediterranean region dedicated for research and educational use (EUMEDCONNECT)				Updated
118	European Infrastructure of Open Screening Platforms for Chemical Biology (EU-OPENSCREEN)				Updated

119	European Network of Freshwater Research Organisations (EurAqua)			Updated
120	European Atomic Energy Community (Euratom)			Updated
121	European rail research network of excellence (EUR²EX)			Updated
122	Research infrastructure for imaging technologies in biological and biomedical sciences (Euro-BioImaging)			Updated
123	Integration of European Simulation Chambers for Investigating Atmospheric Processes (EUROCHAMP)			Updated
124	Activities of the Roadmap to Fusion during Horizon 2020 through a Joint programme of the members of the EUROfusion consortium (EUROfusion)			Updated
125	European Aerosol Research Lidar Network (EARLINET)			
126	European Aquaculture Technology and Innovation Platform (EATIP)			
127	European Association for Solar Telescopes (EAST)			
128	European Cancer Organisation (ECCO)			
129	European Commission for the control of Foot and Mouth Disease (EuFMD)			
130	European Consortium for Ocean Research Drilling (ECORD)			
131	European Coordination for Accelerator Research & Development (EUCARD)			Updated
132	European Culture Collections' Organisation (ECCO)			
133	European Data Infrastructure (EUDAT)			
134	European Energy Research Alliance (EERA)			Updated
135	European Facility for Airborne Research (EUFAR)			
136	European Federation for Primatology (EFP)			
137	European Grid Infrastructure (EGI)			

138	European Infrastructure of Open Screening Platforms for Chemical Biology (EU-OPENSCREEN)			Updated
139	European Institute for Biomedical Imaging Research (EIBIR)			
140	European Labour History Network (ELHN)			
141	European Librarians in African Studies (ELIAS)			
142	European Life Sciences Infrastructure For Biological Information (ELIXIR)			Updated
143	European Light Microscopy Initiative (ELMI)			
144	European Molecular Biology Network (EMBnet)			
145	European Monitoring Agency for Drugs and Drug Addition (EMCDDA)			
146	European Mouse Mutant Archive (EMMA)			
147	European Multidisciplinary Seafloor Observation (EMSO)			
148	European Network for Animal Disease and Infectiology Research Facilities (NADIR)			
149	European Network of Marine Research Institutes and Stations (MARS)			
150	European Network of Vaccine Research and Development (TRANSVAC2)			Updated
151	European Nuclear Science and Applications Research (ENSAR)			
152	European Plant Phenotyping Network (EPPN)			
153	European Plate Observing System (EPOS)			
154	European Polar Board (EPB)			
155	European Research Vessels Operators (ERVO)			
156	European Social Survey Sustainability (ESS-SUSTAIN)			Updated
157	European Technology Platform for High Performance Computing (ETP4HPC)			
158	European VLBI Network (EVN)			

159	European Windtunnel Association (EWA)			Updated
160	European, Middle Eastern and African Society for Biopreservation and Biobanking (ESBB)			
161	Platform for Digital Cultural Heritage (Europeana)			Updated
162	EUROPLANET 2020 Research Infrastructure (EPN2020-RI)			Updated
163	EUROPEAN SOLAR RESEARCH INFRASTRUCTURE FOR CONCENTRATED SOLAR POWER (EU-SOLARIS)			Updated
164	European Vasculitis Study Group (EUVAS)			Updated
165	Event Horizon Telescope (EHT)			Updated
166				Deleted
167	European VLBI Network (EVN)			Updated
168	Experimentation in Ecosystem Research (ExpeER)			
169	Federation of European Neurosciences (FENS)			
170	European research infrastructure for imaging technologies in biological and biomedical sciences (BioImaging Network)			Updated
171	Food and Agricultural Organisation of the United Nations (FAO)			
172	The European Fusion Education Network (FUSENET)			Updated
173	GAW Aerosol Lidar Observations Network (GALION)			Updated
174	Gauss Centre for Supercomputing (GCS)			Updated
175	Global Atmosphere Watch Programme (GAW)			Updated
176	GBIF Nodes Network			Updated
177	Global Climate Observing System (GCOS)			Updated
178	Network of French researchers involved in chemical biology approaches (GDR ChemBioScreen)			Updated

179	Pan-European Research and Education Network (GÉANT)			Updated
180	National Genome Research Network (NGFN)			Updated
181				Deleted
182	German Consortium for Translational Cancer Research (DKTK)			
183	German Data Forum (RatSWD)			Updated
184	Global Alliance for Zika Virus Control and Prevention (ZIKAlliance)			Updated
185	Global Atmosphere Watch Programme-cooperation Germany, Austria, Switzerland (GAW-DACH)			
186	Global Biodiversity Information Facility (GBIF)			
187	Global Earth Observation System of Systems (GEOSS)			
188	Global Genome Biodiversity Network (GGBN)			
189	Global Lake Ecology Observatory Network (GLEON)			
190	The Global mm-VLBI Array (GMVA)			Updated
191	Global Network for Taxonomy (BioNET)			
192	Global Mercury Observation System (GMOS)			Updated
193	European GNSS Service Centre (GSC)			Updated
194	Global Ocean Observing System (GOOS)			Updated
195	Leibniz Library Network for Research Information consortium (Goportis)			Updated
196	GCOS Reference Upper-Air Network (GRUAN)			Updated
197	Grupo Interinstitucional y Comunitario de Pesca Artesanal del Pacífico Chocoano (GIPCA)			Updated
198	Gentle User Interfaces for Disabled and Elderly Citizens (GUIDE)			Updated

199	Integrating European Infrastructure to support science and development of Hydrogen- and Fuel Cell Technologies towards European Strategy for Sustainable, Competitive and Secure Energy (H2FC)			Updated
200				Deleted
201	Helmholtz Centre for Infection Research (HZI)			
202				Deleted
203	Dresden High Magnetic Field Laboratory (Hochfeld-Magnetlabor Dresden, HLD)			Updated
204	Human Brain Project (HBP)			Updated
205	Human Proteome Project (HUPO)			
206	HUMAN centred design for Information Society Technologies (Humanist)			Updated
207				Deleted
208	Highly-complex and networked control systems (HYCON2)			Updated
209	Complex Interaction of Water with Environmental Elements, Sediment, Structures and Ice (Hydralab)			Updated
210	Ibero-american network for the study of carotenoids as food ingredients (IBERCAROT)			
211	Inclusive Blockchain Insurance using Space Assets (IBISA)			Updated
212	Ice Age Europe (ICEAGE)			Updated
213	International Council of Museums (ICOM)			Updated
214				Deleted
215	International Council for Scientific and Technical Information (ICSTI)			Updated
216				Deleted
217	International Forum for Aviation Research Support Action (IFARS)			Updated
218				Deleted

219	International Long Term Ecological Research (ILTER)			Updated
220	Infrastructure for NMR, EM and X-rays for translational research (iNEXT)			Updated
221	Infrafrontier The European infrastructure for phenotyping and archiving of model mammalian genomes (INFRAFRONTIER)			Updated
222	INfraStructure in Proton International Research (INSPIRE)			Updated
223	Integrated non-CO2 Greenhouse Gas Observing Systems (InGOS)			Updated
224				Deleted
225	Integrated Carbon Observation System (ICOS)			
226	Integrated Infrastructure Initiative for Neutron Scattering and Muon Spectroscopy (NMI3)			
227	Intergovernmental Oceanographic Commission/International Oceanographic Data and Information Exchange (IOC/IODE)			
228	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)			
229	Internal Magnets for DNP (DNPMAG)			
230	International Association of Labour History Institutions (IALHI)			
231				Deleted
232	International Barcode of Life (IBOL)			
233	International Cancer Genome Consortium (ICGC)			
234	International Council for the Exploration of the Sea (ICES)			
235	International Council of Museums (ICOM)			
236	International Council on Archives (ICA)			
237	International Energy Agency (IEA)			Updated
238	International Federation of Data Organizations (IFDO)			Updated
239	International Gravity Reference System (IGRS)			

240	International Mouse Knock-out Consortium (IKMC)			
241				Deleted
242	International Mouse Phenotyping Consortium (IMPC)			
243	International Mouse Strain Resources (IMSR)			
244	International Network for Terrestrial Research and Monitoring in the Arctic (INTERACT)			
245	International Network of Ground-Based Microwave Radiometers (MWRnet)			
246	International Ocean Drilling Program (IODP)			
247	International Panel Survey Methods Workshops (IPSMW)			Updated
248	International Primatological Society (IPS)			Updated
249	International programme of biodiversity science (DIVERSITAS)			
250	International Research Institute of Stavanger (IRIS)			
251	International Research Ship Operators (IRSO)			
252	International Society for Atmospheric Research using Remotely Piloted Aircraft (ISARRA)			Updated
253	International Society for Biological and Environmental Repositories (ISBER)			
254	International Tokamak Physics Activity (ITPA)			
255	International Towing Tank Conference (ITTC)			
256	International Virtual Observatory Alliance (IVOA)			Updated
257	International VLBI Service for Geodesy & Astrometry (IVS)			
258	Infrastructure for Systems Biology – Europe (ISBE)			Updated
259	International Society for Biological and Environmental Repositories (ISBER)			Updated
260	International Society of Nephrology (ISN)			Updated
261	Innovation Technologies and Applications for Coastal Archaeological sites (ITACA)			Updated

262	International Union for Conservation of Nature / Species Survival Commission (IUCN/SSC)			Updated
263	International Virtual Observatory Alliance (IVOA)			Updated
264	Kernel-Based ARchitecture for safetY-critical cONtrol (KARYON)			Updated
265	Innovative Radiopharmaceuticals in Oncology and Neurology (Labex IRON)			Updated
266				Deleted
267	Large Binocular Telescope (LBT)			
268	Critical success factors for fish larval production in European Aquaculture: a multidisciplinary network (LarvaNET)			Updated
269	Integrated Initiative of European Laser Research Infrastructures (LASERLAB-EUROPE)			Updated
270	Lasers for Applications at Accelerator facilities for ion beam generation, acceleration and diagnostics (LA³NET)			Updated
271				Deleted
272	League of European Accelerator-based Photon Sources (LEAPS)			Updated
273	European Distributed Information Technology for Health Care (EDITH)			Updated
274	e-Infrastructure for Biodiversity and Ecosystem Research (LifeWatch)			Updated
275	Laboratoire National de Champs Magnétiques Intenses (LNCMI)			Updated
276	Low Voltage Agreement Group (LOVAG)			
277	European Long-Term Ecosystem and socio-ecological Research Infrastructure (eLTER)			Updated
278				Deleted
279	MAnagement of Security information and events in Service InFrastructures (MASSIF)			
280	Marine Renewables Infrastructure Network for Emerging Energy Technologies (MARINET)			Updated
281	Mediterranean Operational Network for the Global Ocean Observing System (MONGOOS)			Updated

282	Network of leading MESOcosm facilities to advance the studies of future AQUAtic ecosystems from the Arctic to the Mediterranean (MESOAQUA)			Updated
283	Open virtual network for aquatic mesocosm facilities worldwide (MESOCOSM)			Updated
284	Meson Physics in Low-Energy QCD (MesonNet)			
285	Organization devoted to the development of metabolism-based research (Metabolomics Society)			Updated
286	Open and secure network of repositories for sharing and exchanging language data, tools and related web services (META-SHARE)			Updated
287	Open Technology for Digitalisation (Meters & More)			Updated
288	Microbial Resources Research Infrastructure (MIRRI)			
289	Millennium Seed Bank (MSB) Partnership			Updated
290	MIcro-and NAnotechnology Manufacturing (MINAM)			Updated
291	Musical Instrument Museums Online (MIMO)			
292	Prototype Operational Continuity for the GMES Ocean Monitoring and Forecasting Service (MyOcean2)			Updated
293	A network for bringing NANOtechnologies TO LIFE (NANO2LIFE)			Updated
294	Nanostructured and Functional Polymer-based Materials and Nanocomposites (NANOFUN-POLY)			Updated
295	A cross-ETP Coordination Initiative on nanotechnology (NANOfutures)			Updated
296				Deleted
297				Deleted
298	National Genome Research Network (NGFN)			
299	National Network for Electron Microscopy (RNME)			
300	Network for the Detection of Atmospheric Composition Change (NDACC)			Updated

301	A Network of Excellence for Advanced Road cooperative traffic management in the Information Society (NEARCTIS)			Updated
302	Network for Digital Methods in the Arts and Humanities (NeDiMAH)			
303				Deleted
304	Network of Aquaculture Centres in Central-Eastern Europe (NACEE)			
305	Network of European CEntrifige for Research (NECER)			
306				Deleted
307				Deleted
308	Networking Lake Observatories in Europe (NETLAKE)			
309	Federation of European Neuroscience Societies (FENS)			Updated
310	Neutron scattering and Muon Spectroscopy Integrating Infrastructure Initiative (NMI3)			Updated
311	New operational steps towards an alliance of European research fleets (EUROFLEETS2)			
312	Towards Game-changer Service Operation Vessels for Offshore Windfarms (NEXUS)			Updated
313				Deleted
314	Nordic Microscopy Society (SCANDEM)			
315	Nordic Nanolab Network (NNN)			Updated
316	Nuclear Physics Network (NuPNET)			
317	Ocean Facilities Exchange Group (OFEG)			
318				Deleted
319	Open Access Infrastructure for Research in Europe (OpenAIRE)			
320	Open Planets Foundation (OPF)			Updated
321	Optical Infrared Coordination Network for Astronomy (OPTICON)			Updated

322	Organisation of European Cancer Institutes (OECI)			
323	Parelsnoer Institute (PSI)			Updated
324	Partnership for European Environmental Research (PEER)			
325	Design for Micro & Nano Manufacture (PATENT-DfMM)			Updated
326	PATrimoines matériels : Réseau d'Instrumentation Multisites Equipex (PATRIMEX)			
327	Photonics community of industry and research organisations (PHOTONICS21)			Updated
328	Polar barcode of life (IBOL)			Updated
329	Partnership for Advanced Computing (PRACE)			Updated
330	PoweRline Intelligent Metering Evolution Alliance (PRIME)			Updated
331	Proteomics Research Infrastructure Maximising knowledge EXchange and access (PRIME-XS)			Updated
332	Protein Production and Purification Platforms in Europe (P4EU)			
333	Proteomics and Metabolomics Core Facility (PROMEC)			
334	Carlos III Networked Proteomics Platform (ProteoRed-ISCIII)			Updated
335	Public Population Project in Genomics and Society (P³G)			
336	An international network of 50 CubeSats for multi-point, in-situ measurements in the lower thermosphere and re-entry research (QB50)			Updated
337				Deleted
338	Belgian Network for Radiation Applications in Healthcare (Rad4med)			Updated
339	Advanced Radio Astronomy in Europe (RadioNet)			
340	Rede de Remediação e Reabilitação de Ambientes Degradados (READE)			Updated
341	International Excellence Research Network (REBT)			Updated
342				Deleted

343	Research Data Alliance (RDA)			Updated
344	Research infrastructures for the control of insect vector-borne diseases (Infravec2)			Updated
345	Resource Network Supporting Academic Chemical Biology Research (ChemBioNet)			Updated
346	Flagship Project is one of the National Research Programmes funded by the Italian Ministry of University and Research (RITMARE)			
347				Deleted
348	European Association for Transactional analysis (EATA)			Updated
349	SatNav Network			
350	Scalable, Secure Storage of Biobank Data (BiobankCloud)			
351	Scandinavian Dialect Syntax Network (ScanDiaSyn)			Updated
352	Scientific Collections International (SciColl)			Updated
353	Science and Applications of ultrafast and ultraintense lasers (SAUUL)			
354	World class Science and Innovation with Neutrons in Europe (SINE)			Updated
355	ScienceLink Network			
356	Standard Conference on Library Materials on Africa (SCOLMA)			Updated
357	Pan-European infrastructure for ocean & marine data management (SeaDataNet)			Updated
358	Security for Future Networks (SecFuNet)			Updated
359	Security for smart Electricity GRIDs (SEGRID)			Updated
360	Seismic Engineering Research Infrastructures for European Synergies (SERIES)			
361	Seismology and Earthquake Engineering Research Infrastructure Alliance for Europe (SERA)			Updated
362				Deleted
363				Deleted

364				Deleted
365	Square Kilometer Array (SKA)			Updated
366	Society for Neuroscience (SfN)			Updated
367	Society for the Preservation of Natural History Collections (SPNHC)			
368	Society for Tropical Ecology (GTO)			Updated
369	Society of Primatology (ASP)			Updated
370				Deleted
371	High-Resolution Solar Physics Network (SOLARNET)			Updated
372	Social Platrform for Holistic Heritage Imapct Assessment (SOPHIA)			Updated
373	Scalable privacy preserving intelligence analysis for resolving identities (SPIRIT)			Updated
374	State-Trait Anxiety Inventory (STAI)			Updated
375	Standing Committee Research Data Infrastructure (FDI)			
376	Stations at High Altitude for Research on the Environment (SHARE)			
377				Deleted
378	Strange Particles in Hadronic Environment Research in Europe (SPHERE)			
379	Cooperation between Superconductivity and Magnetism in Mesoscopic systems (SuperMAG)			Updated
380				Deleted
381	Swiss Institute for Art Research (SIK-ISEA)			
382	Information Network of European Natural History Collections (SYNTHESYS)			Updated
383	Trustworthy Clouds Privacy and Resilience for Internet-scale Critical Infrastructure (TClouds)			Updated
384	Biodiversity Information Standards (TDWG)			Updated

385	Teide and Roque de los Muchachos Observatories (ORM)			Updated
386	Telescopio Nazionale Galileo (TNG)			
387				Deleted
388				Deleted
389				Deleted
390	Towards a joint European research infrastructure network for coastal observatories (JERICO)			Updated
391	Towards an Alliance of European Research Fleets (EUROFLEETS)			
392	Transnational Access to MAMI (MAMI)			
393	Integrative European Research Infrastructure project to integrate, develop and improve major forest genetics and forestry research (TREES4FUTURE)			Updated
394	UK Environmental Change Network (ECN)			
395	Veterinary Biocontained facility Network for excellence in animal infectious disease research and experimentation (VetBioNet)			Updated
396				Deleted
397	Virtual Atomic and Molecular Data Center (VAMDC)			
398	VISION Advanced Infrastructure for Research (VISIONAIR)			Updated
399	VLBI2010 Global Observing System (VGOS)			
400	Virtual Physiological Human Network of Excellence (VPH)			Updated
401	Worldwide e-Infrastructure for NMR and structural biology (WeNMR)			Updated
402	Ultrafast Nanooptics Research Group - Wigner Research Centre for Physics (UNRG)			Updated
403				Deleted
404	World Data Centre for Microorganisms (WDCM)			Updated
405	World Data System (WDS)			

No.				Changes v1.13 to v3.00	Changes v1.30 to v3.00	Changes v2.00 to v3.00
406	World Federation for Culture Collections (WFCC)					
407	World Organisation for Animal Health (OIE)					
408	WorldWide LHC Computing Grid (wLCG)					
409	Word Wide NMR (WW-NMR)					Updated
410	Zoonoses Anticipation and Preparedness Initiative (ZAPI)					Updated
411	Other					

Provider Structure Type

No.	Provider Type	Description	Changes v1.13 to v3.00	Changes v1.30 to v3.00	Changes v2.00 to v3.00
1	Single-sited	The Provider has one main physical location for users.	**New**	**New**	
2	Distributed	The Provider has multiple physical locations but a unified management structure and a single coordination centre.			
3	Mobile	The Provider is changing its physical location on a regular basis (e.g., satellites, research vessels).			
4	Virtual	The Provider is exclusively an electronic resource/service.			
5	Other				

Provider ESFRI Domain

No.	ESFRI Domain	Description	Changes v1.13 to v3.00	Changes v1.30 to v3.00	Changes v2.00 to v3.00

1	Energy	The energy sector is key to social and economic development. Especially in some non-OECD countries the energy sector sees very high growth rates due to rising GDP. However, it contributes significantly to global CO2 emissions. For the EU, the reduction of CO2 emissions in a sustainable framework is a major driver of its energy policy. This provides opportunities for new technologies both for application within and outside of the EU.			
2	Environment	Environmental sciences are traditionally divided into four research and study domains: ATMOSPHERE, HYDROSPHERE, BIOSPHERE and GEOSPHERE. These different spheres are closely interlinked, and therefore environmental sciences can also be presented according to Grand Challenges, such as loss of biodiversity, pollution, depletion of natural resources, risks, hazards and climate change.			
3	Health & Food	There is a broad consensus that future competitiveness in a globalised knowledge economy depends on research capability. Research Infrastructures (RIs) in the Biological, Agri-Food and Medical Sciences – i.e. Health & Food – continue to establish themselves as research, innovation and skills hubs and as a motor for economic impact. This is reflected in increasing levels of industrial access to RIs, and in their European and global positioning.	**New**	**New**	
4	Physical Sciences & Engineering	Research Infrastructures are integral part of the dayto-day activity of Physical Sciences & Engineering. Historically and today the PSE RIs are integrated in the way research is done in these disciplines, and major advances in knowledge are achieved by the research performed at RIs. However, the RIs are much more than research tools; they are truly Hubs of Knowledge & Innovation with a complete multidisciplinary approach and a systematic impact on many areas beyond Physical Sciences and Engineering.			
5	Social & Cultural Innovation	Research Infrastructures that support research across and within the Social & Cultural Innovation domain are among the first known infrastructures: libraries, museums and archives are the most obvious examples of this legacy. In today's digital age, Research Infrastructures in the Social Sciences and Humanities (SSH) enhance research into the historical, social, economic, political and cultural contexts of the European Union, providing data and knowledge to support its strategies.			

| 6 | Data, Computing and Digital Research Infrastructures | In research, as in all fields of society, Information and Communications Technology (ICT) has become a key enabling factor for progress. ICT is also changing the modus operandi of research by providing new possibilities for geographically distributed collaboration and sharing. Data-driven science, as well as more and more open access to data and scientific results, is transforming not only how research is conducted, but its overall reach. | | | |
| 7 | Other | | | | |

Provider ESFRI Type

No.	Provider ESFRI type	Changes v1.13 to v3.00	Changes v1.30 to v3.00	Changes v2.00 to v3.00
1	RI is a node of an ESFRI project			
2	RI is an ESFRI project			
3	RI is an ESFRI landmark	New	New	
4	Not an ESFRI project or landmark			
5	Other			

Provider MERIL Scientific Domain / Subdomain

This list is based on a MERIL result.

No.	Scientific Domain		No.	Scientific Subdomain	Description	Changes v1.13 to v3.00	Changes v1.30 to v3.00	Changes v2.00 to v3.00

1	Biological & Medical Sciences		1	Agronomy, Forestry, Plant Breeding Centres	Facilities that enable open field and forest experiments to test the impact of management practices and of environmental conditions on soil, crop, and primary production. These include plants and trees ex-situ collections, experimental facilities for controlled crosses and propagation, and population genetics field testing. The facilities are relevant for Biological- and Environmental Sciences.	**New**	**New**	
			2	Animal Facilities	Facilities that provide husbandry of animals and services to the biomedical research community, usually equipped with highly automated systems that provide the best possible conditions for animal reproduction and maintenance. The main activity is the reproduction and maintenance of animal stocks either of inbred strains or genetically engineered animals, such as transgenic and knockout mouse lines, or even chemically-induced mutants.			

			3	Collections of Biological Resources (e.g. Microorganisms, Biobanks and Seed Banks)	Facilities for storage of collections of microorganisms, biological material and the associated data and information facilities for a population or a large subset of a population, maintained under controlled conditions (temperature, humidity, atmosphere, etc.). The biological resources, including microorganisms, human/animal cells, tissue, blood and DNA, seeds of crops, trees and wild plant species, are conserved for their genetic endowment. Databases established on these provide holistic information on each accession with scientific descriptors, ethno-botanical/ zoological/microbiological/medical knowledge, including for the purpose of establishing intellectual property rights and ownership over the biomaterial stored			
			4	Bio-Informatics Facilities	Bioinformatics facilities generate knowledge through computer analysis of biological data. These can consist of the information stored in the genetic code, but also experimental results from various sources, patient statistics, and scientific literature. Research in bioinformatics includes method development for storage, retrieval, and analysis of the data. Bioinformatics is a rapidly developing branch of biology and is highly interdisciplinary, using techniques and concepts from informatics, statistics, mathematics, chemistry, biochemistry, physics, and linguistics. It has many practical applications in different areas of biology and medicine.			

			5	Biological/Biomedical Engineering and Biotechnology/Nanotechnology Research Facilities	Facilities that are dedicated to application of concepts and methods of bioscience and/or nanoscience, and/or use of living systems and organisms to develop solutions to problems in life- and preclinical sciences using engineering methodologies.			
			6	Biomedical Imaging Facilities	Facilities which are equipped for visualisation, characterisation, and measurement of biological processes at the cellular and tissue levels in humans and other living systems.			
			7	Cell Culture Facilities	Facilities that are equipped to provide robust support for isolation and culture of a variety of cell lines (like mammalian and insect cell lines, mouse and human embryonic stem cells), including serum preparation, feeders, growth factors and mycoplasma testing, this may be on serum-based or serum-free media.			
			8	Clinical Research Centres	Facilities that support patient-oriented research, involving a particular person or group of people or using materials from humans. This research can include: studies of mechanisms of human disease; studies of therapies or interventions for disease; clinical trials; studies to develop new technology related to disease.			

			10	Environmental Health Research Facilities	Environmental health research addresses all potential hazards caused to a human being or an animal by external physical, chemical, and biological factors, and all the related factors impacting behaviours. It encompasses the assessment and control of those environmental factors that can potentially affect health. It is targeted towards preventing disease and creating health-supportive environments. This definition excludes behaviour not related to environment, as well as behaviour related to the social and cultural environment, and genetics. This category includes toxicology and infectious diseases facilities as well as epidemiological study centres.			
			11	Genomic, Transcriptomic, Proteomics and Metabolomics Facilities	Multiple sites ranging from single laboratory DNA sequencing and RNA transcript analysis facilities run by biologists for their own department's research to high-throughput facilities aimed at providing a sophisticated service for a broad community of biologists run by informaticians, biologists and engineers. Proteomics: physical chemistry developments for clinical and biological applications getting access to proteins network linked to the physiological and pathological stated of the cells. This includes nutrigenomics research.			
			12	Structural Biology Facilities	Facilities which are equipped for visualisation, characterisation, and measurement of biological processes at the molecular level in humans and other living systems. Main technologies include protein crystallisation, X-ray diffraction, mass spectrometry, DSC.			

			13	Systems Biology/Computational Biology Facilities	Laboratories that combine all relevant scientific disciplines and the know-how to integrate experimental data with computational and theoretical approaches with the aim of targeting, understanding and engineering pathways, cells, organs and complete organisms.			
			14	Telemedicine Laboratories and E-Health Technologies	E-Health is an emerging concept relating to the use of networked digital ICTs (primarily the Internet) to facilitate the organisation & delivery of health care and services. It encompasses applications for providers and organisations (e.g. for storing, exchanging and using clinical or administrative data, or aiding evidence-based practice) and for citizens and patients (e.g. web-based health information, education, virtual consulting), as well as research applications of e-Health technologies.			
			15	Translational Research Centres	Translational Research Centres support the integration of evidence based medicine, social sciences and political sciences with the aim of optimising patient care and preventive measures which may extend beyond healthcare services. This is the process of turning appropriate biological discoveries into drugs and medical devices that can be used in the treatment of patients.			
			16	Other				

2	Chemistry and Material Sciences	1	Analytical Facilities	All facilities where analytical tools are used that are based on one of the following probes or methods: electrons, photons, neutrons, radio frequency, NMR, or analytical chemistry. It does include Surface Science Laboratories dedicated to analysis and characterization of surface and interface phenomena. Different users would come from the scientific domains Chemistry, Earth science, Bio-Medical (including forensic) science and different sensitivities (Analytical Chemistry, electron microscopy laboratories); NMR facilities; surface science laboratories; x-ray diffraction; Electron Microscopy Laboratories, aspects in life sciences, earth, forensics; Surface Science Laboratories.			
		2	Chemical Libraries and Screening Facilities	Digital libraries related to chemistry as well as screening facilities.			
		3	Intense Light Sources	All facilities that provide access to intense light radiation sources as used for lasers, synchrotrons, Free Electron Lasers. The facilities are relevant to the scientific domains of Physics, Chemistry, Bio-Medical Sciences, Earth and Environmental Sciences, Humanities & Arts, Information Science & Technology; Laser Sources for materials synthesis laboratories; Laser Sources for spectroscopy laboratories; Synchrotron Light Sources and X-Ray Diffraction Facilities.			
		4	Intense Neutron Sources	Accelerator-based neutron source facility that provides the intense pulsed neutron beam.			

		5	Materials Synthesis or Testing Facilities	All single or multi sited facilities run by engineers and materials scientists to process or test materials with regard to predefined specifications. It includes testing and processing equipment, structural and properties characterization instruments. The facilities are relevant to the scientific domains of Engineering, Materials Sciences, Physics, and Chemistry.			
		6	Pilot Plants for Process Testing	Plants where processes in biological or chemical systems, including bioenergy/biorefinery research and food processing research, are tested on a pilot level scale. Biology, Chemistry.			
		7	Reference Material Repositories	Facilities providing materials with at least one standardised and fully described property that can be used in measurements e.g. as a standard for calibration of instruments or as reference for measuring other materials.			
		8	Other				
3	Earth and Environmental Sciences	**1**	Acoustic Monitoring Stations	Non audible very low frequency waves infrasound stations, (volcano meteors monitoring, avalanches, landslides) ; audible frequency stations and hydro acoustic stations (marine mammals, multi-beam, acoustic tomography, echosounders, sodar); high frequency stations (T-phase stations).			

				2	Atmospheric Measurement Facilities	Meteorological stations (all physical parameters that can be observed) ; Global Atmospheric Watch (GAW); Airglow; Ionospheric stations (all sky cameras, ionospheric radar); brewers; lidars; chemical compositions, pollution and radionuclides facilities; This includes atmospheric test chambers, used to conduct controlled experiments for climate change research and atmosphere related problems.			
				3	Earth Observation Satellites	Including Optical-IR Earth Observation satellites and Radar Earth Observation satellites.			
				4	Earth, Ocean, Marine, Freshwater, and Atmosphere Data Centres	Platforms for the exchange of earth, oceanographic, marine, freshwater and atmospheric data and information, and for advisory services in the field of earth, ocean, marine, freshwater and atmospheric data management. National Data Centres, Designated National Agencies for international data exchange and Satellite Data Centres represent the backbone of the data and information infrastructure. National networks are usually put in place to interconnect the data centres of major national institutes. The overall objective is to significantly improve the overview and access to data and data analysis from government and research institutes.			
				5	Earthquake Simulation Laboratories	Facilities that are equipped to do computer-assisted earthquake simulation.			

				6	Environmental Management Infrastructures	Pilot facilities and experimental infrastructures for management, ecological restoration and environmental mitigation of terrestrial and aquatic ecosystems in natural or degraded conditions (including hydrological and soil management field facilities; decontamination and bioremediation facilities and pilot plants).			
				7	Geothermal Research Facilities	Facilities that enable research, development, and demonstration of technologies to advance the use of geothermal energy as a clean, renewable, domestic power source.			
				8	In Situ Earth Observatories	Platforms and sensor technologies deployed in situ to collect environmental data (including physical, chemical and biological observations) in support of terrestrial environmental research and management activities. These facilities, including ecological habitat field stations, provide a base for trans-disciplinary research and training, with access to terrestrial field sites for survey and experimental opportunities and often supporting environmental observations and the collection of long-term time series data sets (a.o. on biodiversity).			

| | | | 9 | In Situ Marine/Freshwater Observatories | Platforms and sensor technologies deployed in situ to collect environmental data (including physical, chemical and biological observations) in support of aquatic environmental research and management activities. These facilities, including marine/freshwater research centres, provide a base for trans-disciplinary research and training, with access to marine and freshwater field sites, and equipment (including research vessels that may carry large exchangeable underwater equipment/instruments) for survey and experimental opportunities and often supporting environmental observations and the collection of long-term time series data sets (a.o. on biodiversity). Typical equipment includes: Buoys; Argo; gliders; autonomous underwater vehicles; remotely operated vehicle (Victor); Tide gauges; deep sea laboratories. Ship-time for stock assessments, polar supply, naval research, and educational courses and non- academic research are not considered in this context. For this inventory the atmospheric measurement facilities are kept as a separate category. This implies that some marine research centres will also fall under this category if they host an atmospheric measurement site. | | | |
| | | | 10 | Natural History Collections | Facilities that serve as a library of organisms have lived and/or are living on Earth and curation sites for materials relevant for planetary exploration. They contribute to specific research and public education in an easily accessible venue. | | | |

		11	Polar and Cryospheric Research Infrastructures	Arctic and Antarctic stations; high altitude and mountain stations; heavy icebreakers; International Partnerships in Ice Core Sciences (IPICS); ANDRILL; Polar Ionospheric stations.			
		12	Research Aircraft	-			
		13	Solid Earth Observatories, including Seismological Monitoring Stations	Drilling platforms and sensor technologies deployed to collect solid earth data and material in support of solid earth research and management activities. This includes facilities that collect seismological data to be added to the European Integrated Data Archive (EIDA) and made available to the scientific community. Integrated Ocean Drilling Programme (IODP) and Integrated Continental Drilling Programme (ICDP); Sediment Coring Archives; VLBI stations.			
		14	Other				
4	Engineering & Energy	1	Aerospace and Aerodynamics Research Facilities	Single-sited facilities providing a controlled wind stream in which objects (aircrafts, vehicles, buildings) are placed in order to measure their aerodynamic properties, using for instance lasers and/or simulate an operation and control during flight/ drive; includes wind tunnels.			
		2	Civil Engineering Research Infrastructures	Single-sited, distributed or virtual facilities for the design, construction, testing (including the use of shaking tables) and maintenance of non-military, non-aerospace or non-mechanical large structures, typically including large buildings, transport infrastructures, bridges, dams, tunnels, sewers, plus river, coastal and public health engineering.			

			3	Electrical and Optical Engineering Facilities	Single- or multi-sited facilities that offer scientists and engineers access to devices for handling light, utilizing properties of light, and detecting light or access to infrastructure for research and development in the fields of electricity, electronics, and electromagnetism. These infrastructures may either broadly deal with electrical or electronic engineering, or be focused specifically on some of the numerous subtopics, like electronics, electric power, telecommunications, control systems, or other.		
			4	Energy Engineering Facilities (non-nuclear)	Combustion, solar, wind, production & distribution, includes, combustion test facilities and associated technologies.		
			5	Marine & Maritime Engineering Facilities	Experimental facilities in the fields of hydraulics, geophysical fluid dynamics, ship dynamics and ice engineering research. These include: Basins (both for marine research with waves and/or (tidal) currents and research on inland water issues); multi-directional wave basins; flumes (both for marine research and for research on inland water issues); towing tanks for ship dynamics research; cavitation tunnels; rotation basins for research on Coriolis-dominated issues; facilities for ice research; other hydraulic facilities. The facilities are relevant for the scientific domains Engineering, Earth and Environmental Sciences, Marine and Polar Sciences		

		6	Mechanical Engineering Facilities	Facilities dedicated to manufacturing, assembly and testing of components and systems offering services related to control, integration and realization of products and processes including modelling and simulation tools. Processing technology, road-transport vehicle development and testing are included.			
		7	Other				
5	Humanities & Arts	**1**	Collections	Sets of often unique objects and items of different types collected usually to be exhibited. Collections normally include a collecting policy for new acquisitions, so only objects and items in certain categories and of a certain quality are accepted into the collection. Objects in a collection are normally catalogued, traditionally in a card index, but nowadays this is being replaced by computerized database also for physical collections. These type of RIs are particularly relevant for the humanities, which often deal with the study of unique artefacts, but they can be relevant for other domains, such as social sciences, life and environmental sciences. PHYSICAL: Museums, Galleries, Analogue audio/visual/multimedia collections, Archaeology, Anthropology and Ethnology Collections, Arts & Art History Collections, Music and Instrument Collections, Datasets (e.g. analogue audio/visual/multimedia datasets). DIGITAL: Archaeology, Anthropology and Ethnology Collections, Arts & Art History Collections, Digitised Manuscript Collections, Music and Instrument Collections, Virtual museums, Virtual galleries, Datasets.			

| | | | 2 | Repositories | Locations for storage of often unique objects and items of different nature, in general for preservation purposes. Repositories not only have the function to store objects and items but they also guarantee access for future retrieval and study. This type of RI in its general definition is relevant to all scientific domains (for instance as far as physical or virtual facility for the deposit of academic publications such as academic journal articles are concerned); however, some humanities disciplines strongly rely on specific repositories for its analysis. PHYSICAL: Analogue audio/visual/multimedia repositories, Archaeology, Anthropology and Ethnology Repositories, Arts & Art History Repositories. DIGITAL: Data repositories (e.g. digital library), Archaeology, Anthropology and Ethnology Repositories, Arts & Art History Repositories, Digitised Manuscript Repositories. | | | |
| | | | 3 | Databases | Structured sets of data for one or more purposes, usually in digital form. The term database applies to the data and their supporting data structures. The utilisation of databases is spread across all scientific disciplines. Databases are therefore RIs relevant to all scientific domains. Databases in the form of structured meta-data as well as analytical data organised usually within a relational model have been extensively developed as RIs in the Humanities with increasing uptake in all its disciplines: Archaeology, Anthropology and Ethnology Databases, Arts & Art History Databases, History Databases, Digitised Manuscript Databases. | | | |

| | | | 4 | Conceptual Models | Explicit formalisations that map a concept to its intended semantics. Conceptual models are adopted in every research domain (e.g. economic models, mathematical models). In the humanities, however, some conceptual models have developed into RIs indispensable to structure a certain knowledge domain, such as is the case for thesauri and taxonomies (also very much used in life sciences) which have a long tradition in supporting analytical efforts especially in linguistics. Increasingly, digital models built around conceptual ontologies and networks are being developed for modelling specific research domain or for cross-referencing purposes in the Humanities. | | | |

			5	Research Archives	Accounting normally for organised sets of unpublished and almost always unique historical records, or the physical place they are located, archives contain primary source documents (texts, maps, pictures etc.) in physical but also increasingly digital form (e.g. text archives structured in databases) that have accumulated over the course of an individual or organisation's lifetime. In general, archives consist of records that have been selected for permanent or long-term preservation on grounds of their enduring cultural, historical, or evidentiary value. Archives are thus particularly relevant to the Humanities, chiefly to historians but also to many other Humanities researchers dealing with primary sources of various kinds. A scientific discipline called archival science, dedicated to the study and practice of organising, preserving, and providing access to information and materials in archives, has established itself within the Humanities: History Archives, Literature and Text Archives.			

| | | | | 6 | Research Libraries | Traditionally, large collections of books, or the place in which the collection is housed. However, the term library has extended its meaning to refer to any collection, including digital sources, resources, and services. The collections can be of print, audio, and visual materials in numerous formats, including maps, prints, documents, microform (microfilm/microfiche), CDs, cassettes, videotapes, DVDs, video games, e-books, audiobooks and many other electronic resources. A research library is a collection of useful material for research use. A library is organised for use and maintained by a public body, an institution, a corporation, or a private individual. In addition to providing materials, libraries also provide the services of librarians who are experts at finding and organising information and at interpreting information needs.
Modern libraries are increasingly being redefined as places to get unrestricted access to information in many formats and from many sources. They are extending services beyond the physical walls of a building, by providing material accessible by electronic means, and by providing the assistance of librarians in navigating and analysing tremendous amounts of information with a variety of digital tools. Libraries are valuable to all scientific domains; however, they are of specific relevance to Humanities research which relies on access to historical and rare collections of unique artefacts (e.g. primary sources such as ancient manuscripts) and other sources to study those artefacts and works (secondary and tertiary sources) usually held within libraries and otherwise hardly accessible. A scientific | | | |

			discipline called library and information science, an interdisciplinary or multidisciplinary field dedicated to the analysis, collection, organisation, classification, manipulation, preservation, retrieval and dissemination of information resources, has established itself at the crossroads between social sciences, humanities and computer sciences. Historically, library science has also included archival science.			
	7	Research Bibliographies	Large-scale systematic lists of books and other works such as journal articles, reference and access resources. They can be physical publications (i.e. bound volumes) or digital (indexes and catalogues usually in the form of databases). They can be generally divided into enumerative bibliography, which results in an overview of publications in a particular category, and analytical, or critical, bibliography, which studies the production of research material (in the form of books as well as other formats, including recordings, motion pictures, videos, graphic objects, databases, CD-ROMs and websites). As a bibliography can be produced in any field, it could be considered a transversal category; however it is Humanities research especially that has traditionally relied on such tools to systematise its fields of enquiry – spanning centuries of relevant publications for many humanities disciplines – and circumscribe its research domain.			
	8	Other				

6	Information Science & Technology	1	Centralised Computing Facilities	Single-sited facilities with a centralised control that enable high performance computing through supercomputers. These are relevant to all scientific domains.			
		2	Communication Networks	Facilities responsible, at national or international levels, for the provision of data communications networks, capacity and services to the research and education community in all scientific domains. The networks typically connect other networks at international, regional or metropolitan level.			
		3	Complex Data Facilities	Facilities to store huge and high dimensional data volumes and apply statistical methods to classify or cluster the data in order to extract valuable information. The facilities are relevant to Bio-Medical Sciences; Earth and Environmental Sciences; Physics; Astrophysics; Social Sciences.			
		4	Distributed Computing Facilities	Facilities for virtualisation, grid and cloud computing, or capability computing that are loosely coupled, heterogeneous, and geographically dispersed distributed system with non-interactive workloads that involve a large number of files. They federate, share and coordinate distributed resources from different organisations that are not subject to centralized control, using open, general-purpose and in some cases standard protocols and interfaces to deliver non-trivial qualities of service relevant to all scientific domains.			

		5	Software Service Facilities	Facilities that provide access to well fabricated software for modelling, simulation, development, control and optimization, including software libraries/ repositories or support services for the implementation of the software, their maintenance and adaptation to new hardware platforms as well consultation regarding proper use of the software as well as training facilities for users. These are relevant to all scientific domains.			
		6	Other				
7	Physics, Astronomy, Astrophysics and Mathematics	**1**	Astro-Particle and Neutrino Detectors and Observatories	Range of detectors/observatories, using interactions in water or ice for detecting astrophysical neutrinos, interactions in liquid noble gases or solids for searching for dark matter particles, and light emission in the atmosphere for the detection of gamma rays from astrophysical sources.			
		2	Centres for Advanced Research in Mathematics	Research Centres hosting researchers and organizing scientific events at a high level. Three different types of centres can be distinguished according to their aim: a) centres organizing high level one week conferences in mathematics or their interface with sciences and industry; b) centres organizing, over three or more months, targeted advanced scientific programmes at doctoral level or on specific research challenges; c) high-level research institutes with few permanent positions and a highly developed visitor's programme. (High level mathematics, interface between mathematics and other sciences).			

			3	Centres for Development of Industrial Mathematics	Centres devoted to the development of the interface between mathematics and industry. Their research groups offer a wide range of mathematical expertise and are able to interact with scientists from other disciplines (life sciences, bio-medicine, material sciences, engineering, computer sciences, physics, social sciences, etc.) both in the academic or industrial frameworks. (Industrial mathematics, applied mathematics).			
			4	Cross-Disciplinary Centres in Mathematics	Specialised structures devoted to the interaction of mathematics with other sciences (e.g. biology, genomics, chemistry, computer sciences …). These structures strive at developing new areas of research where mathematics is known to play a founding role as it did in the development of physics. (Cross-disciplinary centres; mathematical sciences; interaction of mathematics).			
			5	Extreme Conditions Facilities	All facilities where materials are studied under extreme physical conditions as in High Magnetic Field Laboratories, High Pressure Laboratories, Low Temperature Laboratories, High Radiation Facilities, and Microgravity platforms.			
			6	Gravitational Wave Detectors and Observatories	Instruments using laser interferometry between freely hung test masses up to several km apart in vacuum. The lengths of two perpendicular arms, defined by the test masses, are compared and fluctuations in the arm length differences are recorded and analysed for potential GW signals. Links to earth observation.			

			7	High Energy Physics Facilities	High Energy Physics Facilities include accelerators, colliders, targets, light sources and detectors of high energy particles through electrostatic or oscillating fields accelerating particles to speeds sufficient to cause nuclear and particle reactions.			
			8	Mathematics Centres of Competence	Mathematics centres of competence develop mathematical models for applications in all sciences and engineering, including social sciences, and medicine. They analyse the models, develop and implement algorithms for the simulation of the models as well as for the optimization and control of the involved processes. They provide transversal competences which allow transferring concepts and methods from one specific science to another and they also provide consulting concerning the use of methods and their implementation for specific applications. When needed, they generate the basic mathematical theory that is needed to perform the described tasks. (Mathematical modelling; numerical and statistical simulation; control theory; optimization; mathematical algorithm repository).			
			9	Micro and Nanotechnology Facilities	Micro and nanotechnology facilities deals with the understanding and control of matter at the nanoscale and microscales, at dimensions between approximately 1 and 1000 nanometres, involving imaging, measuring, modelling, and manipulating matter at this length scale.			

			10	Nuclear Research Facilities	Nuclear Physics facilities include accelerators, colliders, targets and detectors to study the atomic nucleus, the nuclear matter including its fusion and fission. The facilities can be classified according to their objects of study (hadrons, nuclei, applications), the probes that are used to investigate them (lepton/ photon or hadron/heavy ion beams), or simply by the size of the facility and the type of reactions involved in the various nuclear processes.		
			11	Safety Handling Facilities	Facilities that are required to handle materials that potentially cause biosafety, chemical, radioactive, explosive, or engineering hazards. Also clean rooms and Actinide Handling Facilities would be included. Includes Biosecurity Level-4 Laboratories.		
			12	Space Environment Test Facilities	Includes planetary/space environment simulation chambers and space environment exposure facilities as well as space plasma physics facilities		
			13	Telescopes	Includes ground-based telescopes with (1) optical and/or near infrared telescopes, interferometers or (2) reflector telescopes with mirrors of different diameters, operating at radio frequencies, or infrared and/or optical wavelengths and (3) Space-borne telescopes orbiting the earth including a wide range of wavelengths, from gamma-rays to the radio.		

		14	Underground Laboratories	Underground spaces providing experimental areas of reduced cosmic ray background, reduced seismic noise etc. for a range of experiments in physics and particle astrophysics. Open to members of collaborations involved in installing and running experiments. These facilities also have relevance to ICT and Material Sciences, Environment, Biological and Medical Sciences, Physics.			
		15	Other				
8	Social Sciences	1	Data Archives, Data Repositories and Collections	A digital data archive is a centre of expertise in data acquisition, preservation, management, dissemination and promotion of an access to the national and international collections and repositories of digital data. These type of RIs are particularly acute to the social sciences, which often rely on the aggregation of longitudinal data, and to the humanities, which often rely on preservation, but they can be relevant for other domains, particularly, the life and environmental sciences and the medical sciences.			
		2	Data mining and Analysis (Methodological) Centres, including statistical analysis	Centres of expertise or methodological resources for extracting patterns from large data sets by combining methods from statistics and artificial intelligence. These RIs enable researchers to overcome the challenge of working with increasingly larger data-sets. Data-mining and statistical techniques populate every scientific domain but what counts as data is domain specific. Therefore, this category should be understood as specific to social sciences because it refers to data in the social sciences.			

		3	National Statistical Facilities (offices)	Centres of expertise responsible for the collection and publication of statistics related to the economy, population and society at international, national and regional levels. These infrastructures have been traditionally created by the states but constitute as well powerful resources for the social scientists in particular.			
		4	Registers and Survey-led Studies/Databases	Organized and systematic collection of data (time or spatial series) for one or more purposes (research, evidence-based policy, non-governmental organisations) in digital form or not. These type of RIs are particularly acute to the social sciences, which often rely on the aggregation of masses of longitudinal data but they can be relevant for all the other domains, that is, the humanities, the life and environmental sciences, the physical sciences and engineering, and the medical sciences.			
		5	Research Data Service Facilities	Facilities for clustering research data and making it permanently accessible, as well as facilities for the provision of all sorts of data services. These often include meta-infrastructures. These types of RIs are particularly relevant to Humanities and Arts; Social Sciences, Medical sciences.			
		6	Other				
9	Other	1	Other				

Provider Area of Activity

No.	Provider Area of Activity	Changes v1.13 to v3.00	Changes v1.30 to v3.00	Changes v2.00 to v3.00
1	Basic research	New	New	
2	Applied research			

| 3 | Technological development | | | |
| 4 | Other | | | |

Provider Societal Grand Challenges

No.	Provider Societal Grand Challenges	Changes v1.13 to v3.00	Changes v1.30 to v3.00	Changes v2.00 to v3.00
1	Health, demographic change and wellbeing			
2	Food security, sustainable agriculture and forestry, marine and maritime and inland water research, and the Bioeconomy			
3	Secure, clean and efficient energy			
4	Smart, green and integrated transport	**New**	**New**	
5	Climate action, environment, resource efficiency and raw materials			
6	Europe in a changing world – inclusive, innovative and reflective societies			
7	Secure societies – protecting freedom and security of Europe and its citizens			
8	Other			

EOSC Resource Profile

An EOSC Resource is an asset made available by means of the *EOSC system* and according to the *EOSC Rules of Participation* to *EOSC End-Users* to perform a process useful to deliver value in the context of the EOSC. *EOSC Resources* include Services, Data Sources, Research Products and any other asset. More definitions here.

Data Model

Basic Information						
Code	Attribute Name	Definition	Type	Multiplicity	Required	Public
ERP.BAI.0	**ID**	A persistent identifier, a unique reference to the Resource in the context of the EOSC Portal.	String (max 30)	1	Mandatory (Assigned by the EOSC Portal)	Yes
ERP.BAI.1	**Name**	Brief and descriptive name of Resource as assigned by the Provider.	String (max 80)	1	Mandatory	Yes
ERP.BAI.2	**Resource Organisation**	The name (or abbreviation) of the organisation that manages or delivers the resource, or that coordinates resource delivery in a federated scenario.	Provider ID	1	Mandatory (Filled in by the EOSC Portal)	Yes
ERP.BAI.3	**Resource Providers**	The name(s) (or abbreviation(s)) of Provider(s) that manage or deliver the Resource in federated scenarios.	Provider IDs	Multiple	Optional	Yes
ERP.BAI.4	**Webpage**	Webpage with information about the Resource usually hosted and maintained by the Provider.	URL	1	Mandatory	Yes
Marketing Information						
Code	Attribute Name	Definition	Type	Multiplicity	Required	Public

ERP.MRI.1	**Description**	A high-level description in fairly non-technical terms of a) what the Resource does, functionality it provides and Resources it enables to access, b) the benefit to a user/customer delivered by a Resource; benefits are usually related to alleviating pains (e.g., eliminate undesired outcomes, obstacles or risks) or producing gains (e.g. increased performance, social gains, positive emotions or cost saving), c) list of customers, communities, users, etc. using the Resource.	String (max 1000)	1	Mandatory	Yes
ERP.MRI.2	**Tagline**	Short catch-phrase for marketing and advertising purposes. It will be usually displayed close to the Resource name and should refer to the main value or purpose of the Resource.	String (max 100)	1	Mandatory	Yes
ERP.MRI.3	**Logo**	Link to the logo/visual identity of the Resource. The logo will be visible at the Portal.	URL	1	Mandatory	Yes
ERP.MRI.4	**Multimedia**	Link to video, screenshots or slides showing details of the Resource.	URL	Multiple	Optional	Yes
ERP.MRI.5	**Use Cases**	Link to use cases supported by this Resource.	URL	Multiple	Optional	Yes
~~ERP.MRI.6~~	~~User Value~~					
~~ERP.MRI.7~~	~~User Base~~					
~~ERP.MRI.8~~	~~Service Options~~					
~~ERP.MRI.9~~	~~Service endpoint~~					
Classification Information						
Code	Attribute Name	Definition	Type	Multiplicity	Required	Public

ERP.CLI.1	**Scientific Domain**	The branch of science, scientific discipline that is related to the Resource.	List of controlled values: [ERV: EOSC Resource Profile#Resource Scientific Domain](#)	Multiple	Mandatory	Yes
ERP.CLI.2	**Scientific Subdomain**	The subbranch of science, scientific subdicipline that is related to the Resource.	List of controlled values: [ERV: EOSC Resource Profile#Resource Scientific Domain](#)	Multiple	Mandatory	Yes
ERP.CLI.3	**Category**	A named group of Resources that offer access to the same type of Resource or capabilities.	List of controlled values: [ERV: EOSC Resource Profile#Resource Category](#)	Multiple	Mandatory	Yes
ERP.CLI.4	**Subcategory**	A named group of Resources that offer access to the same type of Resource or capabilities, within the defined Resource category	List of controlled values: [ERV: EOSC Resource Profile#Resource Category](#)	Multiple	Mandatory	Yes
ERP.CLI.5	**Target Users**	Type of users/customers that commissions a Provider to deliver a Resource.	List of controlled values: [ERV: EOSC Resource Profile#Resource Target Users](#)	Multiple	Mandatory	Yes
ERP.CLI.6	**Access Type**	The way a user can access the Resource (Remote, Physical, Virtual, etc.)	List of controlled values: [ERV: EOSC Resource Profile#Resource Access Type](#)	Multiple	Optional	Yes

Code	Attribute Name	Definition	Type	Multiplicity	Required	Public
ERP.CLI.7	**Access Mode**	Eligibility/criteria for granting access to users (excellence-based, free-conditionally, free etc.)	List of controlled values: [ERV: EOSC Resource Profile#Resource Access Mode](#)	Multiple	Optional	Yes
ERP.CLI.8	**Tags**	Keywords associated to the Resource to simplify search by relevant keywords.	String (max 50)	Multiple	Optional	Yes
~~ERP.CLI.9~~	~~Target customer tags~~					

Geographical and Language Availability Information

Code	Attribute Name	Definition	Type	Multiplicity	Required	Public
ERP.GLA.1	**Geographical Availability**	Locations where the Resource is offered.	List of controlled values: [ERV: EOSC Resource Profile#Resource Geographical Availability](#)	Multiple	Mandatory	Yes
ERP.GLA.2	**Language Availability**	Languages of the (user interface of the) Resource.	List of controlled values: [ERV: EOSC Resource Profile#Resource Language Availability](#)	Multiple	Mandatory	Yes

Resource Location Information

Code	Attribute Name	Definition	Type	Multiplicity	Required	Public
ERP.RLI.01	**Resource Geographic Location**	List of geographic locations where data is stored and processed	List of controlled values: [ERV: EOSC Resource Profile#Resource Geographic Location](#)	Multiple	Optional	

Contact Information						
Main Contact/Resource Owner						
Code	Attribute Name	Definition	Type	Multiplicity	Required	Public
ERP.COI.1	**First Name**	First Name of the Resource's main contact person/manager.	String (max 20)	1	Mandatory	No
ERP.COI.2	**Last Name**	Last Name of the Resource's main contact person/manager.	String (max 20)	1	Mandatory	No
ERP.COI.3	**Email**	Email of the Resource's main contact person/manager.	Email	1	Mandatory	No
ERP.COI.4	**Phone**	Telephone of the Resource's main contact person/manager.	String (max 20)	1	Optional	No
ERP.COI.5	**Position**	Position of the Resource's main contact person/manager.	String (max 20)	1	Optional	No
ERP.COI.6	**Organisation**	The organisation to which the contact is affiliated	String (max 50)	1	Optional	No
Public Contact						
Code	Attribute Name	Definition	Type	Multiplicity	Required	Public
ERP.COI.7	**First Name**	First Name of the Resource's contact person to be displayed at the portal.	String (max 20)	1	Optional	Yes
ERP.COI.8	**Last Name**	Last Name of the Resource's contact person to be displayed at the portal.	String (max 20)	1	Optional	Yes
ERP.COI.9	**Email**	Email of the Resource's contact person or a generic email of the Provider to be displayed at the portal.	Email	1	Mandatory	Yes
ERP.COI.10	**Phone**	Telephone of the Resource's contact person to be displayed at the portal.	String (max 20)	1	Optional	Yes

ERP.COI.11	**Position**	Position of the Resource's contact person to be displayed at the portal.	String (max 20)	1	Optional	Yes
ERP.COI.12	**Organisation**	The organisation to which the contact is affiliated	String (max 50)	1	Optional	Yes

Other Contacts

Code	Attribute Name	Definition	Type	Multiplicity	Required	Public
ERP.COI.13	**Helpdesk Email**	The email to ask more information from the Provider about this Resource.	Email	1	Mandatory	Yes
ERP.COI.14	**Security Contact Email**	The email to contact the Provider for critical secutiry issues about this Resource.	Email	1	Mandatory	No
~~ERP.COI.15~~	~~Service security name/group~~					

Maturity Information

Code	Attribute Name	Definition	Type	Multiplicity	Required	Public
ERP.MTI.1	**Technology Readiness Level**	The Technology Readiness Level of the Resource uodated in the context of the EOSC.	List of controlled values: ERV: EOSC Resource Profile#Resource TRL	1	Mandatory	Yes
ERP.MTI.2	**Life Cycle Status**	Phase of the Resource life-cycle.	List of controlled values:	1	Optional	Yes
ERP.MTI.3	**Certifications**	List of certifications obtained for the Resource (including the certification body).	String (max 100)	Multiple	Optional	Yes
ERP.MTI.4	**Standards**	List of standards supported by the Resource.	String (max 100)	Multiple	Optional	Yes
ERP.MTI.5	**Open Source Technologies**	List of open source technologies supported by the Resource.	String (max 100)	Multiple	Optional	Yes

ERP.MTI.6	**Version**	Version of the Resource that is in force.	String (max 10)	1	Optional	Yes
ERP.MTI.7	**Last Update**	Date of the latest update of the Resource.	Date (dd/mm/yyyy)	1	Optional	Yes
ERP.MTI.8	**Change Log**	Summary of the Resource features updated from the previous version.	String (max 1000)	Multiple	Optional	Yes
~~ERP.MTI.9~~	~~**Service Valid for**~~	~~The date up to which the Description is valid.~~	~~Date (dd/mm/yyyy)~~	~~1~~	~~Optional~~	~~Yes~~

Dependencies Information

Code	Attribute Name	Definition	Type	Multiplicity	Required	Public
ERP.DEI.1	**Required Resources**	List of other Resources required to use this Resource.	Resource IDs	Multiple	Optional	Yes
ERP.DEI.2	**Related Resources**	List of other Resources that are commonly used with this Resource.	Resource IDs	Multiple	Optional	Yes
ERP.DEI.3	**Related Platforms**	List of suites or thematic platforms in which the Resource is engaged or Providers (Provider groups) contributing to this Resource.	String (max 50)	Multiple	Optional	Yes

Attribution Information

Code	Attribute Name	Definition	Type	Multiplicity	Required	Public
ERP.ATI.1	**Funding Body**	Name of the funding body that supported the development and/or operation of the Resource.	List of controlled values: [ERV: EOSC Resource Profile#Resource Funding Body]	Multiple	Optional	Yes

Code	Attribute Name	Definition	Type	Multiplicity	Required	Public
ERP.ATI.2	**Funding Program**	Name of the funding program that supported the development and/or operation of the Resource.	List of controlled values: [ERV: EOSC Resource Profile#Resource Funding Program](#)	Multiple	Optional	Yes
ERP.ATI.3	**Grant/Project Name**	Name of the project that supported the development and/or operation of the Resource.	String (max 100)	Multiple	Optional	Yes
Management Information						
Code	Attribute Name	Definition	Type	Multiplicity	Required	Public
ERP.MGI.1	**Helpdesk Page**	The URL to a webpage to ask more information from the Provider about this Resource.	URL	1	Optional	Yes
ERP.MGI.2	**User Manual**	Link to the Resource user manual and documentation.	URL	1	Optional	Yes
ERP.MGI.3	**Terms Of Use**	Webpage describing the rules, Resource conditions and usage policy which one must agree to abide by in order to use the Resource.	URL	1	Optional	Yes
ERP.MGI.4	**Privacy Policy**	Link to the privacy policy applicable to the Resource.	URL	1	Optional	Yes
ERP.MGI.5	**Access Policy**	Information about the access policies that apply.	URL	1	Optional	Yes
ERP.MGI.6	**Service Level**	Webpage with the information about the levels of performance that a Provider is expected to deliver.	URL	1	Optional	Yes
ERP.MGI.7	**Training Information**	Webpage to training information on the Resource.	URL	1	Optional	Yes
ERP.MGI.8	**Status Monitoring**	Webpage with monitoring information about this Resource	URL	1	Optional	Yes
ERP.MGI.9	**Maintenance**	Webpage with information about planned maintenance windows for this Resource	URL	1	Optional	Yes

Code	Attribute Name	Definition	Type	Multiplicity	Required	Public
ERP.MGI.10	~~**Service Feedback**~~					
~~**ERP.MGI.11**~~	~~**Admin Manual**~~					

Access and Order Information

Code	Attribute Name	Definition	Type	Multiplicity	Required	Public
ERP.AOI.1	**Order Type**	Information on the order type (requires an ordering procedure, or no ordering and if fully open or requires authentication)	List of controlled values: ERV: EOSC Resource Profile#Resource Order Type	1	Mandatory	Yes
ERP.AOI.2	**Order**	Webpage through which an order for the Resource can be placed	URL	1	Optional	Yes
~~**ERP.AOI.3**~~	~~**Open/Wide Access Service**~~					
~~**ERP.AOI.4**~~	~~**Service ordering**~~					

Financial Information

Code	Attribute Name	Definition	Type	Multiplicity	Required	Public
ERP.FNI.1	**Payment Model**	Webpage with the supported payment models and restrictions that apply to each of them	URL	1	Optional	Yes
ERP.FNI.2	**Pricing**	Webpage with the information on the price scheme for this Resource in case the customer is charged for.	URL	1	Optional	Yes

Onboarding Guide

Basic Information					
Code	Attribute Name	Example Value	Guidelines for Providers	Machine-based validation	Human-based validation
ERP.BAI.0	**ID**	openaire.zenodo	A provider does not need to provide this ID during registration or update. This is a unique ID which EOSC Portal assigns to a resource registered in the Registry and it is used to identify a resource in the EOSC portal. In next releases, Providers can use a PID; i.e., PID Providers will offer PID services to Resource Providers to reach a point that the EOSC portal will use global PIDs.		Should examine whether the Resource has been already onboarded by any other Providers and and escalate to the EPOT for resolution.
ERP.BAI.1	**Name**	B2DROP	Should be descriptive from a customer point of view and should be quite simple, such that someone non-technical is able to understand what the Resource is about. This attribute will be used in the search function to prioritise results.		In general it should be taken as-is because it is specific to the Resource and the Resource name selected by the Provider. Only ask for clarifications if the name does not correspond with the name of the Reource name provided on the Resource URL or in case of obvious typo's.

ERP.BAI.2	**Resource Organisation**	OpenAIRE			
ERP.BAI.3	**Resource Providers**	CERN, GRNET			
ERP.BAI.4	**Webpage**	http://www.Provider.eu/Resource-name or http://Resource-name.Provider.eu	Create a unique URL for each Resource and provide the shortest possible alias	Validate nominal URL, reject IP or other formats	Verify if the URL refers to the web page of the Resource, this is commonly the web page of the Resource in the Catalogue of the Provider. Verify if the name on the web page corresponds to the name provided as Resource Name.
Marketing Information					
Code	Attribute Name	Example Value	Guidelines for Providers	Machine-based validation	Human-based validation

ERP.MRI.1	**Description**	B2SHARE is a user-friendly, reliable and trustworthy service that allows to store and share worldwide small-scale research data, results and metadata from diverse contexts and guarantees their long-term persistence. For the communities who need to guard against data loss, B2SAFE is a customer facing service that allow data replication and safe storage between geographically distributed centres in the EUDAT CDI. 900+ data Providers in Europe with different compatibility levels. Adoption in Latin America and Japan.	Describe the Resource in a way that helps potential customers understand it and the benefit it brings. What is the main functionality of the service? The layout and content are up to the Provider. This field is used in the search function to prioritise results. Benefits are usually related to alleviating pains (e.g., eliminate undesired outcomes, obstacles or risks) or producing gains (e.g. increased performance, social gains, positive emotions or cost saving). Description should be as quantified as possible. Please consider GDPR.		In general take as-is because it is specific to the Resource provided by the Provider. Review the text, not to qualify the quality, but more on readability and for obvious typo's, if necessary, ask for clarifications. Also point out if it does not appear to address the potential customers and explain the main functionality of the Resource. If description is excessively long suggest being more concise.
ERP.MRI.2	**Tagline**	Store, share and access your files and their metadata on a global scale	Marketing specialists are encouraged to be engaged in order to come up with a catch phrase that can aid Resource dissemination and visibility.		In general it should be taken as-is because it is specific to the Resource provided by the Provider. Only ask for clarifications if the tagline does not correspond to the provided Resource Description and in case of obvious typos.

ERP.MRI.3	**Logo**	https://Resource-name.Resource-Provider.eu/Symbol.jpg	Provide URL of the Resource, which must be in https, in the form of the shortest possible alias	Validate nominal URL, reject IP or other formats For the Resource located at the URL validate as follows: -Formats: png, gif, jpg, jpeg, pjpeg, tiff, vnd.adobe, vnd.microsoft -Minimum dimensions 180x120px	Verify if the URL points to a logo picture or source including a logo that relate to the Resource in question. If needed, contact requester for clarification.
ERP.MRI.4	**Multimedia**	http://Resource-name.Resource-Provider.eu/Multimedia	Provide URL of the Resource, in the form of the shortest possible alias	Validate nominal URL, reject IP or other formats	Verify if the URL points to multimedia that relates to the Resource in question. If needed, contact requester for clarification.
ERP.MRI.5	**Use Cases**	https://zenodo.org/record/1490344#.XfR8p_yxWUk	Provide URL of the webpage describing a use case		Verify that the URL refers to the web page of the Resource and the screenshots and/or videos presented therein correspond to the Resource described.
~~ERP.MRI.6~~	**~~User Value~~**				
~~ERP.MRI.7~~	**~~User Base~~**				
~~ERP.MRI.8~~	**~~Service Options~~**				

Code	Attribute Name	Example Value	Guidelines for Providers	Machine-based validation	Human-based validation
ERP.MRI.9	**Service endpoint**				
Classification Information					
ERP.CLI.1	**Scientific Domain**	Natural Sciences	A second scientific domain should be used only if strictly needed		Verify that the provided value corresponds with names provided in the Resource's webpage.
ERP.CLI.2	**Scientific Subdomain**	Biological sciences			Verify that the provided value corresponds with names provided in the Resource's webpage.
ERP.CLI.3	**Category**	Aggregators & Integrators	A second category should be used only if strictly needed		Verify that the category chosen is logical to Resource description.
ERP.CLI.4	**Subcategory**	Software & Data			Verify that the subcategory chosen is logical to Resource description.
ERP.CLI.5	**Target Users**	Researchers, Research group, Research community, Research project, Research manager, Research organization, Innovators, Business	Target users should be defined as accurately and as inclusive as possible at the same time.		
ERP.CLI.6	**Access Type**	Virtual			

ERP.CLI.7	**Access Mode**	Excellence-based, peer reviewed			
ERP.CLI.8	**Tags**	Open Science, data, dataset, data archive, library, repository	For multi-word keywords, please use '-' to concatenate words. This field will be used in the search function to prioritise results.	Validate keywords, by inserting '-' to concatenate words not separated by commas and identify as separate keywords words that are separated by commas	In general take as-is because it is specific to the Resource and selected by the Provider. Only ask for clarifications in case of unfamiliar words and/or obvious typo's.
~~ERP.CLI.9~~	~~**Target customer tags**~~				

Geographical and Language Availability Information

Code	Attribute Name	Example Value	Guidelines for Providers	Machine-based validation	Human-based validation
ERP.GLA.1	**Geographical Availability**	World		Validation using the ISO 3166-1 alpha-2 standard for the 2-letter codes for representing the languages.	
ERP.GLA.2	**Language Availability**	English		Validation using the ISO 3166-1 alpha-2 standard for the 2-letter codes for representing the languages.	

Resource Location Information

Code	Attribute Name	Example Value	Guidelines for Providers	Machine-based validation	Human-based validation

ERP.RLI.01	Resource Geographic Location				
Contact Information					
Main Contact/Resource Owner					
Code	Attribute Name	Example Value	Guidelines for Providers	Machine-based validation	Human-based validation
ERP.COI.1	**First Name**	John			
ERP.COI.2	**Last Name**	Smith			Check for obvious typos in the name. Confirm with a google search of the name and Provider
ERP.COI.3	**Email**	john.smith@example.com		Validate e-mail address	
ERP.COI.4	**Phone**	3021077755500		Validate for number (use separate input field for country prefixes)	
ERP.COI.5	**Position**	Coordinator			
ERP.COI.6	**Organisation**	Open Access Infrastructure for Research in Europe			
Public Contact					
Code	Attribute Name	Example Value	Guidelines for Providers	Machine-based validation	Human-based validation
ERP.COI.7	**First Name**	Jack			

Code	Attribute Name	Example Value	Guidelines for Providers	Machine-based validation	Human-based validation
ERP.COI.8	**Last Name**	White			Check for obvious typos in the name. Confirm with a google search of the name and Provider
ERP.COI.9	**Email**	jack.white@example.com		Validate e-mail address	
ERP.COI.10	**Phone**	3021077755501		Validate for number (use separate input field for country prefixes)	
ERP.COI.11	**Position**	Manager			
ERP.COI.12	**Organisation**	Open Access Infrastructure for Research in Europe			

Other Contacts

Code	Attribute Name	Example Value	Guidelines for Providers	Machine-based validation	Human-based validation
ERP.COI.13	**Helpdesk Email**	helpdesk@Provider.com	Email to contact your helpdesk, where users with incidents and requests will be directed.	Validate e-mail address	Verify the validity of the email address as a helpdesk email for the specific Resource (via internet search)
ERP.COI.14	**Security Contact Email**	secutiry@Provider.com	Email contact of the person or group responsible for the security aspects of the Resource.	Validate e-mail address	Verify the validity of the email address as a security email for the specific Resource (via internet search)

Code	Attribute Name	Example Value	Guidelines for Providers	Machine-based validation	Human-based validation
ERP.COI.15	**Service security name/group**				
Maturity Information					
Code	Attribute Name	Example Value	Guidelines for Providers	Machine-based validation	Human-based validation
ERP.MTI.1	**Technology Readiness Level**	TRL8	https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/support/faq;keywords=/2890	A Resource needs to have TRL>=7 to be visible in the portal	Verify the provided TRL according to the Classification Appendix definitions
ERP.MTI.2	**Life Cycle Status**	Production			

| ERP.MTI.3 | Certifications | - | List of certifications obtained for the Resource (including the certification body and any certificate number if available). | | The certifications provided can be generic or community specific. We do not qualify the quality of a certification, the only qualification is that the certification is described on a public webpage. Verify via internet searches if the provided names give a valid result describing the certification. If not, request clarification and an URL reference describing the certification. Check whether the certification body is real and appears to offer certification. |

ERP.MTI.4	**Standards**	ISO 15430, ISO 27000 Webdav (https://en.wikipedia.org/wiki/WebDAV, https://tools.ietf.org/html/rfc4918, http://www.webdav.org/)	List of formal and externally recognised standards that this Resource conforms to.		The standards provided can be generic or community specific. We do not qualify a standard, the only qualification is that the standard is described on a public webpage. Verify via internet searches if the provided names give a valid result describing the standard. If not, request clarification and an URL reference describing the standard.
ERP.MTI.5	**Open Source Technologies**		List any open source technologies incoportated into the Resource. Please note this is for specific technologies not broad ones like HTTP or a Linux distribution.		Check that the technologies mentioned/projects exist
ERP.MTI.6	**Version**	3.1	Only stable releases should be referenced.		
ERP.MTI.7	**Last Update**	2/28/2018	The date should refer to when the updated version became available to users, not when it was developed or released internally in the Provider.	Validate for date	
ERP.MTI.8	**Change Log**	Upgrade of user interface. Correction of minor bugs.	Clear, staccato sentences for each updated feature should be used.		

ERP.MTI.9	~~Service Valid for~~				

Dependencies Information

Code	Attribute Name	Example Value	Guidelines for Providers	Machine-based validation	Human-based validation
ERP.DEI.1	**Required Resources**	List of Resource IDs	List any other EOSC Resources that your Resource requires in order to operate.		
ERP.DEI.2	**Related Resources**	List of Resource IDs	List any other EOSC Resources that you are aware of that your service can cooperate with.		
ERP.DEI.3	**Related Platforms**	E.g.: WeNMR Suite for DISVIS	List any platform this Resource is part of, e.g. a thematic portal for a certain community.		Verify via an internet search the name of the platform and its relevance with the Resource

Attribution Information

Code	Attribute Name	Example Value	Guidelines for Providers	Machine-based validation	Human-based validation
ERP.ATI.1	**Funding Body**	European Commission	Publicity guidelines of each respective funding sources should be adhered to.		
ERP.ATI.2	**Funding Program**	Horizon 2020			
ERP.ATI.3	**Grant/Project Name**	OpenAIRE2020 (643410)			

Management Information					
Code	Attribute Name	Example Value	Guidelines for Providers	Machine-based validation	Human-based validation
ERP.MGI.1	**Helpdesk Page**	http://Resource-name.Resource-Provider.eu/Helpdesk http://helpdesk.Resource-Provider.eu	Link to the helpdesk where users with incidents and requests will be directed. It should allow private communication with providers (not a public forum). Create a dedicated URL for your Resources and provide the shortest possible alias.	Validate nominal URL, reject IP or other formats	For this field it should be a URL to a helpdesk portal, verify the URL by accessing the URL via a web browser.
ERP.MGI.2	**User Manual**	http://Resource-name.provid-er.eu/UserManual	Link to the user manual or other basic user instructional information about teh Resource. Create a dedicated URL for your Resources and provide the shortest possible alias.	Validate nominal URL, reject IP or other formats	Verify if the URL refers to the web page, document or other information describing the Resource. If not ask clarification from the Provider. The quality of the content does not have to be verified, but the information provided must have a look and feel of a user manual.

| ERP.MGI.3 | Terms Of Use | http://Resource-name.provid-er.eu/TermsOfUse | Link describing the rules, resource conditions and usage policy which one must agree to abide by in order to use the Resource. Create a dedicated URL for your Resources and provide the shortest possible alias. | Validate nominal URL, reject IP or other formats | Verify that the URL refers to the web page, document or other information providing the terms of use for the Resource. If not ask clarification from the Provider. The quality of the content does not to have be verified. The content has to be publically accessible before the user logs in.

If there is no Terms of Use / Acceptable Use Policy or the existing one appears of low quality, suggest the WISE Baseline AUP, see https://aarc-project.eu/wp-content/uploads/2019/03/AARC-I044-Implementers-Guide-to-the-WISE-Baseline-AUP.pdf |

				Validate nominal URL,	
ERP.MGI.4	**Privacy Policy**		Link to the privacy policy applicable to the Resource. Privacy policies are required for all Resources, since they will likely fall under the GDPR limitations. Create a dedicated URL for your Resources and provide the shortest possible alias.	Validate nominal URL, reject IP or other formats	Verify that the URL refers to the web page, document or other information describing the Resource privacy policy. If not ask clarification from the Provider. The quality of the content does not have to be verified.
ERP.MGI.5	**Access Policy**	PRACE provides HPC Resources to researchers and scientists from academia and industry through Preparatory Access (code scaling and optimization) and/or through Project Access (large-scale, computationally intensive projects) http://www.prace-ri.eu/hpc-access	Create a dedicated URL for your Resources and provide the shortest possible alias.		Check that the answer can be generally understood by users, and seems to relate to the servie as shown on its website.
ERP.MGI.6	**Service Level**	http://Resource-name.Provider.eu/SLA	Link to a Service Level Agreement (SLA) or Service Level Specification (SLS) applicable to the Resource. Support is available in forming an SLA or SLS is available at https://wiki.eosc-hub.eu/display/EOSC/Service+Provider+Documentation.	Validate nominal URL, reject IP or other formats	Verify that the provided link poins to a Service Level Agreement (SLA) or Service Level Specification (SLS) applicable to the Resource.

ERP.MGI.7	Training Information	http://Resource-name.Provider.eu/Training	Link to page with training information on the Resource. Create a dedicated URL for your Resources and provide the shortest possible alias.	Validate nominal URL, reject IP or other formats	Verify that the URL refers to the web page, document or other information related to training for the Resource. If not ask clarification from the Provider. The quality of the content does not have to be verified, but the information provided must have a look and feel and to be useful as training material.
ERP.MGI.8	Status Monitoring	http://Resource-name.Provider.eu/Monitoring	Web Page with monitoring information about this Resource.	Validate nominal URL, reject IP or other formats	Verify that the URL points to a webpage that provides monitoring information about the Resource. If not ask clarification from the Provider. We do not assess the quality and/or usefulness of the monitoring page.
ERP.MGI.9	Maintenance	http://Resource-name.Provider.eu/Maintenance	Web Page with information about planned maintenance windows for this Resource.	Validate nominal URL, reject IP or other formats	Verify that the URL points to a webpage that provides information on scheduled downtimes of the Resource. If not ask clarification from the Provider.

Code	Attribute Name	Example Value	Guidelines for Providers	Machine-based validation	Human-based validation
~~ERP.MGI.10~~	~~Service Feedback~~				
~~ERP.MGI.11~~	~~Admin Manual~~				

Access and Order Information

Code	Attribute Name	Example Value	Guidelines for Providers	Machine-based validation	Human-based validation
ERP.AOI.1	**Order Type**				
ERP.AOI.2	**Order**	https://gts.geant.net/login		Validate nominal URL, reject IP or other formats	
~~ERP.AOI.3~~	~~Open/Wide Access Service~~				
~~ERP.AOI.4~~	~~Service ordering~~				

Financial Information

Code	Attribute Name	Example Value	Guidelines for Providers	Machine-based validation	Human-based validation
ERP.FNI.1	**Payment Model**			Validate nominal URL, reject IP or other formats	Verify that the URL provided indeed provides information on the payment model of the Resource. If not, requrest clarifications from the Provider

| ERP.FNI.2 | Pricing | http://Resource-name.Provider.eu/Price | Look at https://cloud.telekom.de/en/infrastructure/open-telekom-cloud/pricing as an example | Validate nominal URL, reject IP or other formats | Verify that the URL provided indeed provides information on the pricing of the Resource. If not, requrest clarifications from the Provider |

Transition Guide

Basic Information							
Code	Attribute Name	Changes v1.13 to v3.00 (eInfraCentral)	Transition v1.13 to v3.00	Changes v1.30 to v3.00 (EOSC-hub)	Transition v1.30 to v3.00	Changes v2.00 to v3.00 (CatRIS)	Transition v2.00 to v3.00
ERP.BAI.0	**ID**	Change Attribute Name (old Service ID) Type added Definition updated	*Copy*		*ID should be compliant to the Providers' IDs*	Type added Definition updated	*Copy*
ERP.BAI.1	**Name**	Change Attribute Name (old Service Name)	*Copy*	Change Attribute Name (old Service Name) Change Type (old Single Line)	*Copy*	No change	*Copy*
ERP.BAI.2	**Resource Organisation**	Change Attribute Name (old Service Provider Name) Change Type (old Free text)	*Copy*	**New**	Default value **EPP.BAI.0**	Change Attribute Name (old Provider Name) **Change Multiplicity (old Multiple)**	*Keep only 1st Provider ID*
ERP.BAI.3	**Resource Providers**	**New**	Default value empty(null)	**New**	Default value empty(null)	**New**	*Move from ERP.BAI.2 all other Provider IDs except 1st*

ERP.BAI.4	**Webpage**	Change Attribute Name (old Service URL)	*Copy*	Change Attribute Name (old Service URL)	*Copy*	No change	*Copy*

Marketing Information

Code	Attribute Name	Changes v1.13 to v3.00 (eInfraCentral)	Transition v1.13 to v3.00	Changes v1.30 to v3.00 (EOSC-hub)	Transition v1.30 to v3.00	Changes v2.00 to v3.00 (CatRIS)	Transition v2.00 to v3.00
ERP.MRI.1	**Description**	Moved from Basic Information Block Change Attribute Name (old Service Description)	*Concatenate Description + User Value + User Base + Service Options*	Moved from Basic Information Block Change Attribute Name (old Service Description) Change Type (old Freetext)	*Copy*	Moved from Basic Information Block	*Copy*
ERP.MRI.2	**Tagline**	Moved from Basic Information Block Change Attribute Name (old Service Tagline) **Change to Mandatory**	*Copy or "-" if empty*	Change Attribute Name (old Service Tagline) Change Type (old Single LIne)	*Copy*	Moved from Basic Information Block	*Copy*

ERP.MRI.3	**Logo**	Moved from Basic Information Block Change Attribute Name (old Service Symbol)	*Copy*	Change Attribute Name (old Service Logo)	*Copy*	Moved from Basic Information Block	*Copy*
ERP.MRI.4	**Multimedia**	Moved from Basic Information Block Change Attribute Name (old Service Multimedia)	*Copy*	Change Attribute Name (old Service Multimedia)	*Copy*	Moved from Basic Information Block	*Copy*
ERP.MRI.5	**Use Cases**	**New**	Default value empty(null)	Change Attribute Name (old Use cases/case studies) Change Type (old Freetext)	*Copy*	Change of Type (old String)	*Default value empty(null)*
~~ERP.MRI.6~~	~~User Value~~	**Removed for simplification**	*Content to be concatenated in Description*			**Removed for simplification**	*Content to be concatenated in Description*
~~ERP.MRI.7~~	~~User Base~~	**Removed for simplification**	*Content to be concatenated in Description*			**Removed for simplification**	*Content to be concatenated in Description*
~~ERP.MRI.8~~	~~Service Options~~	**Removed for simplification**	*Content to be concatenated in Description*			**Removed for simplification**	*Content to be concatenated in Description*
~~ERP.MRI.9~~	~~Service endpoint~~			**Removed for simplification**	*Delete*		

Classification Information

Code	Attribute Name	Changes v1.13 to v3.00 (eInfraCentral)	Transition v1.13 to v3.00	Changes v1.30 to v3.00 (EOSC-hub)	Transition v1.30 to v3.00	Changes v2.00 to v3.00 (CatRIS)	Transition v2.00 to v3.00
ERP.CLI.1	**Scientific Domain**	**New**	Default value "Other"	Moved from Classification & Matutiry Block Change Attribute Name (old Research fileds) Change Type (old Multiselect list)	New List of controlled values. Delete and use Default value "Other"	No change	*Copy*
ERP.CLI.2	**Scientific Subdomain**	**New**	Default value "Other"	**New**	Default value "Other"	No change	*Copy*
ERP.CLI.3	**Category**	Change Attribute Name (old Service Category) **Change Multiplicity (old 1)**	*Copy*	Moved from Classification & Matutiry Block Change Attribute Name (old Service category) Change Type (old Multiselect list)	New List of controlled values. Delete and use Default value "Other"	No change	*Copy*
ERP.CLI.4	**Subcategory**	Change Attribute Name (old Service Subcategory) **Change Multiplicity (old 1)**	*Copy*	**New**	Default value "Other"	No change	*Copy*

Code	Attribute Name	Changes v1.13 to v3.00 (eInfraCentral)	Transition v1.13 to v3.00	Changes v1.30 to v3.00 (EOSC-hub)	Transition v1.30 to v3.00	Changes v2.00 to v3.00 (CatRIS)	Transition v2.00 to v3.00
ERP.CLI.5	**Target Users**	Moved from Basic Information Block Change Type (old String (max 1000)) **Change to Mandatory**	Delete Free Text and Put Default value "Other" (or do manual selection based on free text)	Moved from Service Customers and Users Block Change Attribute Name (old Target user categories) Change Type (old Multiselect list)	*Copy checking the New List of controlled values or Default value "Other"*	No change	*Copy*
ERP.CLI.6	**Access Type**	**New**	Default value "Other"	**New**	Default value "Other"	No change	*Copy*
ERP.CLI.7	**Access Mode**	**New**	Default value "Other"	Moved from Access & Order Block Change Attribute Name (old Access Policies in use) Change Type (old Multiselect list)	*Copy checking the New List of controlled values or Default value "Other"*	No change	*Copy*
ERP.CLI.8	**Tags**	Change Attribute Name (old Service Tags)	*Copy*	Moved from Classification & Matutiry Block Change Attribute Name (old Service tags) Change Type (old Freetext)	*Copy*	Change Type (old max 20)	*Copy*
~~ERP.CLI.9~~	~~**Target customer tags**~~			**Removed for simplification**	*Delete*		
Geographical and Language Availability Information							
Code	Attribute Name	Changes v1.13 to v3.00 (eInfraCentral)	Transition v1.13 to v3.00	Changes v1.30 to v3.00 (EOSC-hub)	Transition v1.30 to v3.00	Changes v2.00 to v3.00 (CatRIS)	Transition v2.00 to v3.00

ERP.GLA.1	**Geographical Availability**	Moved from Classification Block Change Attribute Name (old Service Place)	*Copy*	Moved from Basic Information Block Change Type (old Single Line)	*Copy*	Moved from Classification Block Change Attribute Name (old Location)	*Copy*
ERP.GLA.2	**Language Availability**	Moved from Classification Block Change Attribute Name (old Service Language)	*Copy*	Moved from Basic Information Block Change Attribute Name (old Service language) Change Type (old Single Line)	*Copy*	Moved from Classification Block Change Attribute Name (old Language)	*Copy*
Resource Location Information							
Code	Attribute Name	Changes v1.13 to v3.00	Registry Transition v1.13 to v3.00	Changes MP v1.3 to v3.00	Registry Transition MP v1.3 to v3.00	Changes v2.00 to v3.00	Registry Transition v2.00 to v3.00
ERP.RLI.01	**Resource Geographic Location**	**New**	Default value "Other"	**New**	Default value "Other"	**New**	Default value "Other"
Contact Information							
Main Contact/Resource Owner							
Code	Attribute Name	Changes v1.13 to v3.00 (eInfraCentral)	Transition v1.13 to v3.00	Changes v1.30 to v3.00 (EOSC-hub)	Transition v1.30 to v3.00	Changes v2.00 to v3.00 (CatRIS)	Transition v2.00 to v3.00

ERP.COI.1	**First Name**	**New**	*Copy from the Proviider Onboarding*	Change Atttribute Name (old Service Owner name/group) Change Type (old Single Line) Change to Mandatory	*Copy only First Name*	Change Atttribute Name (old Contact-1 First Name)	*Copy*
ERP.COI.2	**Last Name**	**New**	*Copy from the Proviider Onboarding*	Change Atttribute Name (old Service Owner name/group) Change Type (old Single Line) Change to Mandatory	*Copy only Last Name*	Change Atttribute Name (old Contact-1 Last Name)	*Copy*
ERP.COI.3	**Email**	**New**	*Copy from the Proviider Onboarding*	Change Atttribute Name (old Service Owner contact)	*Copy*	Change Atttribute Name (old Contact-1 Email)	*Copy*
ERP.COI.4	**Phone**	**New**	Default value empty(null)	**New**	Default value empty(null)	Change Atttribute Name (old Contact-1 Telephone)	*Copy*
ERP.COI.5	**Position**	**New**	Default value empty(null)	**New**	Default value empty(null)	Change Atttribute Name (old Contact-1 Position)	*Copy*
ERP.COI.6	**Organisation**	**New**	Default value empty(null)	**New**	Default value empty(null)	**New**	Default value empty(null)
Public Contact							

Code	Attribute Name	Changes v1.13 to v3.00 (eInfraCentral)	Transition v1.13 to v3.00	Changes v1.30 to v3.00 (EOSC-hub)	Transition v1.30 to v3.00	Changes v2.00 to v3.00 (CatRIS)	Transition v2.00 to v3.00
ERP.COI.7	**First Name**	**New**	Default value empty(null)	Change Atttribute Name (old Service support name/group) Change Type (old Single Line)	*Copy only First Name*	Change Atttribute Name (old Contact-2 First Name)	*Copy*
ERP.COI.8	**Last Name**	**New**	Default value empty(null)	Change Atttribute Name (old Service support name/group) Change Type (old Single Line)	*Copy only Last Name*	Change Atttribute Name (old Contact-2 Last Name)	*Copy*
ERP.COI.9	**Email**	**New**	Insert info@[Provider Domain] or if difficult "-"	Change Atttribute Name (old Service support contact)	*Copy*	Change Atttribute Name (old Contact-2 Email)	*Copy*
ERP.COI.10	**Phone**	**New**	Default value empty(null)	**New**	Default value empty(null)	Change Atttribute Name (old Contact-2 Telephone)	*Copy*
ERP.COI.11	**Position**	**New**	Default value empty(null)	**New**	Default value empty(null)	Change Atttribute Name (old Contact-2 Position)	*Copy*
ERP.COI.12	**Organisation**	**New**	Default value empty(null)	**New**	Default value empty(null)	**New**	Default value empty(null)
Other Contacts							

Code	Attribute Name	Changes v1.13 to v3.00 (eInfraCentral)	Transition v1.13 to v3.00	Changes v1.30 to v3.00 (EOSC-hub)	Transition v1.30 to v3.00	Changes v2.00 to v3.00 (CatRIS)	Transition v2.00 to v3.00
ERP.COI.13	**Helpdesk Email**	**New**	Default value ERP.COI.9	Moved from Service Management Block Change Atttribute Name (old Helpdesk email address)	*Copy*	**New**	Copy from ERP.COI.9
ERP.COI.14	**Security Contact Email**	**New**	Default value ERP.COI.9	Moved from Service Management Block Change Atttribute Name (old Service security contact)	*Copy*	**New**	Copy from ERP.COI.9
~~ERP.COI.15~~	~~Service security name/group~~			**Removed**	*Delete*		
Maturity Information							
Code	Attribute Name	Changes v1.13 to v3.00 (eInfraCentral)	Transition v1.13 to v3.00	Changes v1.30 to v3.00 (EOSC-hub)	Transition v1.30 to v3.00	Changes v2.00 to v3.00 (CatRIS)	Transition v2.00 to v3.00
ERP.MTI.1	**Technology Readiness Level**	Moved from Classification Block Change Attribute Name (old Service TRL)	*Copy*	Moved from Classification & Matutiry Block Change Attribute Name (old Service TRL)	*Copy*	Change Necessity (old optional)	*Copy or "TRL7" if null*

ERP.MTI.2	**Life Cycle Status**	Moved from Classification Block **Change to Optional**	*Copy*	**New**	Default value "Other"	Change Atttribute Name (old Phase)	*Copy*
ERP.MTI.3	**Certifications**	**New**	Default value empty(null)	Moved from Standards & Technologies Block Change Attribute Name (old Service Certifications)	*Copy*	No change	*Copy*
ERP.MTI.4	**Standards**	**New**	Default value empty(null)	Moved from Standards & Technologies Block Change Attribute Name (old Service Standards)	*Copy*	No change	*Copy*
ERP.MTI.5	**Open Source Technologies**	**New**	Default value empty(null)	Moved from Standards & Technologies Block	*Copy*	**New**	Default value empty(null)
ERP.MTI.6	**Version**	Moved from Classification Block Change Attribute Name (old Service Version)	*Copy*	**New**	Default value empty(null)	No change	*Copy*
ERP.MTI.7	**Last Update**	Moved from Classification Block Change Attribute Name (old Service Last Update)	*Copy*	**New**	Default value empty(null)	No change	*Copy*

Code	Attribute Name	Changes v1.13 to v3.00 (eInfraCentral)	Transition v1.13 to v3.00	Changes v1.30 to v3.00 (EOSC-hub)	Transition v1.30 to v3.00	Changes v2.00 to v3.00 (CatRIS)	Transition v2.00 to v3.00
ERP.MTI.8	**Change Log**	Moved from Classification Block Change Attribute Name (old Service Change Log) **Change Multiplicity (old 1)**	*Copy*	**New**	Default value empty(null)	No change	*Copy*
~~ERP.MTI.9~~	~~Service Valid for~~	**Removed** Not very relevant in the Research context		**Removed** Not very relevant in the Research context		**Removed** Not very relevant in the Research context Was removed	
Dependencies Information							
Code	Attribute Name	Changes v1.13 to v3.00 (eInfraCentral)	Transition v1.13 to v3.00	Changes v1.30 to v3.00 (EOSC-hub)	Transition v1.30 to v3.00	Changes v2.00 to v3.00 (CatRIS)	Transition v2.00 to v3.00
ERP.DEI.1	**Required Resources**	Moved from Classification Block Change Attribute Name (old Required Services)	*Copy*	Change Attribute Name (old Dependencies/Required services from the EOSC Portfolio) Change Type (old Freetext)	*Copy Confirm ID*	No change	*Copy*

Code	Attribute Name	Changes v1.13 to v3.00 (eInfraCentral)	Transition v1.13 to v3.00	Changes v1.30 to v3.00 (EOSC-hub)	Transition v1.30 to v3.00	Changes v2.00 to v3.00 (CatRIS)	Transition v2.00 to v3.00
ERP.DEI.2	**Related Resources**	Moved from Classification Block Change Attribute Name (old Related Services)	*Copy*	Change Attribute Name (old Related Services) Change Type (old Freetext)	*Copy* *Confirm ID*	No change	*Copy*
ERP.DEI.3	**Related Platforms**	**New**	Default value empty(null)	Change Attribute Name (old Ralated providers and platforms) Change Type (old Freetext)	*Copy*	Change Type (old max 20)	*Copy*
Attribution Information							
Code	Attribute Name	Changes v1.13 to v3.00 (eInfraCentral)	Transition v1.13 to v3.00	Changes v1.30 to v3.00 (EOSC-hub)	Transition v1.30 to v3.00	Changes v2.00 to v3.00 (CatRIS)	Transition v2.00 to v3.00
ERP.ATI.1	**Funding Body**	Moved from Contractual Block Change Attribute Name (old Service Funding) Change Type (old String (max 1000))	Delete Free Text and Put Default value "Other" (or do manual selection based on free text)	**New**	Default value "Other"	Moved from Classification Block Change Attribute Name (old Funded by)	*Copy*
ERP.ATI.2	**Funding Program**	**New**	Default value "Other"	**New**	Default value "Other"	**New**	Default value "Other"
ERP.ATI.3	**Grant/Project Name**	**New**	Default value empty(null)	**New**	Default value empty(null)	**New**	Default value empty(null)

Management Information							
Code	Attribute Name	Changes v1.13 to v3.00 (eInfraCentral)	Transition v1.13 to v3.00	Changes v1.30 to v3.00 (EOSC-hub)	Transition v1.30 to v3.00	Changes v2.00 to v3.00 (CatRIS)	Transition v2.00 to v3.00
ERP.MGI.1	**Helpdesk Page**	Moved from Support Block Change Attribute Name (old Service Helpdesk)	*Copy*	Moved from Service Management Block Change Attribute Name (old Helpdesk URL) **Change to Optional**	*Copy*	Moved from Support Block Change Attribute Name (old Helpdesk)	*Copy*
ERP.MGI.2	**User Manual**	Moved from Support Block Change Attribute Name (old Service User Manual)	*Copy*	Moved from Service Management Block Change Attribute Name (old Service User Manual) **Change to Optional**	*Copy*	Moved from Support Block	*Copy*
ERP.MGI.3	**Terms Of Use**	Moved from Contractual Block Change Attribute Name (old Service Terms of Use)	*Copy*	Moved from Service Management Block Change Attribute Name (old Service terms of use / Acceptable use Policy / Terms and Conditions) **Change to Optional**	*Copy*	Moved from Contractual Block	*Copy*
ERP.MGI.4	**Privacy Policy**	**New**	Default value empty(null)	Moved from Service Management Block **Change to Optional**	*Copy*	Moved from Contractual Block	Default value empty(null)

ERP.MGI.5	**Access Policy**	**New**	Default value empty(null)	Moved from Access & Order Information Block Change Attribute Name (old Service Access Policy description) Change Type (old Freetext)	*Copy*	Moved from Contractual Block	Default value empty(null)
ERP.MGI.6	**Service Level**	Moved from Contractual Block Change Attribute Name (old Service Level Agreement) **Change to Optional**	*Copy*	Moved from Service Management Block Change Attribute Name (old Service Level Agreement ro Service Level Specification)	*Copy*	Moved from Contractual Block Change Attribute Name (old Service Level Agreement)	*Copy*
ERP.MGI.7	**Training Information**	Moved from Support Block Change Attribute Name (old Service Training Information)	*Copy*	Moved from Service Management Block Change Attribute Name (old Service training or tutorial information)	*Copy*	Moved from Support Block	*Copy*
ERP.MGI.8	**Status Monitoring**	**New**	Default value empty(null)	Moved from Service Management Block Change Attribute Name (old Service Monitoring URL)	*Copy*	Moved from Support Block	*Copy*

ERP.MGI.9	**Maintenance**	**New**	Default value empty(null)	Moved from Service Management Block Change Attribute Name (old Service Maintenance URL)	*Copy*	Moved from Support Block	*Copy*
ERP.MGI.10	**Service Feedback**	**Removed**				**Removed**	
ERP.MGI.11	**Admin Manual**	**Removed**				**Removed**	

Access and Order Information

Code	Attribute Name	Changes v1.13 to v3.00 (eInfraCentral)	Transition v1.13 to v3.00	Changes v1.30 to v3.00 (EOSC-hub)	Transition v1.30 to v3.00	Changes v2.00 to v3.00 (CatRIS)	Transition v2.00 to v3.00
ERP.AOI.1	**Order Type**	**New**	Default value "Other"	**New**	Default value "Other"	Moved from Contractual Block	*Copy*
ERP.AOI.2	**Order**	Moved from Support Block Change Attribute Name (old Service Order)	*Copy*	**New**	Default value empty(null)	Moved from Contractual Block	*Copy*
ERP.AOI.3	**Open/Wide Access Service**			**Removed**			
ERP.AOI.4	**Service ordering**			**Removed**			

Financial Information							
Code	Attribute Name	Changes v1.13 to v3.00 (eInfraCentral)	Transition v1.13 to v3.00	Changes v1.30 to v3.00 (EOSC-hub)	Transition v1.30 to v3.00	Changes v2.00 to v3.00 (CatRIS)	Transition v2.00 to v3.00
ERP.FNI.1	**Payment Model**	**New**	Default value empty(null)	**New**	Default value empty(null)	Moved from Contractual Block	*Copy*
ERP.FNI.2	**Pricing**	Moved from Support Block Change Attribute Name (old Service Price)	*Copy*	**New**	Default value empty(null)	Moved from Contractual Block	*Copy*

Code Lists, Taxonomies, Classifications

Resource Scientific Domain/Subdomain

From the <u>Revised Field of Science and Technology (FOS) Classification in the Frascati Manual by the Working Party of National Experts on Science and Technology Indicators (2007), OECD</u>.

No.	Scientific Domain	Description	No.	Scientific Subdomain	Changes v1.13 to v3.00	Changes v1.30 to v3.00	Changes v2.00 to v3.00
1	Natural Sciences	Any of the sciences (such as physics, chemistry, or biology) that deal with matter, energy, and their interrelations and transformations or with objectively measurable phenomena.	1	Mathematics	New	Change to FOS 2017	Change to FOS 2017
			2	Computer and information sciences			
			3	Physical sciences			
			4	Chemical sciences			
			5	Earth and related environmental sciences			
			6	Biological sciences			
			7	Other natural sciences			
2	Engineering & Technology	The application of science and mathematics by which the properties of matter and the sources of energy in nature are made useful to people	1	Civil engineering			
			2	Electrical, electronic and information engineering			

			3	Mechanical engineering			
			4	Chemical engineering			
			5	Materials engineering			
			6	Medical engineering			
			7	Environmental engineering			
			8	Environmental biotechnology			
			9	Industrial biotechnology			
			10	Nano-technology			
			11	Other engineering and technology sciences			
3	Medical & Health Sciences	The science of dealing with the maintenance of health and the prevention and treatment of disease	1	Basic medicine			
			2	Clinical medicine			
			3	Health sciences			
			4	Medical biotechnology			
			5	Other medical sciences			

4	Agricultural Sciences	Sciences dealing with food and fibre production and processing. They include the technologies of soil cultivation, crop cultivation and harvesting, animal production, and the processing of plant and animal products for human consumption and use.	1	Agriculture, forestry, and fisheries			
			2	Animal and dairy sciences			
			3	Veterinary sciences			
			4	Agricultural biotechnology			
			5	Other agricultural sciences			
5	Social Sciences	A branch of science that deals with the institutions and functioning of human society and with the interpersonal relationships of individuals as members of society	1	Psychology			
			2	Economics and business			
			3	Educational sciences			
			4	Sociology			
			5	Law			
			6	Political sciences			
			7	Social and economic geography			
			8	Media and communications			
			9	Other social sciences			
6	Humanities	The branches of learning that investigate human constructs and concerns as	1	History and archaeology			

No	Category	Description	No	Subcategory			
		opposed to natural processes (as in physics or chemistry) and social relations (as in anthropology or economics).	2	Languages and literature			
			3	Philosophy, ethics and religion			
			4	Arts			
			5	Other humanities			
7	Generic	Generic, Not targeting a specific domain.	1	Generic		Change from Interdisciplinary to Generic	Change from Interdisciplinary to Generic
8	Other		1	Other			

Resource Category, Subcategory (and Supercategory)

Supercategories are defined to facilitate the User Interfaces and Menus with a small number of clasess.

No.	Category	Description	No.	Subcategory	No.	Supercategory	Changes v1.13 to v3.00	Changes v1.30 to v3.00	Changes v2.00 to v3.00
1	Instrument & Equipment	Access to instruments and equipment	1	Spectrometer	1	Access physical & e-Infrastructures	New		
			2	Radiation					
			3	Microscopy					
			4	Laser					
			5	Geophysical					
			6	Chromatographer					
			7	Cytometer					
			8	Spectrophotometer					

			10	Digitisation equipment				
			11	Monument maintenance equipment				
			12	Other				
2	Material Storage	Access to biological, chemical, historical, archeological, cultural, etc. storage. Includes the acquisition, preparation and processing of samples and materials in view of their preservation.	**1**	Warehousing			New		
			2	Fulfilment					
			3	Assembly					
			4	Sorting					
			5	Re-working					
			6	Packaging					
			7	Quality inspecting					
			8	Archiving					
			9	Disposal					
			10	Repository					
			11	Preservation					
			12	Other					
3	Network	Ultra-fast connectivity and access to eInfrastructures' Resources	**1**	Direct Connect			Change Name (old Networking)

Deleted Subcategories: Application | | |
			2	Virtual Network					
			3	Load Balancer					
			4	VPN Gateway					
			5	Exchange					

			6	Content Delivery Network			Gateway, API Gateway		
			7	Traffic Manager					
			8	Other			Added subcategories: Exchange		
4	Compute	High-performance computing Resources and scalable cloud compute capacity for demanding job processes	**1**	Virtual Machine Management			Deleted Subcategories: Batch Processing		
			2	Container Management					
			3	Job Execution					
			4	Workload Management					
			5	Orchestration					
			6	Serverless Applications Repository					
			7	Other					
5	Data Storage	Reliable, secure and scalable cloud storage for scientific data, apps and workloads	**1**	Data			Change Name (old Storage)		
			2	File					
			3	Queue			Deleted Subcategories: Blob, Digital preservation		
			4	Disk					
			5	Online					
			6	Archive			Added subcategories: Online		
			7	Backup					
			8	Synchronised					

			9	Replicated					
			10	Recovery					
			11	Digital preservation					
			12	Other					
6	Data	Vast range of data, datasets etc to facilitate research and scientific activities	**1**	Government and agency data	**2**	Sharing & Discovery	Deleted Subcategories: Mining, Access, Management, Transfer Management, Registration, Persisten Identifier, Interlinking, Publishing, DIscovery, Anonymisation, Preservation, Brokering, Anotation Added subcategories: All new		
			2	Statistical data					
			3	Scientific/Research data					
			4	Online service data					
			5	Clinical trial data					
			6	Epidemiological data					
			7	Data archives					
			8	Other					
7		Research findings	**1**	Preparation			New		
			2	Discovery					

	Scholarly Communicatio n	available to the wider academic community and beyond		**3**	Analysis			
				4	Writing			
				5	Publication			
				6	Outreach			
				7	Assessment			
				8	Other			
8	Software	Software, platforms and tools offered-as-a-service or deployed-on-demand		**1**	Software Repository		Deleted Subcategories: Tool, Component, Algorithm, Developer Added subcategories: Software Repository, Software Package, Libraries	
				2	Platform			
				3	Software Package			
				4	Libraries			
				5	Other			
9	Application	End-user applications (apps) offered-as-a-service or deployed-on-demand		**1**	Communication		Deleted Subcategories: Porting, Scaling, Developer Added subcategories: Co mmunication, Collaboration, Social/Networking, Utilities, Applications Repository	
				2	Collaboration			
				3	Productivity			
				4	Business			
				5	Education			
				6	Social/Networking			
				7	Utilities			
				8	Applications Repository			

			9	Other					
10	Development Resource	Developer tools, development kits, libraries, APIs	1	Developer Tools			New		
			2	Software Development Kits					
			3	Software Libraries					
			4	APIs Repository/Gateway					
			5	Other					
11	Samples	Collection, preparation and delivery of biological, chemical, environmental or other samples.	1	Biological samples			New		
			2	Chemical compounds library					
			3	Preparation					
			4	Characterisation					
			5	Other					
12	Data Management	Robust, feature-rich and user-friendly data management services	1	Mining	3	Processing & Analysis	New		
			2	Access					
			3	Transfer					
			4	Registration					
			5	Persistent Identifier					
			6	Interlinking					
			7	Publishing					
			8	Discovery					

			9	Anonymisation					
			10	Preservation					
			11	Brokering					
			12	Annotation					
			13	Validation					
			14	Maintenance					
			15	Embargo					
			16	Digitisation					
			17	Other					
13	Data Analysis	Processes for data with the goal of discovering useful information, informing conclusions, and supporting decision-making	**1**	Machine Learning			Change Name (old Analytics) Deleted subcategories: Business Analytics, Web Analytics, Learning Analytics, Predictive Analytics, Added subcategories: Artificial		
			2	Artificial Intelligence					
			3	Forecast					
			4	Visualization					
			5	Data extrapolation					
			6	Image/data analysis					
			7	Workfows					
			8	2D/3D Digitisation					

			9	Other			Intelligence, Forecast, Visualisation, Data extrapolation, Image/data analysis, workflows, 2d/3d Difitisation		
14	Measurement & Materials Analysis	Processess and techiques for material analysis, characterisation and monitoring	**1**	Analysis			New		
			2	Maintenance and Modification					
			3	Production					
			4	Testing and Validation					
			6	Characterisation					
			7	Validation					
			8	Workflows					
			9	Other					
15	Security & Identity	Protect [your] infrastructure and manage user identities and access against advanced threats across devices, data, apps, etc	**1**	User authentication	**4**	Security & Operations	Change Name (old Secutiry) Deleted subcategories: AAI, Attacks protection Added subcategories: User authentication,		
			2	Identity and access management					
			3	Threat protection					
			4	Coordination					
			5	Tools					
			6	Certification authority					

			7	Single Sign-On			Identity and access management, Threat protection, Certification authority, single sign-on, Firewall, Group Management	
			8	Firewall				
			9	Group Management				
			10	Other				
16	Operations & Infrastructure Management Services	Services for monitoring, scaling, creating, tracking and automating operations on [your] infrastructures and services.	1	Accounting			Change Name (old Operations) Deleted subcategories: Uilities, Added subcategories: Billing, Transportation	
			2	Helpdesk				
			3	Monitoring				
			4	Analysis				
			5	Configuration				
			6	Utilities				
			7	Coordination				
			8	Billing				
			9	Order Management				
			10	Transportation				
			11	Other				
17	Education & Training	Highly-specialized seminars and courses to help advance research knowledge and	1	Online Courses	5	Training & Support	Change Name (old Training) Added subcategories: Related Training, Required Training	
			2	Open Registration Courses				
			3	In-house Courses				
			4	Training Tool				
			5	Training Platform				

		sharpen scientific skills	**6**	Related Training			
			7	Required Training			
			8	Other			
18	Consultancy & Support	Dedicated support, expertise, consultancy for a wide range of scientific disciplines and research activities	**1**	Consulting		Change Name (old Consulting) Added subcategories: Consulting, Application Porting, Application Scaling, Application Optimisation, Software Development, Software Improvement, Modelling and Simulation, Protorype Development, Testing, Certification, Calibration, Benchmarking, Technology Transfer, Methodology Development	
			2	Audit and Assessment			
			3	Application Porting			
			4	Application Scaling			
			5	Application Optimisation			
			6	Software Development			
			7	Software Improvement			
			8	Modeling and Simulation			
			9	Prototype Development			
			10	Testing			
			11	Certification			
			12	Calibration			
			13	Benchmarking			

No.	Category	Subcategory	No.	Subcategory	No.	Category	Change		Change
			14	Technology Transfer					
			15	Methodology Development					
			16	Other					
19	Aggregators & Integrators	Thematic, Regional and other Aggregators & Integrators	1	Services	6	Aggregators & Integrators	New		Deleted a number of subcategories since now the Provider can insert multiple categories and subcategories
			2	Data					
			3	Applications					
			4	Software					
			5	Other					
20	Other		1	Other	7	Other			

Resource Target Users

No.	Target Users	Description	Changes v1.13 to v3.00	Changes v1.30 to v3.00	Changes v2.00 to v3.00
1	Researchers	Someone who conducts scientific research, i.e., an organized and systematic investigation by using scientific methods.	New		
2	Research groups	A research group is a group of researchers working together on a particular issue or topic. Research groups may be composed of researchers all from the same subject/discipline or from different subjects/disciplines.			
3	Research communities	Research communities provide an infrastructure through which scientists of discipline-specific scientific areas are able to advance their research goals, reaching out to other researchers.			

4	Research projects	A privately or publicly funded project on a research topic.			
5	Research networks	Research networks aim to stimulate interaction between researchers and promote information exchange.			
6	Research managers	Someone in an organization whose job is to manage a research initiative aiming to the development of new scientific results, products or ideas.			
7	Research organisations	A public or private legal entity (e.g. academia, business, industry, public services, etc.) representing the User.			
8	Students	A person who is studying at a university or other place of higher education.			
8	Innovators	The group or individual which is the first to try new ideas, processes, goods and services. Innovators are followed by early adopters, early majority, late majority, and laggards, in that order.			
9	Businesses	An organization or economic system where goods and services are exchanged for one another or for money. Businesses can be privately owned, not-for-profit or state-owned.			
10	Providers	A Provider is an organisation that provides different kind of solutions and/or services or other Resources to end users and other organizations. This broad term incorporates all businesses and organisations that provide products and solutions that are offered for free, on-demand, pay per use or a hybrid delivery model.			
11	Funders	Individual or organization financing a part or all of a project's cost as a grant, investment, or loan.			
12	Policy Makers	Individuals (usually members of the board of directors) who have the authority to set the policy framework of an organization.			
13	Research Infrastructure Managers	A RI Manager is a type of Project Coordinator who specializes in research infrastructures. They are responsible for things like managing researchers, making sure costs are on budget and serving as a liaison between reserach staff and project stakeholders.			
14	Provider Managers	A Provider Manager is an individual within an organisation that is responsible for the quality of the Resources provided and monitors the delivery of the Resource.			

| 15 | Resource Managers | Resource Managers are typically responsible for managing Service level agreements with customers and external Providers. | | | |
| 16 | Other | | | | |

Resource Access Type

No.	Access Type	Description	Changes v1.13 to v3.00	Changes v1.30 to v3.00	Changes v2.00 to v3.00
1	Physical	Resources require a physical presence of the user. The user can only access the RI if he is physically present in the specific location that the RI is offered.			
2	Remote	Resources are delivered remotely with the use of a physical infrastructure. The user is able to remotely work with the physical RI without the need of physical presence.			
3	Virtual	The Resource is delivered through a virtual infrastructure that the use may access virtually through the web or an intranet.	New	New	
4	Mail-in	Samples are sent in to for e.g. analysis and the results are returned to the user without the user actually accessing the RI			
5	Other				

Resource Access Mode

No.	Access Mode	Description	Changes v1.13 to v3.00	Changes v1.30 to v3.00	Changes v2.00 to v3.00
1	Free	Users can freely access the Resource provided, registration may be needed.			
2	Free conditionally	Users are granted access based on defined policies; such policies usually apply to Resources being offered with "sponsored use" to meet some national or EU level objective; for instance, a country may offer Resources with "sponsored use" to support national researchers involved in international collaborations.	New	New	

3	Peer-reviewed	Users are selected based on scientific excellence evaluation, originality, quality and technical and ethical feasibility of an application evaluated through peer review conducted by internal or external experts of the activity to be supported by the Resource			
4	Paid	Users need to pay a fee to access the Resource			
5	Other				

Resource Geographical Availability

Values for this Attribute are all countries in the [ERV: EOSC Resource Profile#Resource Geographic Location](#) and the following area aggregates**.**

No.	Country	Definition	Changes v1.13 to v3.00	Changes v1.30 to v3.00	Changes v2.00 to v3.00
1	Worldwide (WW)	All counries			
2	Europe (EO)	All European Countries	New		New
3	European Union (EU)	All countries of the European Union			
4	Euro Zone (EZ)	All countries of the Eurozone	New		New
5	Schengen Area (AH)	All Schengen Area countries	New		New
...	+ all countries in the [ERV: EOSC Resource Profile#Resource Geographic Location](#)				

Resource Language Availability
From ISO 639-1:2002 standard - Codes for the representation of names of languages.

No.	Language	Changes v1.13 to v3.00	Changes v1.30 to v3.00	Changes v2.00 to v3.00
1	Abkhazian (ab)	Change from Abkhaz		Change from Abkhaz
2	Afar (aa)			
3	Afrikaans (af)			

4	Akan (ak)			
5	Albanian (sq)			
6	Amharic (am)			
7	Arabic (ar)			
8	Aragonese (an)			
9	Armenian (hy)			
10	Assamese (as)			
11	Avaric (av)			
12	Avestan (ae)			
13	Aymara (ay)			
14	Azerbaijani (az)			
15	Bambara (bm)			
16	Bashkir (ba)			
17	Basque (eu)			
18	Belarusian (be)			
19	Bengali (bn)			
20	Bihari (bh)			
21	Bislama (bi)			
22	Bosnian (bs)			
23	Breton (br)			
24	Bulgarian (bg)			
25	Burmese (my)			

26	Catalan (ca)			
27	Chamorro (ch)			
28	Chechen (ce)			
29	Chichewa (ny)			
30	Chinese (zh)			
31	Chuvash (cv)			
32	Cornish (kw)			
33	Corsican (co)			
34	Cree (cr)			
35	Croatian (hr)			
36	Czech (cs)			
37	Danish (da)			
38	Divehi (dv)			
39	Dutch (nl)			
40	Dzongkha (dx)			
41	English (en)			
42	Esperanto (eo)			
43	Estonian (et)			
44	Ewe (ee)			
45	Faroese (fo)			
46	Fijian (fj)			
47	Finnish (fi)			

48	French (fr)			
49	Fula (ff)			
50	Gaelic (gl)			
51	Galician (gd)			
52	Georgian (ka)			
53	German (de)			
54	Greek (el)			
55	Guarani (gn)			
56	Gujarati (gu)			
57	Haitian (ht)			
58	Hausa (ha)			
59	Hebrew (he)			
60	Herero (hz)			
61	Hindi (hi)			
62	Hiri Motu (ho)			
63	Hungarian (hu			
64	Icelandic (is)			
65	Ido (io)			
66	Igbo (ig)			
67	Indonesian (id)			
68	Interlingua (ia)			
69	Interlingue (ie)			

70	Inuktitut (iu)			
71	Inupiak (ik)			
72	Irish (ga)			
73	Italian (it)			
74	Japanese (ja)			
75	Javanese (jv)			
76	Kalaallisut (kl)			
77	Kannada (kn)			
78	Kanuri (kr)			
79	Kashmiri (ks)			
80	Kazakh (kk)			
81	Khmer (km)			
82	Kikuyu (ki)			
83	Kinyarwanda (rw)			
84	Kirundi (rn)			
85	Komi (kv)			
86	Kongo (kg)	Added		Added
87	Korean (ko)			
88	Kurdish (ku)			
89	Kwanyama (kj)			
90	Kyrgyz (ky)			
91	Lao (lo)			

92	Latin (la)			
93	Latvian (lv)			
94	Limburgish (li)			
95	Lingala (ln)			
96	Lithuanian (lt)			
97	Luba-Katanga (lu)			
98	Luxembourgish (lb)			
99	Macedonian (mk)			
100	Malagasy (mg)	Added		Added
101	Malay (ms)			
102	Malayalam (ml)			
103	Maltese (mt)			
104	Manx (gv)			
105	Maori (mi)			
106	Marathi (mr)			
107	Marshallese (mh)			
108	Mongolian (mn)			
109	Nauru (na)			
110	Navajo (nv)			
111	Ndonga (ng)			
112	Nepali (ne)			
113	Northern Ndebele (nd)			

114	Norwegian (no)			
115	Norwegian bokmål (nb)			
116	Norwegian nynorsk (nn)			
117	Nuosu (ii)			
118	Occitan (oc)			
119	Ojibwe (oj)			
120	Old Church Slavonic (cu)			
121	Oriya (or)			
122	Oromo (om)			
123	Ossetian (os)			
124	Pāli (pi)			
125	Pashto (ps)			
126	Persian (fa)			
127	Polish (pl)			
128	Portuguese (pt)			
129	Panjabi (pa)			
130	Quechua (qu)			
131	Romanian (ro)			
132	Romansh (rm)			
133	Russian (ru)	Added		Added
134	Sami (se)	Added		Added

135	Samoan (sm)			
136	Sango (sg)			
137	Sanskrit (sa)			
138	Sardinian (sc)			
139	Serbian (sr)			
140	Sesotho (st)	Added		Added
141	Setswana (tn)	Added		Added
142	Shona (sn)			
143	Sindhi (sd)			
144	Sinhalese (si)	Change rom Sinhala		Change rom Sinhala
145	Slovak (sk)			
146	Slovenian (sl)	Change from Slovene		Change from Slovene
147	Somali (so)			
148	Southern Ndebele (nr)			
149	Spanish (es)			
150	Sundanese (su)			
151	Swahili (sw)			
152	Swati (ss)			
153	Swedish (sv)			
154	Tagalog (tl)			
155	Tahitian (ty)			
156	Tajik (tg)			

157	Tamil (ta)			
158	Tatar (tt)			
159	Telugu (te)			
160	Thai (th)			
161	Tibetan (bo)			
162	Tigrinya (ti)			
163	Tonga (to)			
164	Tsonga (ts)			
165	Turkish (tr)			
166	Turkmen (tk)			
167	Twi (tw)			
168	Ukrainian (uk)			
169	Urdu (ur)			
170	Uyghur (ug)			
171	Uzbek (uz)			
172	Venda (ve)			
173	Vietnamese (vi)			
174	Volapük (vo)			
175	Wallon (wa)			
176	Welsh (cy)			
177	Western Frisian (fy)			
178	Wolof (wo)			

No.	Language			
179	Xhosa (xh)			
180	Yiddish (yi)			
181	Yoruba (yo)			
182	Zhuang (za)			
183	Zulu (zu)			
184	Other			

Resource Geographic Location

From <u>ISO 3166 standard – Codes for the representation of names of countries and their subdivisions</u>, except for Greece and the United Kingdom (use EL and UK respectively instead of GR and GB) from <u>Eurostat code lists</u>.

No.	Country	Changes v1.13 to v3.00	Changes v1.30 to v3.00	Changes v2.00 to v3.00
1	Afghanistan (AF)	New		
2	Åland Islands (AX)			
3	Albania (AL)			
4	Algeria (DZ			
5	American Samoa (AS)			
6	Andorra (AD)			
7	Angola (AO)			
8	Anguilla (AI)			
9	Antarctica (AQ)			
10	Antigua and Barbuda (AG)			

11	Argentina (AR)			
12	Armenia (AM)			
13	Aruba (AW)			
14	Australia (AU)			
15	Austria (AT)			
16	Azerbaijan (AZ)			
17	Bahamas (BS)			
18	Bahrain (BH)			
19	Bangladesh (BD)			
20	Barbados (BB)			
21	Belarus (BY)			
22	Belgium (BE)			
23	Belize (BZ)			
24	Benin (BJ)			
25	Bermuda (BM)			
26	Bhutan (BT)			
27	Bolivia (BO)			
28	Bonaire, Sint Eustatius and Saba (BQ)			
29	Bosnia and Herzegovina (BA)			
30	Botswana (BW)			
31	Bouvet Island BV)			
32	Brazil (BR)			

33	British Indian Ocean Territory (IO)		
34	Brunei Darussalam (BN)		
35	Bulgaria (BG)		
36	Burkina Faso (BF)		
37	Burundi (BI)		
38	Cabo Verde (CV)	Cape Verde replaced by Cabo Verde	Cape Verde replaced by Cabo Verde
39	Cambodia (KH)		
40	Cameroon (CM)		
41	Canada (CA)		
42	Cayman Islands (KY)		
43	Central African Republic (CF)		
44	Chad (TD)		
45	Chile (CL)		
46	China (CN)		
47	Christmas Island (CX)		
48	Cocos (Keeling) Islands (CC)		
49	Colombia (CO)		
50	Comoros (KM)		
51	Congo (Democratic Republic) (CD)		
52	Congo (CG)		
53	Cook Islands (CK)		

54	Costa Rica (CR)		
55	Côte d'Ivoire (CI)		
56	Croatia (CR)		
57	Cuba (CU)		
58	Curaçao (CW)		
59	Cyprus (CY)		
60	Czechia (CZ)	Czech Republic replaced by Czechia	Czech Republic replaced by Czechia
61	Denmark (DK)		
62	Djibouti (DJ)		
63	Dominica (DM)		
64	Dominican Republic (DO)		
65	Ecuador (EC)		
66	Egypt (EG)		
67	El Salvador (SV)		
68	Equatorial Guinea (GQ)		
69	Eritrea (ER)		
70	Estonia (EE)		
71	Eswatini (SZ)	Swaziland replaced by Eswatini	Swaziland replaced by Eswatini
72	Ethiopia (ET)		

73	Falkland Islands (FK)			
74	Faroe Islands (FO)		Faeroe Islands replaced by Faroe Islands	Faeroe Islands replaced by Faroe Islands
75	Fiji (FJ)			
76	Finland (FI)			
77	France (FR)			
78	French Guiana (GF)			
79	French Polynesia (PF)			
80	French Southern Territories (TF)			
81	Gabon (GA)			
82	Gambia (GM)			
83	Georgia (GE)			
84	Germany (DE)			
85	Ghana (GH)			
86	Gibraltar (GI)			
87	Greece (EL)		EL instead of GR	EL instead of GR
88	Greenland (GL)			
89	Grenada (GD)			
90	Guadeloupe (GP)			
91	Guam (GU)			
92	Guatemala (GT)			
93	Guernsey (GC)			

94	Guinea (GN)			
95	Guinea-Bissau (GW)			
96	Guyana (GY)			
97	Haiti (HT)			
98	Heard Island and McDonald Islands (HM)			
99	Holy See (VA)			
100	Honduras (HN)			
101	Hong Kong HK)			
102	Hungary (HU)		Republic of Hungary replaced by Hungary	Republic of Hungary replaced by Hungary
103	Iceland (IS)			
104	India (IN)			
105	Indonesia (ID)			
106	Iran (IR)			
107	Iraq (IQ)			
108	Ireland (IE)			
109	Isle of Man (IM)			
110	Israel (IL)			
111	Italy (IT)			
112	Jamaica (JM)			
113	Japan (JP)			
114	Jersey (JE)			

115	Jordan (JO)		
116	Kazakhstan (KZ)		
117	Kenya (KE)		
118	Kiribati (KI)		
119	Korea (Democratic People's Republic) (KP)		
120	Korea (Republic) (KR)		
121	Kuwait (KW)		
122	Kyrgyzstan (KG)		
123	Lao People's Democratic Republic (LA)		
124	Latvia (LV)		
125	Lebanon (LB)		
126	Lesotho (LS)		
127	Liberia (LR)		
128	Libya (LY)		
129	Liechtenstein (LI)		
130	Lithuania (LT)		
131	Luxembourg (LU)		
132	Macao (MO)		
133	Madagascar (MG)		
134	Malawi (MW)		
135	Malaysia (MY)		

136	Maldives (MV)			
137	Mali (ML)			
138	Malta (MT)			
139	Marshall Islands (MH)			
140	Martinique (MQ)			
141	Mauritania (MR)			
142	Mauritius (MU)			
143	Mayotte (YT)			
144	Mexico (MX)			
145	Micronesia (FM)			
146	Moldova (MD)			
147	Monaco (MC)			
148	Mongolia (MN)			
149	Montenegro (ME)			
150	Montserrat (MS)			
151	Morocco (MA)			
152	Mozambique (MZ)			
153	Myanmar (MM)			
154	Namibia (NA)			
155	Nauru (NR)			
156	Nepal (NP)			
157	Netherlands (NL)			

158	New Caledonia (NC)			
159	New Zealand (NZ)			
160	Nicaragua (NI)			
161	Niger (NE)			
162	Nigeria (NG)			
163	Niue (NU)			
164	Norfolk Island (NF)			
165	North Macedonia MK)		Former Yugoslav Republic of Macedonia replaced by North Macedonia	Former Yugoslav Republic of Macedonia replaced by North Macedonia
166	Northern Mariana Islands (MP)		Northern Marianas replaced by Northern Mariana Islands	Northern Marianas replaced by Northern Mariana Islands
167	Norway (NO)			
168	Oman (OM)			
169	Pakistan (PK)			
170	Palau (PW)			
171	Palestine, State of (PS)			
172	Panama (PA)			
173	Papua New Guinea (PG)			
174	Paraguay (PY)			
175	Peru (PE)			

176	Philippines (PH)		
177	Pitcairn (PN)		
178	Poland (PL)		
179	Portugal (PT)		
180	Puerto Rico (PR)		
181	Qatar (QA)		
182	Réunion (RE)		
183	Romania (RO)		
184	Russian Federation (RU)		
185	Rwanda (RW)		
186	Saint Barthélemy (BL)		
187	Saint Helena, Ascension and Tristan da Cunha (SH)	Saint Helena replaced by Saint Helena, Ascension and Tristan da Cunha	Saint Helena replaced by Saint Helena, Ascension and Tristan da Cunha
188	Saint Kitts and Nevis (KN)		
189	Saint Lucia (LC)		
190	Saint Martin (MF)		
191	Saint Pierre and Miquelon (PM)		
192	Saint Vincent and the Grenadines (VC)		
193	Samoa (WS)		
194	San Marino (SM)		

195	São Tomé and Príncipe (ST)			
196	Saudi Arabia (SA)			
197	Senegal (SN)			
198	Serbia (RS)			
199	Seychelles (SC)			
200	Sierra Leone (SL)			
201	Singapore (SG)			
202	Sint Maarten (SX)			
203	Slovakia (SK)			
204	Slovenia (SI)			
205	Solomon Islands (SB)			
206	Somalia (SO)			
207	South Africa (ZA)			
208	South Georgia and the South Sandwich Islands (GS)			
209	South Sudan (SS)			
210	Spain (ES)			
211	Sri Lanka (LK)			
212	Sudan (SD)			
213	Suriname (SR)			
214	Svalbard and Jan Mayen (SJ)			
215	Sweden (SE)			

216	Switzerland (SH)			
217	Syrian Arab Republic (SY)			
218	Taiwan (Province of China) (TW)			
219	Tajikistan (TJ)			
220	Tanzania (TZ)			
221	Thailand (TH)			
222	Timor-Leste (TL)		East Timor replaced by Timor-Leste	East Timor replaced by Timor-Leste
223	Togo (TG)			
224	Tokelau (TK)			
225	Tonga (YO)			
226	Trinidad and Tobago (TT)			
227	Tunisia (TN)			
228	Turkey (TR)			
229	Turkmenistan (TM)			
230	Turks and Caicos Islands (TC)			
231	Tuvalu (TV)			
232	Uganda (UG)			
233	Ukraine (UA)			
234	United Arab Emirates (AE)			
235	United Kingdom of Great Britain and Northern Ireland (UK)		UK instead of GB	UK instead of GB

236	United States Minor Outlying Islands (UM)				
237	United States of America (US)				
238	Uruguay (UY)				
239	Uzbekistan (UZ)				
240	Vanuatu (VU)				
241	Venezuela (VE)				
242	Viet Nam (VN)				
243	Virgin Islands (British) (VG)				
244	Virgin Islands (U.S.) (VI)				
245	Wallis and Futuna (WF)				
246	Western Sahara (EH)				
247	Yemen (YE)				
248	Zambia (ZM)				
249	Zimbabwe (ZW)				
250	Other				

Resource TRL

According to Horizon 2020

No.	Technology Readiness Level	Description	Changes v1.13 to v3.00	Changes v1.30 to v3.00	Changes v2.00 to v3.00
1	TRL1	Basic principles observed			

2	TRL2	Technology concept formulated	Use of EU definitions		Use of EU definitions
3	TRL3	Experimental proof of concept			
4	TRL4	Technology validated in lab			
5	TRL5	Technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies)			
6	TRL6	Technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies)			
7	TRL7	System prototype demonstration in operational environment			
8	TRL8	System complete and qualified			
9	TRL9	Actual system proven in operational environment (competitive manufacturing in the case of key enabling technologies; or in space)			

Resource Life Cycle Status

No.	Life Cycle Status	Description	Changes v1.13 to v3.00	Changes v1.30 to v3.00	Changes v2.00 to v3.00
1	Concept	Concept development	Updates in Description	New	Updates in Description
2	Discovery	Researching users needs, exploring technological or policy constraints			
3	Design	Resource in design			
4	Preparation	Resource in preparatory phase			
5	Planned	Resource plan defined			
6	Alpha	Resource prototype available for closed set of users			
7	Beta	Resource being developed while available for testing publicly			
8	Implementation	Resource in deployment			

9	Production	Resource available in the live environment			
10	Operation	Resource offered			
11	In containment	Resource active, but generally not available to new users			
12	Retirement	Resource is not anymore offered			
13	Termination	Resource dissolution, dismantling			
14	Other				

Resource Funding Body

No.	Funding Body	Changes v1.13 to v3.00	Changes v1.30 to v3.00	Changes v2.00 to v3.00
1	Academy of Finland (AKA) - Finland	New		
2	Agency for Environment and Energy Management (ADEME) - France			
3	Agency for Innovation by Science and Technology (IWT) - Belgium			
4	Agency for Science, Innovation and Technology (MITA) - Lithuania			
5	Alfred Wegener Institute for Polar and Marine Research (AWI) - Germany			
6	Alternative Energies and Atomic Energy Commission (CEA) - France		New	
7	Arts and Humanities Research Council (AHRC) - United Kingdom			
8	Australian Research Council (ARC) - Australia			
9	Austrian Academy of Sciences (OeAW) - Austria			
10	Austrian Research Promotion Agency (FFG) - Austria			
11	Austrian Science Fund (FWF) - Austria			
12	Belmont Forum			

13	Biotechnology and Biological Sciences Research Council (BBSRC) - United Kingdom			
14	Brussels Institute for Research and Innovation (INNOVIRIS) - Belgium			
15	Canadian Institutes of Health Research (CIHR) - Canada			
16	Carlos III Health Institute (ISCIII) - Spain			
17	Center for Industrial Technological Development (CDTI) - Spain			
18	Croatian Science Foundation (CSF) - Croatia			
19	Czech Science Foundation (GACR) - Czechia			
20	Danish Agency for Science and Higher Education (DASHE) - Denmark			
21	Danish Agency for Science, Technology and Innovation (DASTI) - Denmark			
22	Danish Council for Independent Research (DFF) - Denmark			
23	Danish National Research Foundation (DNRF) - Denmark			
24	German Research Foundation (DFG) - Germany			
25	Economic and Social Research Council (ESRC) - United Kingdom			
26	Engineering and Physical Sciences Research Council (EPSRC) - United Kingdom			
27	Estonian Research Council (ETAG) - Estonia			
28	European Comission (EC)			
29	European Space Agency (ESA)			
30	Executive Agency for Higher Education, Research, Development and Innovation Funding (UEFISCDI - CNCS) - Romania			
31	Federal Department of Economic Affairs, Education and Research (EAER) - Switzerland			

32	Federal Ministry of Education and Research (BMBF) - Germany			
33	Finnish Funding Agency for Innovation (TEKES)			
34	Flanders Innovation & Entrepeneurship (VLAIO) - Belgium			
35	Fonds National de la Recherche Scientifique (FNRS) - Belgium			
36	Foundation for Fundamental Research on Matter (FOM) - Netherlands			
37	Foundation for Polish Science (FNP) - Poland			
38	General Secretariat for Research and Technology (GSRT) - Greece			
39	Foundation for Science and Technology (FCT) - Portugal			
40	French National Aerospace Research Center (ONERA) - France			
41	French National Research Agency (ANR) - France			
42	French Polar Institute (IPEV) - France			
43	French Research Institute for Exploitation of the Sea (IFREMER) - France			
44	Fritz Thyssen Foundation (FTS) - Germany			
45	General Operational Directorate for Economy, Employment and ResearchDGO6) - Belgium			
46	German Aerospace Center (DLR) - Germany			
47	Icelandic Centre for Research (RANNIS) - Iceland			
48	Innovation Fund Denmark			
49	Innovation Fund of the Ministry of Economy of the Slovak Republic (IMSR) - Slovakia			
50	International Science Council (ISC)			
51	Irish Research Council (IRC) - Ireland			

52	Israel Science Foundation (ISF) - Israel			
53	Japanese Science and Technology Agency (JST) - Japan			
54	Japanese Society for the Promotion of Science (JSPS) - Japan			
55	Knowledge Foundation (KKS) - Sweden			
56	Knut and Alice Wallenberg Foundation (KAWS) - Sweden			
57	La Caixa Foundation (CAIXA) - Spain			
58	Malta Council for Science and Technology (MCST) - Malta			
59	Max Planck Society for the Advancement of Science (MPG) - Germany			
60	Medical Research Council (MRC) - United Kingdom			
61	Ministry for Economic Development and Technology (MGRT) - Slovenia			
62	Ministry for Economy and Competitveness (MINECO) - Spain			
63	Ministry for Education and Scientific Research (MECR) - Romania			
64	Ministry for Education, University and Research (MIUR) - Italy			
65	Ministry of Education, Science and Technological Development of Republic of Serbia (MESTD) - Serbia			
66	Ministry of Higher Education and Research (MESR) - France			
67	Ministry of Science and Education Republic of Croatia (MSE) - Croatia			
68	Ministry of Science and Technology of the People's Republic of China (MOST) - China			
69	National Aeronautics and Space Administration (NASA) - United States			
70	National Authority for Scientific Research (ANCS) - Romania			
71	National Centre for Research and Development (NCBiR) - Poland			

72	National Centre for Scientific Research (CNRS) - France			
73	National Centre for Space Studies (CNES) - France			
74	National Council for Scientific and Technological Development (CNPq) - Brazil			
75	National Foundation for Research, Technology and Development (OeNFTE) - Austria			
76	National Health and Medical Research Council (NHMRC) - Australia			
77	National institute of Agricultural Research (INRA) - France			
78	National Institute of Health and Medical Research (INSERM) - France			
79	National Institutes of Health (NIG) - United States			
80	National Research Council (CNR) - Italy			
81	National Research Foundation (NRF) - South Africa			
82	National Research Fund (FNR) - Luxembourg			
83	National Research, Development and Innovation Fund (NKFIA) - Hungary			
84	National Science Center (NCN) - Poland			
85	National Science Foundation (NSF) - United States			
86	National University Research Council (CNCSIS) - Romania			
87	Natural Environment Research Council (NERC) - United Kingdom			
88	Natural Sciences and Engineering Research Council of Canada (NSERC) - Canada			
89	Netherlands Organisation for Scientific Research (NWO) - Netherlands			
90	Research Council UK (RCUK) - United Kingdom			

91	Research and Development Agency (APVV) - Slovakia			
92	Research Council of Lithuania (LMT) - Lithuania			
93	Research Council of Norway (RCN) - Norway			
94	Research Foundation Flanders (FWO) - Belgium			
95	Research Promotion Foundation (RPF) - Cyprus			
96	São Paulo Research Foundation (FAPESP) - Brazil			
97	Science and Technology Facilities Council (STFC) - United Kingdom			
98	Science Foundation Ireland (SFI) - Ireland			
99	Scientific and Technological Research Council of Turkey (TUBITAK) - Turkey			
100	Scientific Grant Agency (VEGA) - Slovakia			
101	Secretariat-General for Investment (SGPI) - France			
102	Slovenian Research Agency (ARRS) - Slovenia			
103	Social Sciences and Humanities Research Council (SSHRC) - Canada			
104	Spanish National Research Council (CSIC) - Spain			
105	State Education Development Agency (VIAA) - Latvia			
106	Swedish Energy Agency - Sweden			
107	Swedish Environmental Protection Agency - Sweden			
108	Swedish Foundation for Strategic Environmental Research (MISTRA) - Sweden			
109	Swedish Foundation for Strategic Research (SSF) - Sweden			
110	Swedish Governmental Agency for Innovation Systems (VINNOVA) - Sweden			

111	Swedish National Space Board (SNSB) - Sweden			
112	Swedish Radiation Safety Authority - Sweden			
113	Swedish Reseach Council Formas - Sweden			
114	Swedish Research Council (VR) - Sweden			
115	Swedish Research Council for Health, Working Life and Welfare (FORTE) - Sweden			
116	Swiss National Science Foundation (SNF) - Switzerland			
117	Tara Expeditions Foundation (TARA) - France			
118	Finnish Funding Agency for Technology and Innovation (TEKES) - Finland			
119	Technology Agency of the Czech Republic (TACR) - Czechia			
120	Technology Foundation (STW) - Netherlands			
121	The Danish Council for Independent Research (DDF) - Denmark			
122	The Icelandic Centre for Research (RANNIS) - Iceland			
123	The Ministry of Education, Science, Research and Sports of the Slovak Republic (MSVVaS SR) - Slovakia			
124	The Research Council of Norway - Norway			
125	The Swedish Foundation for Humanities and Social Sciences (RJ) - Sweden			
126	UK Research and Innovation (UKRI) - United Kingdom			
127	Vienna Science and Technology Fund (WWTF) - Austria			
128	Volkswagen Foundation (VS) - Germany			
129	Wellcome trust (WT) - United Kingdom			

130	Other			

Resource Funding Program

No.	Funding Program	Changes v1.13 to v3.00	Changes v1.30 to v3.00	Changes v2.00 to v3.00
1	Anti Fraud Information System (AFIS2020)			
2	European Agricultural Guarantee Fund (after transfers between EAGF and EAFRD) (AGR)			
3	Net transfer between EAGF and EAFRD (AGRNET)			
4	Asylum, Migration and Integration Fund (AMF)			
5	Rights, equality and citizenship programme (CDF2020)			
6	Connecting Europe Facility (CEF)			
7	Cohesion Fund (CF)			
8	Common foreign and security policy (CFSP2020)			
9	Contribution from the Cohesion Fund to the CEF programme (CF_DET)	New	New	New
10	Europe for Citizens (CIT2020)			
11	Competitiveness (more developed regions) (COMPREG)			
12	Consumer programme (CONS)			
13	European Earth Observation Programme (COPERNICUS)			
14	Programme for the competitiveness of enterprises and small and medium-sized enterprises (COSME)			
15	Union Civil Protection Mechanism — Member States (CPM_H3)			
16	Union Civil Protection Mechanism — Outside EU (CPM_H4)			
17	Creative Europe programme (CREA)			

18	Action programme for customs in the European Union (CUST2020)			
19	Development Cooperation Instrument (DCI2020)			
20	The Union programme for education, training, youth and sport (Erasmus+) (E4A)			
21	European Agricultural Fund for Rural Development (after transfers between EAGF and EAFRD) (EAFRD)			
22	European Agricultural Fund for Rural Development (EAFRD2020)			
23	European Agricultural Guarantee Fund (EAGF2020)			
24	Emergency Aid Reserve (EAR2020)			
25	Energy projects to aid economic recovery (EERP)			
26	European Fund for Sustainable Development (EFSD)			
27	European Fund for Strategic Investments (EFSI)			
28	European Globalisation Adjustment Fund (EGF2020)			
29	European Instrument for Democracy and Human Rights (EIDHR2020)			
20	European Maritime and Fisheries Fund (EMFF2020)			
31	European Neighbourhood Instrument (ENI)			
32	European Regional Development Fund (ERDF)			
33	European Solidarity Corps (ESC)			
34	European Social Fund (ESF)			
35	European statistical programme (ESP2017)			
36	European statistical programme (ESP2020)			
37	EU Aid Volunteers initiative (EUAV)			
38	Euratom research and training programme (EURATOM)			

39	Comparison of fingerprints for the effective application of the Dublin Convention (EURODAC2020)			
40	European Union Solidarity Fund (EUSF2020)			
41	European Union Solidarity Fund (EUSF) — Member States (EUSF_H3)			
42	European Union Solidarity Fund (EUSF) — Countries negotiating for accession (EUSF_H4)			
43	Fund for European Aid to the Most Deprived (FEAD)			
44	Food and feed (FF2020)			
45	Specific activities in the field of financial reporting and auditing (FINSER2020)			
46	Action programme for taxation in the European Union (FISC2020)			
47	Implementation and exploitation of European satellite navigation systems (EGNOS and Galileo) (GAL2014)			
48	EU cooperation with Greenland (GRLD2020)			
49	The framework programme for research and innovation (H2020)			
50	Union's action in the field of health (Health programme) (HEALTH)			
51	Programme to promote activities in the field of the protection of the European Union's financial interests (HERC3)			
52	Supplementary high flux reactor (HFR) programmes (HFR2015)			
53	Humanitarian aid (HUMA2020)			
54	Enhancing consumers involvement in EU policy making in the field of financial services (ICFS)			
55	Instrument for emergency support within the Union (IES)			
56	Instrument contributing to Stability and Peace (IFS2020)			
57	Instrument for Nuclear Safety Cooperation (INSC2020)			

58	Instrument for Pre-accession Assistance (IPA2)			
59	Interoperability Solutions for European Public Administrations (ISA2015)			
60	Interoperability Solutions for European public administrations, businesses and citizens (ISA2020)			
61	Internal Security Fund (ISF)			
62	International thermonuclear experimental reactor (ITER)			
63	Justice programme (JUST)			
64	Programme for the Environment and Climate Action (LIFE2020)			
65	Guarantee Fund for external actions (LOAN2020)			
66	Macro financial assistance (MFA)			
67	Nuclear decommissioning assistance programmes in Bulgaria, Lithuania and Slovakia (ND)			
68	Outermost and sparsely populated regions (OUTREG)			
69	Exchange, assistance and training programme for the protection of the euro against counterfeiting (PERI2020)			
70	Partnership instrument for cooperation with third countries (PI)			
71	European Union programme for employment and social innovation (PSCI)			
72	Regional convergence (less developed regions) (REGCONV)			
73	Compulsory contributions to regional fisheries management organisations (RFMOs) and to other international organisations			
74	Sustainable Fisheries Partnership Agreements (SFPAs)			
75	Schengen Information System (SIS2020)			
76	Technical assistance and innovative actions (TA_IA)			

77	Instrument of financial support for encouraging the economic development of the Turkish Cypriot community (TCC)			
78	European territorial cooperation (TERRCOOP)			
79	Transition regions (TRANSREG)			
80	Visa Information System (VIS2020)			
81	Youth employment initiative (specific top-up allocation) (YEI)			
82	Other			

Resource Order Type

No.	Request/Order Type	Description	Changes v1.13 to v3.00	Changes v1.30 to v3.00	Changes v2.00 to v3.00
1	Request/Order required	Resource requires an ordering procedure	New		
2	Open access	No ordering procedure necessary to access the resource but requires user authentication		New	
3	Fully open access	No ordering procedure necessary to access the resource and no user authentication required			
4	Other				