

EOSC-Pillar

Coordination and Harmonisation of National & Thematic Initiatives to support EOSC

WP5 – The Data Layer

Des services de données FAIR au niveau national français

Yann Le Franc, PhD – Technical Manager - CINES



EOSC-Pillar has received funding from the European Union's Horizon 2020 research and innovation Programme under Grant Agreement No. 857650.

Soutenir l'intégration des principes FAIR dans les communautés nationales du projet.

TECHNOLOGIE

Tâche 5.1/Tâche 5.2

Tâche 5.5

FORMATION/SUPPORT

Tâche 5.3

Tâche 5.4

Soutenir l'intégration des principes FAIR dans les communautés nationales du projet.

TECHNOLOGIE

Tâche 5.1/Tâche 5.2

Des services innovants pour créer et utiliser des espaces fédérés de données FAIR

Tâche 5.5

Intéropérabilité sémantique pluridisciplinaire

FORMATION/SUPPORT

Tâche 5.3

Un catalogue de ressources sur les bonnes pratiques de gestion des données recherches FAIR

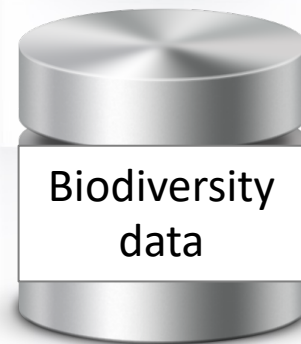
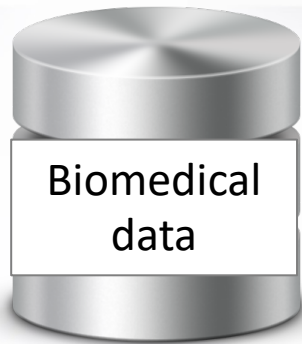
Tâche 5.4

Former les data stewards et les chercheurs d'aujourd'hui et de demain

Technologie

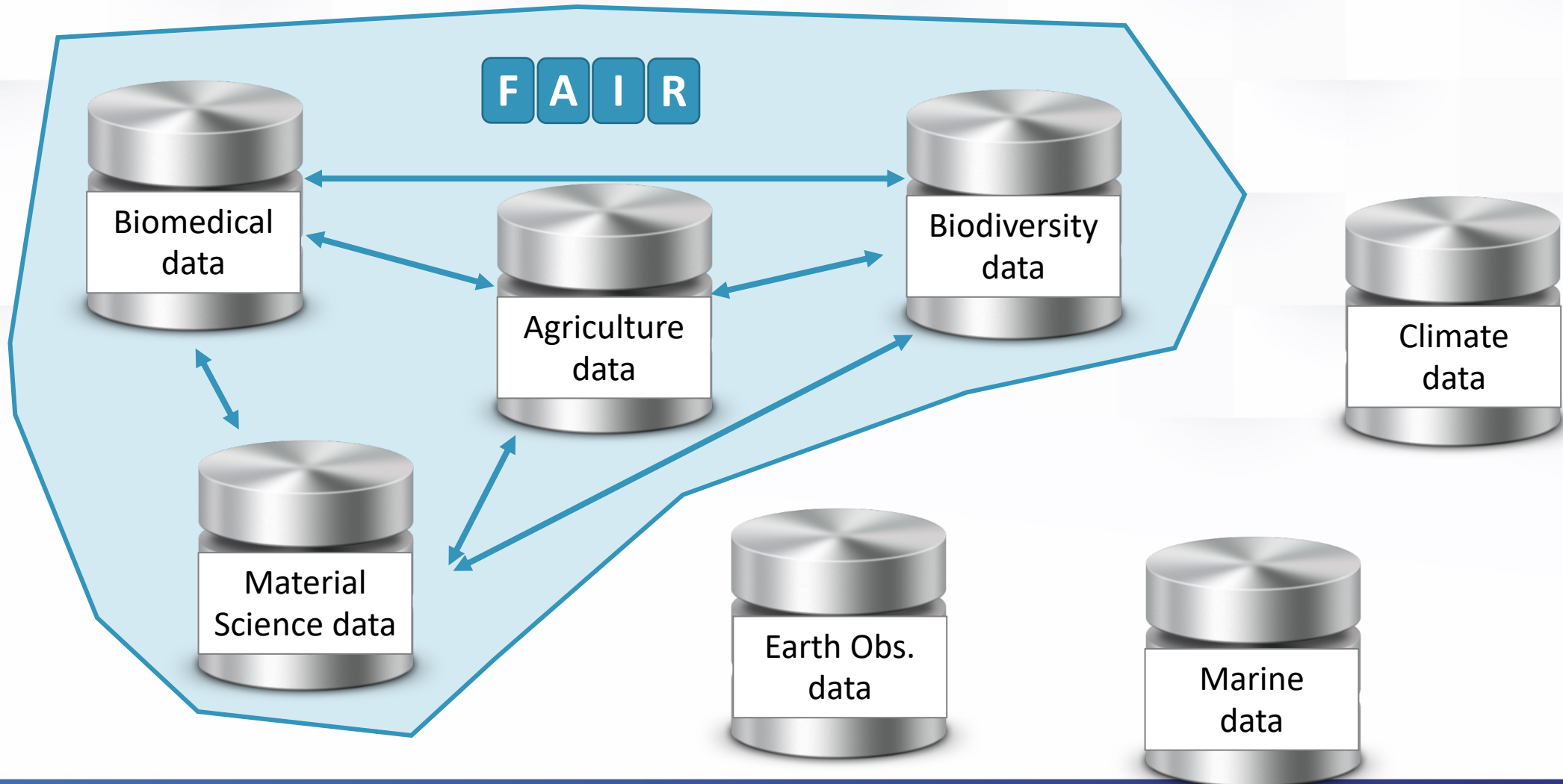
Pourquoi construire un espace fédéré de données FAIR ?

EOSC-Pillar: un projet pluridisciplinaire



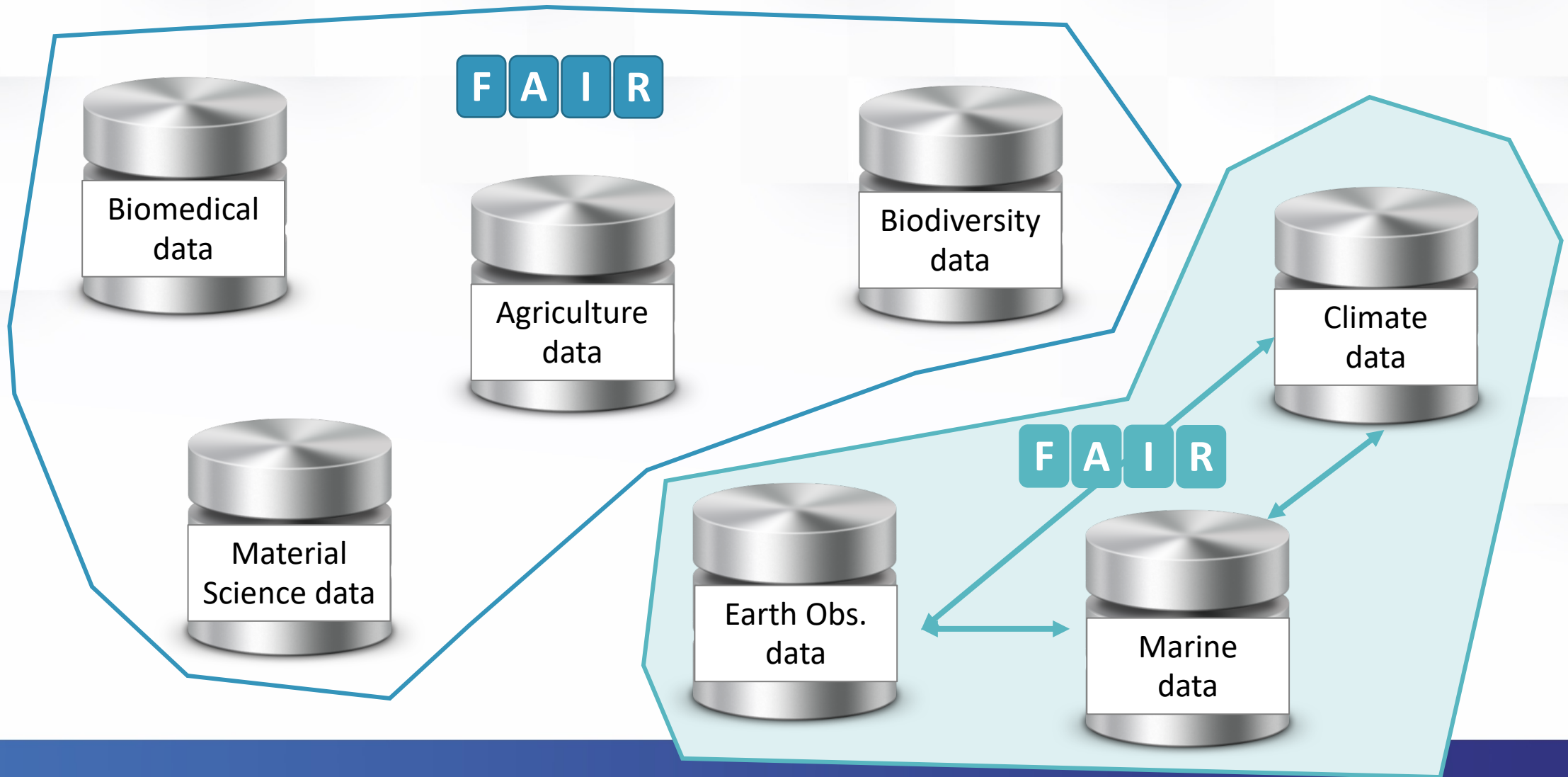
Pourquoi construire un espace fédéré de données FAIR ?

EOSC-Pillar: un projet pluridisciplinaire



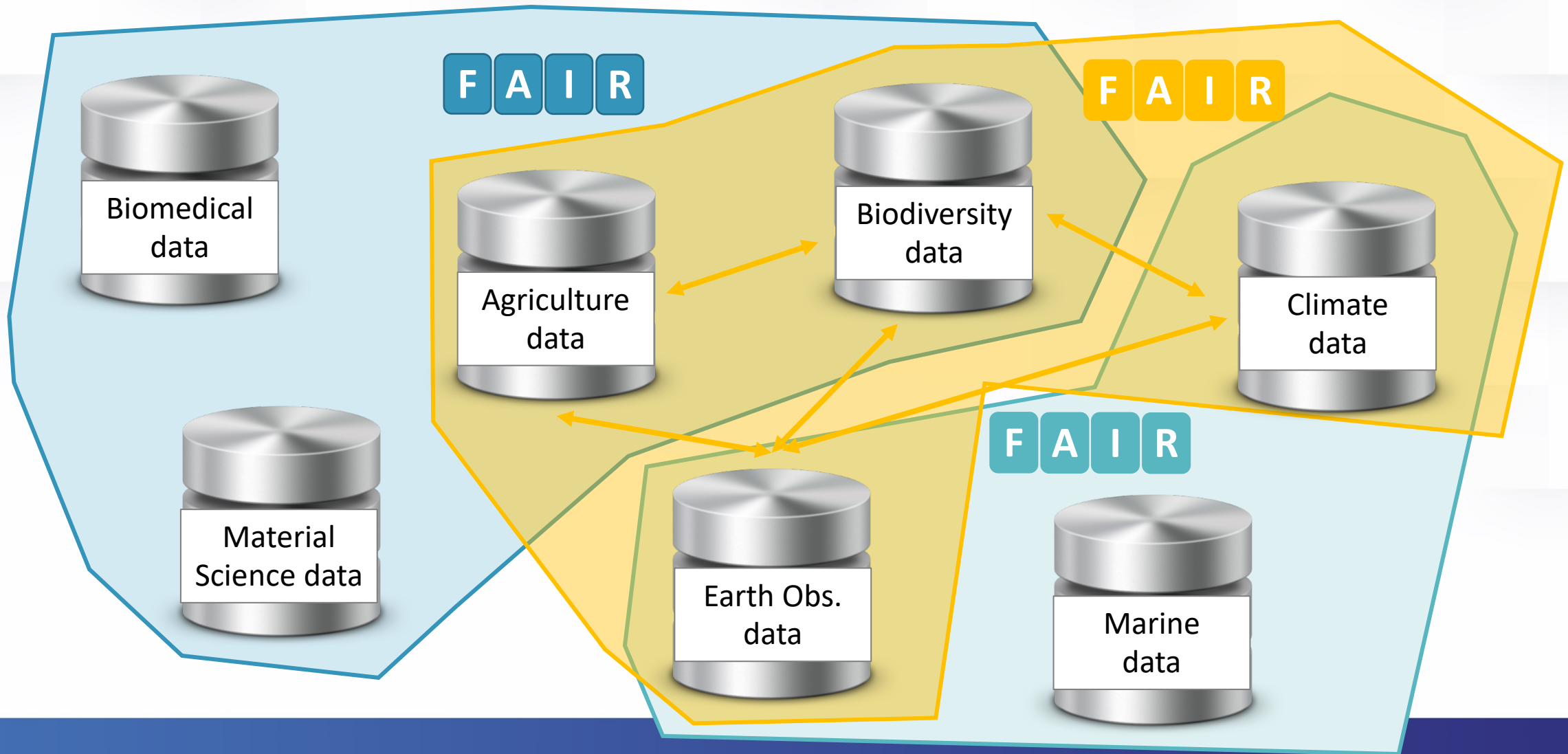
Pourquoi construire un espace fédéré de données FAIR ?

EOSC-Pillar: un projet pluridisciplinaire



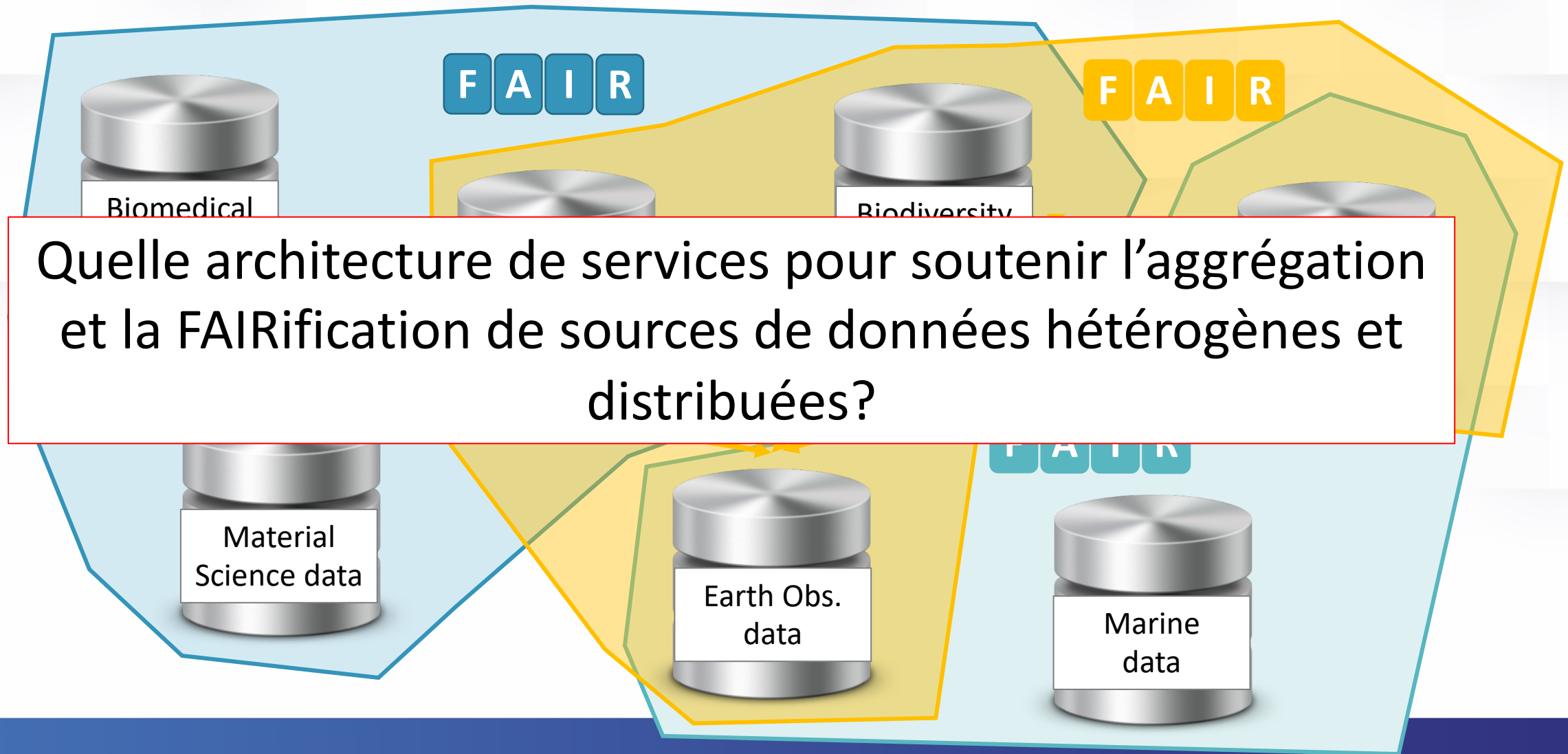
Pourquoi construire un espace fédéré de données FAIR ?

EOSC-Pillar: un projet pluridisciplinaire



Pourquoi construire un espace fédéré de données FAIR ?

EOSC-Pillar: un projet pluridisciplinaire



Les principes FAIR: un guide pour des informations utilisables par les machines

Considérations techniques

- Identifiant globalement unique persistant et résolvable
- Métadonnées
 - Provenance
 - Format commun
 - Vocabulaires/Ontologies FAIR
 - Intègre les standards de métadonnées spécifiques aux domaines
 - Persistentes
- Protocole d'accès gratuit, ouvert et universel
- Licenses (lisible par les humains et les machines)

Services existants

Publier des données FAIR



Enrichir les (méta)données avec de la sémantique



Evaluer le niveau de FAIRification



Tâche 5.1



Fournisseur de données/
Opérateurs d'entrepôts



Tâche 5.2



Utilisateurs des données



Tâche 5.1



Fournisseur de données/
Opérateurs d'entrepôts



Tâche 5.2



Utilisateurs des données



Consiglio Nazionale
delle Ricerche

Federated FAIR Data Space tool set

FAIR
DATA POINT

FAIRIFIER

SEMAPHORA

F-UJI



FAIRshake

FAIRsharing.org
standards, databases, policies

Aggrégation/Enrichissement/Evaluation

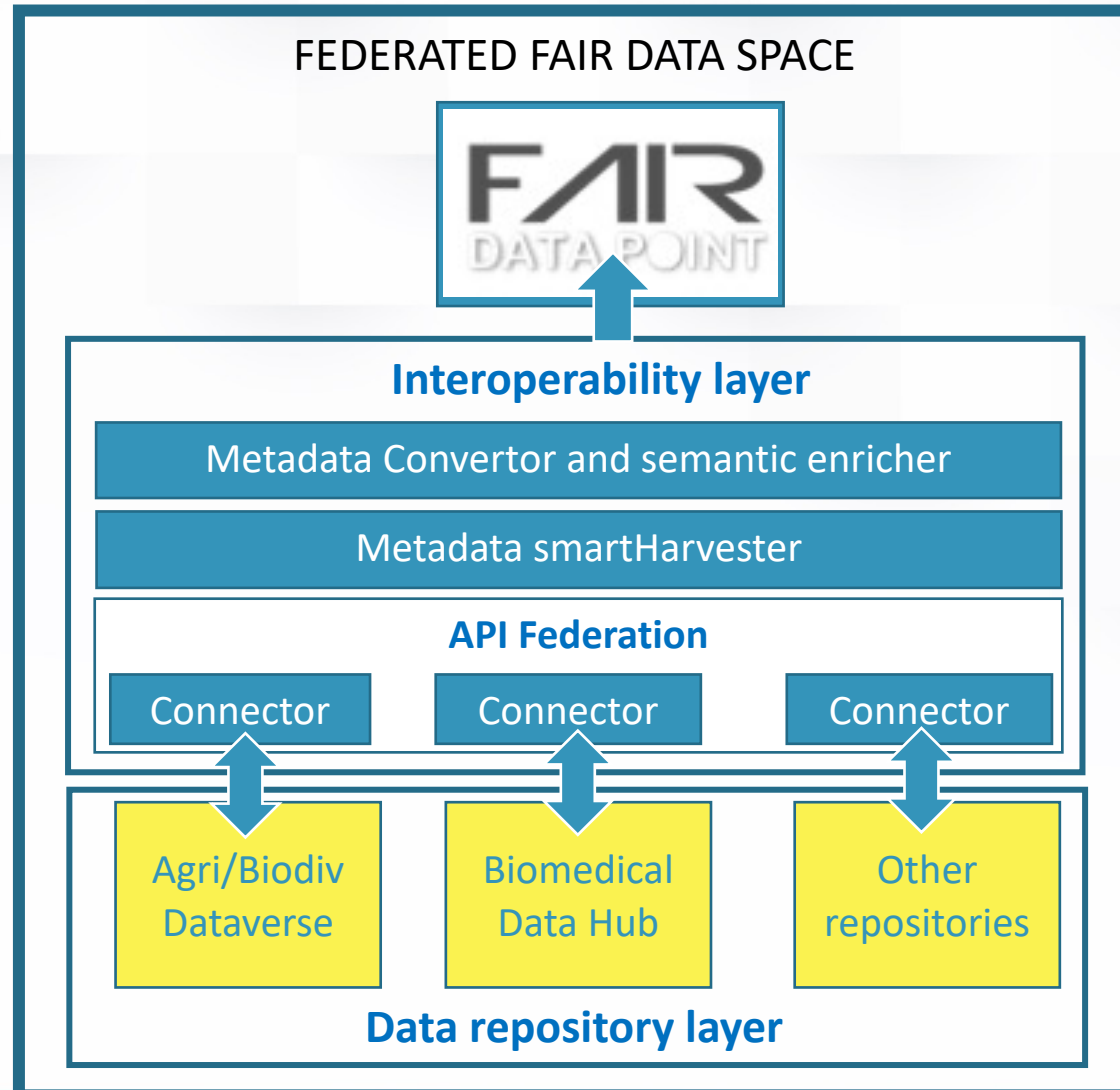


D4SCIENCE
INFRASTRUCTURE

Visualisation/Recherche

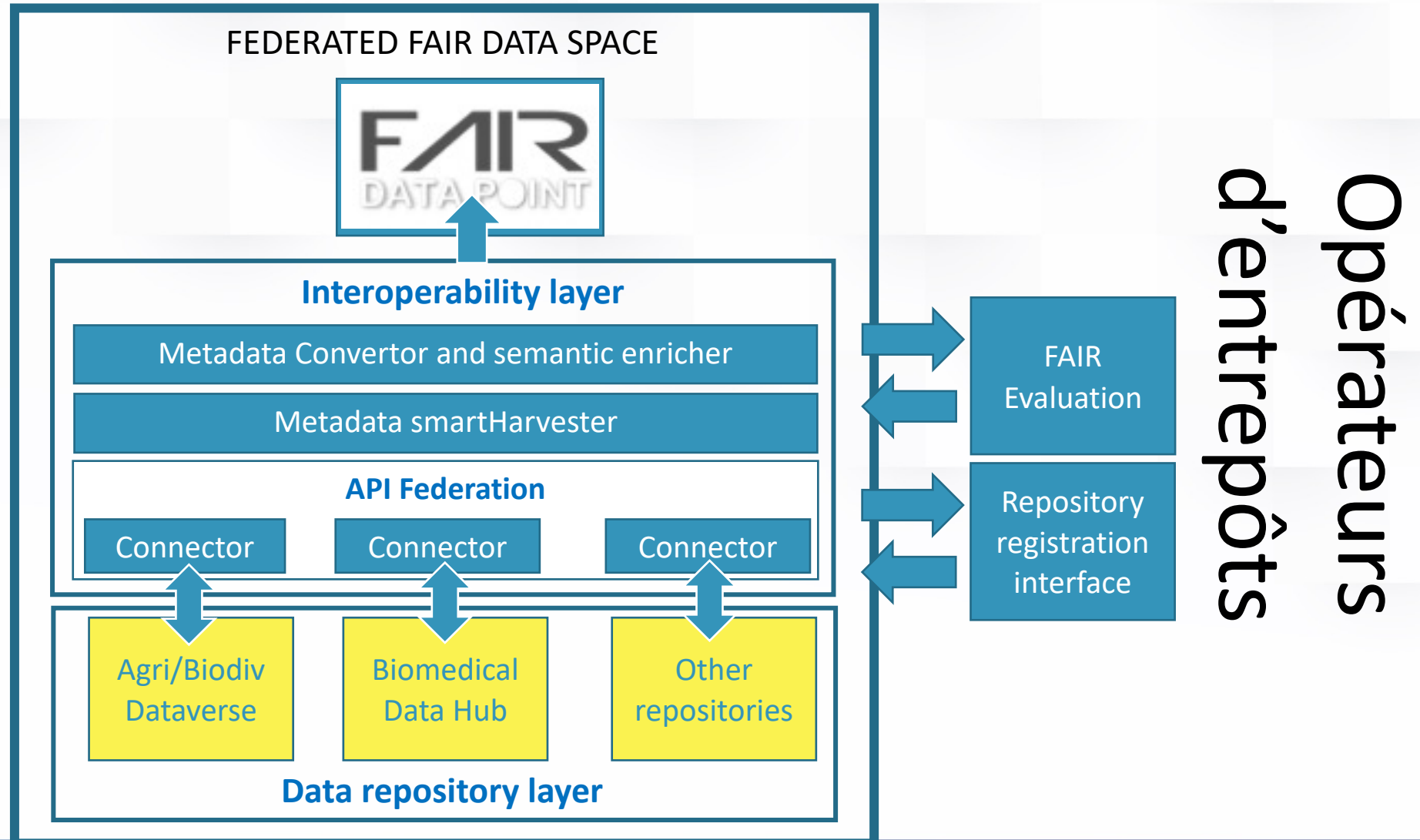
Une architecture simple

Concept, Design: Y. Le Franc, N. Cazenave



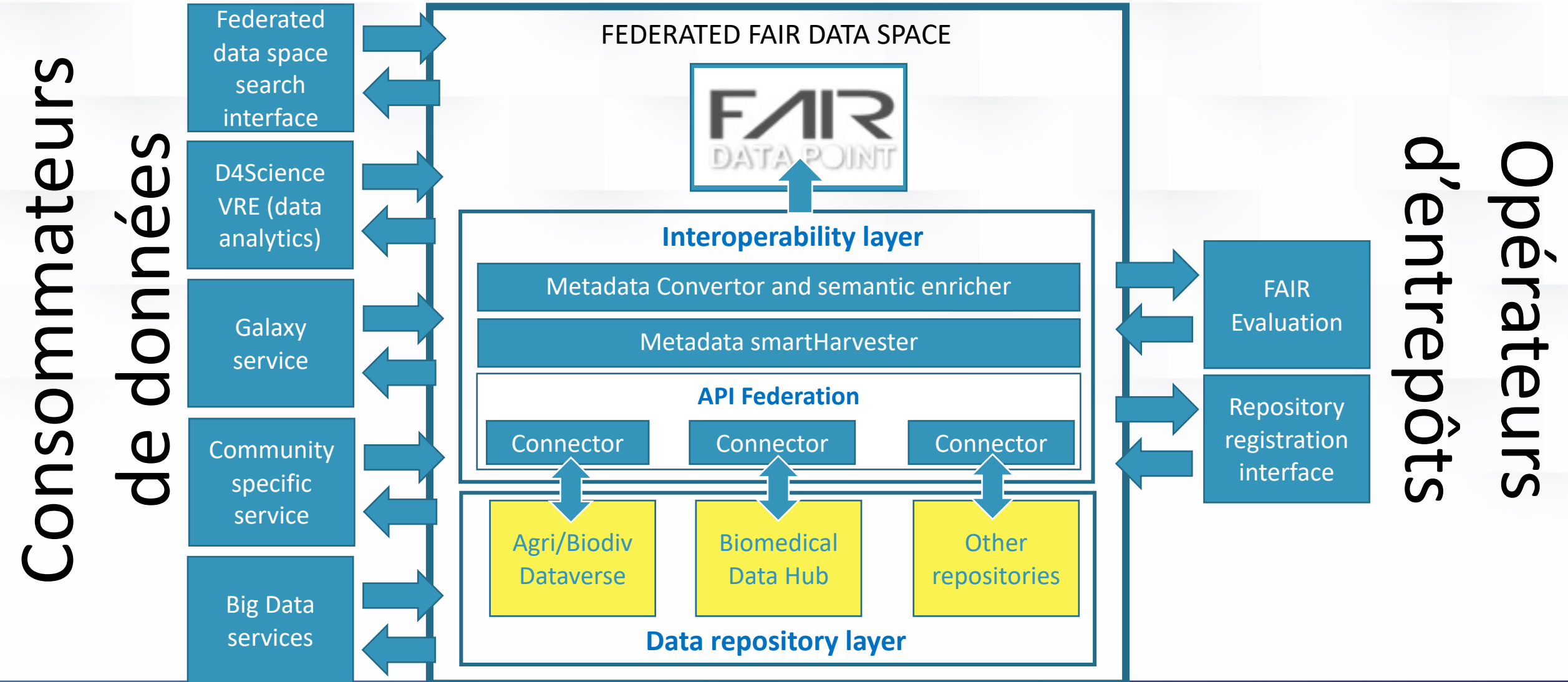
Une architecture simple

Concept, Design: Y. Le Franc, N. Cazenave



Une architecture simple

Concept, Design: Y. Le Franc, N. Cazenave



Un déploiement simple et évolutif

Un ensemble de services open-source facilement déployables et évolutifs sur n'importe quelle infrastructure cloud en utilisant Kubernetes

Créer des espaces fédérés de données à la volée pour des utilisations diverses

Enregistrer un entrepôt dans plusieurs espaces fédérés sans re-entrer les informations



Bénéfices



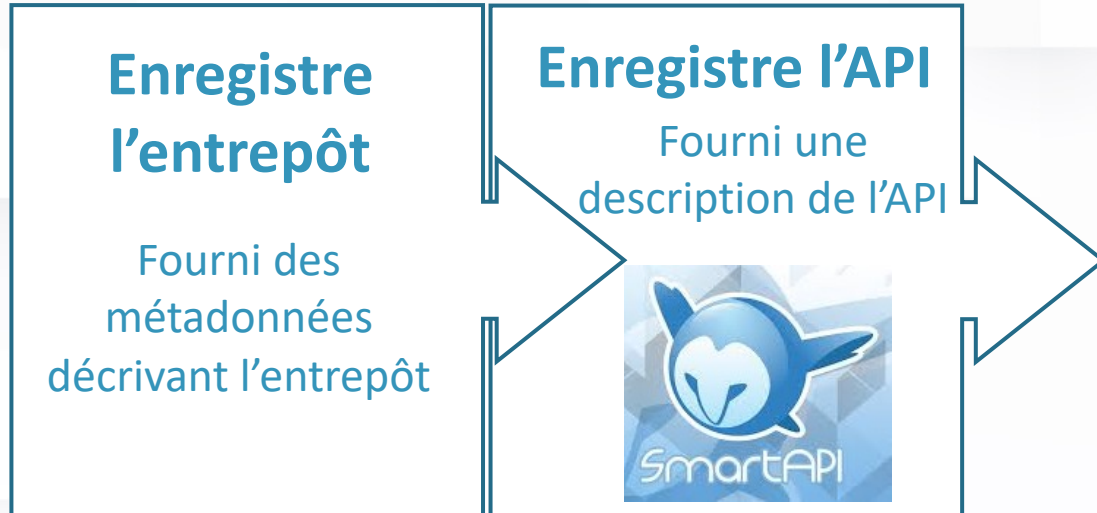
- ✓ **Crée rapidement des espaces fédérés avec des ressources distribuées et hétérogènes au sein de la même organization, entre organisations,...**
- ✓ **Pas ou peu de changements nécessaires pour les entrepôts**
- ✓ **Rend le contenu des entrepôts FAIR**
- ✓ **Des méthodes d'accès multiples pour utiliser les données (SparQL, REST API and web UI)**
- ✓ **Se connecte facilement avec n'importe quel service d'analyse (Galaxy, VREs, PANGEO, HPC/HTC, ...)**

Un workflow centré sur les opérateurs d'entrepôts

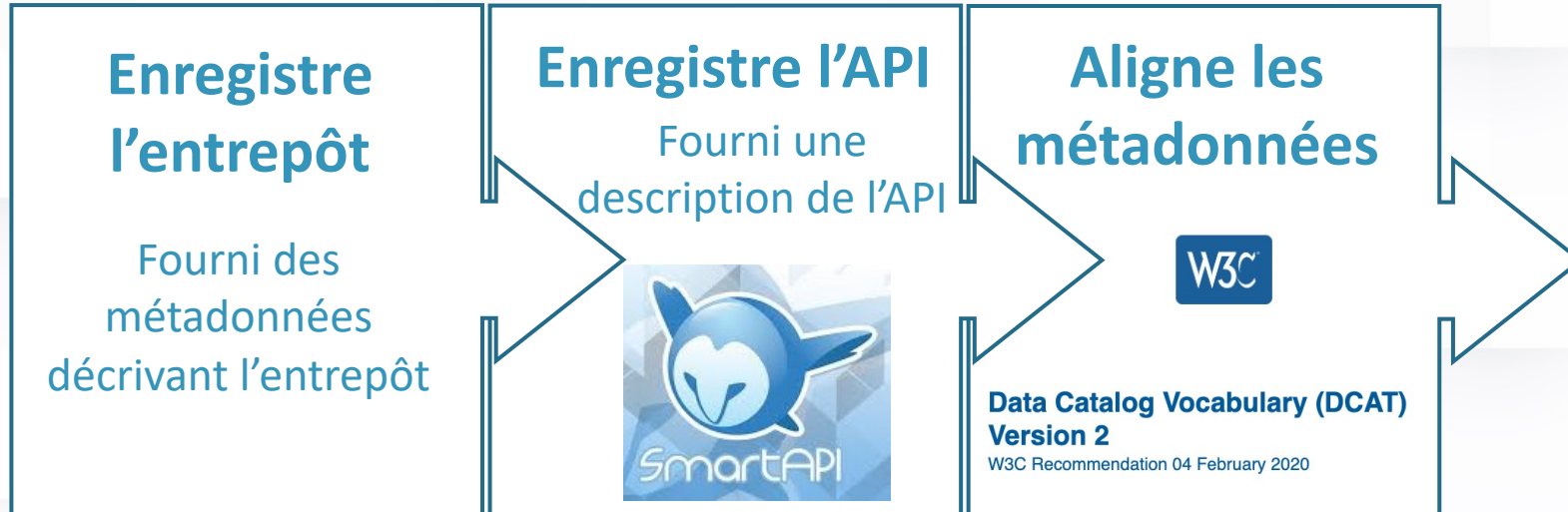
Enregistre l'entrepôt

Fourni des
métadonnées
décrivant l'entrepôt

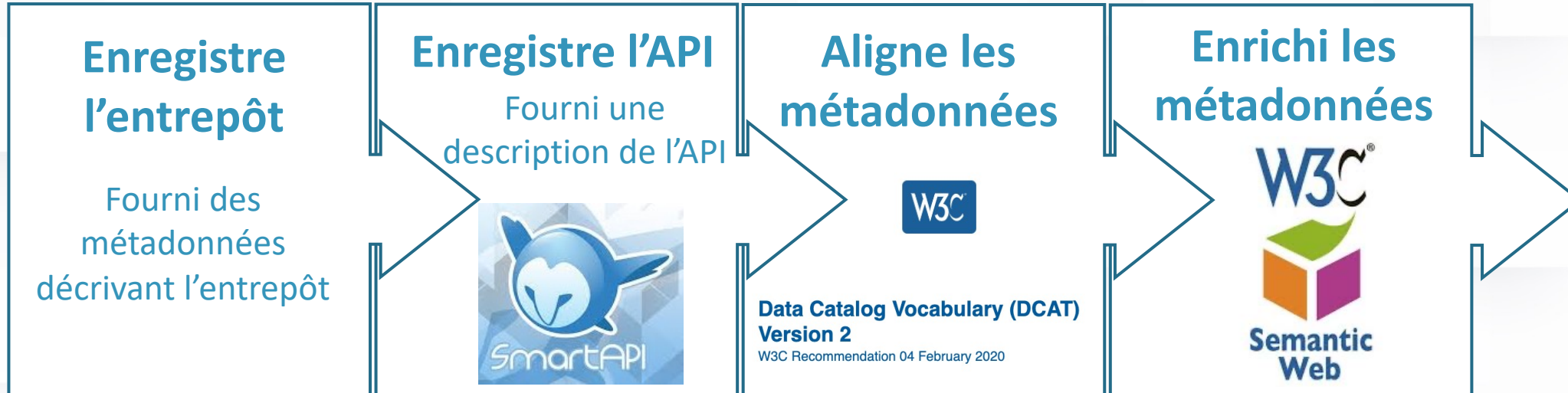
Un workflow centré sur les opérateurs d'entrepôts



Un workflow centré sur les opérateurs d'entrepôts



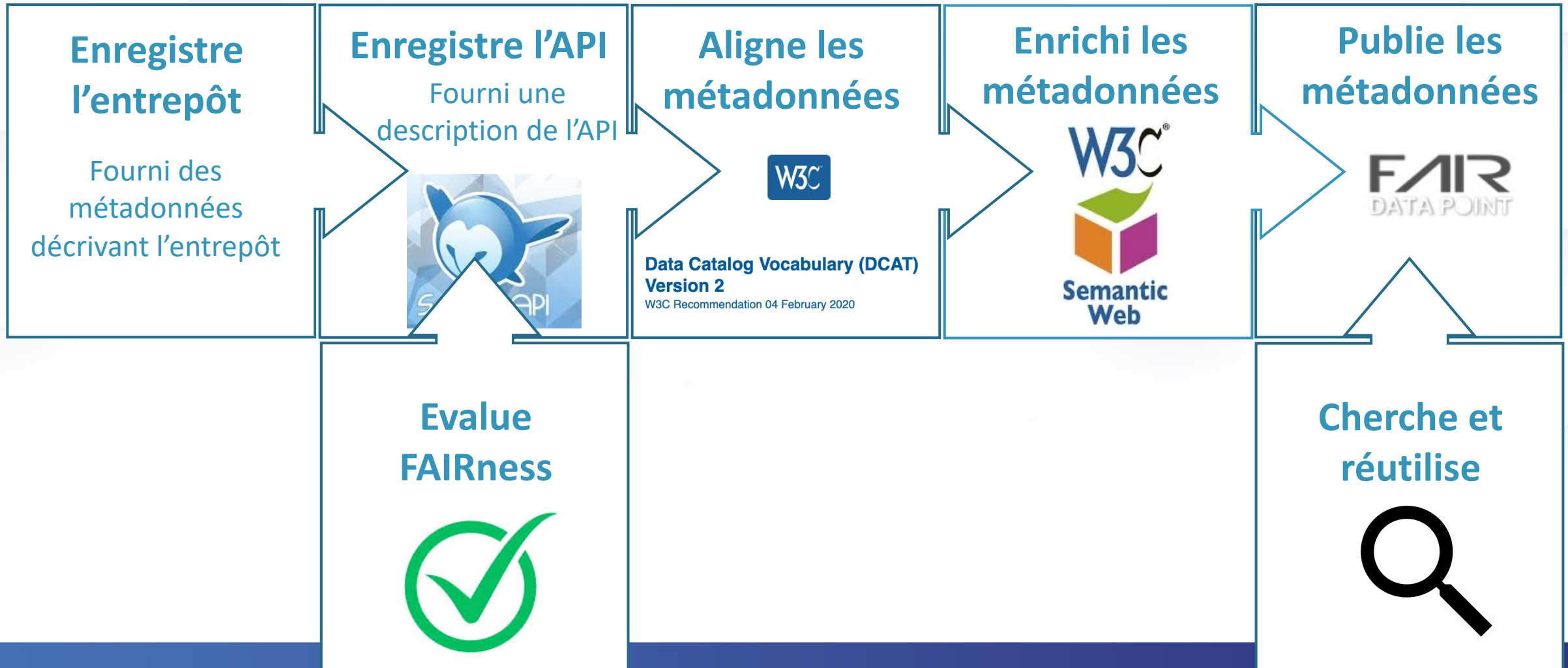
Un workflow centré sur les opérateurs d'entrepôts



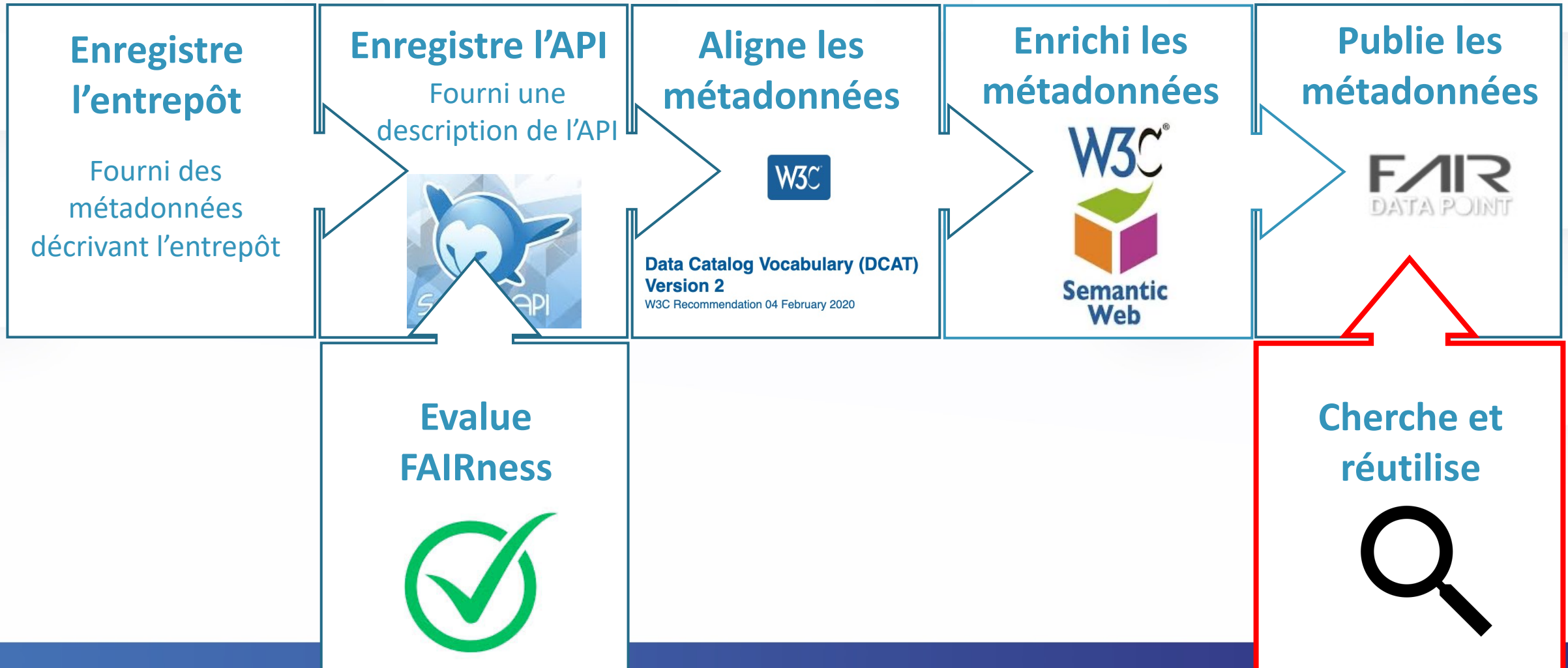
Un workflow centré sur les opérateurs d'entrepôts



Un workflow centré sur les opérateurs d'entrepôts



Un workflow centré sur les opérateurs d'entrepôts



Accéder aux données via un catalogue D4Science

Home Organizations Groups Items Types Statistics My Organizations My Groups My Items

ResourceCatalogue

Welcome to the D4Science Catalogue!
 Here you will find data and other resources hosted by the D4Science.org infrastructure. The catalogue contains a wealth of resources resulting from several activities, projects including BlueBRIDGE (www.bluebridge-vres.eu), i-Marine (www.i-marine.eu), SoBigData.eu and FAO (www.fao.org). All the products are accompanied with rich descriptions capturing general attributes, e.g. title, as well as usage policies and licences.

Items Search

Insert keywords here

See All

D4Science Catalogue statistics

73.8k	21	16
Items	organisations	groups

Filter by location



Map data © OpenStreetMap contributors
 Tiles by MapBox

Organisations

- iMarine (46753)

Formats

- WMS (72519)
- WFS (47646)
- WCS (21600)

Organisations

- iMarine (46753)
- D4Science Labs (23190)

Types

- Dataset (73611)
- VirtualResearchEnvi... (58)
- SoBigData.eu: Dataset (47)

Licenses

- Creative Commons At... (65)
- Academic Free Licen... (49)
- Other (Public Domain) (35)

Groups

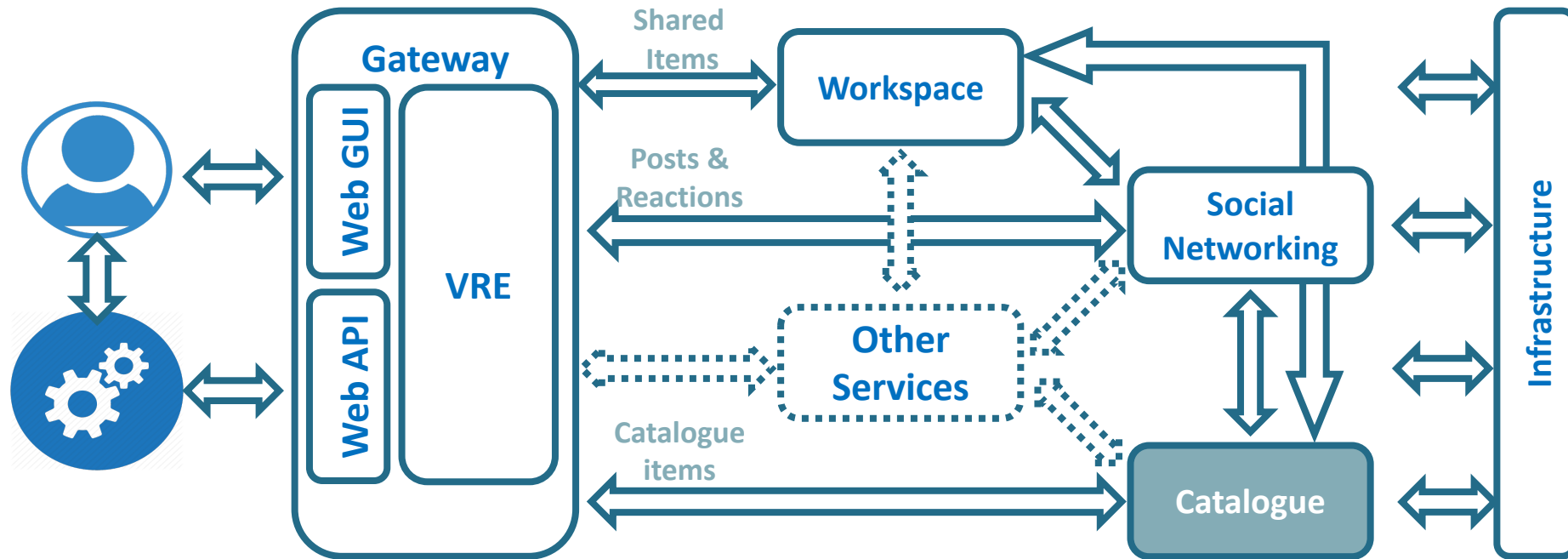
- biota (47404)
- environment (23100)

Accéder aux données via un catalogue D4Science

The screenshot displays the D4Science Resource Catalogue interface. At the top, there is a navigation bar with links for Home, Organizations, Groups, Items, Types, Statistics, My Organizations, My Groups, and My Items. The main header reads "ResourceCatalogue" and includes a welcome message: "Welcome to the D4Science Catalogue! Here you will find data and other resources hosted by the D4Science.org infrastructure. The catalogue contains a wealth of resources resulting from several activities, project including BlueBRIDGE (www.bluebridge-vres.eu), i-Marine (www.i-marine.eu), SoBigData.eu and FAO (www.fao.org). All the products are accompanied with rich descriptions capturing general attributes, e.g. title, as well as usage policies and licences."

Below the header, there is an "Items Search" section with a search input field and a "D4Science Catalogue statist" section showing 73.8k items, 21 organisations, and 16 groups. A "Filter by location" map is visible, showing a world map with a search icon and a "Clear" button. On the right side, there are several filter panels:

- Formats:** WMS (72519), WFS (47646), WCS (31500)
- Types:** Dataset (73611), VirtualResearchEnvi... (58), SoBigData.eu: Dataset (47)
- Organisations:** iMarine (46753)
- Licenses:** Creative Commons At... (65)
- Groups:** hinta (47404), nt (23100)



Statistics

Your Stats in EOSCPillarResDataCtlg



ACTIVITY

GOT

2
 0
 4
 1
 7

Trending Topics

No Topics found in News Feed

EOSCPillarResDataCt ... [Recent](#)

Share updates



Share an update or a link, use "@" to mention and "#" to add a topic

Notify members: OFF

News feed

Show sorted by: newest Post ▾



Leonardo Candela
 April 30 2020, 2:34 PM

During our weekly call, the following E



EOSCPillar Res Data Ctlg

This working environment is mainly conceived to host and operate the overall research data catalogue resulting from the EOSC-Pillar project. [read more](#)

[Items](#)
[Activity Stream](#)
[About](#)

Search items...

80,954 items found

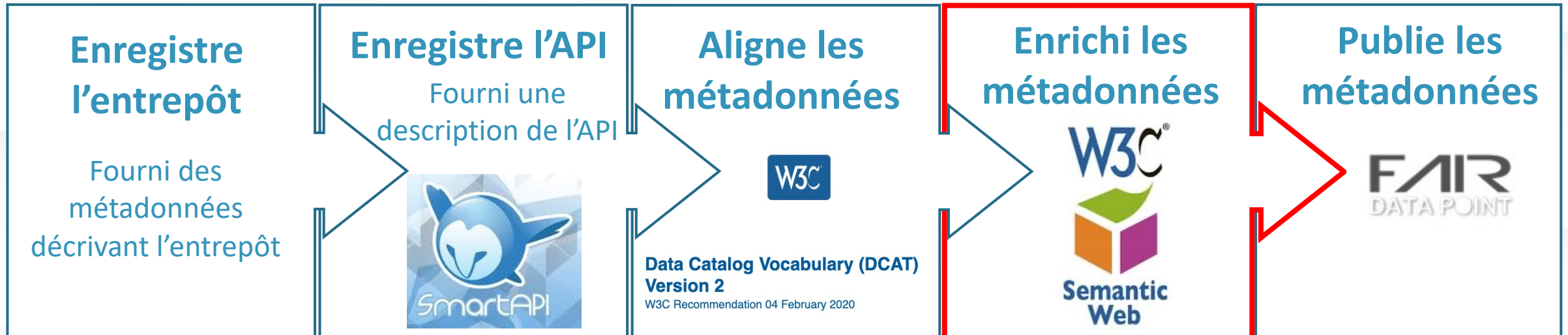
Order by: Relevance ▾

Global Ocean- Delayed Mode gridded CORA- In-situ Observations objective analy... No Type

""Short description:"" For the Global Ocean- Gridded objective analysis fields of temperature and salinity using profiles from the reprocessed in-situ global product CORA...

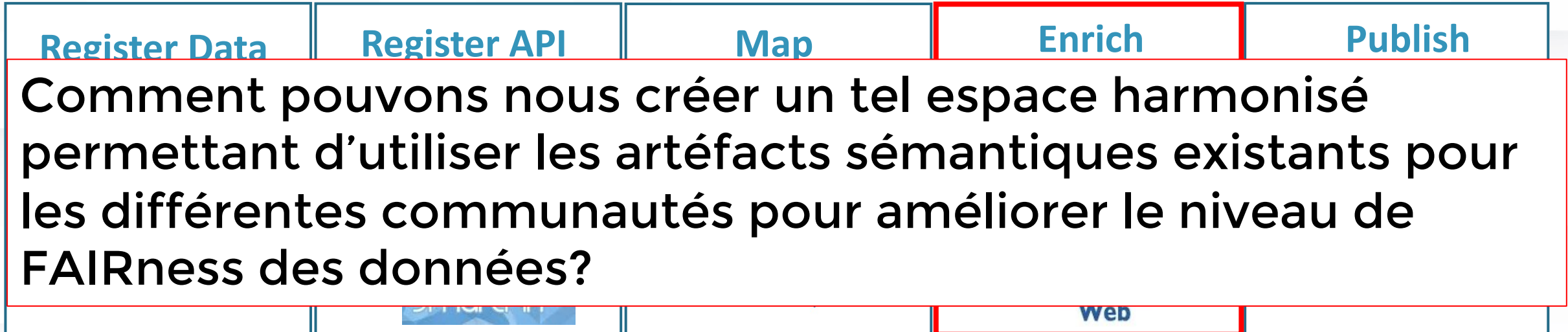
CATDS-PDC L3OS 3Q mixed - Debiased average 10 days & monthly salinity field p... No Type

Un workflow centré sur les opérateurs d'entrepôts



Besoin d'un espace sémantique harmonisé permettant d'accéder aux concepts pour enrichir les métadonnées

Un workflow centré sur les opérateurs d'entrepôts



Besoin d'un espace sémantique harmonisé permettant d'accéder aux concepts pour enrichir les métadonnées

Analyse des ressources ontologiques utilisées par les communautés

	A	B	C	D	E	F	G
1	Questions on semantic artefacts (SA) common in the discipline(s) of: Use Case 5						
2	We are interested in semantic artefacts (i.e. glossaries, controlled vocabularies, thesauri, ontologies, ...) that are common in the discipline(s) covered by this use case. Please answer all questions below considering everything you know on SAs in this discipline/these disciplines.						
3	To resolve any potential misunderstanding arising around the concept of ontologies, we are using instead the concept of semantic artefacts coined in the FAIRsFAIR project and defined as such within the FAIR Semantics recommendations (https://doi.org/10.5281/zenodo.3707985): "semantic artefact is defined in this work as a machine-actionable and -readable formalisation of a conceptualisation enabling sharing and reuse by humans and machines. These artefacts may have a broad range of formalisation, from loose set of terms, taxonomies, thesauri to higher-order logics. Moreover, semantic artefacts are serialised using a variety of digital representation formats, e.g., RDF Turtle, OWL-RDF, XML, JSON-LD.". For more information regarding the concept, please read the introductory part of the FAIR Semantics document. If you have any questions, please reach out to lefranc@cines.fr .						
4	Please think about SAs that are important or common in the discipline(s) covered by this use case: Are there any repositories in which these SAs are available? Please list the name of each repository and provide a link. In case you know whether the access to this repository is regulated, please choose the respective category in the row "access regulation". Please also fill in the information which "discipline(s)" the repository covers.						
5	Please add rows to the table below if the number of rows is not sufficient. If you would like to add any comment, please use the						
6		Name of the repository	Link to the repository	Access regulation	Discipline(s)	Comment	Added by
7	Repository 1						
8	Repository 2						
9	Repository 3						
10	Repository 4						
11	Repository 5						
12	Repository 6						
13	Repository 7						
14	Repository 8						
15	Repository 9						
16	Repository 10						
17	Repository 11						
18	Repository 12						
19	Repository 13						
20	Repository 14						
21	Repository 15						
22							
23							
24	If there are important/common semantic artefacts that are not stored in repositories, please provide the name, link and a short description of the ten most important SAs. Please take all discipline(s) into account that are covered by this use case. If you would like to add any comment, please use the respective column.						
25		Name of the SA	Link to the SA	Description	Comment		Added by
26	Sem. Art. 1	CIDOC-CRM	UC 6.9		Archeology UC; See Franco Niccolucci		Adeline Joffr
27	Sem. Art. 2	PACTOLS	https://pactols.frantiq.fr / https://www.frantiq.fr/tag		Archeology Vocab		Adeline Joffr
28	Sem. Art. 3				Archeology, LIDAR data, to be checked by Adeline with scientists;		Adeline Joffr
29	Sem. Art. 4				Conservatory for 3D data has specific data model		Adeline Joffr
30	Sem. Art. 5	JEL Classification System	https://www.aeaweb.org	Standard method of classifying scholarly literature in the field of economics			Bénédicte Ku
31	Sem. Art. 6	ACM Computing Classification	https://dl.acm.org/ccs				Bénédicte Ku
32	Sem. Art. 7	Thesaurus INRAE	https://vocabulaires.inrae.fr	Agriculture, Environment			Bénédicte Ku


- 1 questionnaire pour collecter les informations sur les ressources sémantiques existantes dans chaque communauté:
 - Les entrepôts sémantiques (AgroPortal, Bioportal, NVS,...)
 - Les ontologies/vocabulaires contrôlés

	A	B	C	D	E	F	G
	Topic	What would we like to know?	How can we measure this?	What is the content of one specific variable measuring (one aspect of) what we want to know?	type of variable or categories of this variable on the left	Variabename	co as: to va
1	2	general info	enter the name of the SA in a textfield	the name of the SA	text field	gen_name	no
2	3	general info	use information in the Excel file	the names of the UC	text field	gen_uc	
3	4	general info	use the information in the Excel file to classify the SA based on the categories by Leo Obrst 2010 as cited in FAIRsFAIR 2020	one of the categories by Leo Obrst 2010 as cited in FAIRsFAIR 2020	list hierarchy thesaurus formal ontology don't know	gen_class	
4	5	general info	Classify the ontology in how well machines can read the content	extent of machine-readability according to our categories	Machine visualisable Machine parseable Machine understandable	gen_machine	
5	6	general info	format of the file (e.g. xml, pdf...)	format of the SA	text field of format		
6	7	general info	use information in Excel file	Is the SA publicly available?	yes no don't know	gen_publ	
7	8	general info	use information in Excel file	Is the SA accessible at no cost?	yes no don't know	gen_cost	ge no
8	9	general info	use information in Excel file	Is the SA publicly available via a repository?	yes no don't know	gen_repo	ge ye
9	10	general info	use information in Excel file + desk research	URL to the repository in which the SA is available	text field	gen_repo_which	ad by
10	11	general info	look in the Excel sheet or ask UC whether they have developed a specific SA	Has the SA been developed by the UC?	yes no don't know	gen_dev	
11	12	general info	ask UC	Do you plan to publish the SA?	yes no don't know	gen_dev_pub	ge ye
12	13	PID	By means of a variable that captures whether the SA currently is identifiable by a PID or not	Does the SA have a persistent identifier (PID) like a DOI?	yes no don't know	pid_yesno	no
13	14	PID	by means of a series of dummy variables, one per PID we are interested in	Which DOI is associated to the SA?	text field	pid_which_doi	pic ==
14	15	PID		Is a URN associated to the SA?	yes + text field no don't know	pid_which_urn	pic ==
15	16	PID		Is a Handle associated to the SA?	yes + text field no don't know	pid_which_handle	pic ==
16	17	PID		Is a persistent URL associated to the SA?	yes + text field no don't know	pid_which_purl	pic ==
17		Name of the SA	Link to the SA	Description	Comment	Added by	
18	26	Sem. Art. 1	CIDOC-CRM	UC 6.9	Archeology UC; See Franco Niccolucci	Adeline Joffr	
19	27	Sem. Art. 2	PACTOLS	https://pactols.frantig.fr	Archeology Vocab	Adeline Joffr	
20	28	Sem. Art. 3			Archeology, LIDAR data, to be checked by Adeline with scientists;	Adeline Joffr	
21	29	Sem. Art. 4			Conservatory for 3D data has specific data model	Adeline Joffr	
22	30	Sem. Art. 5	JEL Classification System	https://www.aeaweb.org	Standard method of classifying scholarly literature in the field of economics	Bénédicte Ku	
23	31	Sem. Art. 6	ACM Computing Classification	https://dl.acm.org/ccs		Bénédicte Ku	
24	32	Sem. Art. 7	Thesaurus INRAE	https://vocabularyes.inrae.fr	Agriculture, Environment	Bénédicte Ku	

communautés

- 1 questionnaire pour collecter les informations sur les ressources sémantiques existantes dans chaque communauté:
 - Les entrepôts sémantiques (AgroPortal, Bioportal, NVS,...)
 - Les ontologies/vocabulaires contrôlés
- Evaluation des ressources selon divers critères et notamment les recommandations FAIR Semantics proposées par le projet FAIRsFAIR
- Etablir une liste de ressources accessibles par les machines pour aider à l'enrichissement sémantique dans l'espace fédéré de données FAIR

- Développées avec la contribution d'une communauté d'experts de domaines différents (science de la terre, géospatial, biodiversité, écology, biomédecine,...)
- 17 recommandations générales/10 bonnes pratiques
- Alignées avec les recommandations existantes proposées par les différentes communautés (OBO Foundry, IOF principles,...)
- Seconde itération des recommandations FAIR Semantics alignées avec RFC 2119 livrée Janvier 2021
<https://doi.org/10.5281/zenodo.4314321>
- **La suite:** établir un cadre pratique pour l'implémentation des recommandations et les utiliser pour l'évaluation du niveau de FAIRness



FAIRSFAR
Fostering Fair Data Practices in Europe

Project Title	Fostering FAIR Data Practices in Europe
Project Acronym	FAIRSFAR
Grant Agreement No	831558
Instrument	H2020-INFRAEOSC-2018-4
Topic	INFRAEOSC-05-2018-2019 Support to the EOSC Governance
Start Date of Project	1st March 2019
Duration of Project	36 months
Project Website	www.fairfair.eu

D2.5 FAIR Semantics Recommendations

Second Iteration

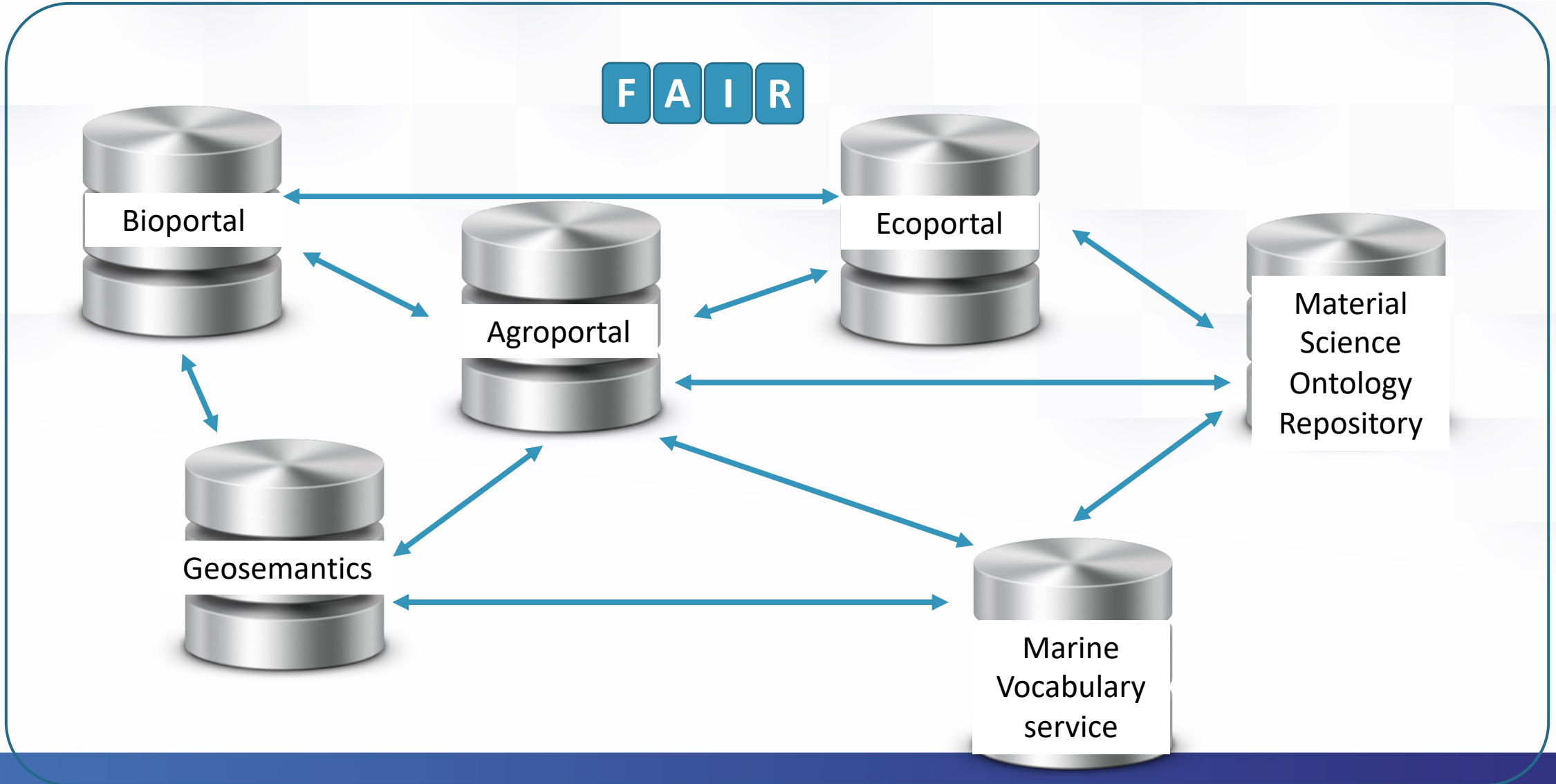
Work Package	WP2
Lead Author (Org)	Yann Le Franc, Wim Hugo (e-Science Data Factory)
Contributing Author(s) (Org)	Gerard Coen (DANS), Jessica Parland von Essen (CSC), Luiz Bonino (LUMC - DTL)
Due Date	31.12.2020
Date	21.12.2020
Version	1.0 DRAFT NOT YET APPROVED BY THE EUROPEAN COMMISSION
DOI	https://doi.org/10.5281/zenodo.4314321

Dissemination Level

<input checked="" type="checkbox"/>	PU: Public
<input type="checkbox"/>	PP: Restricted to other programme participants (including the Commission)
<input type="checkbox"/>	RE: Restricted to a group specified by the consortium (including the Commission)
<input type="checkbox"/>	CO: Confidential, only for members of the consortium (including the Commission)

1

Créer un espace fédéré d'ontologies FAIR



Formation et Support

Promouvoir une culture de la donnée FAIR et l'intégration des bonnes pratiques et outils permettant de rendre les données FAIR

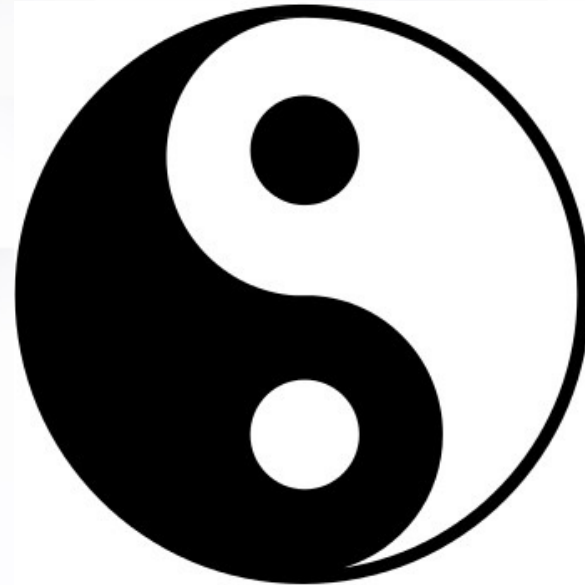


Consiglio Nazionale
delle Ricerche

Tâche 5.3



Un catalogue de
ressources sur les bonnes
pratiques de gestion des
données recherches FAIR



Tâche 5.4



Former les data stewards et les
chercheurs d'aujourd'hui et de demain

Un pilote de formation

- ★ 47 cours organisés sur la période 2019-2020
- ★ 6 modules
 - ★ Science Ouverte
 - ★ Open Access
 - ★ Gestion des données de recherche (plan de gestion des données)
 - ★ Principes FAIR
 - ★ EOOSC basics
 - ★ Data Stewardship
- ★ Différentes typologies de cours:
 - ★ Cours en ligne ouverts à tous
 - ★ Cours en collaboration avec les infrastructures de recherche italienne (Science de la Terre, Santé)
 - ★ Cours en collaboration avec universités (Université de Gent, Université de Pise, Scuola Normale Superiore)
- ★ Prochaines étapes: extension à d'autres pays et à d'autres domaines avec notamment les Sciences Humaines et Sociales

Un catalogue de contenus pour la formation et le support

- ★ Une collection de ressources accessibles en ligne pour le FAIR data stewardship et la gestion des données de recherche

Formation


- ★ Objectif: acquérir des connaissances et **développer des compétences** en particulier sur des sujets autour de la gestion des données scientifiques
- ★ Exemples: cours, slides, livres, tutoriaux, guidelines, jeux, vidéos...

Support

- ★ Objectif: **Outils et solutions prêtes à l'emploi**
- ★ Exemples: checklists, arbres de décisions, guidelines, outils...

- ★ Alignement avec d'autres projets et groupes de travail autour de la formation et des compétences permettant une meilleure connectivité au sein d'EOOSC

Un catalogue basé sur la technologie D4Science



EOSCPILLAR
Training & Support

EOSCPillar Training And Support

This working environment is for the members of the EOSC-Pillar involved in the development of training and support material. [read more](#)

Followers: **4** | Items: **80**

[Follow](#)

Organisations

- EOSCPillar Training And Support (80)

Types

- Guidelines (21)
- Course (14)
- Tool (13)
- Video (12)
- Website (12)
- Checklist (3)
- List (2)

Items About

Search items...

Order by: Relevance

80 items found

OWNER **Generalist Repository Comparison Chart**

The General Repository Comparison Chart and FAIRsharing Collection is a tool researcher could use to make decisions about selecting a generic or domain agnostic repository...

[PDF](#) [HTML](#)

OWNER **DMP Use Case Project Collection**

University of Vienna (Open Aire NOAD Austria) has made a collection of H2020 public DMF available via the Phaidra repository. The content of the DMPs have not been quality...

[HTML](#) [HTML](#)

OWNER **Data Management Hub by ELIXIR Belgium**

Data Management Hub (DM Hub) is an information resource about research data management for biologists and scientists in Life Sciences, curated by ELIXIR Belgium. It ai to...

[HTML](#)

OWNER **Lawful basis interactive tool**

ICO (Information Commissioner's Office) has produced a lawful basis interactive tool to give tailored guidance on which lawful basis is likely to be most appropriate for your...

[HTML](#)

AUSSDA Data Deposit Guideline

The document contains guidelines for data depositors of the Austrian Social Science Data Archive (AUSSDA). The guidelines cover technical aspects (e.g. advice on the format of...

[PDF](#)

OWNER **Reproducible Research using Jupyter Notebooks**

This course teaches how to increase the reproducibility in computational research using Jupyter. The course is aimed at graduate students, postdocs, and other researchers who...

[HTML](#)

Data Management Hub by ELIXIR Belgium

Followers: **0**

[Follow](#)

Rating


☆☆☆☆☆ (0)

Your rating

☆☆☆☆☆

no rating given

Organisation



EOSCPillar Training And Support

This working environment is for the members of the EOSC-Pillar involved in the development of training and support material. [read more](#)

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Data Management Hub by ELIXIR Belgium

Data Management Hub (DM Hub) is an information resource about research data management for biologists and scientists in Life Sciences, curated by ELIXIR Belgium. It aims to communicate essential best practices and practical guidelines that researchers can apply to manage their data, from the beginning to the end of the research project. The recommended best practices and guidelines are accepted by several scientific communities across Europe and data management experts in ELIXIR. It provides a section called "Data Management in simple steps", a detailed section about Data Management Plans and guidelines and tips for all the different topics that should be covered. Finally, it has additional guidelines for Omics data and Covid-19 data submission.

Tags


- Accessibility
- Appraise and preserve
- Capture and process
- Controlled vocabularies
- Costs
- Data formats
- Data librarian or institutional level data steward
- Data steward
- Documentation
- Expose and discover
- File naming
- File organization
- Findability
- Integrate and analyze
- Interoperability
- Level Intermediate
- Licenses
- Life Sciences
- Life Sciences Biology
- Metadata
- Persistent Identifiers
- Plan and design
- Publish and release
- Repositories
- Researcher
- Reusability
- Version control

Data and Resources

[Data Management Hub \(DM Hub\) by Elixir Belgium](#) [Explore](#)

Item URL

http://data.d4science.org/ctlg/EOSCPillarTrainingAndSupport/data_management_hub_by_elixir_belgium



Additional Info

Field	Value
Competence	Not Available
Country	Belgium - BEL
Creator	ELIXIR Belgium
Domain	Life Sciences
Domain	Life Sciences Biology
Language	eng, English

★ Via le site du projet (comme invité):

★ <https://www.eosc-pillar.eu/training-and-support-catalogue>

★ Un catalogue pour les invités

★ <https://eosc-pillar.d4science.org/web/eoscpillartrainingandsupport>

★ Un catalogue pour les “curateurs” et “utilisateurs connus” (via VRE)

★ <https://eosc-pillar.d4science.org/group/eoscpillartrainingandsupport>

★ Autres matériel

★ Webinar 12-11-2020 [recording and slides](#)

★ [FAQs](#)

group, subject, keywords, etc. The categorisation aligns with outputs of other key H2020 projects such as the EOSCPilot and FAIRsFAIR.

EOSC-Pillar Training and Support Catalogue

Skills Groups

It is possible to filter according to skill groups. Two types of skills groups are defined:

Research Lifecycle

A set of competences and capabilities that are usually applied in project-specific ways.



Plan and design

Planning and design of data, research software and other outputs, including the associated documentation. This will include all relevant steps including identifying requirements of research output users, the organisation and research funders, establishing effective approaches to meet their requirements, then reviewing this planning.



Capture and process

Capturing and processing of data or related materials to enable research evidence to be prepared for analysis; provisioning of secure managed access to networked storage, scalable to meet demands, plus resources, tools, standards and workflows for collaboration between research team members, and relevant third parties.



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EOSC-Pillar

Coordination and Harmonisation of National & Thematic Initiatives to support EOSC

Thank you!

Get in touch with us!



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