

EuroCris Pamplona

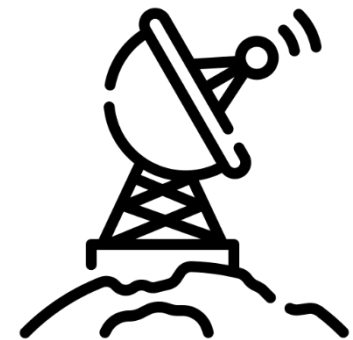
CRIS systems in Spain as open science infrastructures: legal framework, and national overview

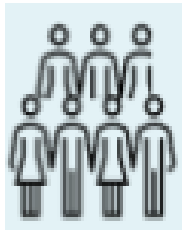
Aurelia Andrés (@aureliaandres)

22nd November 2023



1. Spanish Foundation for Science and Technology (FECYT): Main projects in FECYT at National and International level





140 PEOPLE

99 Women

41 Men



BUDGET 2022

30,1 M€



4 STRATEGIC GOALS

OE2. Scientific information and open science

OE3. Internationalization of science

LA FUNDACIÓN

MISIÓN

Catalizamos la relación entre la ciencia y la sociedad, impulsando el crecimiento de la cultura científica española y fomentando la transferencia de conocimiento a través de la divulgación, la educación, la formación, la información y el asesoramiento.

Colaboramos con otros agentes y actores del Sistema de Ciencia, Tecnología e Innovación en la internacionalización de la ciencia española y la generación y análisis de datos, y damos soporte en la gestión de la información científica y de la ciencia en abierto.

Main projects in FECYT: National Projects

Scientific Information Infrastructures	Scientific information infrastructure Support
  	 

Main Projects in FECYT: International Projects



CoARA



EUROPEAN OPEN
SCIENCE CLOUD

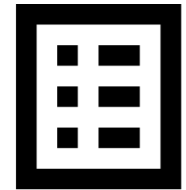


CoNOSC

The Council for National Open Science Coordination (CoNOSC) is a network of national Open Science coordinators in the UN-European region.



2. Legal Framework for Open Science in Spain



Nacional Open Science Policy



Spanish Science, Technology and Innovation Strategy 2021-2027 (EECTI)



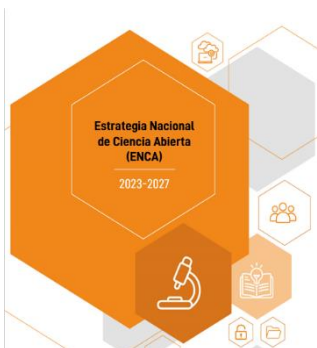
State Plan for Science, Technology and Innovation 2021-2023 (PEICTI)



Science, Technology and Innovation Law 17/2022



University System Law 2023



National Open Science Strategy (ENCA)

NATIONAL OPEN SCIENCE STRATEGY (ENCA) 2023-2027

Pillar A

Digital Infrastructures for Open Science

Pillar B

Research data management following FAIR principles

Pillar C

Open access to scientific publications

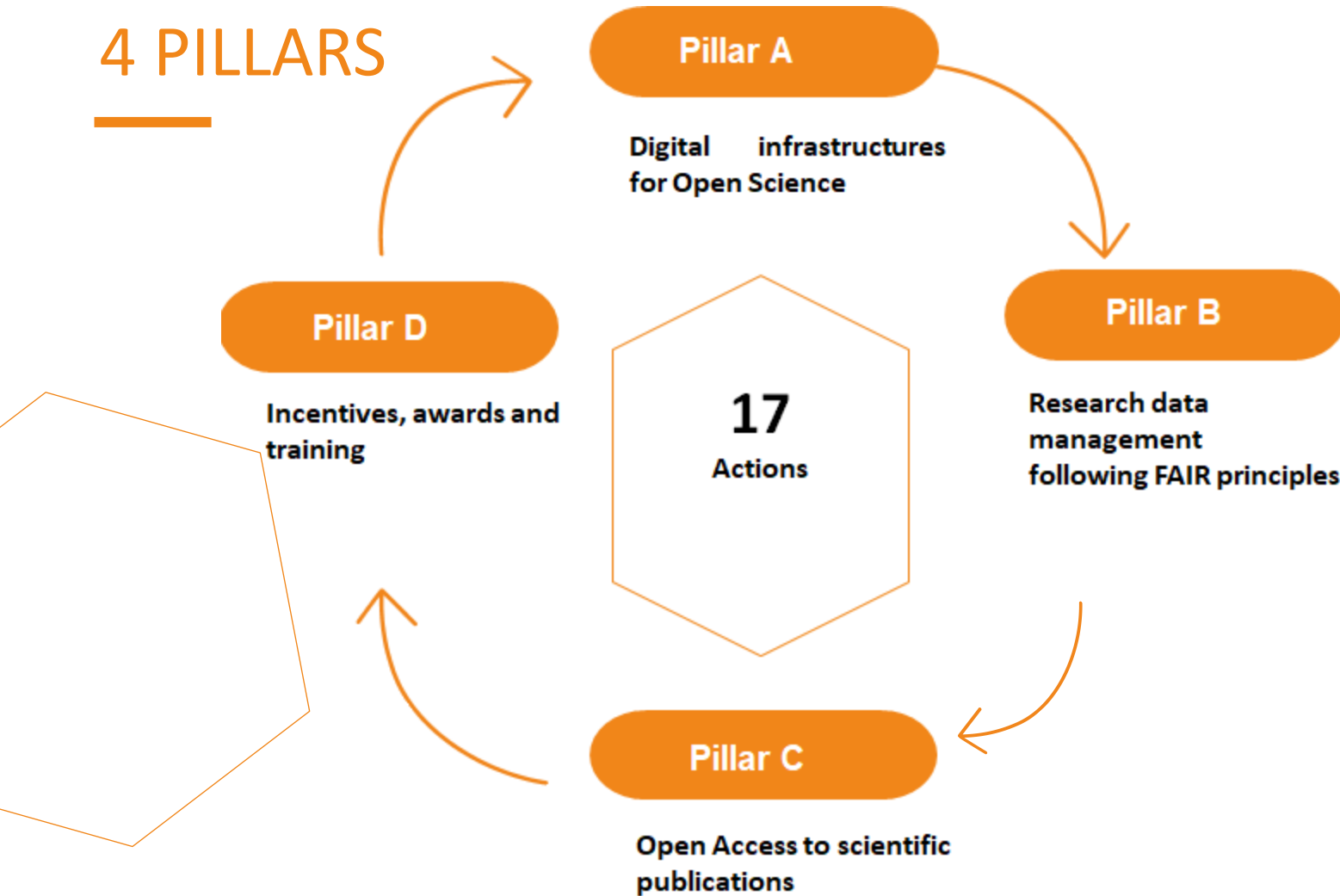
Pillar D

Incentives, awards and training

MISSION

The national open science strategy (ENCA) 2023-2027 has the mission to strengthen the quality, transparency and reproducibility of scientific activity in Spain, to improve dissemination among scientific personnel and transfer to society, and to design the ways in which our country responds to the challenges facing the Spanish scientific community in this new global paradigm.

NATIONAL OPEN SCIENCE STRATEGY : 4 PILLARS



DIGITAL INFRASTRUCTURES

Identification of digital infrastructures, both national and international, necessary for the implementation of the ENCA.

Generation and maintenance of new digital infrastructures for storage and preservation of research outputs necessary for the implementation of the ENCA.

Financing of digital infrastructures for open science.

Interoperability of all open science digital infrastructures to guarantee their sustainability and facilitate the integration of data and services into the European Open Science Cloud (EOSC).

Expected outcome: *Ensure the existence of sufficiently robust and well-articulated interoperable digital infrastructures capable of absorbing the impact of implementing a national open science policy and facilitating its integration into the international ecosystem, including, where applicable, the European Open Science Cloud (EOSC).*



FAIR RESEARCH DATA

Creation, recognition, and promotion of **professional profiles** to support research data management within the SECTI as support figures for research teams, adding specific and necessary expertise and alleviating the workload of research teams.

Improvement of the communication of scientific results, overcoming the current limitations of the scientific results communication system, and including adequate assessment of other research outputs such as data and other digital objects of the scientific process, as well as the adoption of new forms of scientific communication based on them.

Strengthen the implementation of the **legal framework** and mechanisms that facilitate open access to research data

Expected outcome:

Promote the proper management of research data generated by the national R&I system through the FAIR principles (Findable, Accessible, Interoperable, Reusable).



OPEN ACCESS TO ACADEMIC PUBLICATIONS

Compliance with the legal mandate for open access to facilitate the deposit of all scientific publications.

Evaluation of the national open access policy to assess the effectiveness of measures and strengthen incentives if necessary

Negotiation of agreements for transforming the scientific communication model to ensure equal conditions for research personnel across the SECTI regarding access to scientific content, options for open-access publishing, and depositing their publications in open-access repositories

Diversification of publication venues for research results, supporting non-commercial communication models through complementary or alternative dissemination tools to commercial scientific journals, such as research outcome publication platforms, institutional publishing services, and open access repositories. Compliance with the peer review process will be ensured, and mechanisms to guarantee publication quality will be strengthened.

Strengthening the implementation of the **legal framework** and mechanisms that facilitate open access to scientific publications.

Expected outcome:
Implement open and free access by default to publications and scientific results directly or indirectly funded with public funds, for the entire population.



INCENTIVES, REWARDS AND TRAINING

Strengthening scientific knowledge about open science.

Consideration of open **science practices for public R&D Funding.**

Adaptation of the **assessment processes** for teaching, research, and knowledge transfer to the parameters of open science.

Establish mechanisms to promote the idea that **open science is an excellent science.**

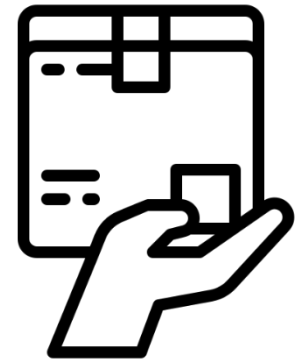
Training for researchers and evaluators in research assessment committees, academic career committees for individuals and institutions, and panels for the allocation of publicly funded projects.

Expected outcome:

Establish new research assessment mechanisms and a system of incentives and recognition aimed at promoting open science practices, as well as providing training to all personnel (researchers, managers, funders, evaluators) to align their professional performance with the principles of open science.



3. Call for funding "María de Guzmán"



CALL FOR FUNDING MARIA DE GUZMAN: LINE 2

Promoting excellent scientific research by improving open science infrastructures

Mode 2

Mode 1
Repositories and regional
harvesters

Institutional and regional CRIS
System and Curriculum
management systems

Mode 3
Institutional publishing
services or publishing
management entities

- New infrastructures
- Updating projects
- Interoperability projects
- Projects of implementation of national and international standards...



CALL FOR FUNDING MARÍA DE GUZMÁN

6.997.000€
Dotación total de la convocatoria FECYT

5.899.000€ Línea 1 RRCC
1.098.000€ Línea 2 Open Science

88 applications line 1
97 applications line 2

6.996.913,66€
Total funding budget

Línea 1 5.898.913,66€
Línea 2 1.098.000€

Línea 1

70,10%
Public
29,90%
Private

Línea 2

76,74%
Public
23,26%
Private

Applications granted by region
140 applications granted /6.238.085,79 €



Applications granted by site
Line 1: 5.898.913,66 € /97 Applications

Universities	OPIs	Health sites
4.592.932,35€	539.412,59€	766.568,72€
77 Applications	9 Applications	11 Applications

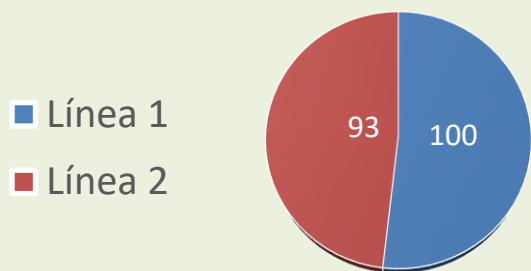
Applications granted by site
Line 2: 1.098.000€ / 43 Applications

Universities	OPIs	Health sites	Resear. Site
826.284,98 €	146.224,77 €	51.548,59€	73.941,66€
34 Applications	4 Applications	1 Applicat.	4 Applic.

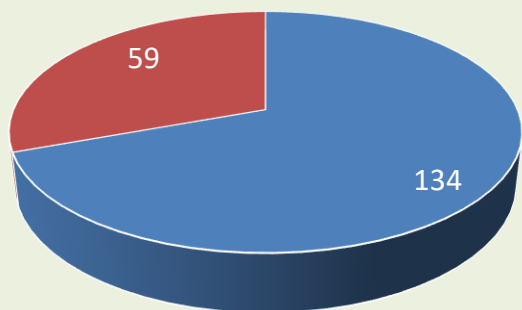
CALL FOR FUNDING MdG 2023: APPLICATIONS RECEIVED

Applications received: 193

Applications MdG 2023

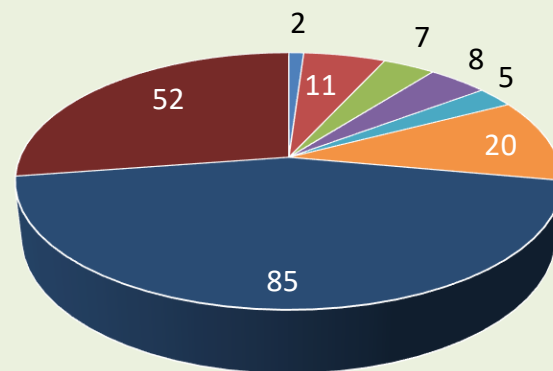


Applications MdG by legal nature



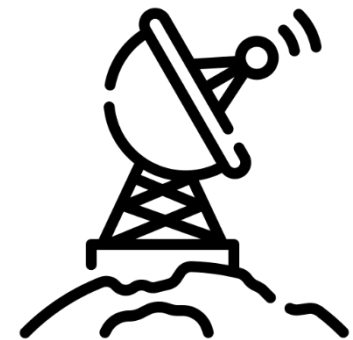
■ Pública ■ Privada

Applications MdG by type of site



■ Centro privado I+D+i ■ Centro Público I+D+i
■ Instituto de investigación Sanitaria ■ OPI
■ Personas jurídicas ■ Sistema nacional de Salud
■ Universidad pública ■ Universidad privada

4. Open Science **infrastructures:** Repositories, CRIS Systems and Curriculum Management System



OPEN ACCESS REPOSITORIES

Institutional repositories: universidades, centros de investigación...

Thematic repositories:

- ArXiv (<http://arxiv.org>) : física, matemáticas, computación, biología cuantitativa.
- Europe PubMed Central (<http://europepmc.org/>) ciencias de la vida
- Cogprints (<http://cogprints.ecs.soton.ac.uk/>): psicología, neurociencias , lingüística, computer sciences, filosofía y biología.
- RePec (<http://ideas.repec.org>): economía. ...

Aggregators :

- Recolecta: <https://www.recolecta.fecyt.es/>
- OpenAIRE: <https://www.openaire.eu/participate/deposit-publications-data>

CHARACTERISTICS OF CRIS SYSTEMS

CRIS (Current Research Information Systems) are information systems used to collect and disseminate all information related to the research activities of an institution.

Main Functions:

- Register the institution's research
- Facilitate external evaluation of research
- Disseminate researcher profile
- Evaluate the degree of compliance with open Access

Internal interoperability:

- Institutional Repository
- Curriculum management systems
- Author identification systems
- International publication databases (WOS, Scopus...etc.)

Agents involved:

- the research management offices
- The library
- The technology área
- The vice-rectorate for research

CRIS SYSTEMS IN SPAIN

Institutional CRIS System:

155 institutions in Spain

- Commercial CRIS : Pure, Dialnet CRIS, Fundanet, IMA sW (Imarina), Universitas XXI etc..
- CRIS adHoc: SENIA, DRAC, SUXI, etc.

CRIS System Aggregators:

- Regional Portal from Castilla y León: 3 Universities
- SICA: 10 Universities, 50 Research Institutes
- Dianet Global-Hercules: 22 Universities from Spain (INV.ES Project & UNIDIGITAL Project)

National CRIS in Spain:



Information System about Science, Technology and Innovation.

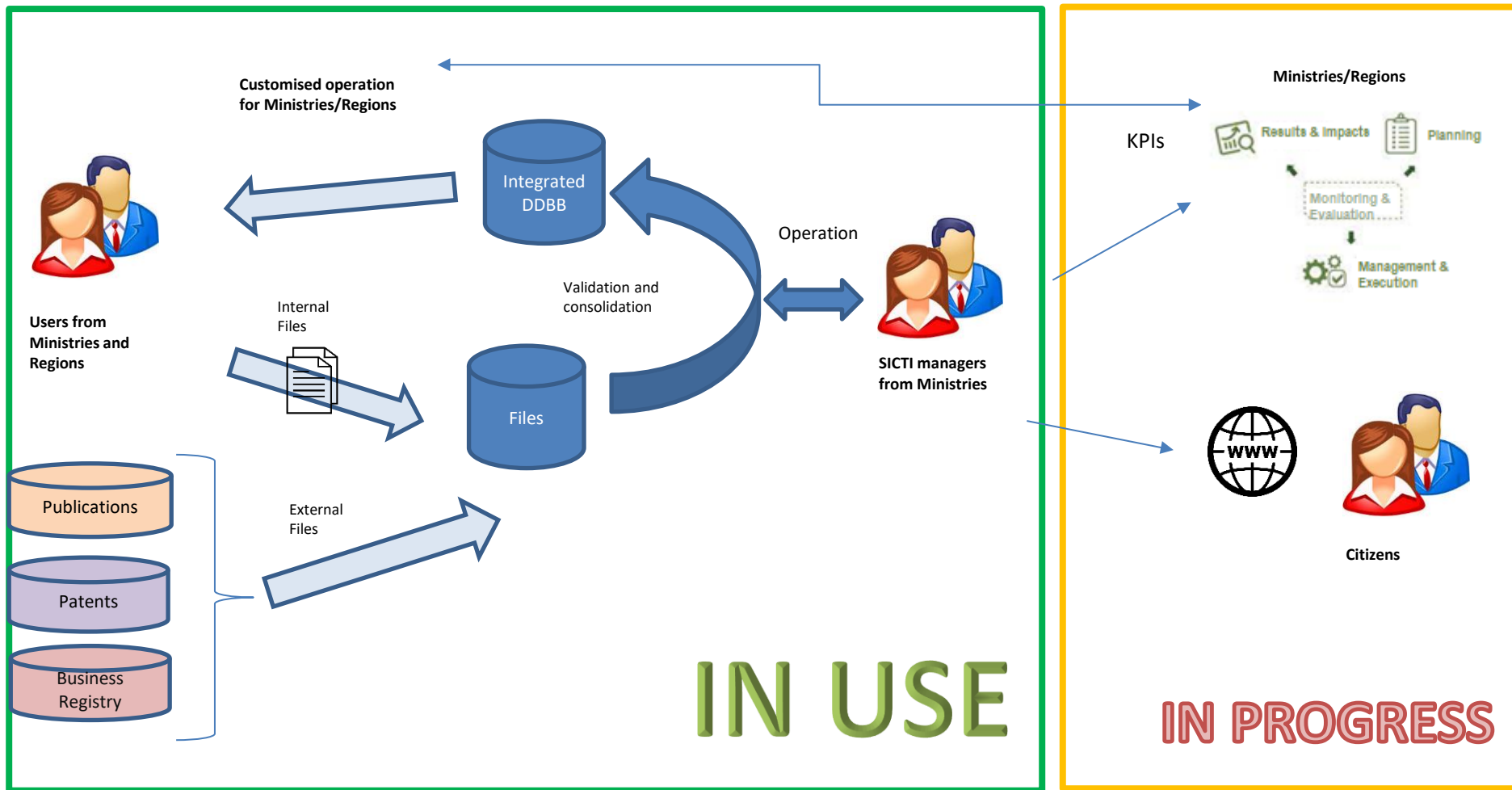
Includes Input and Output of the research and enables the visualization of data and metrics for the monitoring of grants

<https://aplicaciones.ciencia.gob.es/sicti/login> (Access)

<https://www.ciencia.gob.es/Estrategias-y-Planes/Sistema-de-Informacion-sobre-Ciencia--Tecnologia-e-Innovacion--SICTI-.html> (more information)



HOW DOES SICTI WORKS?





155
Certified
institutions



64
Certified
Universities



243.206
Researchers
with CVN



63
Calls with
CVN in 2022



7.007.565
CVNs generated

CVN is a standard for sharing curricular information from researchers and institutions to funding agencies to optimize the evaluation process and reduce administrative loads



- Allows the reusability of the curricular data of the researchers
- Provides funding agency with tools that reduces the evaluation process
- Provides curricular data interoperability with management institutional system



- ✓ **Standard:** Specifications that all CVs have to follow
- ✓ **Editor:** Online tool for researchers that allows them to create or modify their CV
- ✓ **Web Services:** Allows certified institutions to export and import their researchers' data in CVN format
- ✓ **Certification and support** of institutions via email sopORTE.cvn@fecyt.es
- ✓ **Support** to user through email sugerencias.cvn@fecyt.es

**ALLIANCES AND
COLLABORATIONS**

euroCRIS
Current Research Information Systems

ORCID

crue
Consorcio de
Universidades
Españolas
Red de Bibliotecas
RESUB

INEOS
Instituto Nacional de
Estadística y
Censos de España

[HTTPS://CVN.FECYT.ES](https://cvn.fecyt.es)



GOBIERNO
DE ESPAÑA

MINISTERIO
DE CIENCIA
E INNOVACIÓN

20 años
COMPROMETIDOS
CON LA CIENCIA
2001-2021

FECYT
INNOVACIÓN

1. CVN: LEY 17/2022 DE LA CIENCIA , LA TECNOLOGÍA Y LA INNOVACIÓN



LEGISLACIÓN CONSOLIDADA

Ley 17/2022, de 5 de septiembre, por la que se modifica la Ley 14/2011, de 1 de junio, de la Ciencia, la Tecnología y la Innovación.

«Artículo 26. Acceso al empleo público y promoción interna.

4. El sistema selectivo de acceso al empleo público en los Organismos Públicos de Investigación de la Administración General del Estado para el personal investigador será el de concurso público, cuya convocatoria se publicará en el «Boletín Oficial del Estado» y en la página web del departamento ministerial y de la institución convocante. Dicho concurso estará basado en la valoración del currículo del personal investigador, incluyendo los méritos aportados relacionados con la actividad investigadora, de desarrollo experimental, de transferencia de conocimiento y de innovación, así como la adecuación de las competencias y capacidades de las candidaturas a las características de las plazas.

En la fase de valoración curricular, se tendrán en cuenta los siguientes elementos:

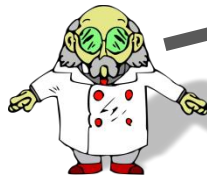
a) La valoración del currículo del personal investigador podrá ser realizada por la Agencia Estatal de Investigación, y su resultado tendrá carácter vinculante en caso de ser negativo. A los efectos en esta ley, se promoverá la implantación de un modelo de curriculum vitae normalizado único.

3. WHAT IS CVN USED FOR? HOW DOES IT WORK?

R&D Institutions



Funding Agencies



Electronic file in PDF (CVN-PDF) with
XML embeded

**CVN MOVES WITH
RESEARCHER!!**

4. STAKEHOLDERS

Researchers



Institutions



Funding Agencies



R&D Institutions

Institutional CRIS and curricular management system adapted to CVN format

CVN Editor of FECYT:

FECYT's Curricular management System to the rest of institutions not adapted to CVN format
Public URL with Research CV in CVN format

WEB Services (Import/Export)

These web services allow institutions to adapt their systems to export and import CVs in CVN format.

Data mining service from public CVNs

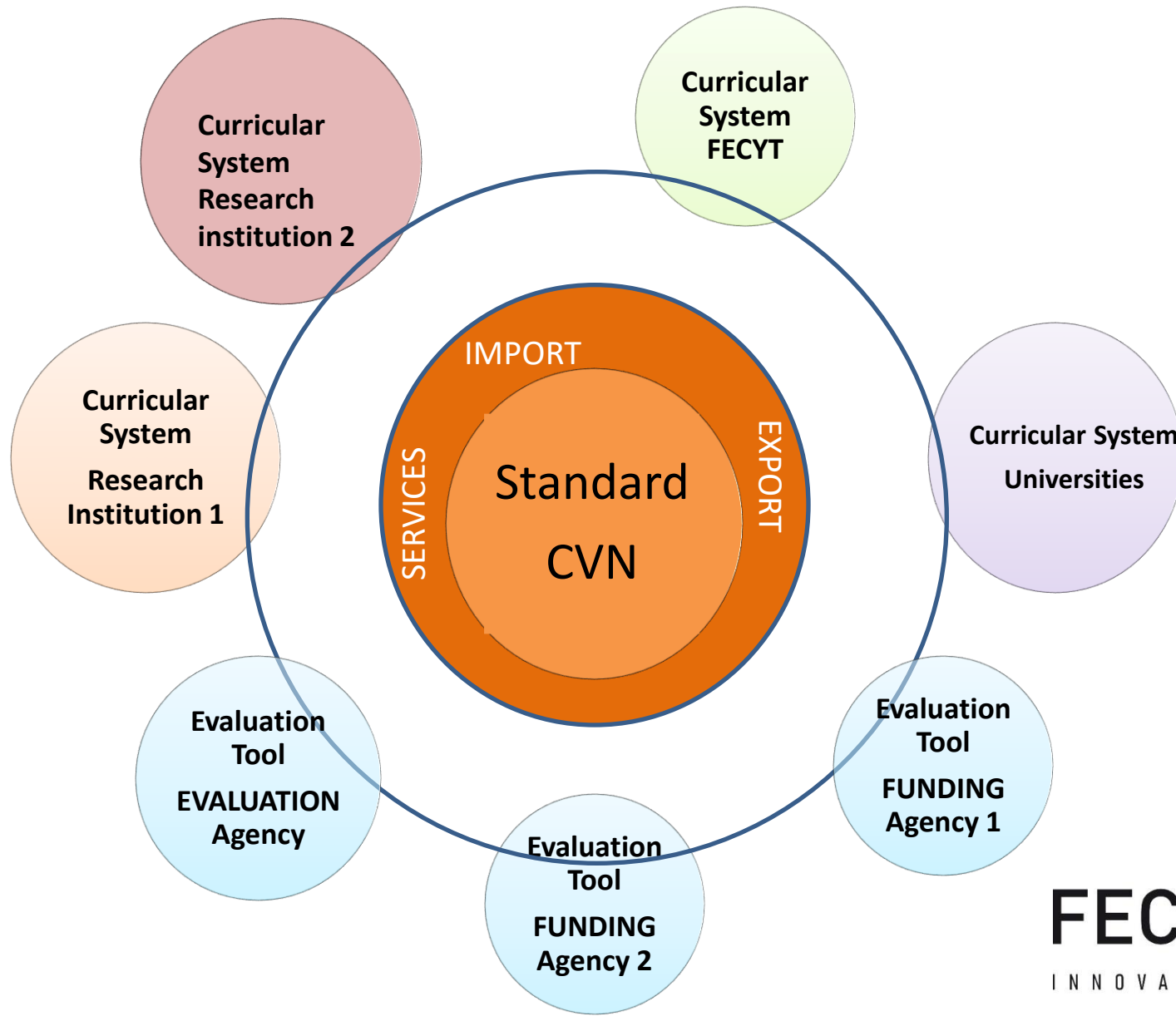
This service allows institutions **enrich curricular data of their researchers from the public CVNs**

Assessment Tool

Assessment tool of CVN that allows to improve the evaluation processes using both qualitative and quantitative researcher quality indicators and reduces administrative burdens.

— Services provided by FECYT

5. CVN ECOSYSTEM



UPCOMING CVN NEWS

CHANGE OF CVN STANDARD IN 2022:



Manual de Especificaciones Técnicas del Curriculum Vitae Normalizado

Nueva versión de la Norma CVN 1.5.0



ISBN/NIPO: e-NIPO: 831230088

Tipo de publicación: Cultura científica

Autor: FECYT

Fecha de edición: 2022

DOI: <https://doi.org/10.58121/9b05-0q45>

Cómo citar:

Spanish Foundation for Science and Technology. (2022). Manual de Especificaciones Técnicas del Curriculum Vitae Normalizado. Fundación Española para la Ciencia y la Tecnología (FECYT). <https://doi.org/10.58121/9B05-0Q45>



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The **recognition of dissemination activity and scientific communication** as a merit of the researcher has been added.

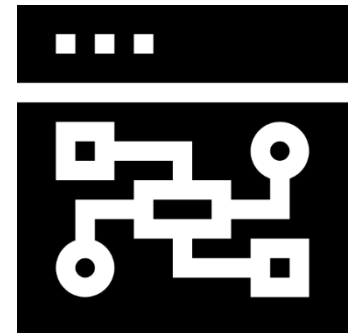
Persistent identifiers (PIDs) have been added to identify funding agencies and institutions (ROR ID).

The **COAR controlled vocabularies** for the different document types have been adopted in CVN.

Identification of publications deposited in open access so that they can be taken into account in the evaluation of researchers

- January 2024 → Update CVN editor with the new standard
→ New import and export web services

5. SUMMARY





SUMMARY:

- Spain has a legal framework that benefits the implementation of open science policy.
- ENCA 2023-2027 is the specific strategy for Open Science recently published (sep 23)
- The first ENCA action was the publication of the María de Guzmán 2023 call for proposals with 3 million for the improvement of open science infrastructures.
- Opportunity to strengthen open science infrastructure including CRIS systems as an alternative to commercial publishing models

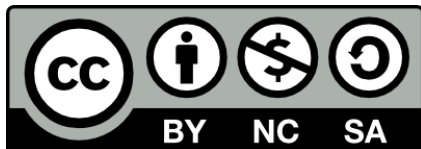


SUMMARY:

- CRIS systems need to be interconnected with institutional systems such as repositories and curriculum management systems to facilitate evaluation and reduce administrative tasks for researchers.
- Standard CVN is the way to achieve this interoperability between Curriculum management systems and CRIS systems

Thank you
@aureliaandres

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