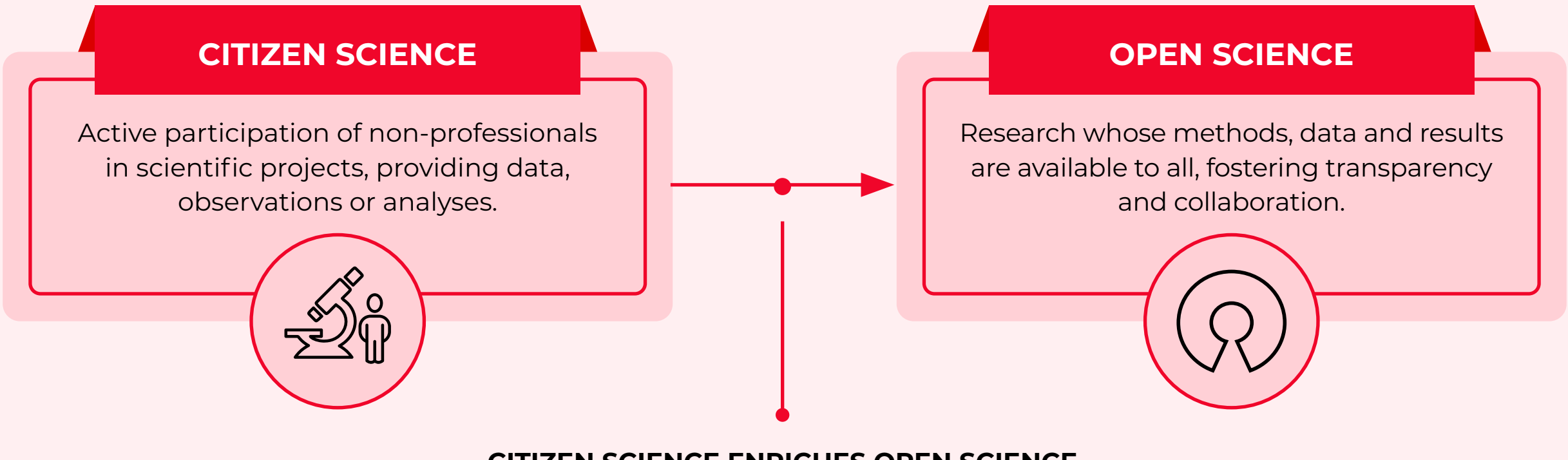


OPEN SCIENCE AND CITIZEN SCIENCE: THE BINOMIAL THAT TRANSFORMS RESEARCH

WHAT IS THE DIFFERENCE?



CITIZEN SCIENCE ENRICHES OPEN SCIENCE
BOTH NURTURE EACH OTHER AND HELP GENERATE OPEN DATA
TO ENHANCE INNOVATION AND SOCIAL IMPACT

WHY SHARE RESEARCH DATA?



Promotes innovation and the reuse of data



Enables collaboration



Maximises data transparency and reliability



Reduces costs



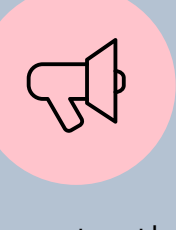
Facilitates the reproducibility of experimental trials



Allows research results to be verified



Increases impact and visibility



Promotes the research projects



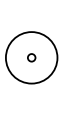
Generates recognition of the researchers

Source: report "Recommendations for research data management", [Mareadata](#)

RECOMMENDATIONS

HOW TO OPEN RESEARCH DATA CORRECTLY?

- ☒ **Design:** Develop a [data management plan](#) that covers its entire cycle.
- ☒ **Collect:** use different methods (previous bibliography, open databases, citizen science projects, etc.)
- ☒ **Prepare:** clean, structure, and document data. Include clear metadata (who, what, how, when).
- ☒ **License:** use open licenses (e.g. CC BY, CC0).
- ☒ **Publish:** upload to reference repositories.

Repositorios de datos para la investigación científica	
 Thematic	- Health. Gene Expression Omnibus - Social Sciences. Qualitative Data Repository (QDR) - Topography. OpenTopography
 Multidisciplinary	Zenodo Figshare Dataverse Dryad
 Institutional	CERN Open Data
 Search engines	re3dat

- ☒ **Disseminate:** communicate its availability in scientific and citizen channels. It is important to comply with the [FAIR principles](#)

HELP GUIDES & TOOLS

[UNESCO Open Science Toolkit](#)

[European Commission EOSC EU Node](#)

[Spanish Society of Documentation and Scientific Information \(SIEDIC\)](#)

EXAMPLES AND USE CASES

PROJECTS THAT COMBINE OPEN SCIENCE AND CITIZEN SCIENCE

Fisabio

Clinical data on mental health, cancer, etc.

Wildtel

Wildlife monitoring to obtain the essential biodiversity variables.

Planttes

Presence and state of allergenic plants in the environment.

Mosquito Alert

Identification of tiger mosquito and transmitters of yellow fever.

Discover more examples at the [Citizen Science Observatory of Spain](#)

DO YOU WANT TO KNOW MORE ABOUT OPEN SCIENCE AND CITIZEN SCIENCE?

WE TELL YOU ABOUT IT IN DATOS.GOB.ES

PODCAST

BLOG

- [How to build a citizen science initiative](#)
- [Science and innovation for public policies](#)
- [Open science and information systems for research](#)
- [Health and Data Research Groups](#)
- [Citizen Science Projects I, II y III](#)



GOBIERNO DE ESPAÑA
MINISTERIO PARA LA TRANSFORMACIÓN DIGITAL Y DE LA FUNCIÓN PÚBLICA



SECRETARÍA DE ESTADO DE DEPENDENCIA Y ENTENDIMIENTO FAMILIAR



red.es



aporta



datos.gob.es