



FACTSHEET #12

OPEN SCIENCE, CITIZEN SCIENCE AND YOUR DATA

WHY DO YOU NEED TO KNOW ABOUT OPEN SCIENCE, CITIZEN SCIENCE AND YOUR DATA?

Open science seeks to make scientific processes and results more accessible to society - and this starts with researchers. **Citizen science**, part of open science, promotes society participating in creating scientific knowledge. As such, both require the **free flow of data** and its **reuse in different research fields**. This has ethical and legal implications, especially when personal data are used. This factsheet explains how you can support this opening up of science, while considering the possibilities and restrictions established by the General Data Protection Regulation (GDPR; see factsheet #2).

KEY MESSAGES

- Under the GDPR, personal data can be **transferred within research initiatives** in Europe without restrictions.
- Citizens sharing personal data for research have the right to ask for that data to be provided in **structured, commonly used and machine-readable formats** (e.g. messages or files).
- Citizens have the right to transmit personal data collected in one process to another research initiative or platform - **without any restrictions from the initial data controller** (i.e. the first researcher).
- Personal data must therefore be provided in a way that makes it **interoperable** - the citizens' right to data portability.
- If a research initiative outside Europe wants to use your personal data, they must ensure that it will be **treated according to the same standards** as in Europe (i.e. the GDPR).

VULNERABLE PEOPLE IN CITIZEN SCIENCE

Open science and citizen science seek to democratise science, which means including a **more diverse representation of society** in research processes. In practice, this means considering different and diverse perspectives, in terms of people's ethnicity, location, gender, socio-economic and sociocultural status, and educational level,



among others. In this way, the **realities and decisions constructed from research** will be as inclusive as possible. As such, citizen science projects and research processes should **actively support the participation of vulnerable groups** in society, to reduce the biases and gaps that often arise by excluding these views.

THE EUROPEAN OPEN SCIENCE CLOUD: IDENTITY AND ACCESS MANAGEMENT

The European Cloud Initiative (bit.ly/3d5t9Gt) seeks to consolidate an economy based on data and knowledge. Among its objectives, it will make it **easier to move, share and reuse data across borders, institutions and research disciplines**. Part of this initiative is the European Open Science Cloud (EOSC) (bit.ly/3qkunTv), a virtual environment that will give the scientific community access to data and services. These include **identity and access management services** that will help ensure the correct management and portability of personal data between technological platforms. Authenix, for example, allows you to use a single authentication (OpenID) to identify yourself across multiple platforms (bit.ly/3jb00AN).

WHAT YOU CAN DO

- If you participate in, or contribute data to a research project, ask: If my personal data is transferred to another project, how will you facilitate this? What practices will you implement to ensure that my data is interoperable? Do you plan to share my personal data with other research initiatives, within or outside Europe?
- If the research requires transferring the data outside of Europe, ask the project leaders to ensure that they will ensure compliance with the GDPR.
- If you use citizen science platforms, ask if they use an authentication service (see case study) that complies with the GDPR.

FIND OUT MORE

READ: Useful documents include the European Open Science Policy (bit.ly/3gLnDLj), 'Inclusiveness and diversity in citizen science' (bit.ly/3vOleUA), this guide to data protection in human research (bit.ly/3qo5fLU), which is available in English, Spanish and Basque.

WATCH: This workshop from the European Citizen Science Association discusses inclusivity in citizen science: bit.ly/2TU03l0

HOW TO CITE



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