ENVRI-Hub-NEXT

General Ethical Considerations

Core Considerations

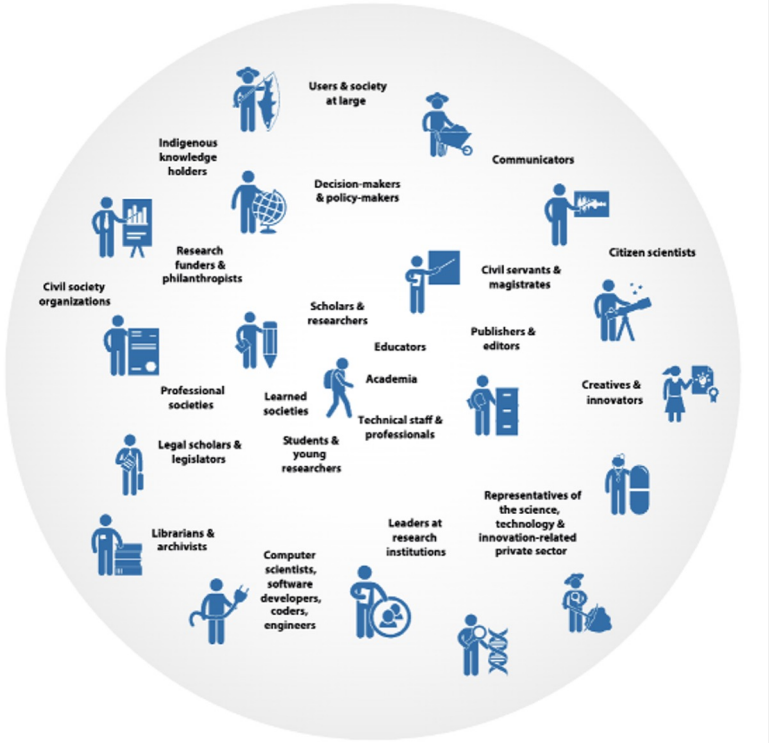
- Ethical areas
  - **Open Science** – EOSC and UNESCO commitments
  - **Integration of data** – generation and reuse of data
  - **AI and advanced processing** – reuse and processing

- Design
  - **AI** (AI will be used in datasets processing);
  - **Data** (a wide range of research data will be collected and processed, including personal data);
  - **Humans** (key stakeholder groups are involved in the co-creation of the ENVRI-Hub through coordinated interactions, including surveys, consultations, collection of user feedback, etc.).

Open Science

- **UNESCO Recommendation on Open Science**
- Signed in 2021 by all partner states
- “Open science is a set of principles and practices that aim to make scientific research from all fields accessible to everyone for the benefits of scientists and society as a whole. Open science is about making sure not only that scientific knowledge is **accessible** but also that the production of that knowledge itself is **inclusive, equitable and sustainable**.”

Open Science (2)



es of open science actors. *Icons: Gan Khoon Lay, Miroslav Kurdov, Adrien Coquet, Wynne Nafus Sayer, courtesy of The Noun*

Integration of Data

- **European Code of Conduct for Research Integrity**
- Present research goals and intentions in an honest and transparent manner
- Design research carefully and conduct it reliably, taking its impact on society into account
- Use appropriate research techniques and methodologies
- Ensure objectivity, accuracy and impartiality when disseminating the results

https://tinyurl.com/p62savbz

Integration of Data and AI

- **General Data Protection Regulation**
- Rules for how organizations handle personal data and strengthens individuals' control over their data
- Focus on EU citizens, but applies to organisations outside the EU who deal with EU citizen data
- Increasingly aligned with personal data protection acts from non-EU countries

Integration of Data and AI (2)

- **(EU) 2021/821**
- Dual-use (1): dual-use items are goods, software and technology that can be used for both civilian and military applications
- Dual-use (2): beneficial research that can be misused by third parties for nefarious purposes

AI and Advanced Processing

- **Ethics by Design and Ethics of Use Approaches for AI (EC)**
- **Respect for Human Agency**: human beings must be respected to make their own decisions and carry out their own actions. Respect for human agency encapsulates three more specific principles, which define fundamental human rights: autonomy, dignity, and freedom;
- **Privacy and Data governance**: people have the right to privacy and data protection, and these should be respected at all times;
- **Fairness**: people should be given equal rights and opportunities and should not be advantaged or disadvantaged undeservedly;
- **Individual, Social and Environmental Well-being**: AI systems should contribute to, and not harm, individual, social, and environmental well-being;
- **Transparency**: the purpose, inputs and operations of AI programs should be knowable and understandable to its stakeholders;
- **Accountability and Oversight**: humans should be able to understand, supervise and control the design and operation of AI-based systems, and the actors involved in their development or operation should take responsibility for the way that these applications function and for the resulting consequences.