A *multidimensional* strategy for Open Access

Convegno «Scienza aperta per una ricerca migliore»
5-7 marzo 2015, Roma
Università degli Studi di Roma La Sapienza

Ilaria Fava – Maurizio Lancia – Lisa Reggiani - Massimiliano Saccone - Luciana Trufelli
CNR – Consiglio Nazionale delle Ricerche

Consiglio Nazionale delle Ricerche

OPEN ACCESS

Open Access and Scholarly Communication: **the benefits**

- More and better **sharing** of resources, infrastructures and instruments/tools, services and outcomes
- More **transparence** of processes
- More **efficiency** and **effectiveness** of processes
- More **quality** of outcomes

Open Access and Scholarly Communication: **a possible way**

In order to do so…

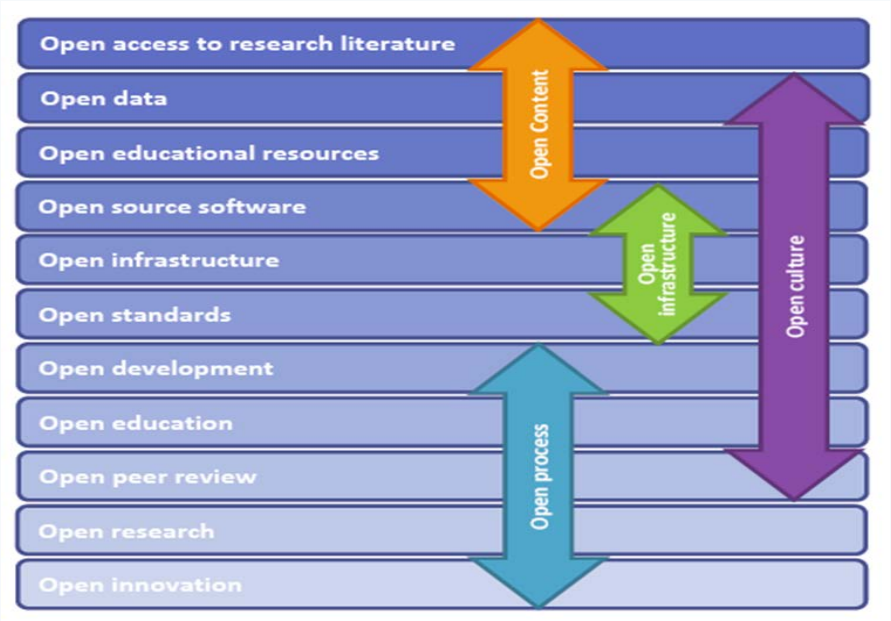
It is necessary to define:

- The conceptual framework and methodology;
- The fundamental processes in R&D system, with particular attention to those of scholarly communication (in which we should intervene);
- A common language among stakeholders and research communities that can go beyond peculiarities of individual entities (institutions/companies/persons) and groups (disciplinary and/or national communities, teams, research networks and communities…)

Open Access and Scholarly Communication: **a methodological proposal**

The reference framework of Open Access and scholarly communication is complex and heterogeneous, and presents many different aspects:

- *multidimensionality*: it affects different sectors and settings of intervention developing on different levels (macro, meso, micro);
- *interdisciplinarity* and *multidisciplinarity*



From: Surf Foundation -
Open as a standard for higher education and research - The various forms (horizontal) and levels (vertical) of 'Open'

OPEN ACCESS

Open Access and Scholarly Communication: **a methodological proposal**

Multidimensionality, *interdisciplinarity* e *multidisciplinarity* characterise the **method** in this reference framework, by:

- Identifying the different stakeholders (researchers, policy makers, ICT and information specialists, citizen, industries, libraries, etc.), and their related purposes and strategies;
- Identifying and knowing the different information and cultural contexts, practices, approaches, channels and specific jargons (technical jargon);
- Identifying and using consistently the instruments/tools that allow to plan and manage the actions in the R&D system on multiple levels and in different intervention areas (International, European and National policies and programmes, guidelines; laws & rules; institutional regulations; agreements, contracts, etc.);
- Verifying the interventions implementation and their effectiveness at different levels (macro, meso, micro), through monitoring and evaluation systems: political, economic, cultural, social, scientometric and technological analysis (macro); scientometric, organisational, management, economic, financial analysis (audit, process monitoring, analysis of Knowledge Transfer, etc.) (meso); performance, target and context indicators, etc. (micro);
- As a consequence, guiding the choices on strategies, instruments, actions on different levels and environments on the basis of the analysis previously carried out (by confronting and relating results)

Open Access and Scholarly Communication: **identification of key processes**

Open Access affects the overall life cycle of scientific information, from its creation and production to publication/reuse of research results.

It deals directly with evaluation, influencing not only scholarly communication and information system, but the whole R&D system.

Evaluation = cross-process (ex ante, in itinere, ex post)

Open Access: **act on processes**

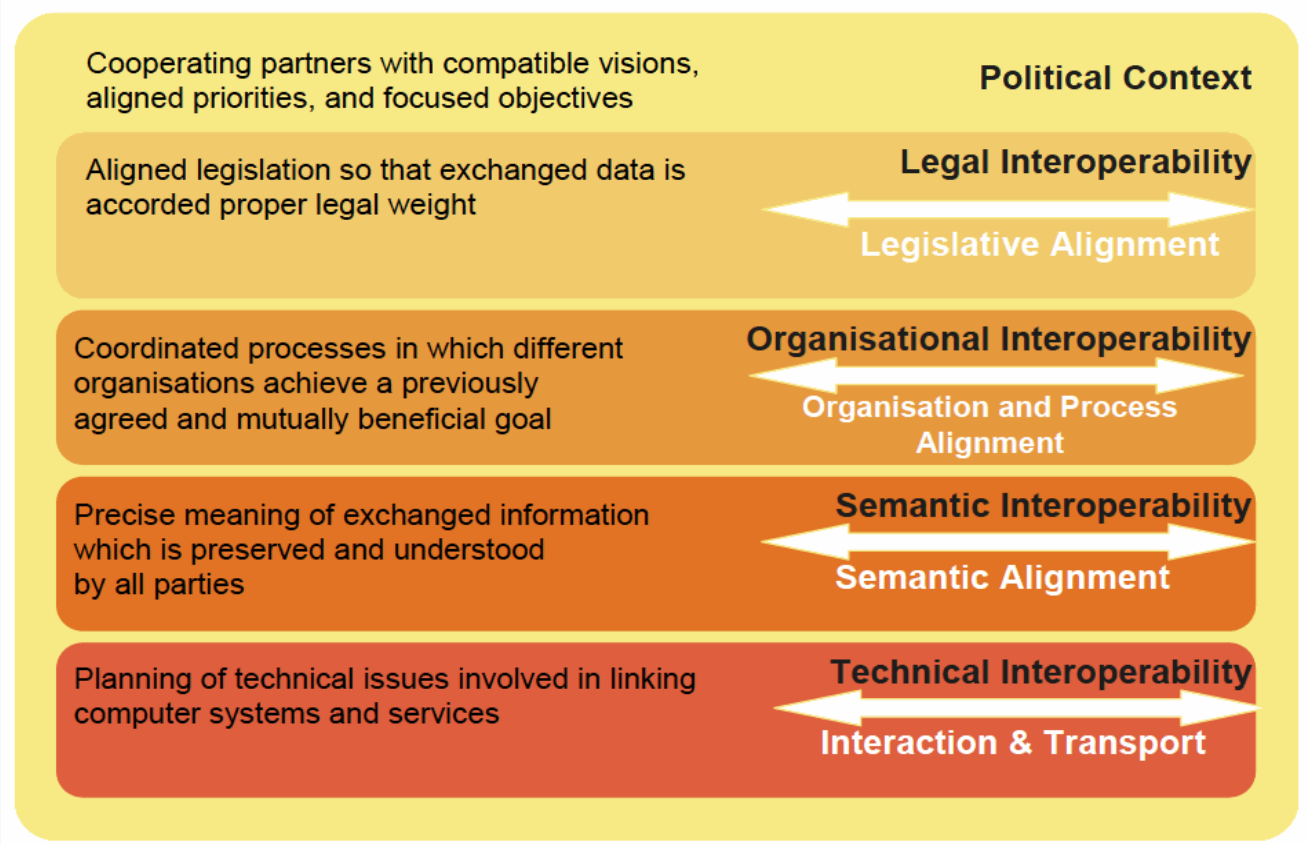
In primis

To define a common framework → *interoperability*

It is necessary to define a *common and open multi-level framework* for open access initiatives

- in which main stakeholders and different research communities can share objectives, resources, infrastructures, instruments/tools, services and results
- that allows to programme and to monitor the wide range of actions in many areas and contexts put in place to carry out concretely OA principles and strategies.

Open Access:
the need for multi-level interoperability



European Interoperability Framework (EIF)

Open Access: **act on processes**

Areas of intervention

Political and economical level: to understand and harmonise objectives and interests of different stakeholders and to define programmes and policies – including those at economical-financial level - that are necessary in order to develop a shared reference framework.

The political action should clearly identify strategies, priorities and common goals that must be shared by all the involved stakeholders;

Legislative/regulatory and legal level: to define a harmonised legal framework in which resources, instruments/tools and infrastructures, services and results can be managed, shared and used. In this environment specific legal instruments & tools can be defined (contracts, agreements, use licenses, etc.) in order to allow the implementation of current legislation;

Organisational (institutional and inter-institutional) level: to cooperate in order to achieve their mutually agreed goals. In practice, organisational level requires integrating business processes and related data and information exchange. Organisational level aims also to meet the requirements of the user community by making resources, instruments/tools and infrastructure, services and outputs available, easily identifiable, accessible and user-focused;

Technical-technological level: to plan the technical and technological issues involved in linking computer - information systems and services

Cultural, linguistic and semantic

***Sharing* is the basis of the above mentioned actions**

Open Access: **the need for a shared language**

This ideal approach requires a shared language among different linguistic-cultural contexts and among different stakeholders

→ it is necessary to identify some fundamental and recurring key-concepts in research and development information system.

It is essential to find shared or (at least) convergent definitions on these terms. Here are some *focus keywords* examples:

scholarly communication, scientific communication, scholarly information, scientific information, open science, open access, interoperability, policy, infrastructure, publication, research data, data set, data collection, big data, curation and/or preservation, etc.

Open Access: **the general context**

International and EU framework

- Scientific communities, that are able to organise themselves independently and build complex systems based on OA;
- National policies and actions for OA (USA, UK, Germany, Portugal, Spain, and so on);
- EU programmes, policies and initiatives (Communications and Recommendations, Digital Agenda for Europe, FP7, H2020, etc.);

Italy

- Legislative decree August 8th, 2013, n. 91 co-ordinated with the conversion October 7th, 2013, n. 112 reporting on «Disposizioni urgenti per la tutela, la valorizzazione e il rilancio dei beni e delle attività culturali e del turismo.»;
- MIUR (Ministry of Education, University and Research) initiatives (Horizon 2020 Italia, working group on OA, National Points of Reference (NPR) - Open Access Policies, Institutional actions, SIR programme, etc.);
- Universities and Research Institutions initiatives (Position Statement, CRUI/CUN initiatives, institutional policies, etc.).

Unfortunately, National situation on OA is strongly afflicted by interest groups resistance, actions fragmentation and poor harmonisation

Italy: **some open issues**

How can harmonisation of efforts and results implementation be reached at a National level?

What kind of initiatives should be useful in order to inform or make aware on OA the main actors in the political and R&D environment?

How should instruments/tools for OA be planned, developed and used in an effective way, on every level and in every context?

Is it appropriate to use continuous monitoring & improvement systems?

What do you think we should do practically?