

### 3.7.4 Details on the Mandated Organisation

ICDI (Italian Computing and Data Infrastructure) is the Italian Mandated Organisation in the EOSC Association, appointed by the Italian Ministry of Research, encouraging and extending Italian participation in EOSC and the development of National Initiatives consistent with EOSC. ICDI started as a collaboration agreement between the most important research organisations such as the CNR, INFN, ENEA, CINECA, INGV, Elettra, INAF, OGS with the aim to collaborate in new projects and to coordinate their participation in EOSC. Thanks to ICDI, Italy plays a leading role in the development of the EOSC, since ICDI was one of the four founding members of the EOSC Association AISBL.

ICDI currently has the form of a MoU<sup>41</sup> signed by 17 organisations, but more are joining and the plan is to set up a legal entity by the end of 2021. Albeit in a preliminary form, they have set up basic governance and representation and kickstarted several activities. In the meantime, GARR, the Italian NREN, is representing ICDI in EOSC as the Mandated Organisation for Italy. Actually ICDI is managed by a General Assembly formed by two representatives from each partner of the MoU.

Besides the MoU participants, ICDI mobilizes a wide community which includes most of the representatives of Research Infrastructures and e-Infrastructures of national interest<sup>42</sup> as well as the Italian delegates in ESFRI and the representatives in the EOSC Steering Committee. The activities towards this wide community include convening periodical meetings, offering training and information related to OS and EOSC topics, and carrying out consultations.

ICDI is planning to manage a national e-infrastructure serving all the Italian research and academic institutions. Its access method as well as its service portfolio has still to be defined: an internal task force is analysing methods and opportunities. The infrastructure aims at federating resources and services belonging to different administrative and scientific domains and plans to federate its services with other organisations, mostly using common APIs, AAI solutions, and a common service catalogue.

In the long term, ICDI aims to create a national coordination body that is representative of Italian infrastructures and interacts with national and European institutions on their behalf.

To promote community engagement, ICDI set up some task forces dedicated to topics of interest to the Italian community<sup>43</sup>:

- the Italian Federated Cloud Platform Task Force to develop a strategy and identify adequate technical solutions to create a federated cloud dedicated to research on a national scale;
- the Italian Competence Center for EOSC Task Force<sup>44</sup> to set up a national Competence Center and a platform to federate, coordinate and further disseminate the existing competences within Research organisations, Infrastructures and Universities that are part of the Italian Open Science community.

<sup>41</sup> The MoU was started in January 2020 and has a duration of five years

<sup>42</sup> see the members' list at <https://www.icdi.it/en/about/members>

<sup>43</sup> <https://www.icdi.it/en/activities>

<sup>44</sup> <https://www.icdi.it/en/activities/tf-cc>

- the Clinical Data Management Task Force<sup>45</sup> to build a support platform among the infrastructures for the management of clinical data, with a special focus on data related to COVID-19, contributing to the European COVID-19 platform, and creating a Proof of Concept that can be used for sharing biomedical data relating to other pathologies.

ICDI is responsible for collecting information on specific topics related to Open Science and EOSC activities, both on its own initiative and in response to requests from the MUR and the Italian delegations in ESFRI and EOSC, with the aim of improving the knowledge of the scenario of Italian research and digital infrastructures. A recent example of this documentation action is the survey on free access to infrastructural resources for research on SARS-CoV-2 and COVID-19 in Italy.

Moreover, ICDI sets up Shadow Working Groups, composed of experts, who are discussing and providing feedback to the Italian delegates participating in the EOSC Advisory Groups. This activity allows the ICDI community to share the strategies and directions of the EOSC and to create a virtuous mechanism of bottom up participation.

The National Plan for Research Infrastructures and the National Plan for Open Science (NOSP), integrated in the new National Research Programme 2021-27 [7] of the Ministry of Universities and Research, recognizes the role of ICDI to create the conditions for Italy's full participation in European and international open science processes.

The NOSP involves the whole research network, the Research Infrastructures, the public research and universities at large to:

- adopt advanced management of research data and services needed to extract knowledge from the data and to support computing and networking needs;
- support the training and recruitment of qualified data scientists for the development of architectures and services, and of data stewards for the curation, description, identification and archiving of datasets;
- encourage the adoption of Data Management Plans (DMPs) for the management of legal aspects, contributing to the implementation of the EOSC<sup>46</sup>;
- disseminate methods and protocols for data, archives and services quality and for the regulation of ethical and legal aspects.

The NOSP supports the ICDI Competence Center, as a driving and coordinating hub for training initiatives in all aspects of open science, as an essential activity for the full involvement of the national scientific community into EOSC.

So far all the ICDI activities are done as in-kind contributions, and each organisation is supporting their persons on a voluntary basis. The plan is to set up a staff that could be dedicated to carry on the different activities, also in relation to the implementation of the NOSP.

<sup>45</sup> <https://www.icdi.it/en/covid-19>

<sup>46</sup> Implementing the EU Directive 2019/1024 of 20 June 2019 on the openness of data and re-use of public sector information and, in particular, Article 10 specific to research data