A legacy plan and an innovative access framework for the next decades of Italian geoscientists involved in scientific drilling: the role of ECORD/IODP-Italy in the ITINERIS project

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In the framework of the Research Infrastructures (RIs), scientific drilling represents a globally ranging, distributed RI that generates a wide variety of subsurface data. The ongoing project “Italian Integrated Environmental Research Infrastructures System (ITINERIS)” aims at building the Italian Hub of RIs in the environmental scientific domain by coordinating a network of national nodes from 22 RIs, including the Italian participation in the European Consortium for Ocean Research Drilling (ECORD) and in the International Continental Scientific Drilling Project (ICDP). The main goal of ITINERIS is to promote cross-disciplinary research in environmental sciences through the use and re-use of existing (or pre-operational) data and services and new observations, and to address scientifically and societally relevant issues.

The impact of ITINERIS on the Italian geoscientists involved in scientific drilling is twofold. First, it will improve the access to both the ECORD and the ICDP infrastructures. This will result in increasing the national participation in terms of proposal writing, drilling expeditions/projects, initiatives to use legacy samples/data, and training activities. Secondly, it will allow to collect and systematize the great amount of data produced by Italian scientists in the past scientific drilling programs (DSDP-ODP-IODP). This will facilitate the data handling and interoperability approach. A thematic digital archive of ECORD/ICDP-related data will be provided within the following thematic areas: micropaleontology, petrology, elemental and isotope geochemistry, paleomagnetism, stratigraphy/lithology, structural geology, borehole geophysics and site survey. This structured and
accessible scientific dataset will represent a milestone for further implementation following FAIR data principles and best practices for ongoing and future drilling projects. Further developments of this digital archive might also serve as an additional tool to be integrated within the SPARCs initiative of IODP\textsuperscript{3}. 