SDI4URD – Results

SDI4URD has built a Spatial Data Infrastructure (SDI) that supports scholars from the Urban regions in the Delta programme and other programmes within Verdus (Verbinden van Duurzame Steden) to develop knowledge for sustainable spatial planning and integral spatial development for urban networks by giving access to reliable geographical information. An SDI is defined as a system of data sets, agreements, standards, technology (hardware, software and electronic communication) and knowledge providing the different users with geographic information (in the widest sense) needed to carry out a specific task. The urgency of building such an infrastructure is widely recognised, not only by Dutch experts (participants of Verdus, Urban Regions in the Delta) in the field, but also in international (science) policy frameworks, and the INSPIRE directives regarding the interoperability of spatial data sets and services (2011).

The SDI is necessary for better exploring, exchanging and combining the increasing amount of digital data and information about the Urban Regions in the Delta, and for making new connections and comparisons by cross-cutting existing boundaries between different disciplines, time periods and geographical areas.

The SDI aims to alleviate the following challenges:
a) the digitisation of information and distribution of data is often done without the needs of the researchers in mind
b) data does not equal useful scientific information
c) the "digital landscape" is of a fragmented nature. Data and models are stored and managed in an inaccessible and dispersed way by a large number of individual researchers, research units, institutions and organisations for academic, governmental and commercial purposes.
d) the supply of data, information and models is insufficiently adapted to the demands of modern research "between" the disciplines.

Although the amount of digital landscape data has grown considerably in recent years, the basic ontology and structure of datasets and digital information are still specific to the discipline or sector involved in producing the data. In addressing these, SDI4URD has implemented search, view, download and upload facilities that allow researcher to easily look for relevant geographical information, publish research results through interactive maps and exchange data with fellow researchers in order to look into each other's "silos". All developments were planned and implemented in close cooperation with researchers and practitioners in an iterative and open process, always putting the users first. In this light SDI4URD assisted in the execution of workshops and streamlining of the ideation phase by deploying and configuring a smart table in a serious design game and by implementing a digital dashboard prototype that acted as a plaything during discussions, respectively.

Efforts were exerted to implement organisational measures for sustaining the infrastructure in the long-term on a national basis and in line iith intemational standards and initiatives Efforts were exerted by following intemational data exchanqe standards and complying to the European INSPIRE directive.SDI4URD has built a Spatial Data Infrastructure (SDI) that supports scholars from the Urban regions in the Delta programme and other programmes within Verdus (Verbinden van Duurzame Steden) to develop knowledge for sustainable spatial planning and integral spatial development for urban networks by giving access to reliable geographical information. An SDI is defined as a system of data sets, agreements, standards, technology (hardware, software and electronic communication) and knowledge providing the different users with geographic information (in the widest sense) needed to carry out a specific task. The urgency of building such an infrastructure is widely recognised, not only by Dutch experts (participants of Verdus, Urban

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