# Open Spatial Data Infrastructures

Instructors:

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Target audience: University and PhD students in fields related to geomatics; staff from National Mapping Agencies, public authorities and interested third parties involved with spatial data infrastructures and open data.

Introduction: In today's information societies with big data as one of the major opportunities and challenges, there is an important role to play for Spatial Data Infrastructures. They can provide the means to organize and deliver core geographies for many challenges at different administrative levels. The paradigm of data availability is changing; there is a huge increase in the tracking and availability of real-time data. It is now recognised that this data is no longer just for mapping and delivery, but for integration, analytics, modelling and aggregation – capable of providing more informed decision making. At this moment, these infrastructures facilitate more and more the accessibility to open spatial data and provision of open services. In this context, Open Spatial Data Infrastructures (Open SDI) refers to relevant standards, technologies, policies, and institutions necessary for opening the open data and services, including Open Government Data (OGD).

Course objective: This introductory course aims to provide a comprehensive overview on the state-of-the art in Open SDI and its key components, and introduce participants to the underlying principles of Open SDI, and let them experience hands-on what it means to establish and maintain an Open SDI. A number of topics will be tackled: spatial data infrastructures as well open data principles, key standards, architectures, (network) services, relevant EU-regulations and policies, governance strategies, and key institutions. At the end of the course, participants are: informed about Open SDI strategies around the world, aware of the main strengths, weaknesses, opportunities and threats of Open SDI, familiar with the latest technological developments, capable to facilitate the opening of open data using latest developed tools, and able to evaluate Open SDIs.
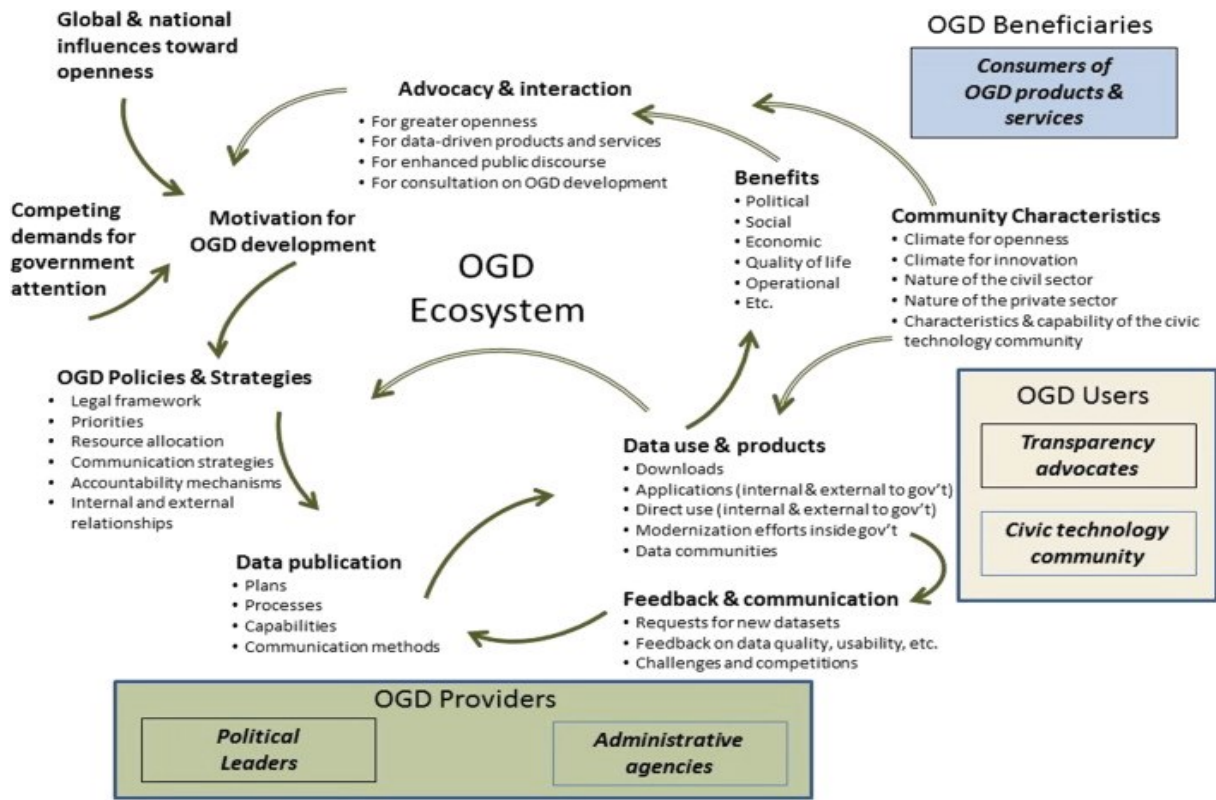
Open Government Data Ecosystem (Dawes et al. 2016)

Course outline: This course provides an overview of issues related to Open SDI. The pre-course seminar in Barcelona will introduce the basic concepts of Open SDI, its key components, and practices. The e-learning part of the course will involve more theoretical concepts and practical exercises / assignments related to regulations, policies, governance, standards, architectures, and (network) services. Support from the instructors will be available through the Internet.

Module 1: Introduction to Open SDI
The module introduces the participant to the basic concepts – principles – of Open SDI, and its contexts, trends, objectives, components, and practices.
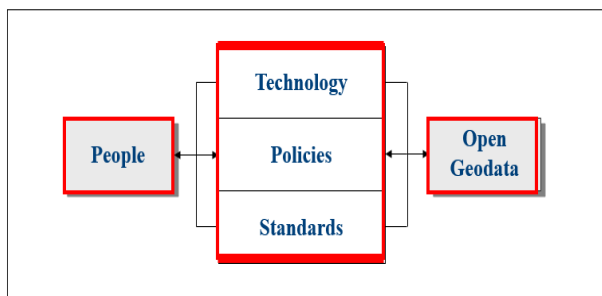
Module 2: Non-technological aspects of Open SDI

The module focuses on the non-technological aspects of SDI including key legislation, policies, governance strategies, business models, and assessment approaches.
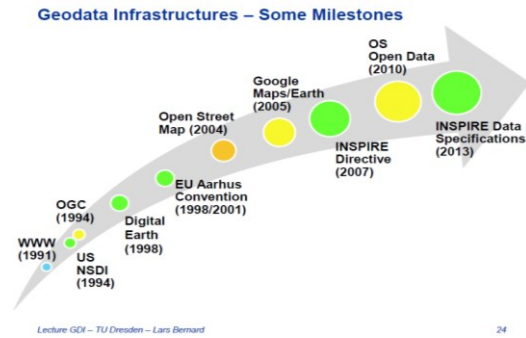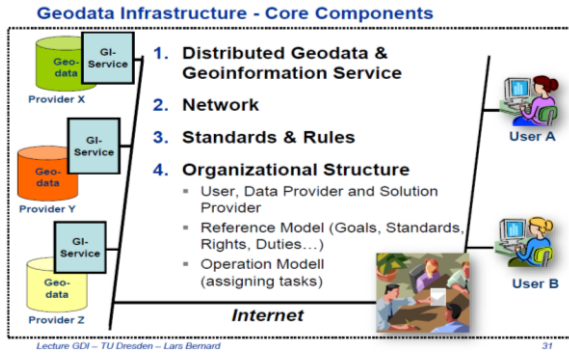
Module 3: Technological aspects of Open SDI

The module focuses on the technological aspects of Open SDI including key standards, networks, architectures, and geo-information services.