Practical exercise 1

- What we are looking for?

Mozambique geomorphological Map

- Where to start?

Search on a website containing the necessary information.

Ex:https://esdac.jrc.ec.europa.eu/ESDB_Archive/EuDASM/Africa/index.htm

Title: Mozambique Geomorphologic Map.

Author: Mr Igor V. Bondyrev

Publication year: 1983

Publisher: People's Republic of Mozambique.

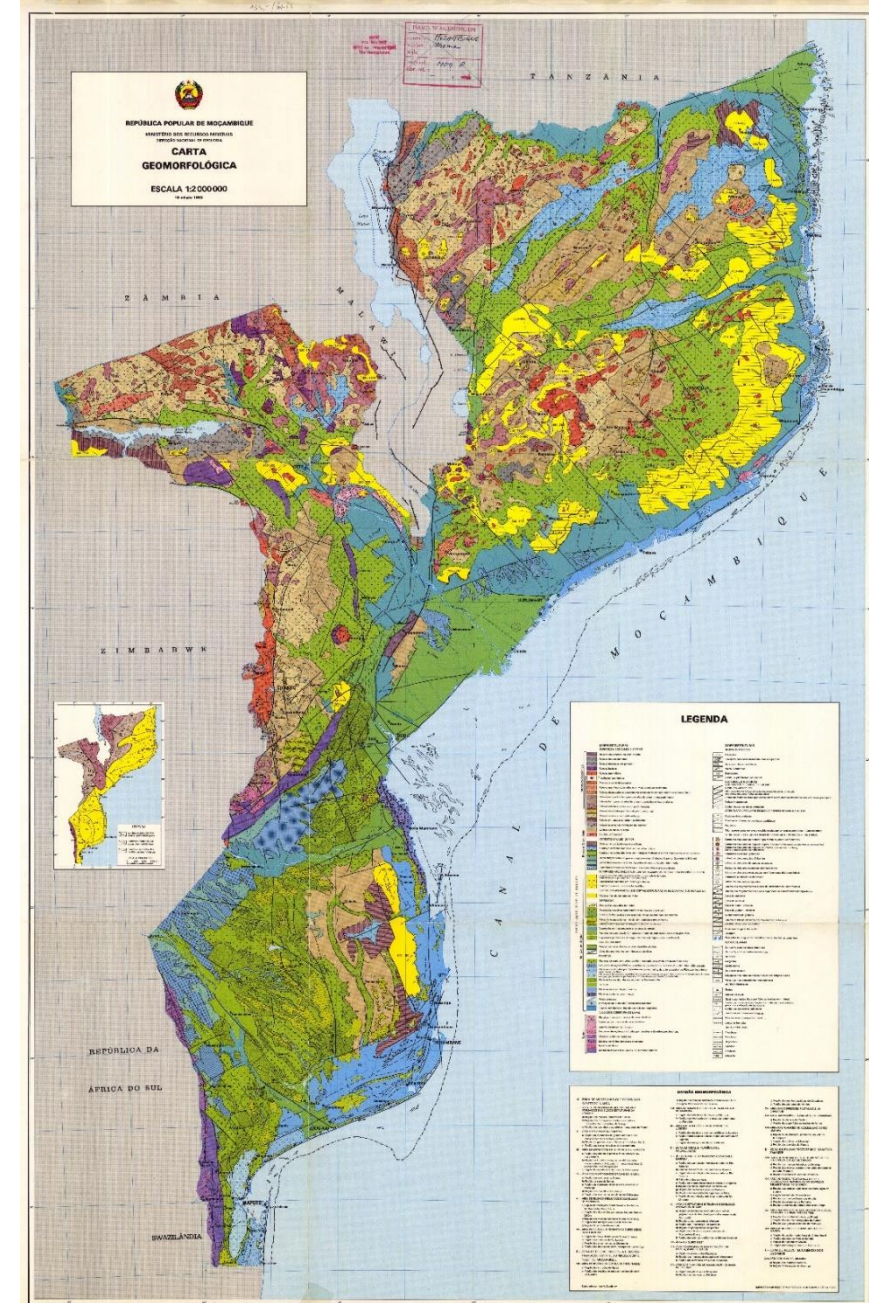Printing: Esselte map service, Stockholm, Sweden

Language: PT

Geographic Coordinates: Latitude:S10°30 — S26O55

Longitude: E30°15 — E40O50

Scale: 2,000,000

Keyword(s): Physical geography; Topography, geomorphology

SDI:

"The technology, policies, standards and human resources required to acquire, process, store, distribute and improve the use of geospatial data, services and other digital resources" (Hu & Li, 2017)

Characteristics

Allow for the discovery, evaluation and efficient **use** of geospatial data

Data and attributes, documentation ('metadata'), visualisation and evaluation

Linking geospatial information repositories

Facilitating the exchange of data between stakeholders

Allows the data to be collected and reused for different purposes

Interface... This allows?

Consultation of the database on the basis of the information provided by the user on the web interface

Transparency and usability

Data input

Presentation of results

Quick searches/extended search ("expert mode")

Advanced search and main metadata components to easily assess search results

GeoDCAT-AP — is one for platforms (European geo-portal) for spreading metadata using ISO 19115/19119 and respective XML- (ISO 19139)

Definition: A website that serves as the starting point for accessing, on or on other sites, the wide variety of information or services organised by topics or areas of interest.

Is a key component of a SDI

'... the means by which users access the information available [in the IDUs]' (Van Loenen et al., 2010)

Some definitions and features:

"A geportal can be defined as an entry point on the Internet or on the intranet with metadata, GI search, display, GI download, broadcasting, and in some cases, geospatial services order" (Giff et al., 2008).

Some definitions and features:

"They are not a repository where data are simply stored but can be considered as a one-stop-shop *for geospatial data from many organisations"* (Crompvorets et al., 2016)

Used both by:

Governmental organisations

Private bodies

Geoportal

Two different Geoportals types (or generations) (Magire & Longley, 2005)

High-level portals (1st generation)

Organisation and management of access to spatial information

Web portals with applications (2nd generation)

Simultaneous access to metadata and effective services

Access of both SGI and browser (mobile) programmes

Not all Geoportals has the same function

Inform the general public (applications and utilities vs. provide raw data)

Geoportal

Geographically, there are different political levels, ranging from municipal level to global initiatives

Geoportal often serves a specific target group or community

But...

Increased demand for interoperability and comparability of spatial data

Geoportal as an access point for interoperable data and services

Web services

Applications

Standards are crucial for interoperability of data and services

Standards for file formats, projections, metadata, etc.

Interoperability

National, regional and thematic portals and
researchers related to a specific organisation or
project

Risk of publishing the same set of data several
times!

E.g.: INSPIRE
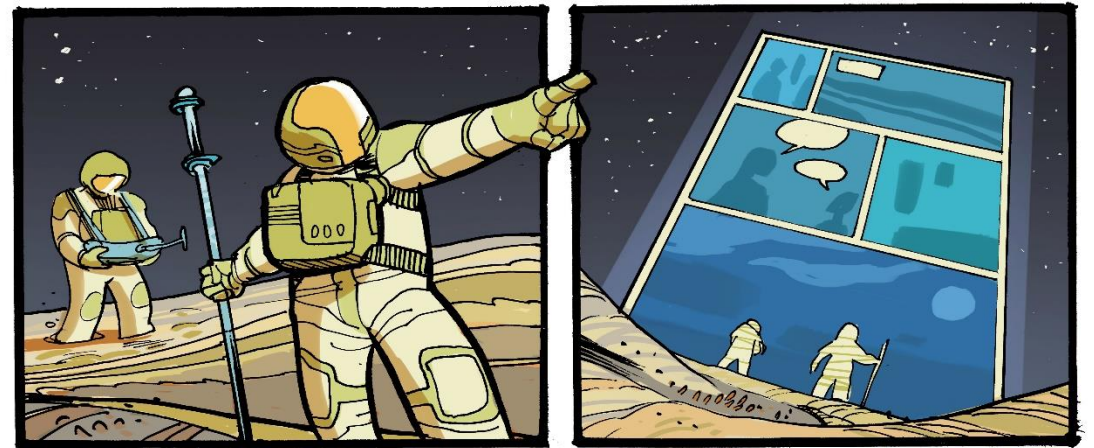
Linking the data to the European portal is a
requirement

But the creation of a national portal is not mandatory

Geoportal

'Complete systems [interfaces] that offer not only information but also how the user (s) are to be used efficiently' (Van Loenen et al., 2010)

The discovery of existing geospatial resources is one of the main functions of an geoportal.

The identification and discovery of these resources is often following 'binding and binding' standards (e.g. Magire & Longley, 2005; HU & Li, 2017)

The (target) data and services are published on a geoportal

User search in Geoportal to find certain data(sets)

The users consume the data and the services of the providers ("binding").

Examples of actions on a geoportal:

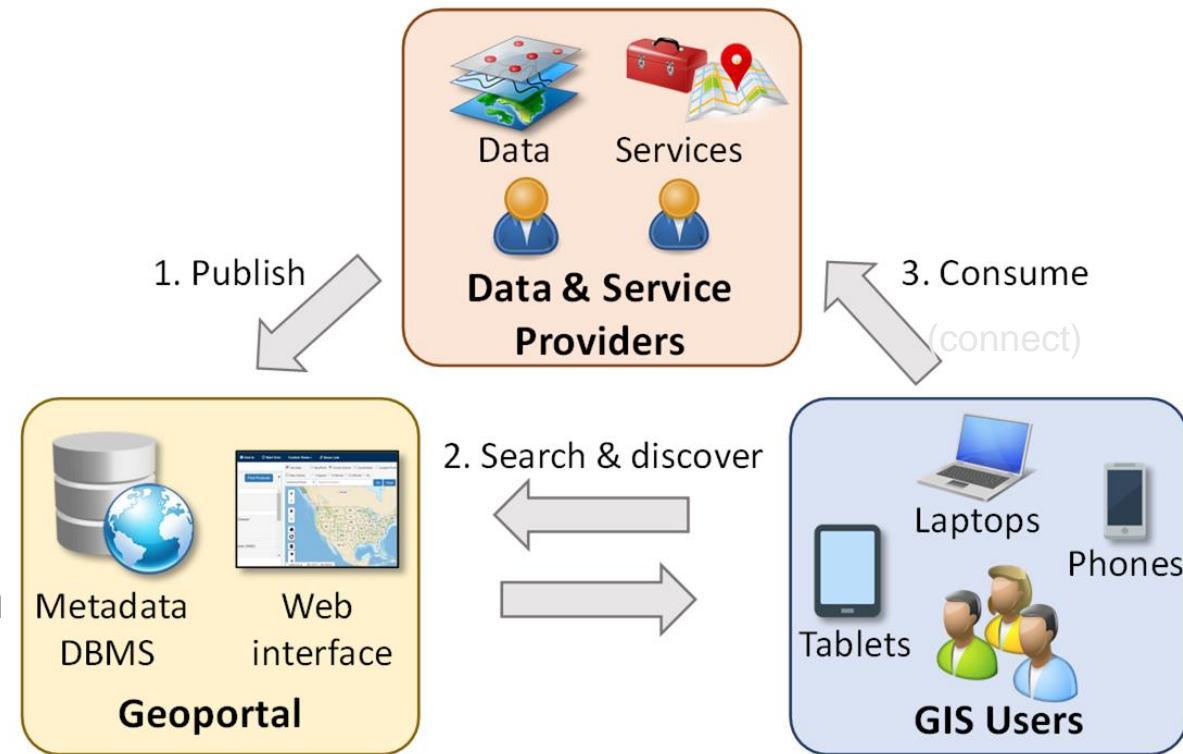Search and discover (find)

Consume (connect)

Search and discover

Search functionalities

Metadata quality

Connection to a thesaurus (compilation
of the thesaurus of a language or a
knowledge area).

Search, find, bind paradigm

Group on Earth Observation

"A partnership of more than 100 national governments and more than 100 participating organisations envisaging a future where decisions and actions for humanity are transmitted through Earth observations in a coordinated, comprehensive and sustained way [...]"

[.........] is establishing a Global Earth Observation System of Systems (GEOSS) to better integrate observation and data sharing systems by connecting existing infrastructure using common standards (Earth observations org, 2018)