

Spatial Data Infrastructure for Pegaso



Module 1: First Steps on SDI Index and general introduction

Week 1
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Pegaso project

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General Introduction

General Introduction to SDI

General Introduction. Definition I

What is an Spatial data infrastructure (SDI)?

It's the union of:

- Geographic data
- Metadata
- Users
- Tools

Which are connected in order to use spatial data in an efficient and flexible way

General Introduction. Definition II

“An SDI is a coordinated series of agreements on technology standards, institutional arrangements, and policies that enable the discovery and use of geospatial information by users and for purposes other than those it was created for.”

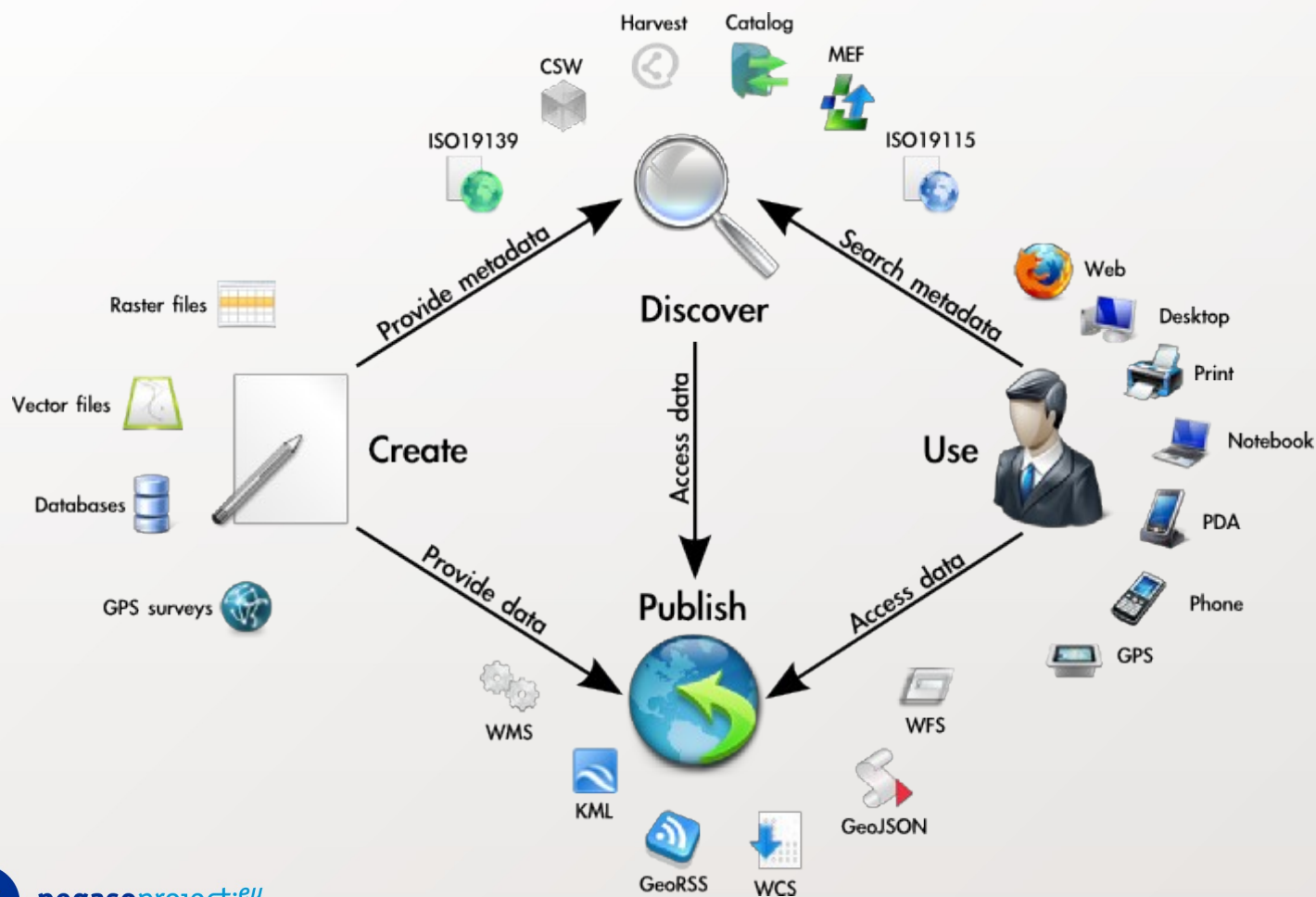
Kuhn, 2005

“An SDI is often used to denote the relevant base collection of technologies, policies and institutional arrangements that facilitate the availability of and access to spatial data”

Nebert, 2004

General Introduction.

General schema of SDI



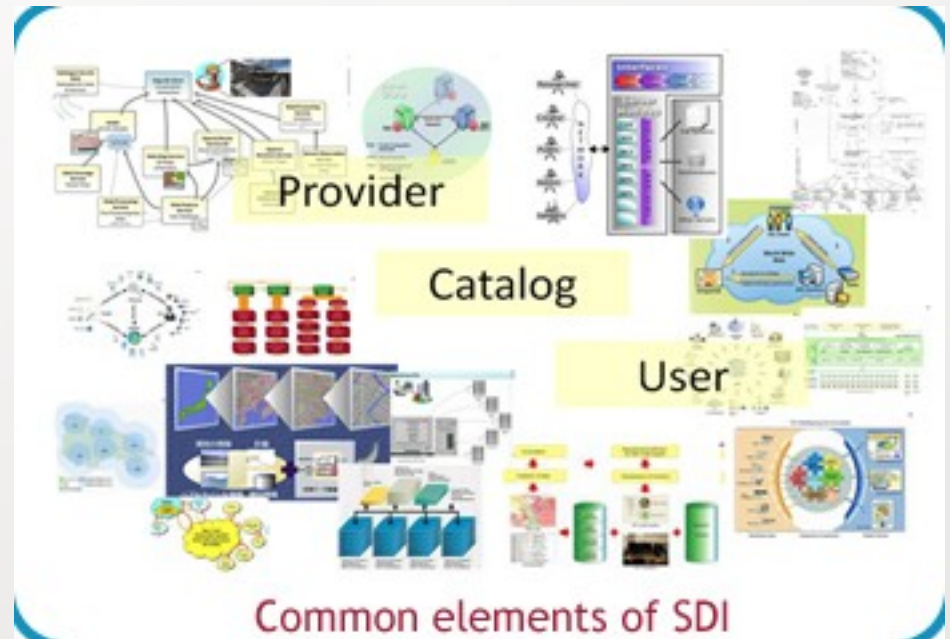
General Introduction.

The SDI provides a basis for:

- spatial data discovery
- share our information
- evaluation
- application

for users and providers within

- all levels of government
- commercial sector
- the non-profit sector
- Academia
- citizens in general



General Introduction.

Basic concepts:

- A SDI is usually government related, due to its great size and its costs.
- A geographic information systems (GIS) is often the platform for deploying an individual node within an SDI
- Most prominent examples of formal SDI programs are on a national scale
- One of the most important objectives is to avoid the duplicity of efforts in the development of spatial data
- Data producers develop and maintain geospatial data sets. They distribute their data to the public. Once distributed, GIS users can collect and integrate them in their own GIS applications. Such data sets would provide GIS users with the most up-to-date and highest quality data sets publicly available.

General Introduction.

SDIs aim to solve these original problems:

- Most organizations need more data than they can afford. Frequently, large amounts of money are spent on basic geographic data, leaving little for applications data and development.
- Some organizations cannot afford to collect base information at all. They do not collect data themselves, but other organizations do.
- Data collected by different organizations are often incompatible because they use different geographic bases and standards.
- Many of the resources organizations spend on GIS go toward duplicating other organizations' data collection efforts. The same geographic data themes for an area are collected again and again, at great expense.

General Introduction.

Different uses:

- Emergency management. A SDI is built to support emergency management information needs, and facilitate the work of all the public forces.
- Large projects, like Pegaso, that work with spatial information from too many countries and need to group all of them
- Regional governments that want their information to become public
- Public bodies that want to harmonize a concrete group of data from different organizations to come all efforts together
- A SDI is developed to support decision-making and based on partnerships at corporate, local, regional, national, multi-national and global levels

General Introduction.

Components:



Exercise

Go to:

<http://inspire-geoportal.ec.europa.eu/discovery/discovery/>

This website is part of inspire geoportal. But.. ¿What is a geoportal?, ok, let's search the definition (we will talk later about inspire):

<http://www.pegasoproject.eu/wiki/Geoportal>

This viewer is part of the geoportal, and give us information located in a SDI.

Search on the viewer:

- 1) Las Palmas de Gran Canaria
- 2) Swansea airport, UK
- 3) And your city

Pegaso SDI Training

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