FROM THE REGIONAL TO NATIONAL ENVIRONMENTAL SYSTEM:
A COMMON APPROACH TO ENVIRONMENTAL INDEX DATA FLOW

Carlo Cipolloni – ISPRA carlo.cipolloni@isprambiente.it

With the contribute of some Regional Environmental Italian Agencies:
SNPA – National Environmental Protection System

• The new Environmental protection system enforced in January 2017 has been established by Italian law n.132/2016 and is begun a real network composed by 22 regional hubs plus ISPRA that represents the national collector hub.

• The law has also defined that it’s the unique official Technical Reference to archive, collect and disseminate Environmental information data based on the Environmental distributed Information System (SINANET).
SIRA = Regional Environmental Information System
Feature ID harmonisation >> FPID
Database harmonisation vs. INSPIRE
INSPIRE Web Service deployment
LOD
General competency

RDF
CSV
Shp
WPS
CSW
XML
WMS
Atom
INSPIRE National Data Workflow Scenario

Regional DBs → DB Harmonisation → INSPRIRE Schema

- National DBs
- ISPRA PID
- INS-Metadata
- ISPRA Geoportal
- Atom/WFS
- WMS Services

General View

- Dataset MD
- Deploy web service
- Service MD
- LOD
- New EU/National eReport
SNPA Data Workflow Scenario vs INSPIRE

**CASE 1A**

- **National DBs**
  - INSPIRE DB
  - Harmonisation
  - National DBs
  - INSPIRE Schema
  - Atom/WFS
  - WMSServices
  - ISPRA PID
  - INS-Metadata

- **INSPIRE on the-fly**
  - Harmonisation
  - Deploy web service
  - Dataset MD
  - Service MD
  - New EU/National eReport

- **Main actor:** ISPRA

**ISPRA Geoportal**
SNPA Data Workflow Scenario vs INSPIRE

**CASE 1B**

**Regional DBs** → **INSPIRE DB Harmonisation** → **ISPRA-SNPA Repository** → **INSPIRE Schema** → **Deploy web service**

- **Main actor:** Regions
- **Main actor:** ISPRA

**Dataset MD**
- **ISPRA PID**
- **Region PID**

**Service MD**
- **ISPRA PID**

**XML**
- **(Service)**
- **Dataset MD**

**ISPRA Geoportal**

**RNDT**

**INSPIRE Conference 2017**

Kehl – Strasbourg 4th-8th September 2017
SNPAPData Workflow Scenario vs INSPIRE

CASE 1C

Regional DBs

INSPRE DB
Harmonisation

INSPRE Schema

Deploy web service

Integrate Services

Main actor:
ISPRA

Main actor:
Regions

Dataset MD
Region PID

Service MD
Region PID

XML

RNDT

ISPRA Geoportal

New EU /National eReport
SNPA Data Workflow Scenario vs INSPIRE

**CASE 2**

**Regional DBs**

- DB Harmonisation
- Inspire DBs
- Dataset MD Region PID
- Service MD Region PID

**National INSPIRE DBs Repository**

- Dataset MD ISPRA PID
- Service MD ISPRA PID
- Deploy web service

**Integrate Services**

- Atom/WFS WMS Services
- LOD
- ISPRA PID Layers

**Main actor:**

- Regions
- Inspire DBs

**Main actor:**

- ISPRA

**Deploy**

- RNDT
Metadata, Service and Spatial Object PID serialisation

Italian National Public Administration Index

ISPRA

Arpa_er:

ispra_rm:20140624:113000

Dataset MD PID

Service MD PID

Deploy web service

Spatial Object PID

Integrate Services Based on Sp.O. PID

Anagrafe Siti Contaminati Contaminated Site Inventory

IPA ID

DB ID

F. ID

Arpa_er: ASC

6264
Conclusion and future actions

Set-up a Regional Board of all the SIRA SDI and Environmental Organisation that provides data and services

Start the INSPIRE Harmonisation procedure to unify the distributed database: PS, Habitat, Industrial emission (PF), AirQuality, Noise, etc..

Set-up an ISPRA central registry to resolve and manage the *SpatioObject* PID and harmonise layer
Questions...