MINISTERIO DE AGRICULTURA, ALIMENTACIÓN Y MEDIO AMBIENTE

DIRECCIÓN GENERAL DEL AGUA

SUBDIRECCIÓN GENERAL DE PLANIFICACION Y USO SOSTENIBLE DEL AGUA

Collaborative production and management of water information

How to make polycentric information available to managers, agencies and the public

SPANISH EXPERIENCE

INTERNATIONAL CONFERENCE ON DATA, INFORMATION AND KNOWLEDGE FOR WATER GOVERNANCE IN NETWORKED SOCIETIES

9-11 June 2014, University of Seville (Spain)

Javier Ruza Rodríguez

swan Sustainable Water ActioN

Collaborative production and management of water information Index

Need for collaboration Europe

- **European Union. EU Commission. DG Environment. Compliance reporting**
  - Questionnaires
- **European Environmental Agency (EEA). Mission and evolution**
  - Eurowaternet 1998
  - Reportnert 2000
- **Joint efforts. EU Commission - EEA - Others**
  - SEIS (WISE) 2003
  - SIIF 2012
  - INSPIRE 2007

Need for collaboration Spain

- Compliance reporting
- Waste water discharges information
- Water rights information
- Water quality data
  - The case of biological quality elements data
- Programmes of measures (DB PoM)
- NSDI Spatial data infrastructure (CODIIGE)
- Non born open collaborative production

Conclusions

The need for collaboration Europe

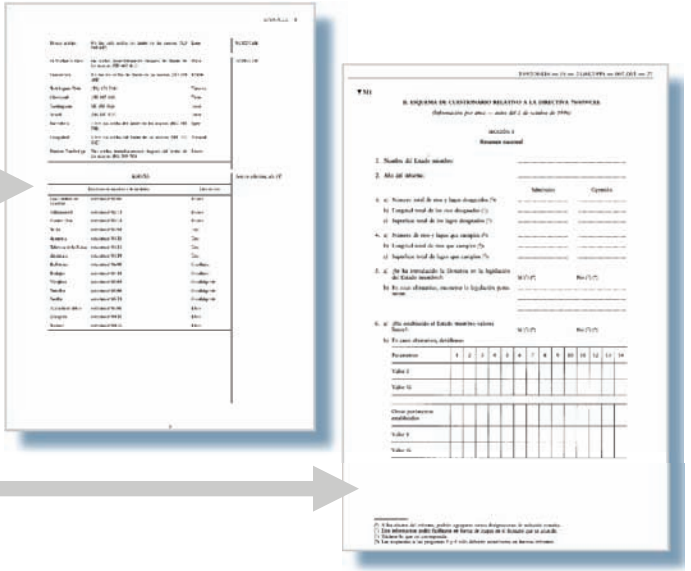
The European Union (EU) today

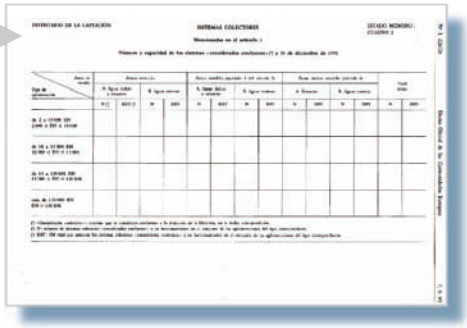
European Commission
Compliance reporting evolution

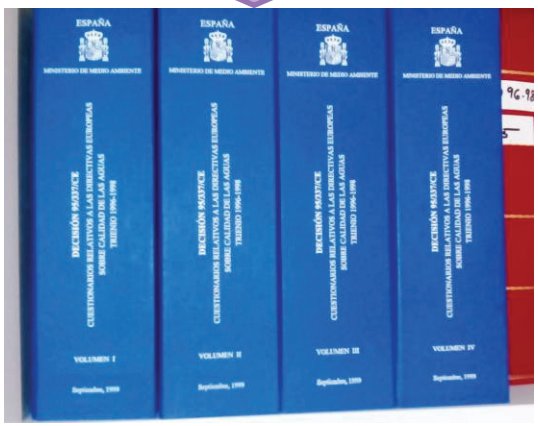
Reports in writing paper

- **Exchange of information Decision (77/795/EEC)**
  [19 parameters, 15 stations (ES)]

- **91/692/EEC: Council Directive standardizing and rationalizing reports on the implementation of certain Directives relating to the environment**
  - 92/446/EEC: Commission Decision concerning questionnaires relating to Directives in the water sector
  - 93/481/EEC: Commission Decision concerning formats for the presentation of national programmes as foreseen by Article 17 of Council Directive 91/271/EEC





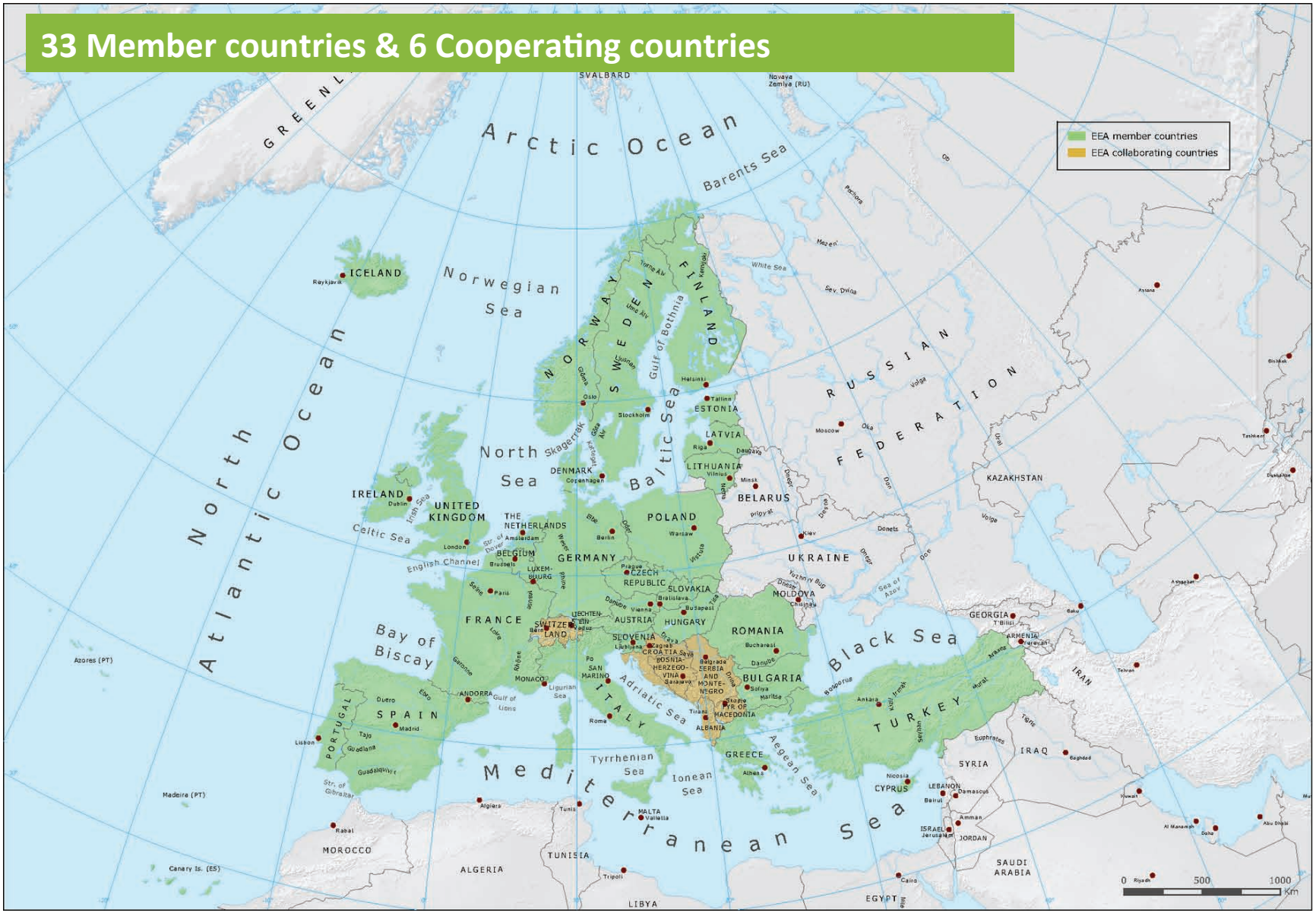


Four-year Spanish report (Sept. 1999)

The European Environment Agency (EEA) Members and collaborators

European Environment Agency

33 Member countries & 6 Cooperating countries



Source EEA

The European Environment Agency (EEA) Mission and evolution

European Environment Agency

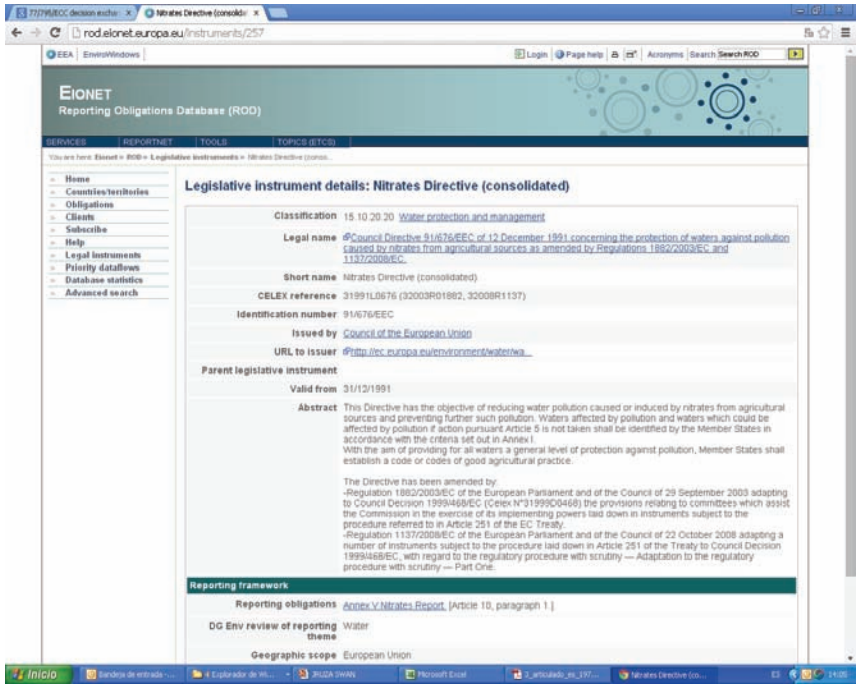
- **1990** - Creation of European Environment Agency (EEA) and the European Environment Information and Observation Network (EIONET)
- **1994** - Work started

MISSION:
To help the Community and member countries make informed decisions about improving the environment, integrating environmental considerations into economic policies and moving towards sustainability

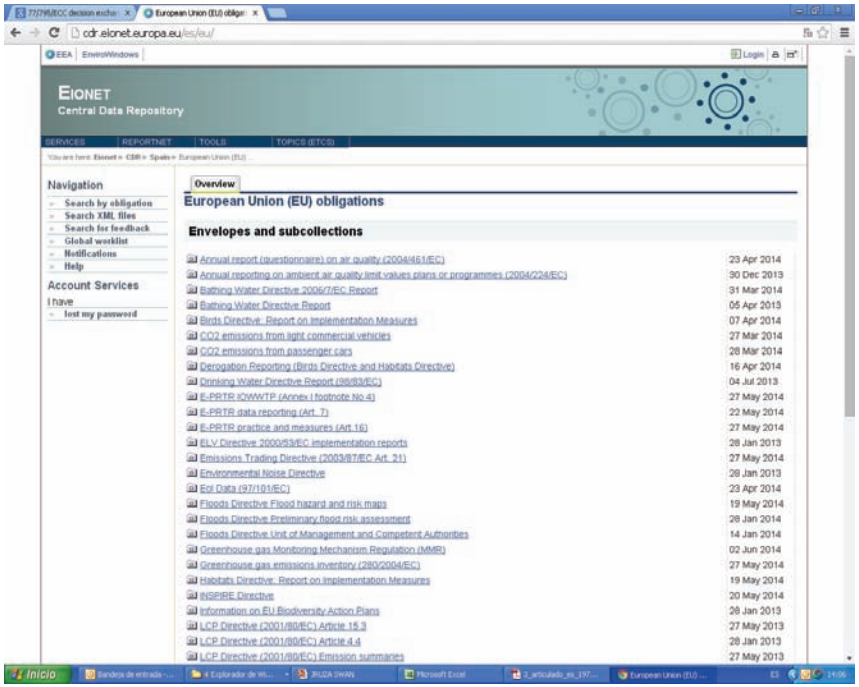
- **1998** – Eurowaternet
  - Annual reports
  - First years (Excel sheets – email)
- **2000** – Reportnet launched
  - Several IT tools
  - Operational 2002

Source EEA

Eionet- REPORTNET

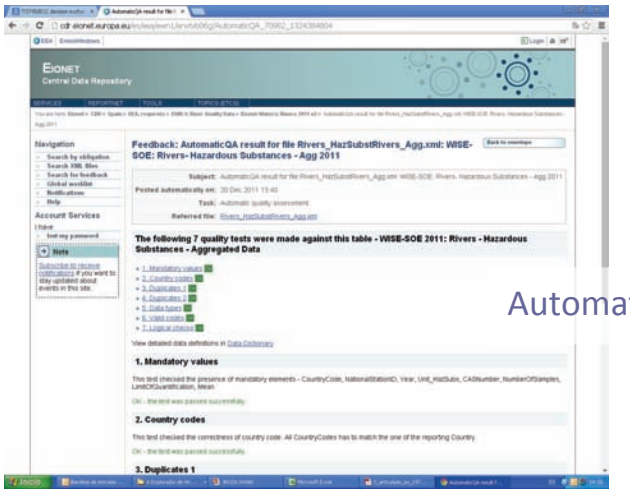


ROD (Reporting Obligations Database)



CDR (Central data repository)

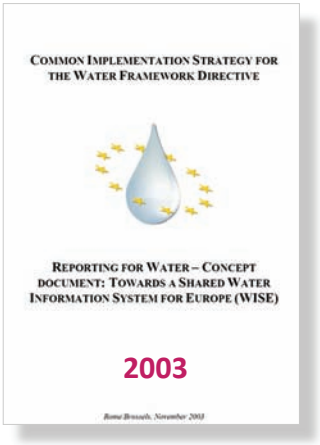
- Used exclusively by EEA till 2003
- Water framework directive 2000/60/EC (WFD) reporting is the driver to extend the use of repornet (SEIS)



Automatic QA

Shared Environmental Information System
SEIS principles

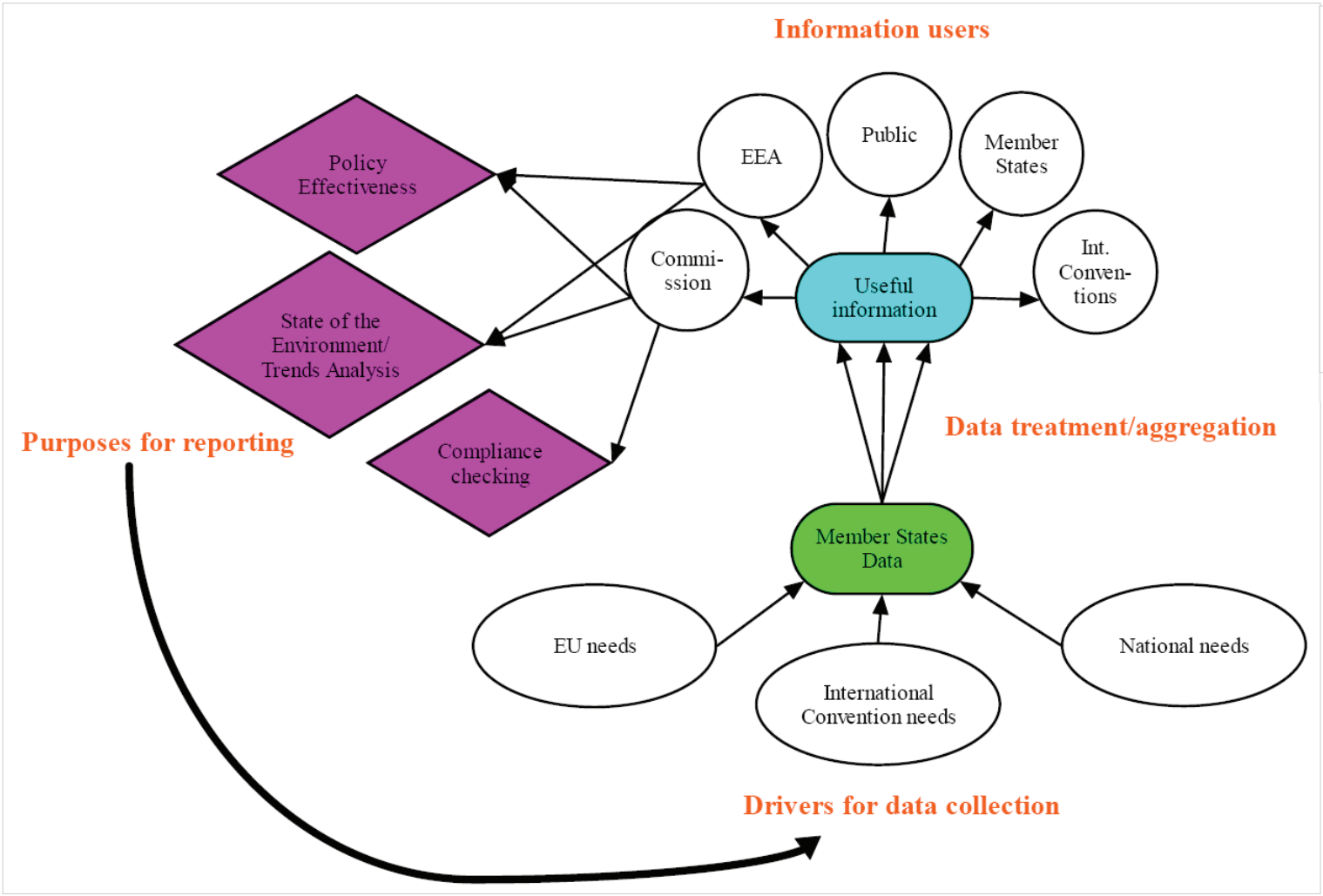
Information should be:

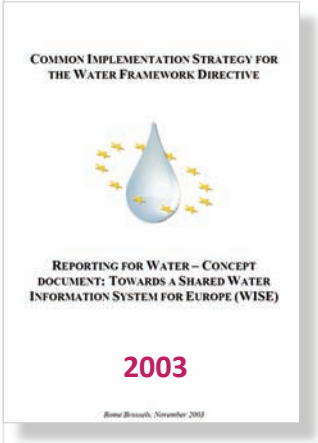


- Managed as **close** as possible to its **source**
- **Collected once**, and shared with others for many purposes
- Readily available to **public authorities** to easily fulfil legal **reporting obligations**
- Readily accessible to **end-users**, primarily public authorities at all levels from local to European, to enable them to **assess** in a timely fashion the **state of the environment** and the **effectiveness** of their policies, and to design new policy
- Accessible to enable end-users, both public authorities and citizens, to make **comparisons at the appropriate geographical scale** (e.g. countries, cities, catchments areas) and to participate meaningfully in the development and implementation of environmental policy
- **Fully available to the general public**, after due consideration of the appropriate level of aggregation and subject to appropriate confidentiality constraints, and at national level in the relevant national languages
- Supported through common, **free open standards** (for sharing and processing)

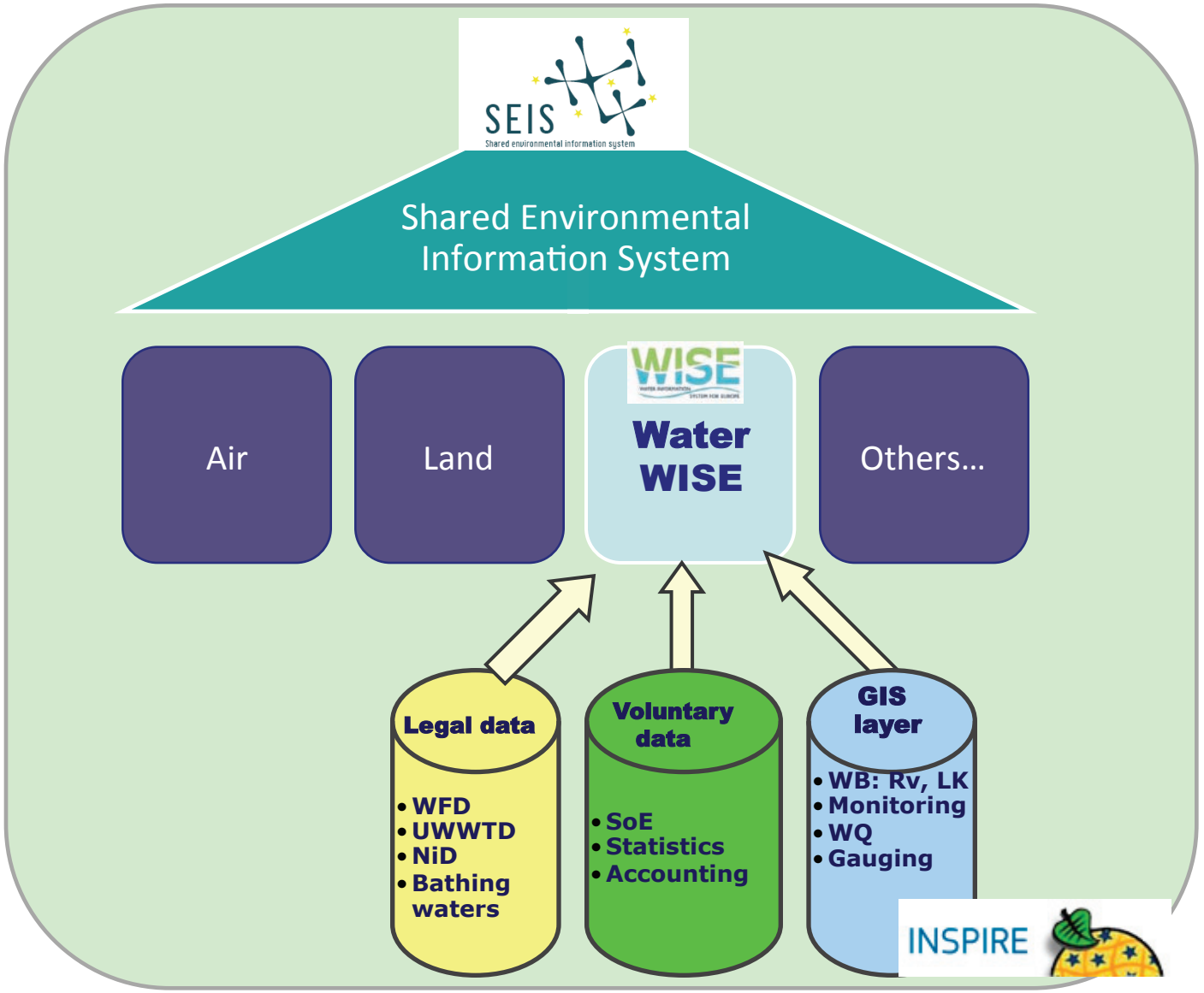
Source: COM (2008) 46 final communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions - Towards a Shared Environmental Information System (SEIS)

Shared Environmental Information System
SEIS





Water Information System for Europe (WISE)



Inspire directive (2007/2/CE). Principles

- Data should be **collected only once** and kept where it can be **maintained** most effectively
- It should be possible to **combine seamless spatial information** from different sources across Europe and share it with many users and applications
- It should be possible for information collected at one level/ scale to be **shared with all levels/scales**
  (detailed & general thorough investigations & strategic purposes)
- Geographic information needed for good governance at all levels should be readily and **transparently** available.
- Easy to **find what** geographic information is available, **how** it can be used to meet a particular need, and under **which conditions** it can be acquired and used

25.4.2007 ES Diario Oficial de la Unión Europea L 108/1

I

(Actos adoptados en aplicación de los Tratados CE/Euratom cuya publicación es obligatoria)

DIRECTIVAS

DIRECTIVA 2007/2/CE DEL PARLAMENTO EUROPEO Y DEL CONSEJO

de 14 de marzo de 2007

por la que se establece una infraestructura de información espacial en la Comunidad Europea (Inspire)

EL PARLAMENTO EUROPEO Y EL CONSEJO DE LA UNIÓN EUROPEA,

Visto el Tratado constitutivo de la Comunidad Europea y, en particular, su artículo 175, apartado 1,

Vista la propuesta de la Comisión,

Visto el dictamen del Comité Económico y Social Europeo (1),

Previa consulta al Comité de las Regiones,

De conformidad con el procedimiento establecido en el artículo 251 del Tratado, a la vista del texto conjunto aprobado el 17 de enero de 2007 por el Comité de conciliación (2),

Considerando lo siguiente:

(1) La política de la Comunidad en el ámbito del medio ambiente debe tener como objetivo alcanzar un nivel de protección elevado, teniendo presente la diversidad de situaciones existentes en las distintas regiones de la Comunidad. Además, la información, incluida la espacial, es necesaria para la definición y realización de dicha política y de otras políticas comunitarias en las que deben integrarse las exigencias de protección del medio ambiente, de conformidad con el artículo 6 del Tratado. Con el fin de procurar esta integración, es necesario establecer un cierto grado de coordinación entre los usuarios y proveedores de la información, de manera que puedan combinarse información y conocimientos procedentes de diferentes sectores.

(2) El sexto programa de acción comunitario en materia de medio ambiente, adoptado por la Decisión nº 1600/2002/CE del Parlamento Europeo y del Consejo (3), precisa que se tendrá bien presente la necesidad de asegurar que la política de medio ambiente de la Comunidad se ponga en práctica de un modo integrado, teniendo en cuenta las diferencias regionales y locales. Existe una serie de problemas en cuanto a la disponibilidad, calidad, organización, accesibilidad y puesta en común de la información espacial necesaria para lograr los objetivos establecidos en dicho Programa.

(3) Los problemas relativos a la disponibilidad, calidad, organización, accesibilidad y puesta en común de información espacial son comunes a un gran número de políticas y de temáticas, y se hacen sentir en los diferentes niveles de la autoridad pública. La resolución de estos problemas requiere medidas que atiendan al intercambio, puesta en común, acceso y utilización de datos espaciales interoperables y de servicios de datos espaciales, medidas que conciernen a los diferentes niveles de la autoridad pública y a los diferentes sectores. Por consiguiente, debe establecerse una infraestructura de información espacial en la Comunidad.

(4) La infraestructura de información espacial en la Comunidad Europea (Inspire) debe servir de ayuda para la adopción de medidas relativas a políticas y actuaciones que puedan incidir directa o indirectamente en el medio ambiente.

(5) Inspire debe basarse en las infraestructuras de información espacial creadas por los Estados miembros, haciéndolas compatibles con unas normas de ejecución comunes y complementadas por medidas a nivel comunitario. Estas medidas deben garantizar que las infraestructuras de información espacial creadas por los Estados miembros sean compatibles y utilizables en un contexto comunitario y transfronterizo.

(1) DO C 221 de 8.9.2005, p. 33.
(2) Dictamen del Parlamento Europeo de 7 de junio de 2005 (DO C 124 E de 25.5.2006, p. 11 6), Posición Común del Consejo de 23 de enero de 2006 (DO C 126 E de 30.5.2006, p. 16) y Posición del Parlamento Europeo de 13 de junio de 2006 (no publicada aún en el Diario Oficial). Decisión del Consejo de 29 de enero de 2007 y Resolución legislativa del Parlamento Europeo de 13 de febrero de 2007 (no publicada aún en el Diario Oficial).
(3) DO L 242 de 10.9.2002, p. 1.

Inspire directive (2007/2/CE)
Water related themes

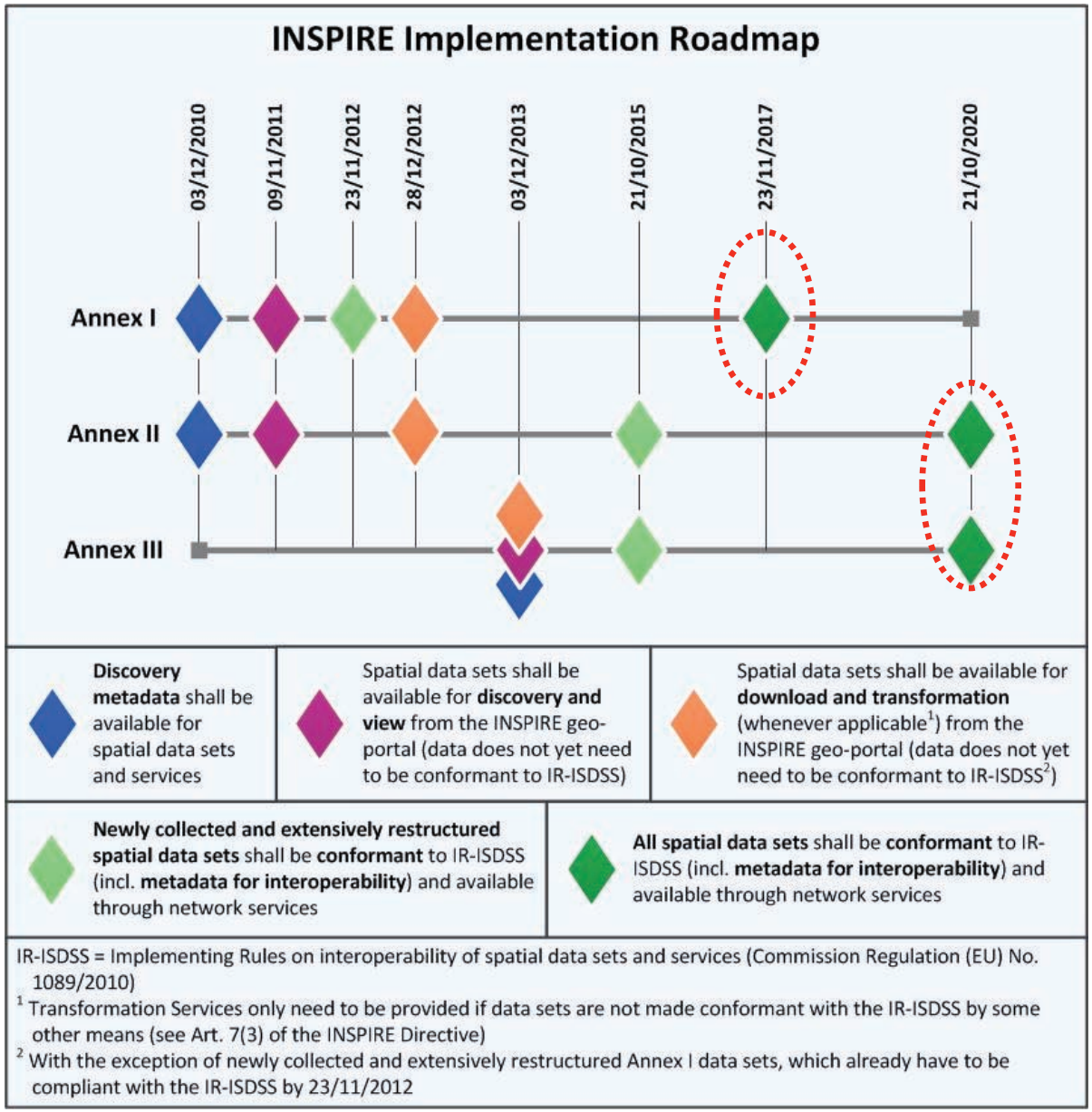
Annex I	
1	Coordinate reference systems
2	Geographical grid systems
3	Geographical names
4	Administrative units
5	Addresses
6	Cadastral parcels
7	Transport networks
✓ 8	**Hydrography**
9	Protected sites

Annex II	
1	Elevation
2	Land cover
3	Orthoimagery
✓ 4	**Geology**

- **34 data themes**
- **8 directly related to water**

Annex III	
1	Statistical units
2	Buildings
3	Soil
4	Land use
5	Human health and safety
✓ 6	**Utility and governmental services**
✓ 7	**Environmental monitoring Facilities**
8	Production and industrial facilities
9	Agricultural and aquaculture facilities
10	Population distribution and demography
✓ 11	**Area management / restriction / regulation zones & reporting units**
✓ 12	**Natural risk zones**
13	Atmospheric conditions
14	Meteorological geographical features
✓ 15	**Oceanographic geographical features**
✓ 16	**Sea regions**
17	Bio-geographical regions
18	Habitats and biotopes
19	Species distribution
20	Energy Resources
21	Mineral Resources

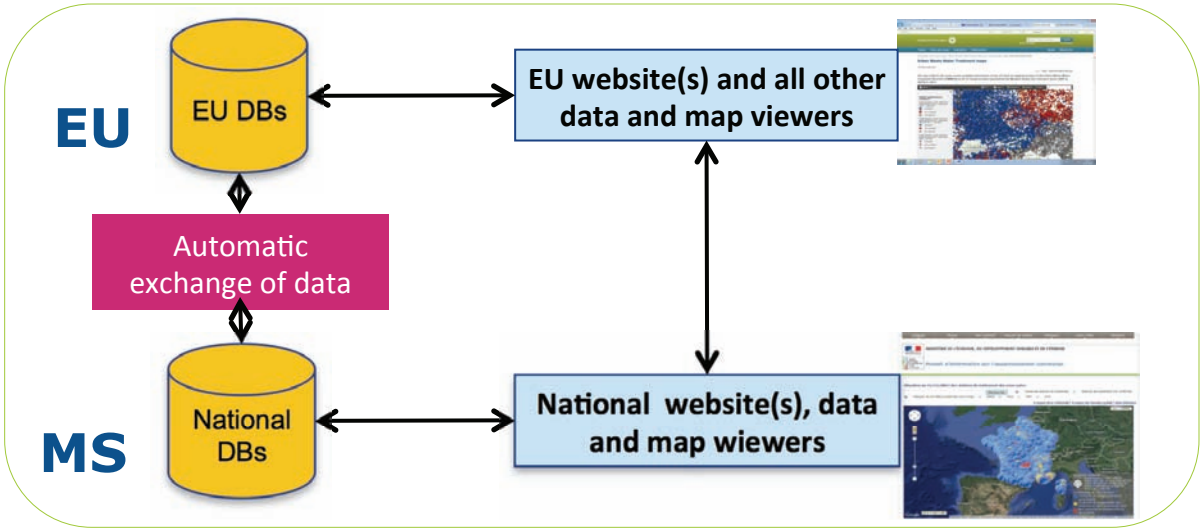
Inspire deadlines

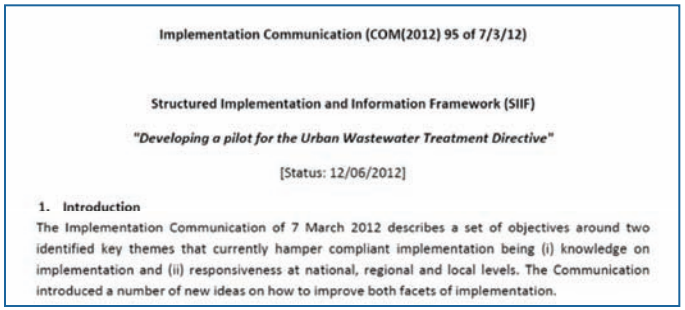


Structured Implementation and Information Framework
SIIF Principles

- **Focus on compliance** (implementation/ compliance)
- **From reporting to information management**
- **Decentralise** (from centralised to distributed information systems)
- **Ensure transparency** (publically available and accessible, Directive 2003/4)
- **Keep up to date** (free to update national systems when data become available)

- **Look forward** (from assessing non-compliance of the past to future actions on getting into compliance)
- **Reduce burden** (reducing reporting for areas in compliance, focusing on non-compliance)
- **Self-assess** (EU-MS carry out a compliance assessment themselves)
- **Develop step-by-step** (development of a modular approach)





Implementation Communication (COM(2012) 95 of 7/3/12)

Structured Implementation and Information Framework (SIIF)

"Developing a pilot for the Urban Wastewater Treatment Directive"

[Status: 12/06/2012]

1. Introduction

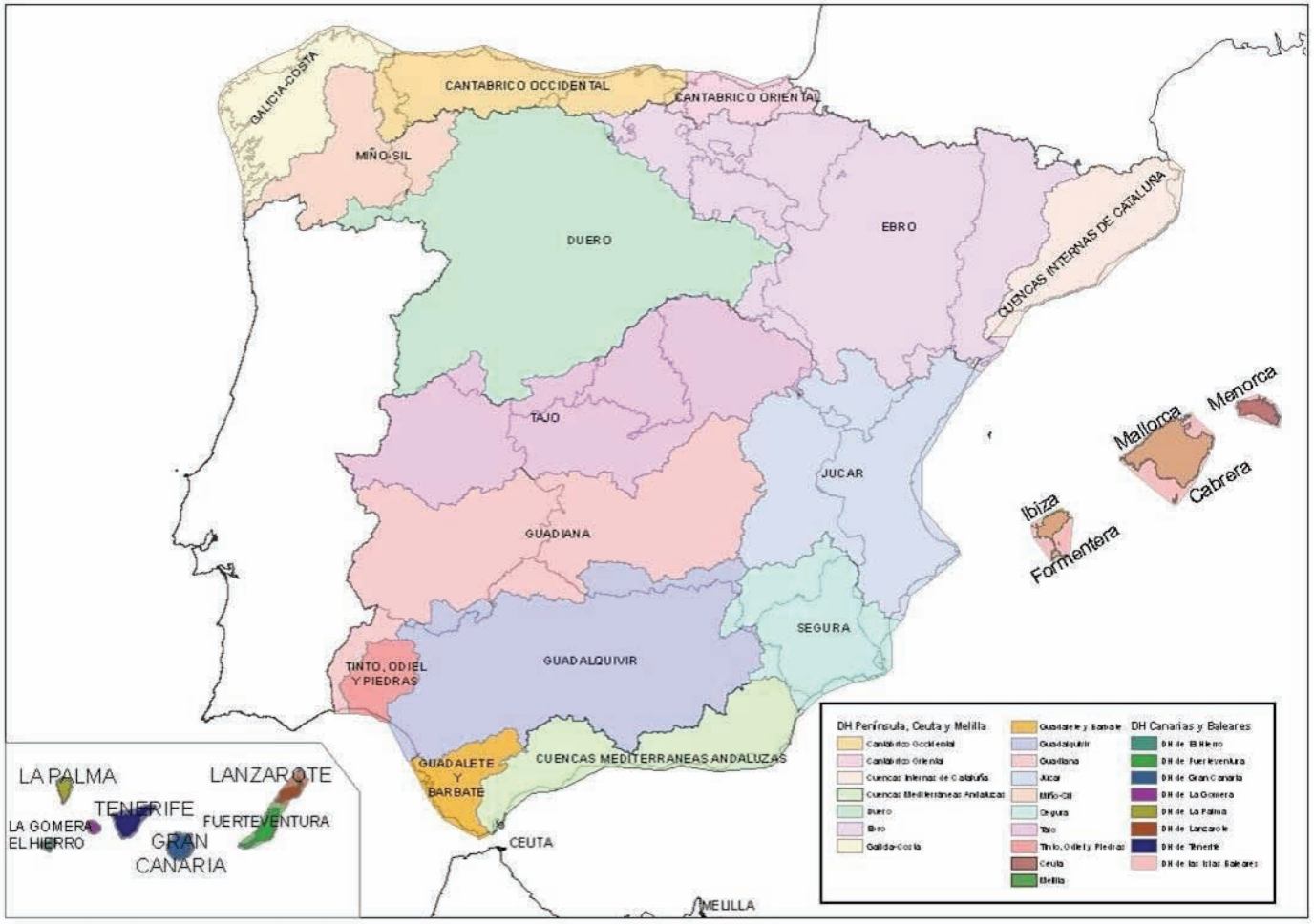
The Implementation Communication of 7 March 2012 describes a set of objectives around two identified key themes that currently hamper compliant implementation being (i) knowledge on implementation and (ii) responsiveness at national, regional and local levels. The Communication introduced a number of new ideas on how to improve both facets of implementation.

The need for collaboration
Spain

Water Administration in Spain
River Basin Districts (RBD)

25 RBD in Spain

- Complex system with different competent authorities represented within a RBD trough cooperation bodies



Regional administration

17 + 2 Regional Governments

- The Regions or Autonomous Communities may assume competences
  - Environmental protection management
    - Agriculture, diffuse pollution
    - Sewage treatment (municipalities)
    - Habitats and species

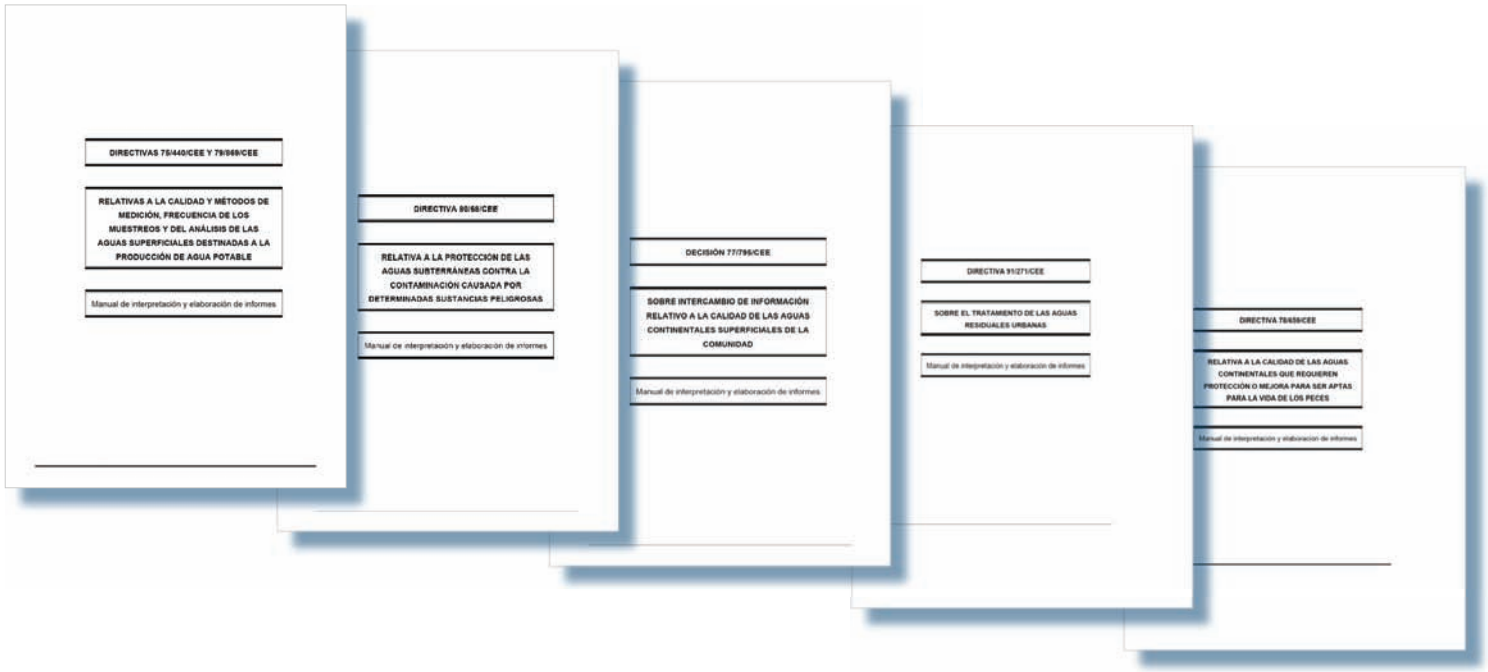
Comunidades Autónomas

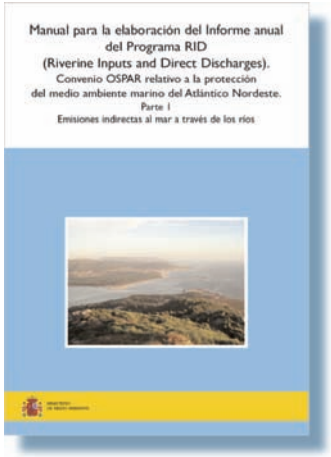
Compliance reporting in Spain

Compliance reporting first attempts

Early 1990s

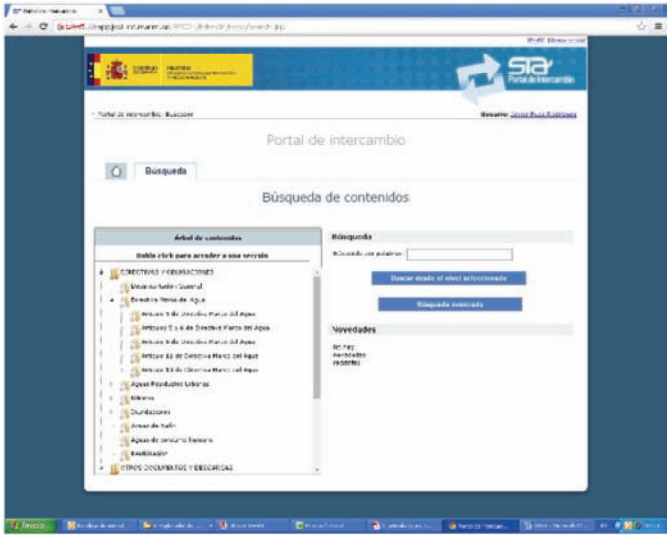
- **Situation**
  - **The Internet and email not widely available (internet search engines inaccurate)**
  - **RBD ignore EU reporting requirements and legislation (not easily accessible)**
- **Measures**
  - **Information and dissemination of requirements (working groups)**
  - **Guidance on reporting on directives on water sector**
  - **Other guidance on reporting requirements**

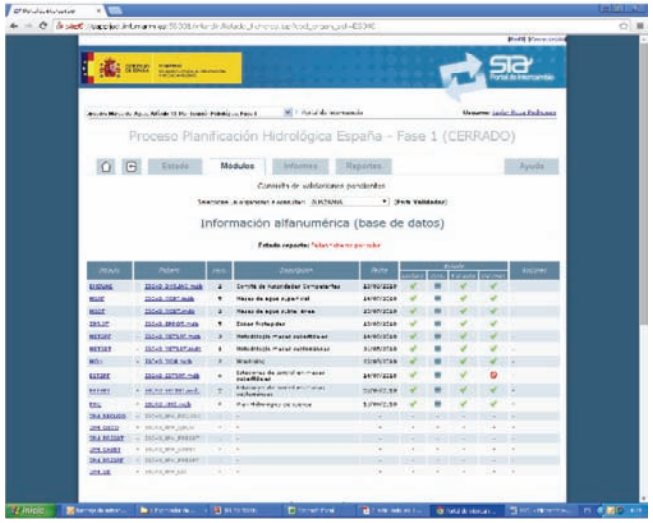


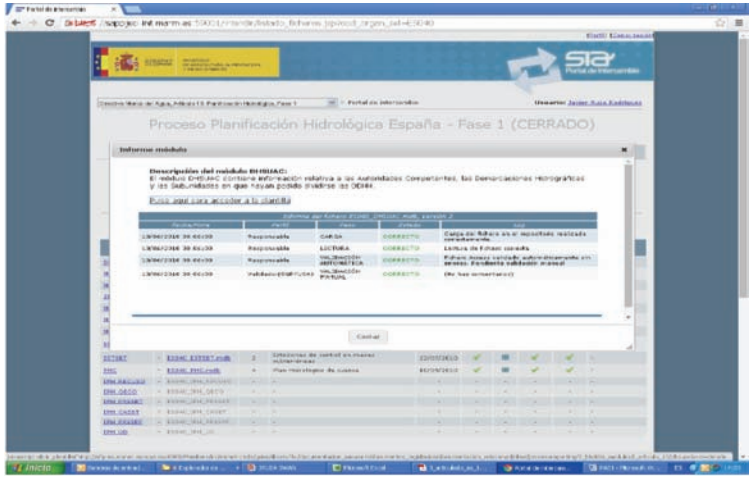


Spain- SIA Exchange of information portal

- **Similar to Reportnet**
  - Obligations database
  - Data repository
  - Responses tracking
  - Automated QA







Waste water discharge information in Spain

The origin of collaboration in WWD

- **1985 Water law**
  - All waste water discharge must have a permit 

- **1986**
  - Almost no permits issued
  - Provisional permit for all discharges (one month to become definitive)
  - Only maximum annual volume was fixed in order to charge a tax (Ministerial Order 23/12/1986)
  - It failed due to lack of effective mechanisms
- **1995**
  - Problem with industrial discharge permits
  - Sectoral regularization plans (Royal decree 484/1995)
  - It also failed
- **1999**
  - The European Commission opened a infringement procedure
    - Fail to correctly issue permits to activities discharging hazardous substances (reduction programs for list II substances)
  - Difficult to collect information from permits as there was no database

Actors involved in WWD permitting

River basin organizations

Regions (Comunidades Autónomas)

Inland water direct discharges	
1 C.H. Cantábrico	13 C.H. Júcar
2 C.I. País Vasco	14 C.H. Ebro
3 Galicia Costa	15 C.I. Cataluña
4 C.H. Miño Sil	16 Islas Baleares
5 C.H. Duero	17 El Hierro
6 C.H. Tajo	18 La Palma
7 C.H. Guadiana	19 La Gomera
8 Tinto, Odiel y Piedras	20 Tenerife
9 C.H. Guadalquivir	21 Gran Canaria
10 Guadalete-Barbate	22 Fuerteventura
11 C.Mediterranea And.	23 Lanzarote
12 C.H. Segura	

Coastal discharges	
24 País Vasco	32 Islas Baleares
25 Cantabria	33 El Hierro
26 Asturias	34 La Palma
27 Galicia	35 La Gomera
28 Andalucía	36 Tenerife
29 Murcia	37 Gran Canaria
30 Valencia	38 Fuerteventura
31 Cataluña	39 Lanzarote

First steps

Objective

- Create a common database to facilitate water managers access to WWD information

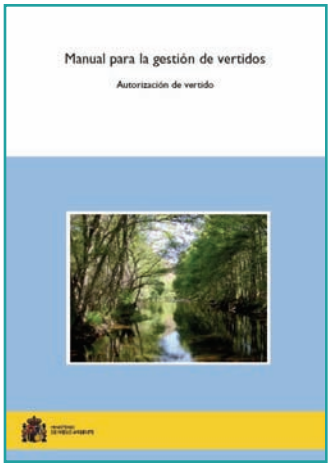
Needs

To take scientifically based decisions, BD should contain sound information:

- Provide **technical tools** to improve the quality of waste water discharge permits

Actions taken

- **Capacity building**
  - Manual for waste water discharge permitting (developed 1999-2007)
    - Standardization
      - Clarify workflow
      - Application forms for waste water discharges
      - Unify permit formats and criteria
      - Enable automated treatment of data
    - Decision support systems (DSS)

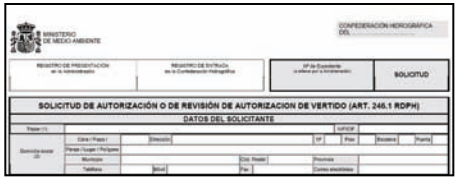


Loyalty

Seminars and training courses (promotion of interpersonal relationships)

	ACTIVIDAD GENERADORA		PUNTO VERTIDO	CARACTERIZACIÓN DEL VERTIDO					INST.	PROYE. OBRAS	AFEC. TERC.	SUST. PEL. COLEC.	PLAN SAN.	EST. HIDROG.	CUV
	SOLICITUD	Form.m 1.1	Form. 1.2	Form. 2	Form. 3.1.	Form. 3.2.	Form. 3.3.	Form. 3.4	Form. 3.5	Form. 4	Form. 5	Form. 6	Form. 7.1	Form. 7.2	Form. 8	Form. 9
Urbanos < 250 h.e.	DECLARACIÓN VERTIDOS SIMPLIFICADA															
Urbanos > 250 h.e.	X	X		X		X		X		X	X	X	X	X	X	X
Ind. Sust. Pel.	X		X	X		X		X	X	X	X	X			X	X
Ind. Piscifactorías	X		X	X		X		X		X	X	X			X	X
Ind. Refrigeración	X		X	X	X		X			X	X	X			X	X
Ind. Achique minas	X		X	X				X		X	X	X			X	X
Reso ind.	X		X	X		X		X		X	X	X			X	X

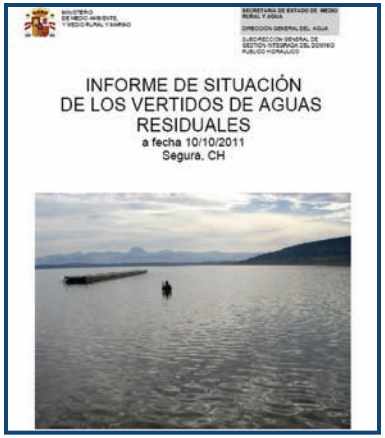
- **Legislative changes**
  - Royal Decree 606/2003
    - Emission limits only for characteristic pollutants
    - National inventory of waste water discharges (CNV)



National Inventory of waste water discharges Functionalities

¿Why should we have a National Inventory on Waste Water Discharges?

- To meet information requirements of supranational institutions, streamlining (removing) reporting requests to River basin authorities and Regional authorities
- To facilitate decision-making process at strategic and political level (also local level)
- To serve as basis for the development of guidance documents on emission limits
- To share information between administrations involved in water permitting
- To enable public access to environmental information
  - ✓Specific: applicants for permits can consult conditions of similar discharges
  - ✓Specific: how affected is your waterbody
  - ✓General: summary reports



National inventory on waste water discharges (CNV)

First results – Year 2.005

- **20 years after Water Law: no clear results achieved**
  - Waste water discharge permit (WWDP) conditions inadequate
    - ✓ 50% (9.860) of WWDP still provisional (without emission limit values)
    - ✓ 50% (9.220) of WWDP definitive (with emission limits, but not always adequate for water quality objective compliance)
    - ✓ 9.287 applications in process

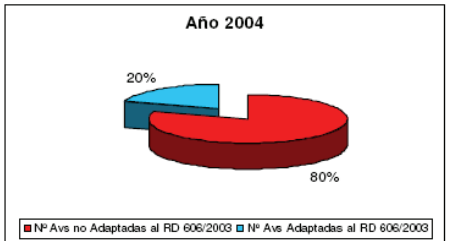
- **Need for additional measures and resources**

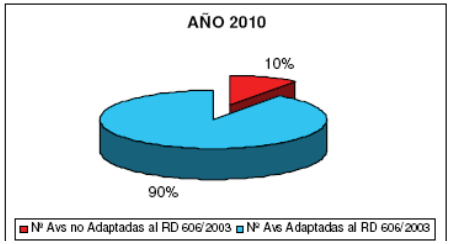
National inventory on waste water discharges (CNV)

WWD Action Plan (Plan de Choque de vertidos)

- Budget allocation (23,8 million €)
  - Human, technical and material resources for RBD
  - Selection of most important discharges to prioritise WWDP revision (based on basic statistics available – economic study for RD 606/2003)

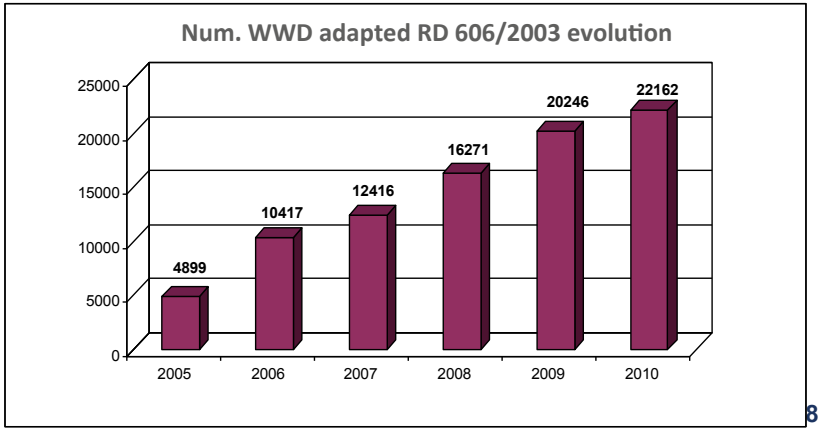
Results





Three stages with different priorities depending on volume and hazard:

- Priority I (2005): 800 WWD permits represent 90% of discharge volume and of pollution. Urban discharges of more than 10.000 p.e, industrial discharges with hazardous substances, cooling water discharges and fish farm discharges.
- Priority II (2007): urban discharges between 2.000 and 10.000 p.e. and biodegradable waste water discharges from agri-food industry of more than 4.000 p.e.
- Priority III (2009): urban discharges of less than 2.000 p.e.



National inventory on waste water discharges (CNV)

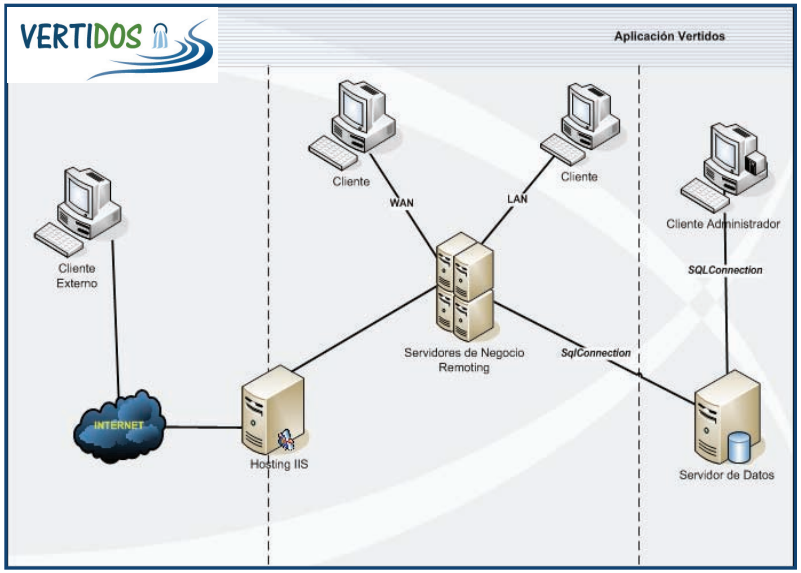
WWD Action Plan (Plan de Choque de vertidos)

Some measures

- Human resources
  - Temporal external aid
  - New specialized public employees
    - Waste water discharge management 30 master degree graduates + 70 bachelor degree
    - Water quality 62 master degree
- New ICT tools
  - To help issuing permits
  - To create the CNV-INEA

VERTIDOS

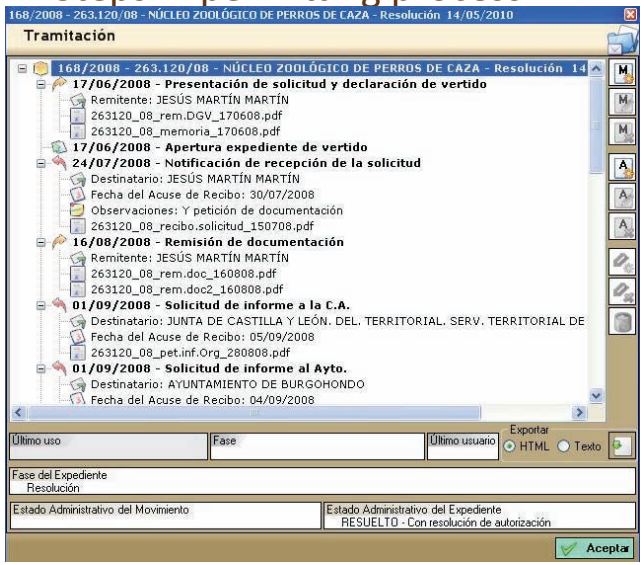
cnv-inea



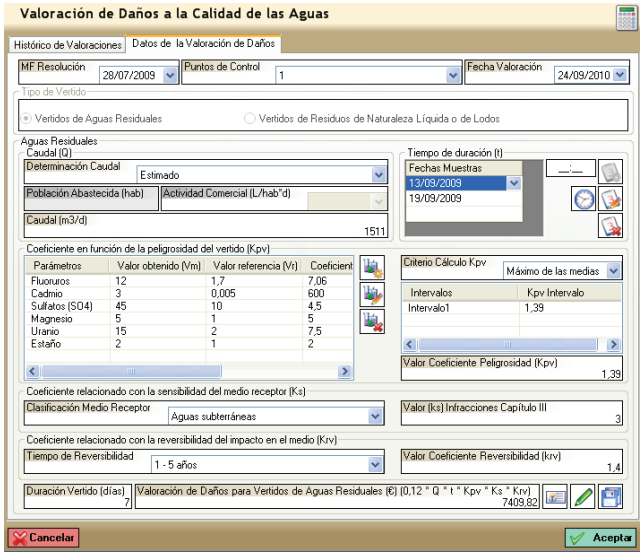
New ICT tools

VERTIDOS

Steps in permitting process



Compliance: evaluation of damages



@dministración
TODOS LOS SERVICIOS EN TU MANO

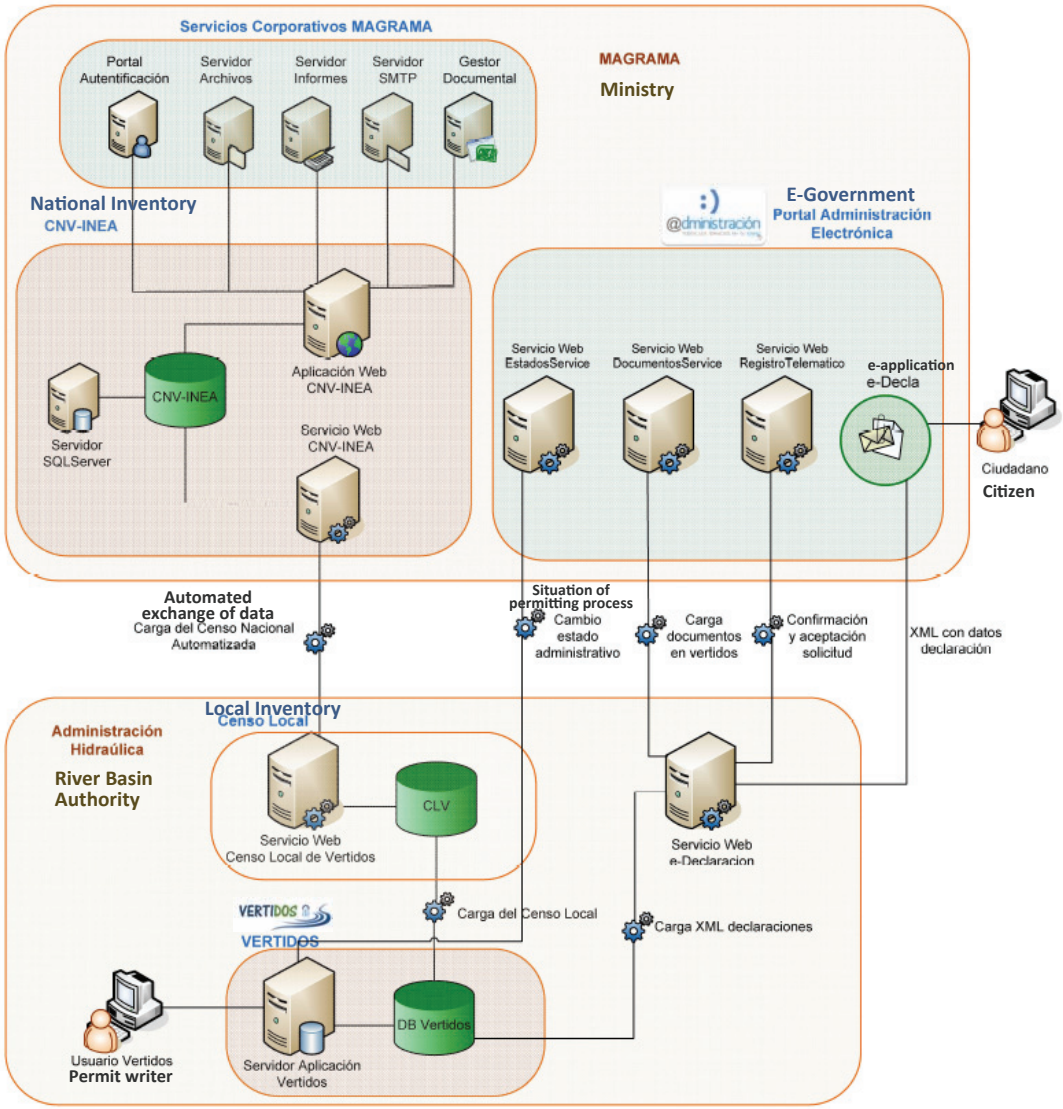
Sede electrónic@

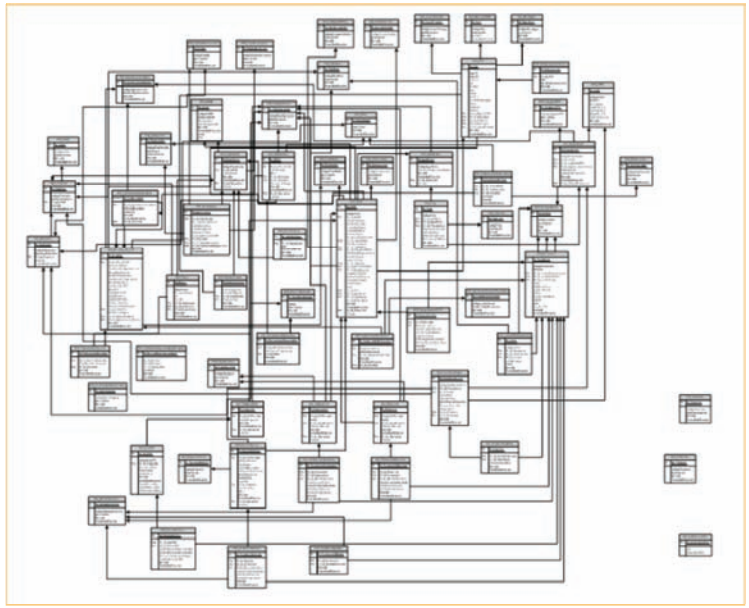
E-Government

All application process can be done totally online

New ICT tools

cnv-inea





cnv-inea

Compliance reporting in Spain
Urban waste water discharge information (Directive 91/271/CEE)

EdarNet
Urban waste water discharges

EdarNet

- A **web based tool** which give access to all national relevant information concerning Urban waste water discharges (directive 91/271/CEE)

- **Inventory of infrastructures:**
  - Sewage system - description and Key figures
  - UWW Treatment Plant - description and Key figures
  - Agglomerations of the UWWTP – Compliance, description and Key figures
  - Discharge point - Description and Key figures
  - Sensitive areas

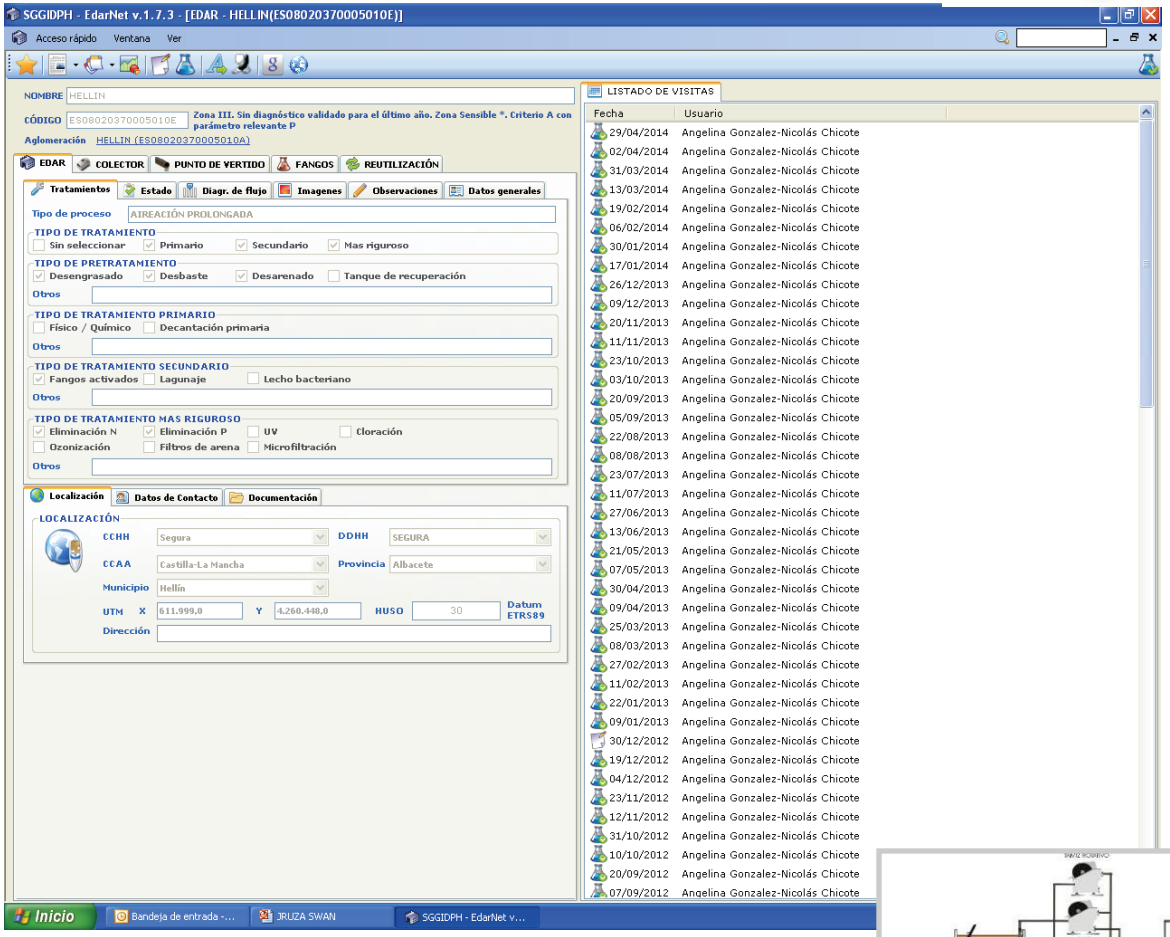
- **Management of analytical data**

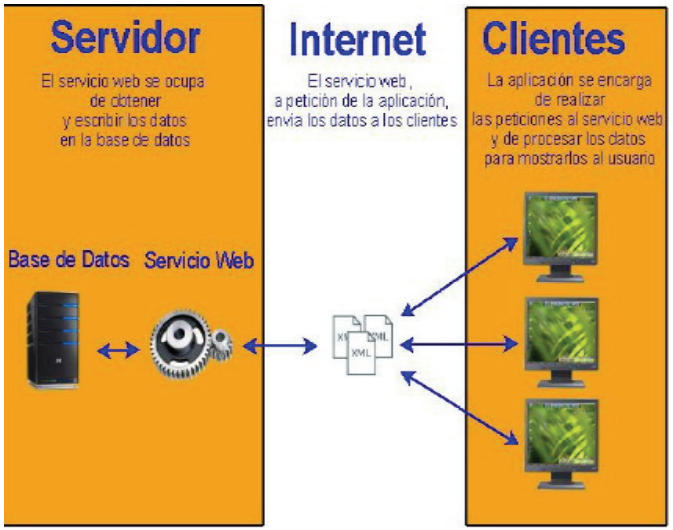
- **Functionalities**
  - Compliance is automatically processed from raw analytical data
  - Generation of maps
  - Automated generation of detailed or synthesis reports (colour codes)
  - Generation of EU report

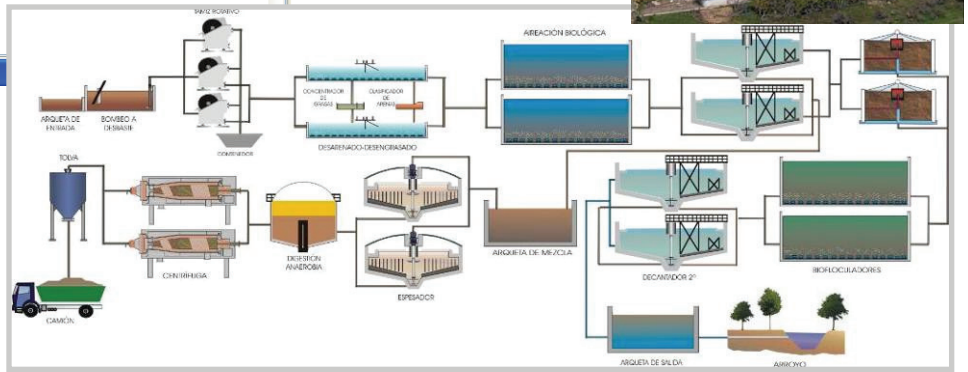
- **Users**
  - 200 from Confederaciones hidrográficas and Comunidades Autónomas
  - Similar to SIIF but without publication of data

EdarNet
Urban waste water discharges

EdarNet

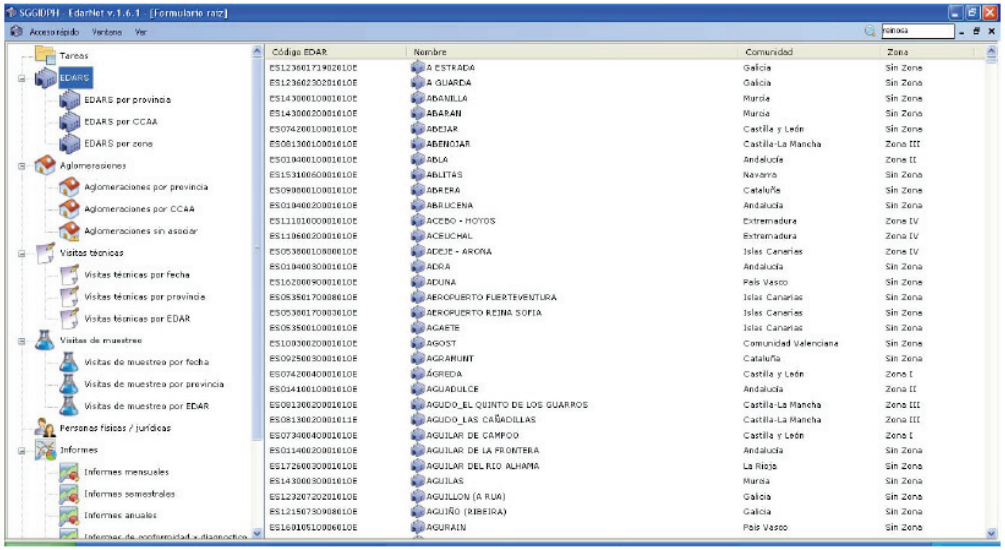


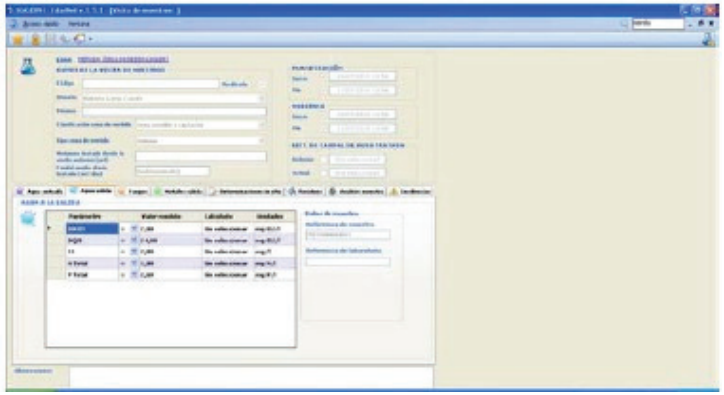


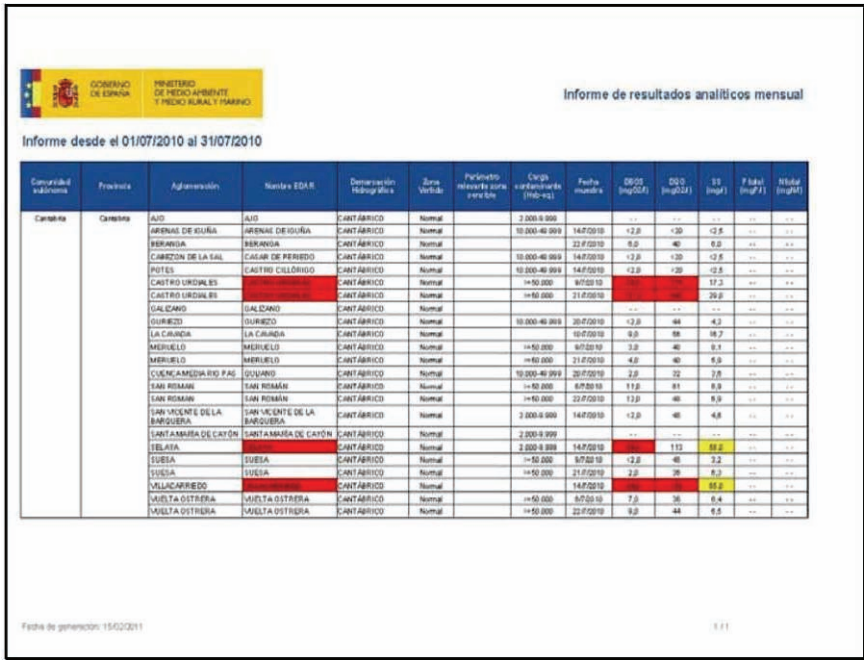


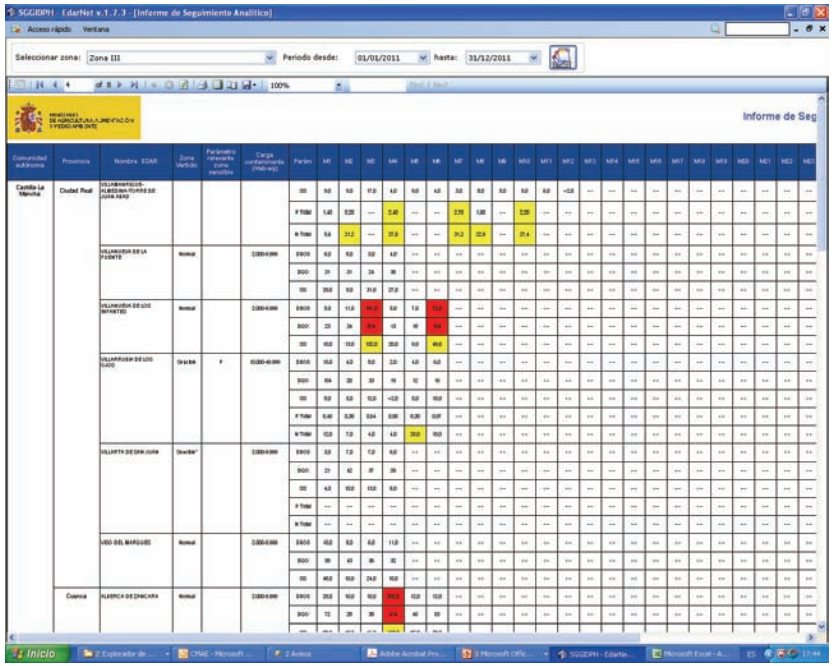
Edarnet
Analytical results

EdarNet





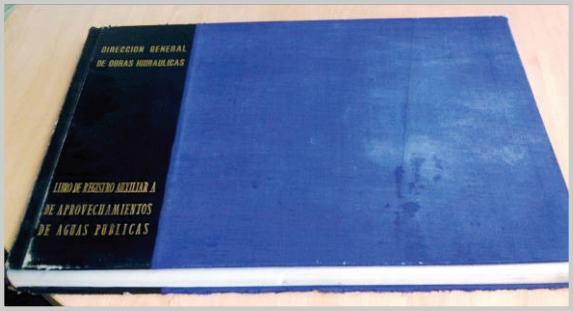


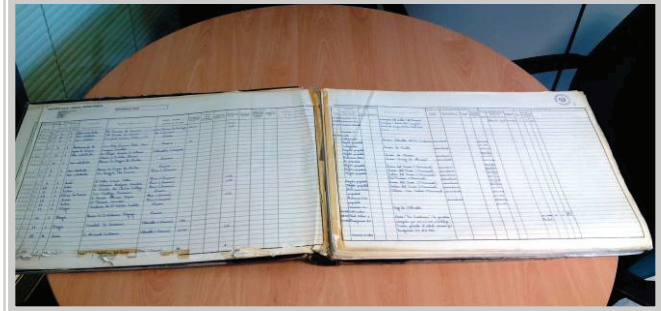


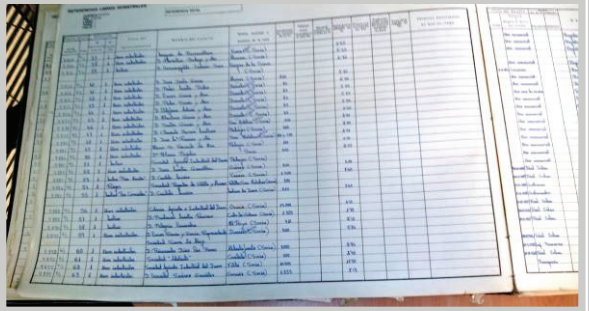
Water rights in Spain

Water Registry

- In previous legal regulation (Water Act of 1879) groundwater was private water
- Since The Water Act came into force in 1985, all water has been considered public
- The Spanish administrative law is especially careful with private property and to not damage the property rights
- The Water Act 1985 created a transition period to adapt the private exploitation of groundwater







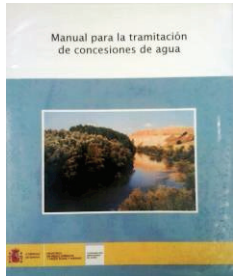
- Historically, records were registered in paper
- Difficult decision-taking process to issue new water rights (some demands for economic compensation by the administration of previous water right holders)
- Big amount of groundwater applications to manage to adapt to the new water law

Water Registry
Some steps

2003

- Modernisation plan of hydraulic administration
  - **ALBERCA program was launched**:
    - Provide human, technical, technological and financial resources
    - New software developed to help the administrative process (more than 500.000 administrative records)
    - Review of the water rights registered in the The Catalogue of Historical Private Abstractions
    - Need to control external contactors (centralized system)

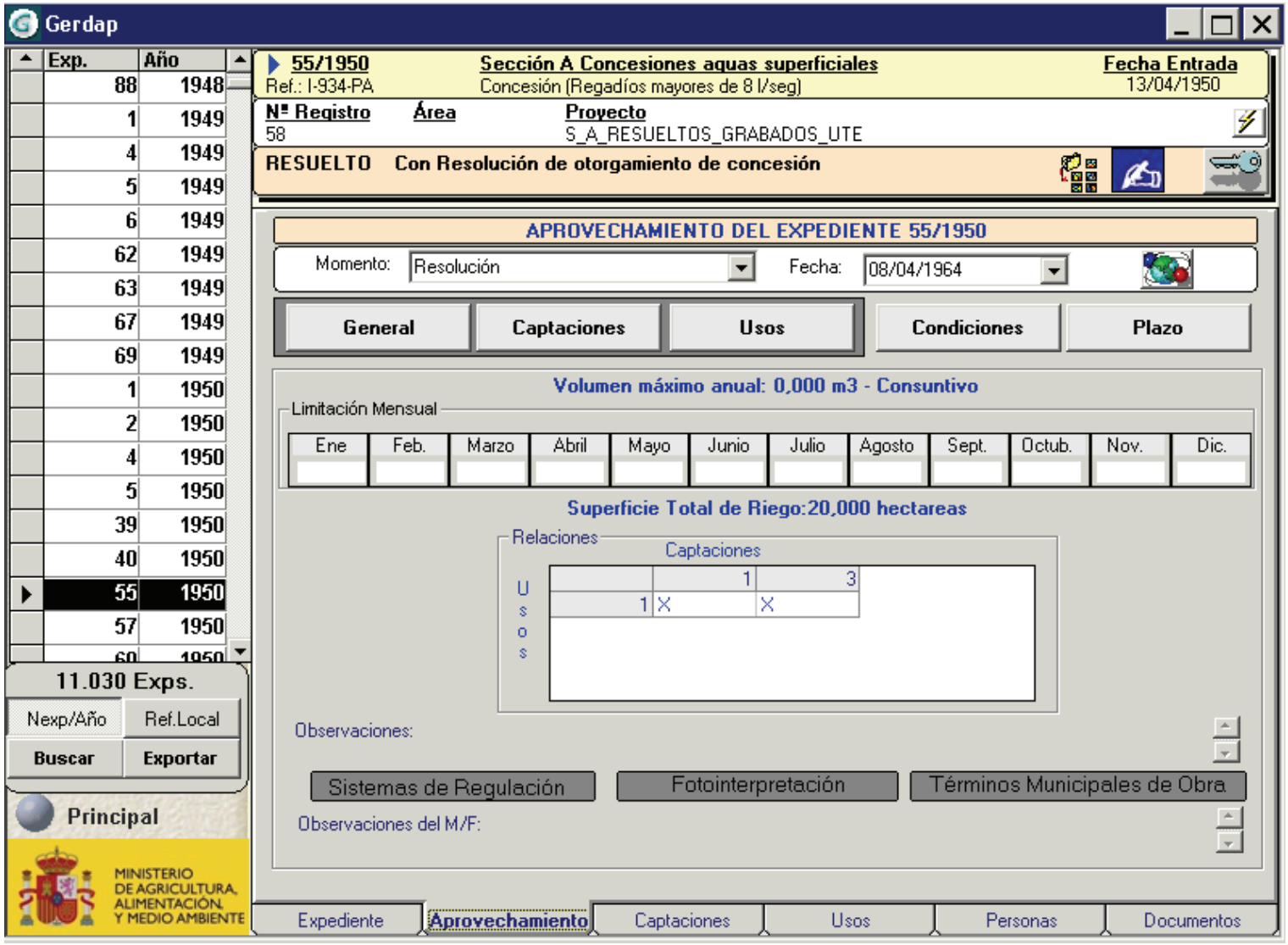
Alberca



2014

- 2014 Confederaciones Hidrográficas: 689.106 records within ALBERCA system (or similar systems)
  - **WATER REGISTRY: a modern tool to register, modify, identify and locate all water uses… It is already developed, but now it is being tested**

REGISTRO DE AGUAS
WATER REGISTRY


Gerdap
Exp.
Año
88 1948
1 1949
4 1949
5 1949
6 1949
62 1949
63 1949
67 1949
69 1949
1 1950
2 1950
4 1950
5 1950
39 1950
40 1950
55 1950
57 1950
11.030 Exps.
Nexp/Año
Ref.Local
Buscar
Exportar
Principal
MINISTERIO DE AGRICULTURA, ALIMENTACIÓN Y MEDIO AMBIENTE
55/1950
Ref.: I-934-PA
Sección A Concesiones aguas superficiales
Concesión (Regadíos mayores de 8 l/seg)
Fecha Entrada
13/04/1950
Nº Registro
58
Área
Proyecto
S_A_RESUELTOS_GRABADOS_UTE
RESUELTO
Con Resolución de otorgamiento de concesión
APROVECHAMIENTO DEL EXPEDIENTE 55/1950
Momento:
Resolución
Fecha:
08/04/1964
General
Captaciones
Usos
Condiciones
Plazo
Volumen máximo anual: 0,000 m3 - Consuntivo
Limitación Mensual
Ene
Feb.
Marzo
Abril
Mayo
Junio
Julio
Agosto
Sept.
Octub.
Nov.
Dic.
Superficie Total de Riego:20,000 hectareas
Relaciones
Captaciones
Usos
1
3
1
X
X
Observaciones:
Sistemas de Regulación
Fotointerpretación
Términos Municipales de Obra
Observaciones del M/F:
Expediente
Aprovechamiento
Captaciones
Usos
Personas
Documentos

Nº Inscripción: DU2014001080 · Inmatriculación
Organismo: Confederación Hidrográfica del Duero
Estado: Vigente
Sección: A
Fecha de registro del asiento: 21/01/2014

Resumen

Generar PDF | Opciones | Volver

Derecho

DATOS GENERALES:

Plazo del derecho: 30 años
Fecha inicio: 29/01/1985
Fecha de extinción: 29/01/2015
Volumen máximo anual (m³): 1.150,000

TITULARES:

A58818501 - Comunidad de Regantes El Porvenir

Captaciones

Captación 1:
Procedencia del agua: Superficial
Río o cauce:
PRADO ANCHO
Masa de agua superficial:
Natural
Volumen máximo anual (m³): 800,000
Caudal máximo instantáneo (l/s): 500,000

Captación 2:
Procedencia del agua: Subterránea
Acuífero:
Páramo del Duratón
Volumen máximo anual (m³): 200,000
Caudal máximo instantáneo (l/s): 200,000

Captación 3:
Procedencia del agua: Subterránea
Acuífero:
Páramo del Duratón
Volumen máximo anual (m³): 150,000
Caudal máximo instantáneo (l/s): 100,000

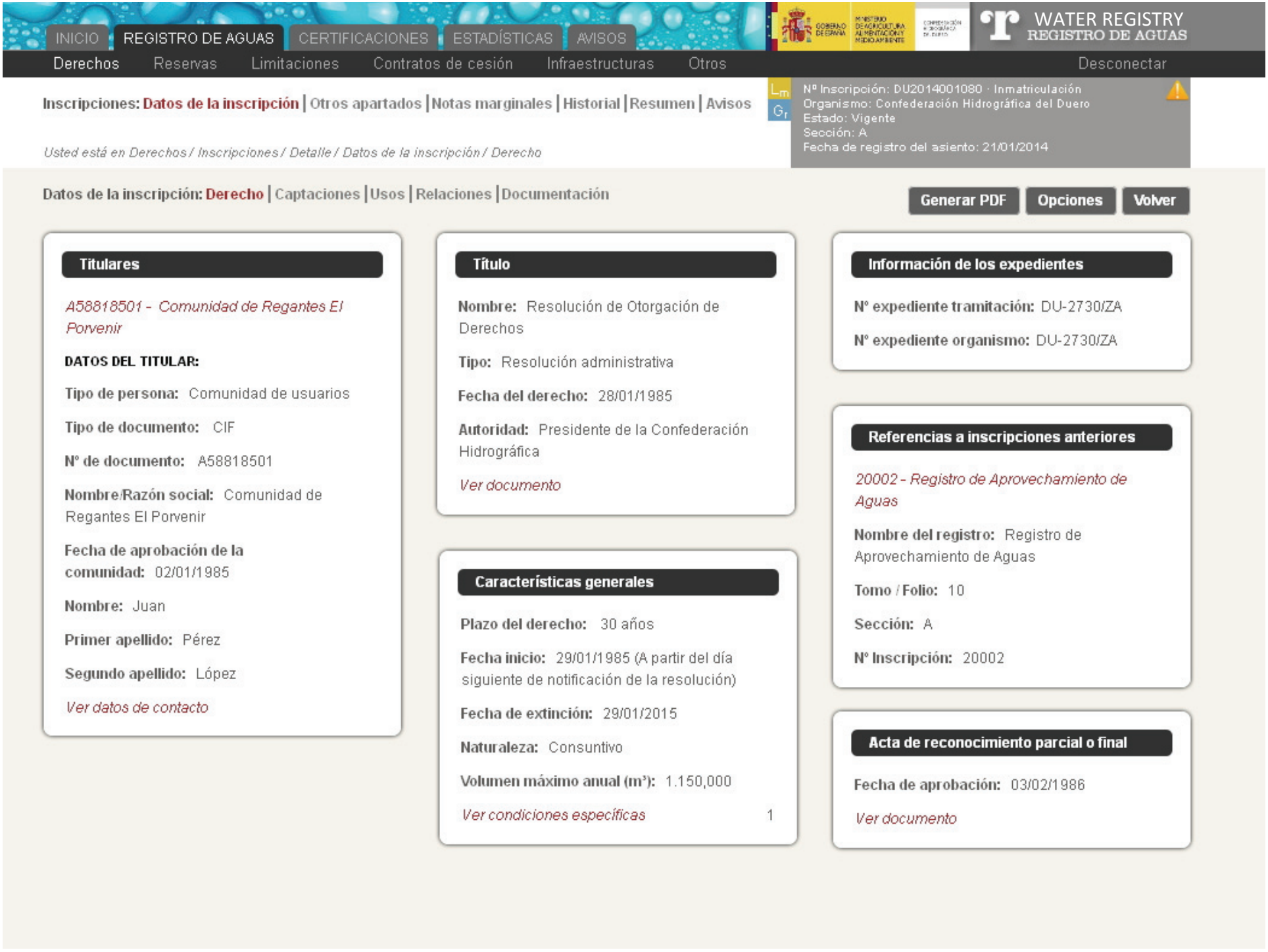
INFRAESTRUCTURAS:

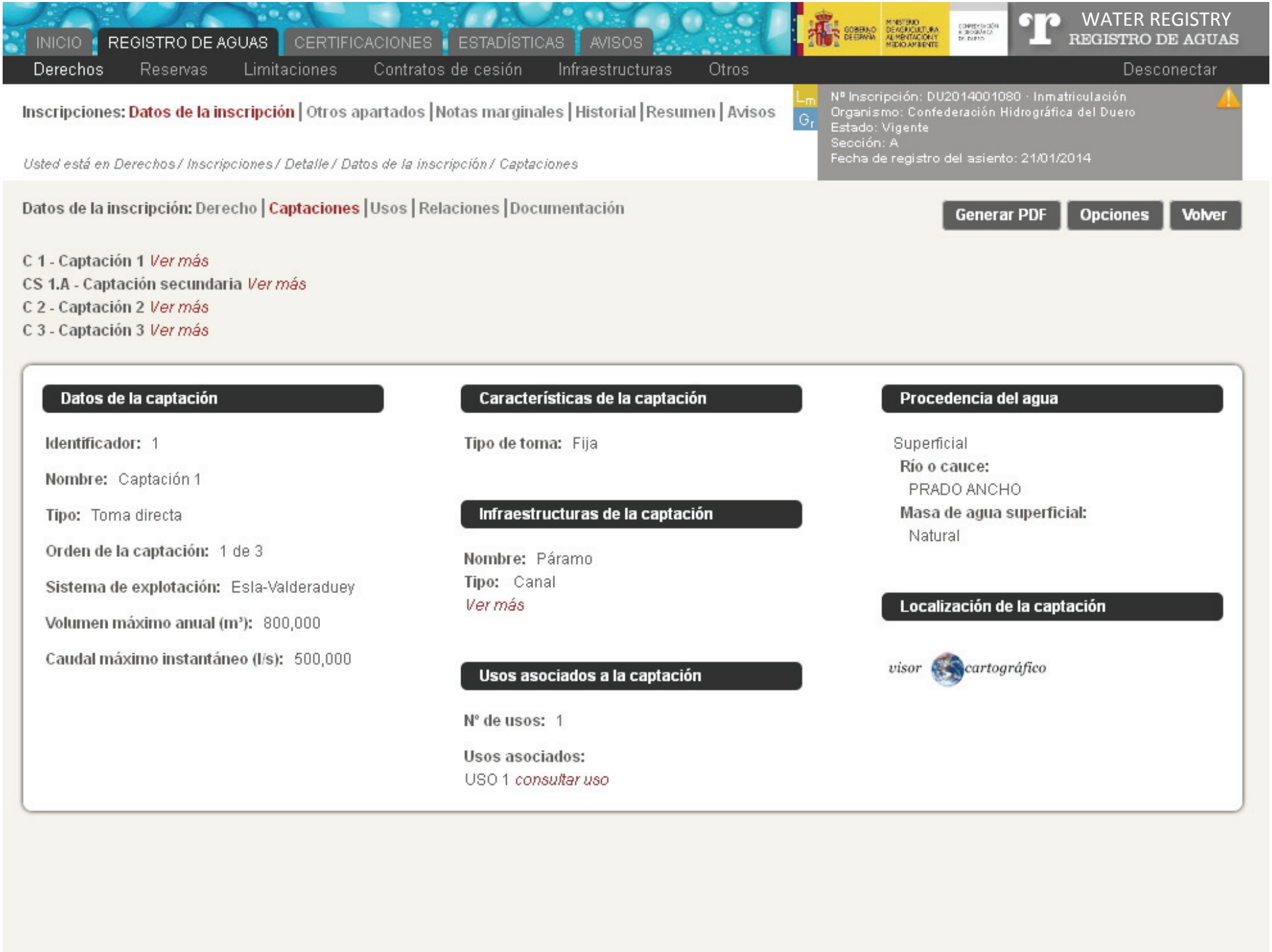
Nombre: Páramo
Tipo: Canal
Ver más

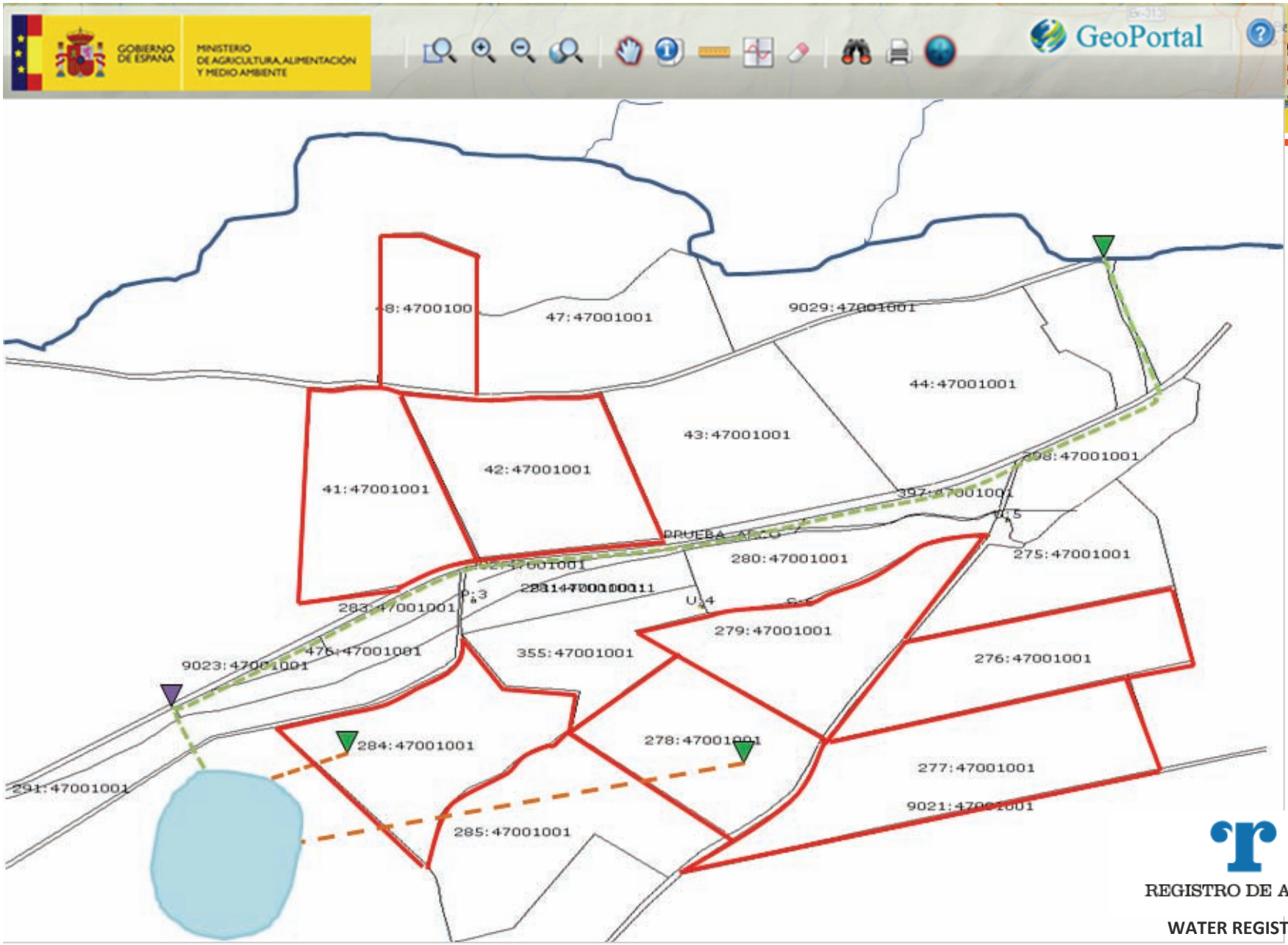
Usos

Uso 1:
Tipo de uso: Usos agropecuarios - Regadíos
Volumen máximo anual (m³): 800,000

Uso 2:
Tipo de uso: Abastecimiento - Usos destinados a otros abastecimiento fuera de los núcleos urbanos - Otros usos domésticos distintos del consumo humano
Volumen máximo anual (m³): 350,000


INICIO
REGISTRO DE AGUAS
CERTIFICACIONES
ESTADÍSTICAS
AVISOS
WATER REGISTRY
REGISTRO DE AGUAS
Derechos
Reservas
Limitaciones
Contratos de cesión
Infraestructuras
Otros
Desconectar
Inscripciones: Datos de la inscripción | Otros apartados | Notas marginales | Historial | Resumen | Avisos
Nº Inscripción: DU2014001080 · Inmatriculación
Organismo: Confederación Hidrográfica del Duero
Estado: Vigente
Sección: A
Fecha de registro del asiento: 21/01/2014
Usted está en Derechos / Inscripciones / Detalle / Datos de la inscripción / Derecho
Datos de la inscripción: Derecho | Captaciones | Usos | Relaciones | Documentación
Generar PDF
Opciones
Volver
Titulares
A58818501 - Comunidad de Regantes El Porvenir
DATOS DEL TITULAR:
Tipo de persona: Comunidad de usuarios
Tipo de documento: CIF
Nº de documento: A58818501
Nombre/Razón social: Comunidad de Regantes El Porvenir
Fecha de aprobación de la comunidad: 02/01/1985
Nombre: Juan
Primer apellido: Pérez
Segundo apellido: López
Ver datos de contacto
Título
Nombre: Resolución de Otorgación de Derechos
Tipo: Resolución administrativa
Fecha del derecho: 28/01/1985
Autoridad: Presidente de la Confederación Hidrográfica
Ver documento
Características generales
Plazo del derecho: 30 años
Fecha inicio: 29/01/1985 (A partir del día siguiente de notificación de la resolución)
Fecha de extinción: 29/01/2015
Naturaleza: Consuntivo
Volumen máximo anual (m³): 1.150,000
Ver condiciones específicas
1
Información de los expedientes
Nº expediente tramitación: DU-2730/ZA
Nº expediente organismo: DU-2730/ZA
Referencias a inscripciones anteriores
20002 - Registro de Aprovechamiento de Aguas
Nombre del registro: Registro de Aprovechamiento de Aguas
Tomo / Folio: 10
Sección: A
Nº Inscripción: 20002
Acta de reconocimiento parcial o final
Fecha de aprobación: 03/02/1986
Ver documento


INICIO
REGISTRO DE AGUAS
CERTIFICACIONES
ESTADÍSTICAS
AVISOS
WATER REGISTRY
REGISTRO DE AGUAS
Derechos
Reservas
Limitaciones
Contratos de cesión
Infraestructuras
Otros
Desconectar
Inscripciones: Datos de la inscripción | Otros apartados | Notas marginales | Historial | Resumen | Avisos
Nº Inscripción: DU2014001080 · Inmatriculación
Organismo: Confederación Hidrográfica del Duero
Estado: Vigente
Sección: A
Fecha de registro del asiento: 21/01/2014
Usted está en Derechos / Inscripciones / Detalle / Datos de la inscripción / Captaciones
Datos de la inscripción: Derecho | Captaciones | Usos | Relaciones | Documentación
Generar PDF
Opciones
Volver
C 1 - Captación 1 Ver más
CS 1.A - Captación secundaria Ver más
C 2 - Captación 2 Ver más
C 3 - Captación 3 Ver más
Datos de la captación
Identificador: 1
Nombre: Captación 1
Tipo: Toma directa
Orden de la captación: 1 de 3
Sistema de explotación: Esla-Valderaduey
Volumen máximo anual (m³): 800,000
Caudal máximo instantáneo (l/s): 500,000
Características de la captación
Tipo de toma: Fija
Infraestructuras de la captación
Nombre: Páramo
Tipo: Canal
Ver más
Usos asociados a la captación
Nº de usos: 1
Usos asociados:
USO 1 consultar uso
Procedencia del agua
Superficial
Río o cauce:
PRADO ANCHO
Masa de agua superficial:
Natural
Localización de la captación
visor cartográfico



REGISTRO DE AGUAS

WATER REGISTRY

Abstractions:

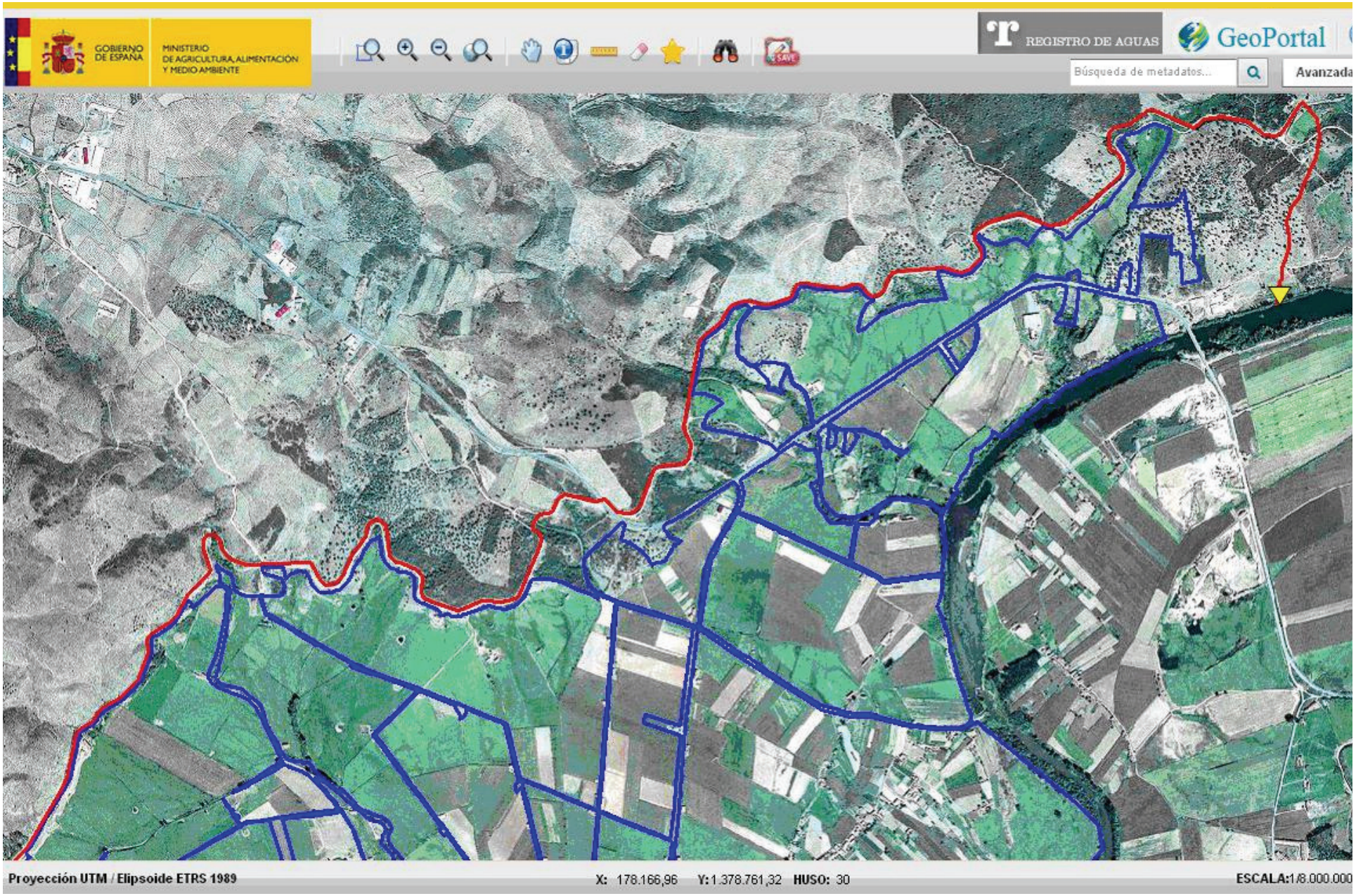
- Primary
- Secundary

Uses:

- Irrigation

Infrastructures:

- Channel
- Pond
- Underground channel



Abstractions:

- Primary

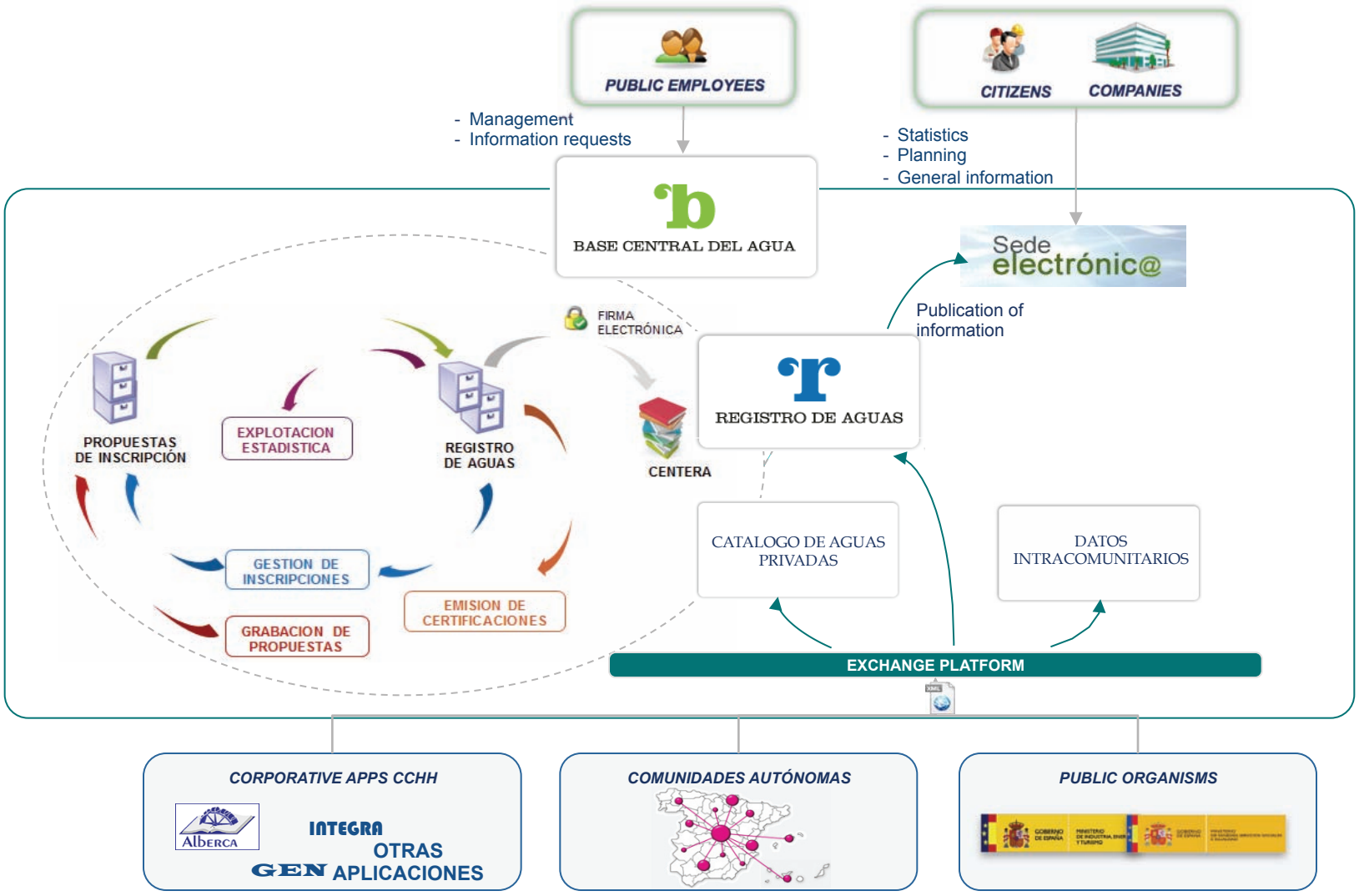
Uses:

- Irrigation

Infraestructures:

- Channel

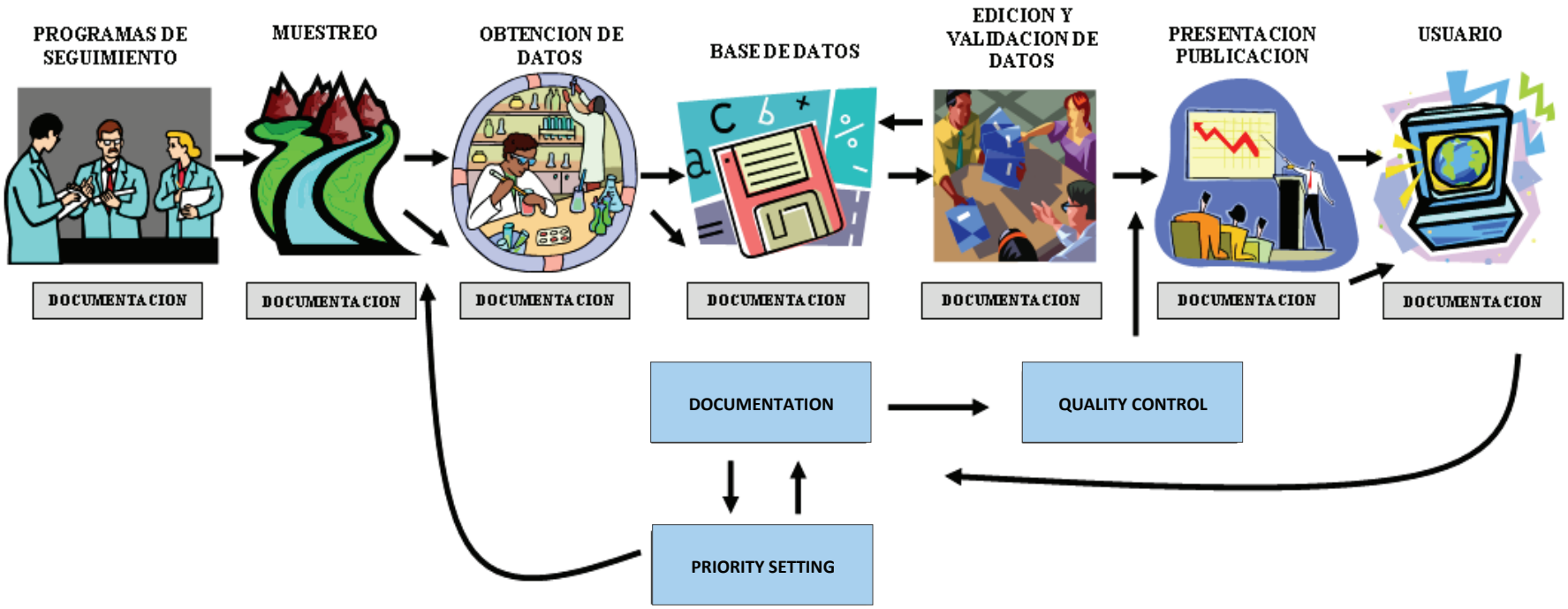
Water Registry



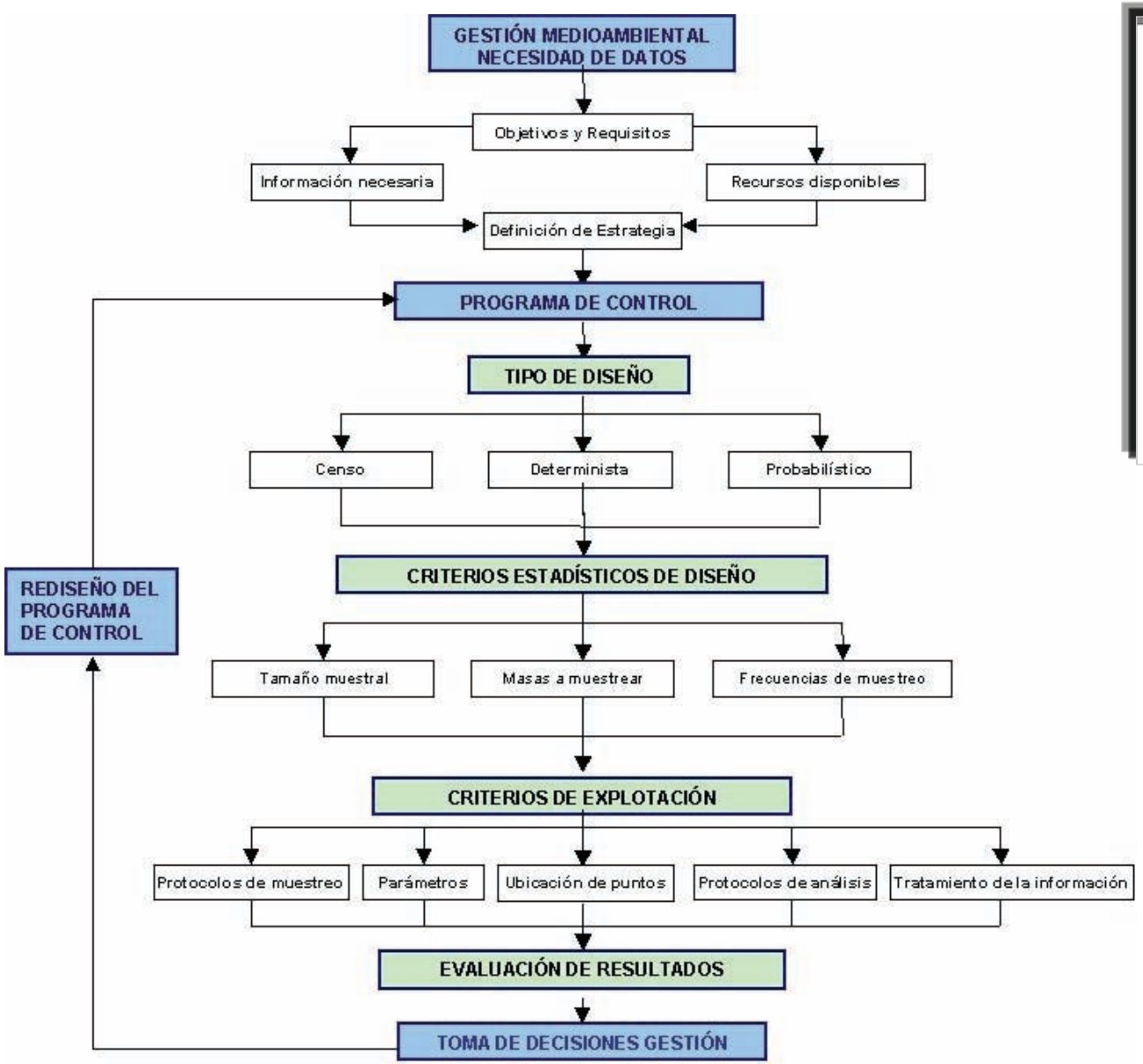
Water quality and water status information in Spain

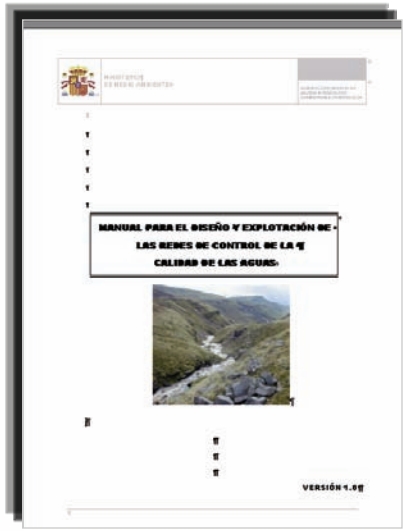
Monitoring programs
Quality assurance

Guidance for the design of monitoring programs	Sampling and analytical protocols (physical, chemical, biological, hymo)	Data models CEMAS TAXAGUA ID-TAX	Apoyo carga de datos y validación FIC	WB status information system



Guidance for the design of water quality monitoring programs





Sampling and analytical protocols

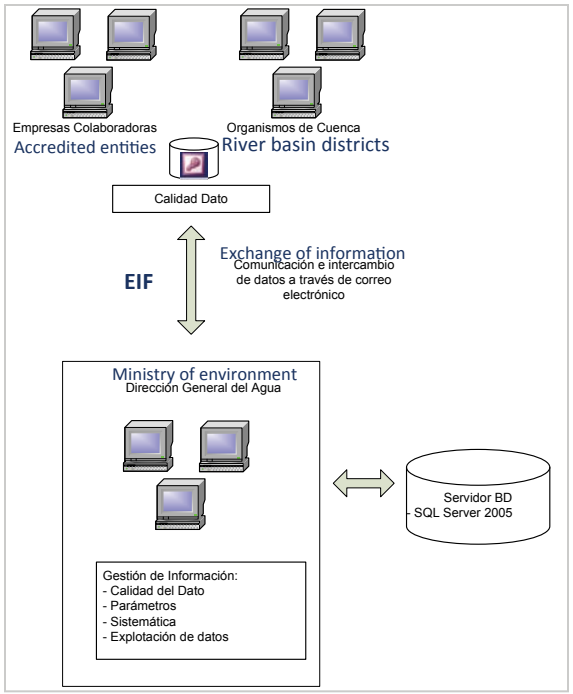
- **Chemical and microbiological analysis**
  - Orden MAM/3207/2006 Technical instruction MMA-EECC-1/06
- **Biological sampling and identification protocols**
  - Invertebrates in wadeable rivers (ML-Rv-I-2013)
  - Phytobenthos in rivers (benthic diatoms) (ML-R-D-2013)
  - Phytoplankton in lakes and reservoirs (M-LE-FP-2013)
  - Invertebrates in lakes (ML-L-I-2013)
  - Macrophytes in lakes (M-L-OFM-2013)
- **Biological sampling protocols**
  - Invertebrates in rivers IBMWP.2013
  - Invertebrates in lakes IBCAEL-2013
  - Phytoplankton in lakes and reservoirs MFIT-2013
  - Diatoms IPS. -2013
  - Macrophytes in lakes. OFALAM-2013

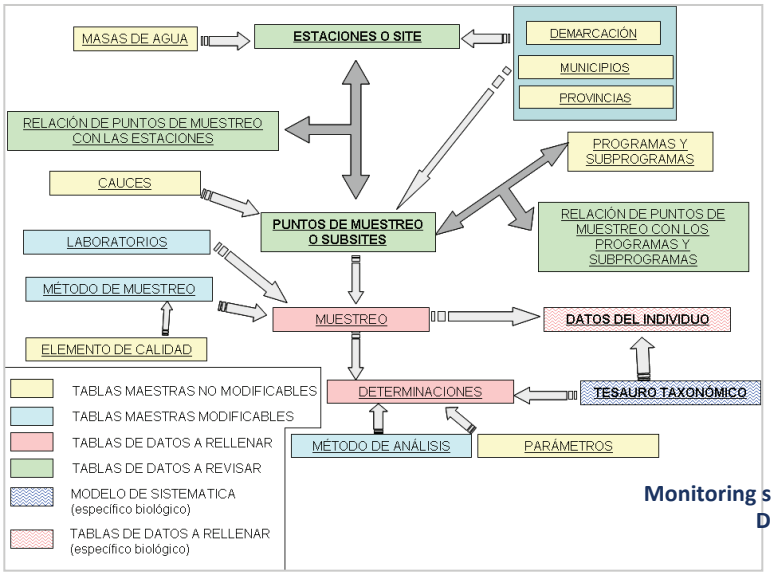

MINISTERIO DE MEDIO AMBIENTE


PROTOCOLO DE MUESTREO DE FITOPLANCTON EN LAGOS Y EMBALSES

Situation of WB status databases 2014

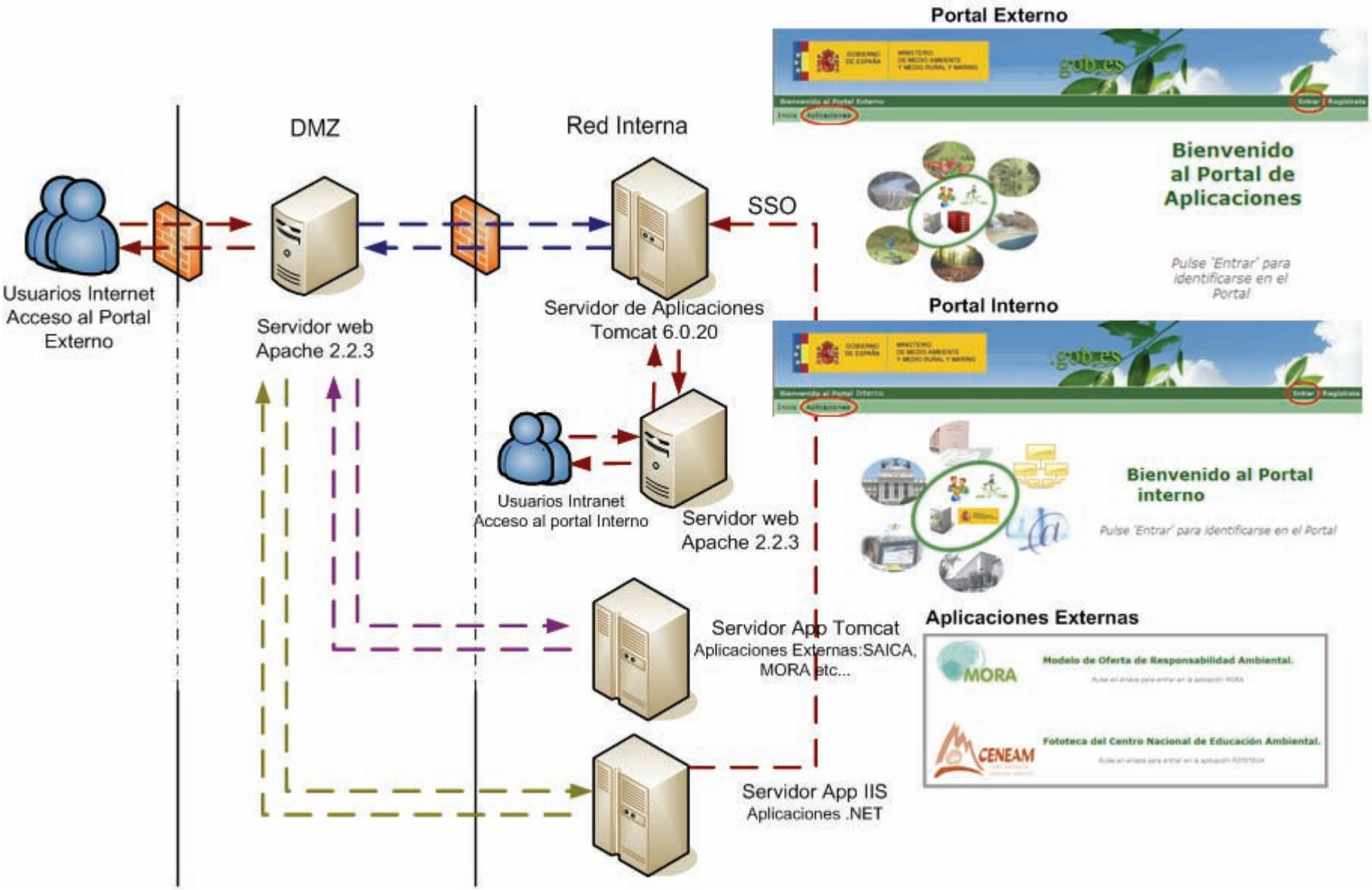
- 25 RBD involved
- Data model in continuous evolution
- Exchange of information file (EIF Access)
- Work focused on the improvement of data quality
- Annual reporting to the Ministry DB
  - From floppy disk exchange to the use of exchange of information platforms (CIRCA)
- Moving towards direct access to data at source





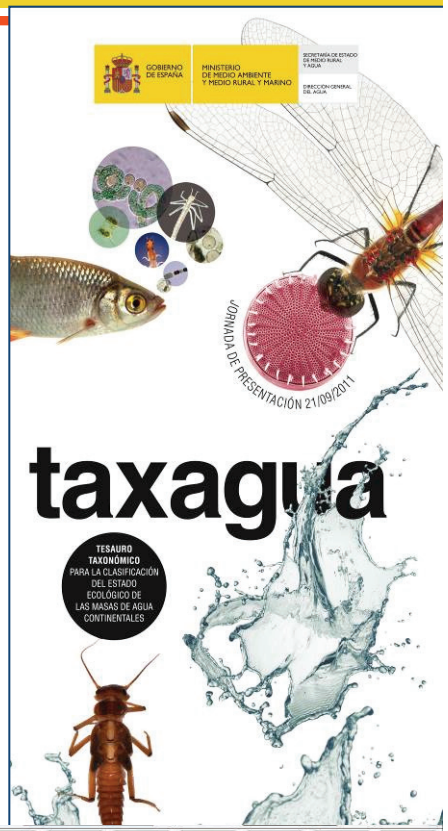
Monitoring status of WB (CEMAS)
Data model

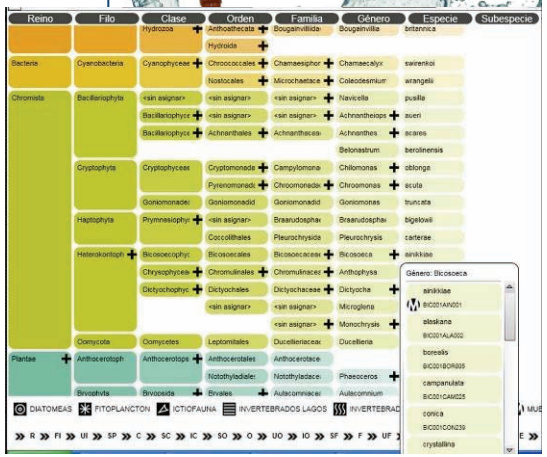
Water status monitoring
System architecture



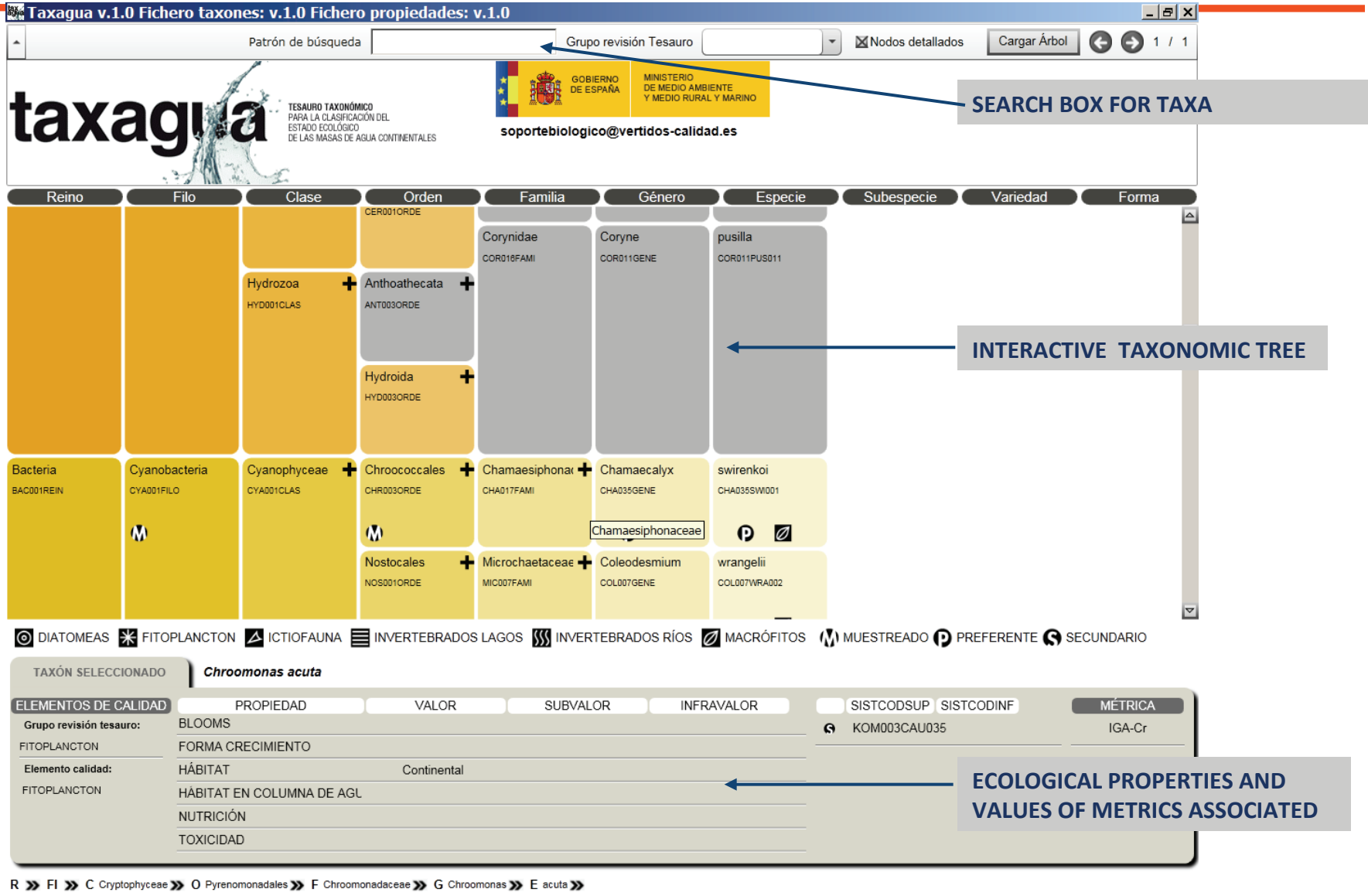
New challenges
Improvemets due to WFD

- **New biological parameters**
  - 2006. More than 32.000 different registers of taxa (only 14.000 valid)
  - Mistakes in writing, synonyms, duplicities, open names…
    - Need for standardization
      - Spanish official taxa list (Taxagua)
      - Common identification keys (ID-TAX)



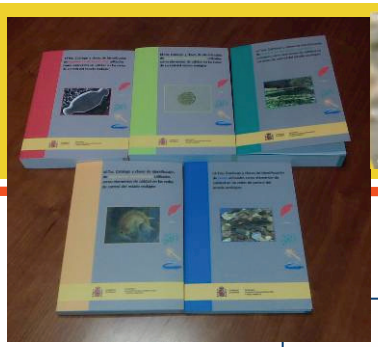


Thesaurus of taxa: TAXAGUA

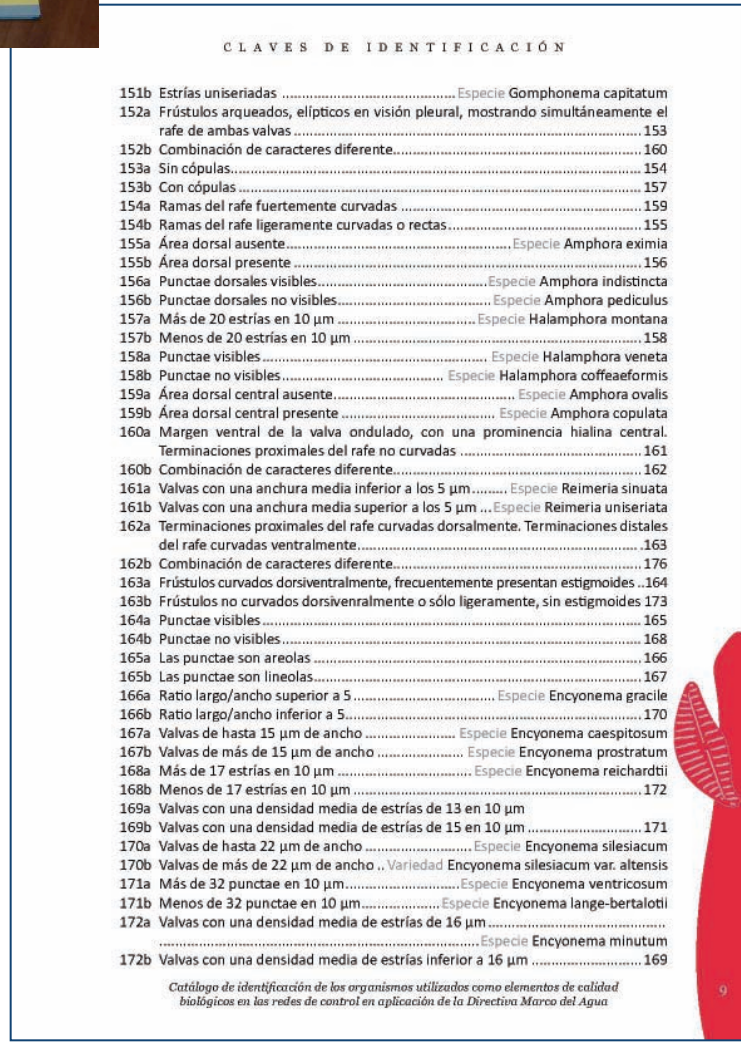


http://www.magrama.gob.es/es/agua/temas/estado-y-calidad-de-las-aguas/aguas-superficiales/programas-seguimiento/taxagua.aspx

Common identification keys



- Phytobenthos: 367 species
- Phytoplancton: 485 species
- Fish: 84 species
- Macrophites: 379 species
- Benthic invertebrates: 160 families, total taza 175

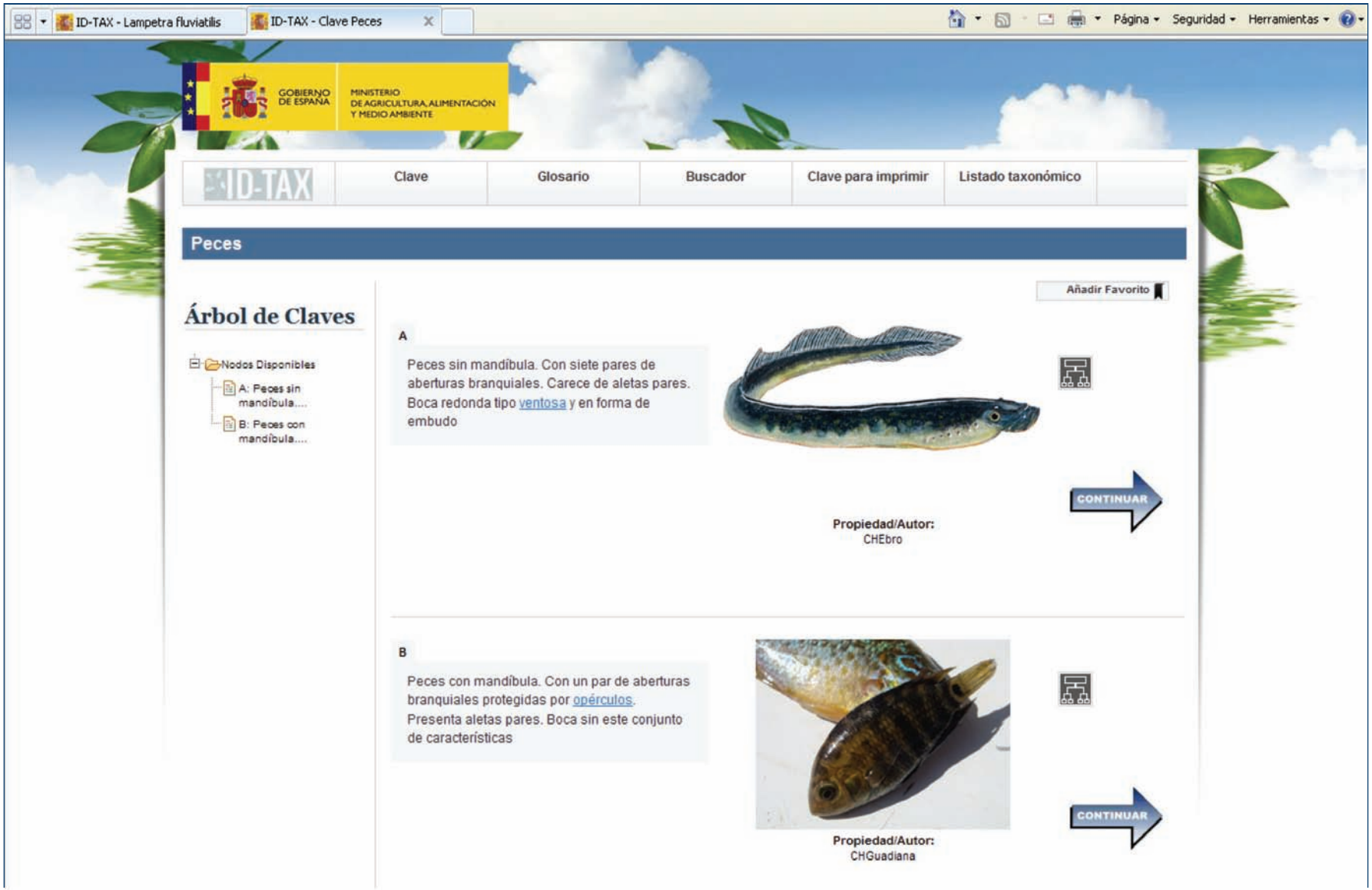


CLAVES DE IDENTIFICACIÓN

151b Estrías uniseriadas ..... Especie Gomphonema capitatum
152a Frústulos arqueados, elípticos en visión pleural, mostrando simultáneamente el rafe de ambas valvas 153
152b Combinación de caracteres diferente 160
153a Sin cópulas 154
153b Con cópulas 157
154a Ramas del rafe fuertemente curvadas 159
154b Ramas del rafe ligeramente curvadas o rectas 155
155a Área dorsal ausente ..... Especie Amphora eximia
155b Área dorsal presente 156
156a Punctae dorsales visibles ..... Especie Amphora indistincta
156b Punctae dorsales no visibles ..... Especie Amphora pediculus
157a Más de 20 estrías en 10 µm ..... Especie Halamphora montana
157b Menos de 20 estrías en 10 µm 158
158a Punctae visibles ..... Especie Halamphora veneta
158b Punctae no visibles ..... Especie Halamphora coffeaeformis
159a Área dorsal central ausente ..... Especie Amphora ovalis
159b Área dorsal central presente ..... Especie Amphora copulata
160a Margen ventral de la valva ondulado, con una prominencia hialina central. Terminaciones proximales del rafe no curvadas 161
160b Combinación de caracteres diferente 162
161a Valvas con una anchura media inferior a los 5 µm ..... Especie Reimeria sinuata
161b Valvas con una anchura media superior a los 5 µm ... Especie Reimeria uniseriata
162a Terminaciones proximales del rafe curvadas dorsalmente. Terminaciones distales del rafe curvadas ventralmente 163
162b Combinación de caracteres diferente 176
163a Frústulos curvados dorsiventralmente, frecuentemente presentan estigmoides .. 164
163b Frústulos no curvados dorsivenralmente o sólo ligeramente, sin estigmoides 173
164a Punctae visibles 165
164b Punctae no visibles 168
165a Las punctae son areolas 166
165b Las punctae son lineolas 167
166a Ratio largo/ancho superior a 5 ..... Especie Encyonema gracile
166b Ratio largo/ancho inferior a 5 170
167a Valvas de hasta 15 µm de ancho ..... Especie Encyonema caespitosum
167b Valvas de más de 15 µm de ancho ..... Especie Encyonema prostratum
168a Más de 17 estrías en 10 µm ..... Especie Encyonema reichardtii
168b Menos de 17 estrías en 10 µm 172
169a Valvas con una densidad media de estrías de 13 en 10 µm
169b Valvas con una densidad media de estrías de 15 en 10 µm 171
170a Valvas de hasta 22 µm de ancho ..... Especie Encyonema silesiacum
170b Valvas de más de 22 µm de ancho .. Variedad Encyonema silesiacum var. altensis
171a Más de 32 punctae en 10 µm ..... Especie Encyonema ventricosum
171b Menos de 32 punctae en 10 µm ..... Especie Encyonema lange-bertalotii
172a Valvas con una densidad media de estrías de 16 µm ..... Especie Encyonema minutum
172b Valvas con una densidad media de estrías inferior a 16 µm 169

Catálogo de identificación de los organismos utilizados como elementos de calidad biológicos en las redes de control en aplicación de la Directiva Marco del Agua

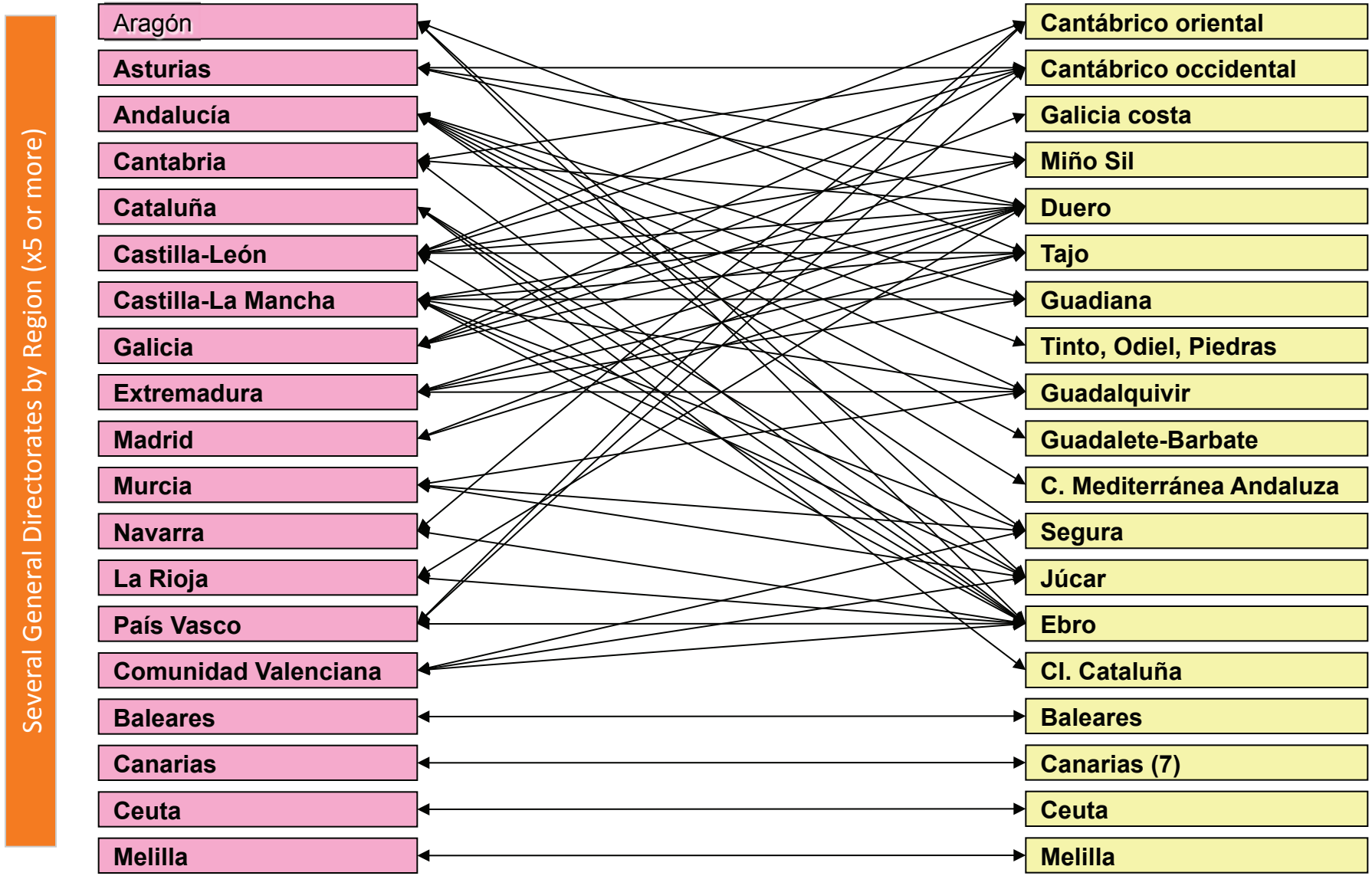
ID-TAX web-based application



http://www.magrama.gob.es/es/agua/temas/estado-y-calidad-de-las-aguas/aguas-superficiales/programas-seguimiento/id-tax.aspx

Programs of measures
WFD river basin management plans
in Spain

Interrelation Regions-River Basin District (measures)



Future situation with Programmes of measures Database (DB PoM)

Several General Directorates by Region (x5 or more)

- Aragón
- Asturias
- Andalucía
- Cantabria
- Cataluña
- Castilla-León
- Castilla-La Mancha
- Galicia
- Extremadura
- Madrid
- Murcia
- Navarra
- La Rioja
- País Vasco
- Comunidad Valenciana
- Baleares
- Canarias
- Ceuta
- Melilla

DB PoM

More than 300 public authorities involved

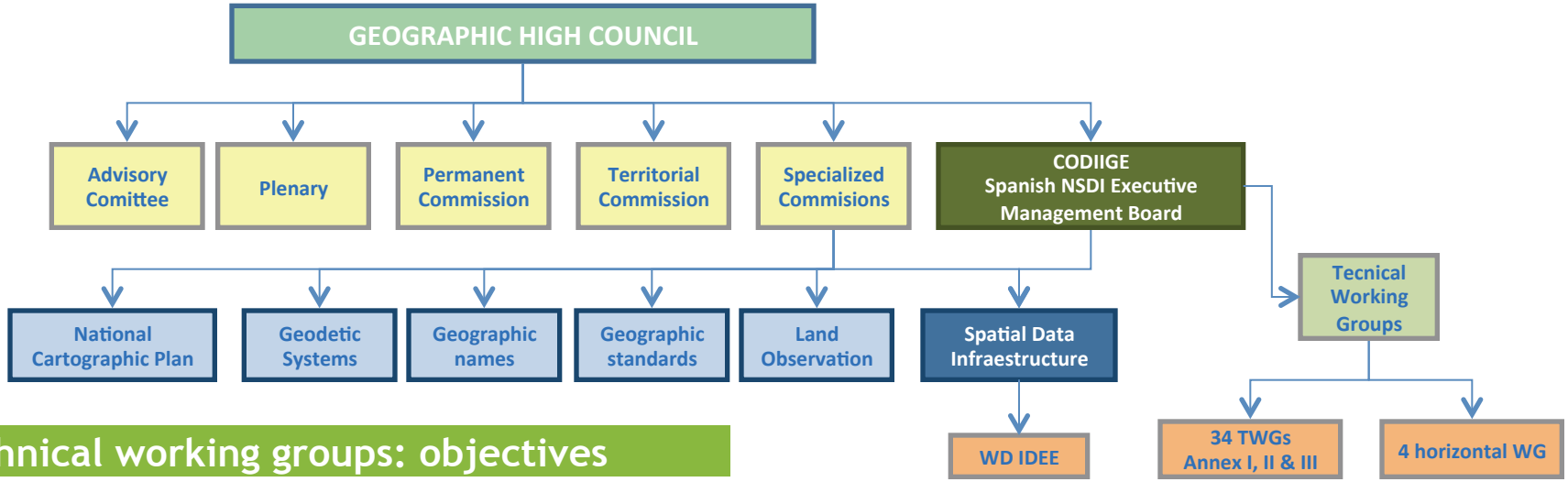
Private measures

- Cantábrico oriental
- Cantábrico occidental
- Galicia costa
- Miño Sil
- Duero
- Tajo
- Guadiana
- Tinto, Odiel, Piedras
- Guadalquivir
- Guadalete-Barbate
- C. Mediterránea Andaluza
- Segura
- Júcar
- Ebro
- Cl. Cataluña
- Baleares
- Canarias (7)
- Ceuta
- Melilla

Spatial datasets
Inspire directive in Spain

Spanish Infrastructure for Spatial Information Managing Board (CODIIGE)

- Created in 2011 to coordinate the implementation of Inspire directive in Spain
  - 38 TWG created (4 horizontal + 34 thematic)



Technical working groups: objectives

- Analysis of existing regulations in Spain
- Search for consistency between these regulations and the corresponding INSPIRE implementing rules
- Preparation of draft standards, guidelines, methodologies, classifications, nomenclatures, codes (standardization)
- Analysis of the data sets, metadata, and services necessary to inform the EC (INSPIRE)
- Raise awareness of creating data sets, metadata, and services
- Monitor the implementation of these data sets and services
- Promote the development of tools for analysis and publication of information

Guidelines – Data Specification

Thematic Guidelines

I.1 INSPIRE_Specification_CRS_v3.1
I.2 INSPIRE_Specification_GGS_v3.0.1
I.3 INSPIRE_DataSpecification_GN_v3.0.1
I.4 INSPIRE_DataSpecification_AU_v3.0.1
I.5 INSPIRE_DataSpecification_AD_v3.0.1
I.6 INSPIRE_DataSpecification_CP_v3.0.1
I.7 INSPIRE_DataSpecification_TN_v3.1
I.8 INSPIRE_DataSpecification_HY_v3.0.1
I.9 INSPIRE_DataSpecification_PS_v3.1
II.1 INSPIRE_DataSpecification_EL_v3.0rc3
II.2 INSPIRE_DataSpecification_LC_v3.0rc3
II.4 INSPIRE_DataSpecification_GE_v3.0rc3
III.1 INSPIRE_DataSpecification_SU_v3.0rc3
III.2 INSPIRE_DataSpecification_BU_v3.0rc3
III.3 INSPIRE_DataSpecification_OI_v3.0rc3
III.3 INSPIRE_DataSpecification_SO_v3.0rc3
III.4 INSPIRE_DataSpecification_LU_v3.0rc3
III.5 INSPIRE_DataSpecification_HH_v3.0rc3
III.6 INSPIRE_DataSpecification_US_v3.0rc3
III.7 INSPIRE_DataSpecification_EF_v3.0rc3
III.8 INSPIRE_DataSpecification_PF_v3.0rc3
III.9 INSPIRE_DataSpecification_AF_v3.0rc3
III.10 INSPIRE_DataSpecification_PD_v3.0rc3
III.11 INSPIRE_DataSpecification_AM_v3.0rc3
III.12 INSPIRE_DataSpecification_NZ_v3.0rc3
III.13 y 14 INSPIRE_DataSpecification_AC-MF_v3.0rc3
III.15 INSPIRE_DataSpecification_OF_v3.0rc3
III.16 INSPIRE_DataSpecification_SR_v3.0rc3
III.17 INSPIRE_DataSpecification_BR_v3.0rc3
III.18 INSPIRE_DataSpecification_HB_v3.0rc3
III.19 INSPIRE_DataSpecification_SD_v3.0rc3
III.20 INSPIRE_DataSpecification_ER_v3.0rc3
III.21 INSPIRE_DataSpecification_MR_v3.0rc3

General Guidelines

D2.3_Definition_of_Annex_Themes_and_scope_v3.0
D2.5_Generic conceptual modelv3.4rc3
D2.6Methodology data specifications_v3.0
D2.7_Encoding data v3.3rc3
D2.8.II-III xx INSPIRE_DataSpecification_
D2.9_Observations&Measurements_v2.0r
D2.10.1_GenericNetworkModel_v1.0rc3
D2.10.2_CoverageTypes_v1.0rc3
D2.10.3_Activity_Complexes_v1.0rc3

Tipo: Adobe Acrobat
Título: Microsoft Wor
Fecha de modificació
Tamaño: 977 KB

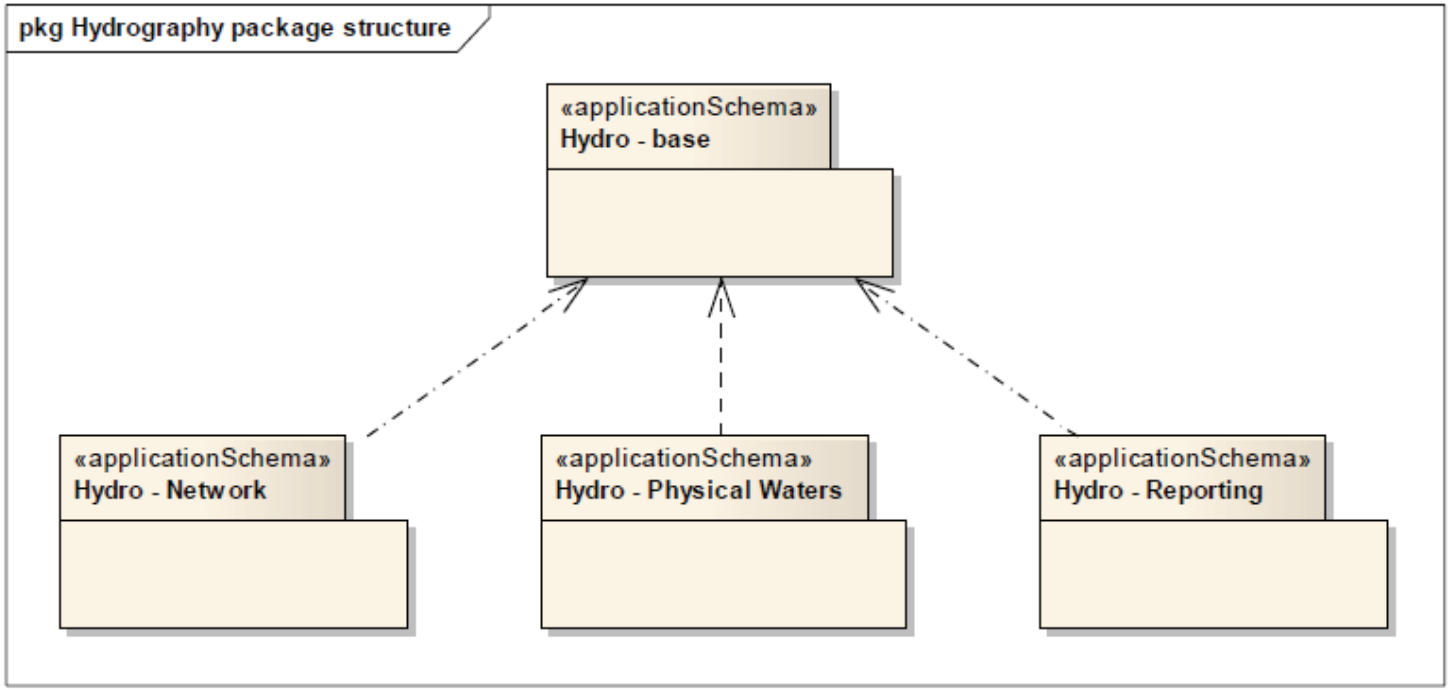
INSPIRE
Infrastructure for Spatial Information in Europe

D2.8.I.8 INSPIRE Data Specification on Hydrography – Guidelines

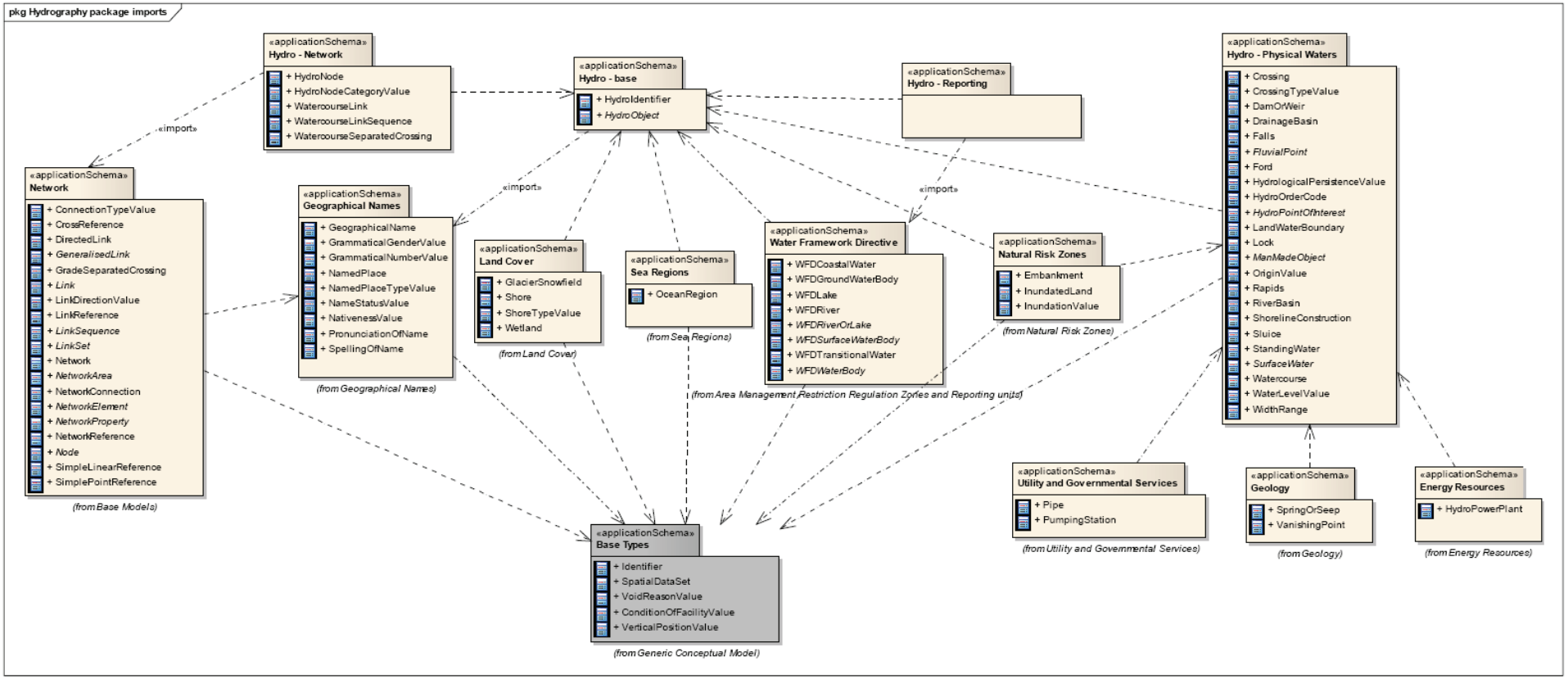
Title	D2.8.I.8 INSPIRE Data Specification on *Hydrography* – Guidelines
Creator	INSPIRE Thematic Working Group *Hydrography*
Date	2010-04-26
Subject	INSPIRE Data Specification for the spatial data theme *Hydrography*
Publisher	INSPIRE Thematic Working Group *Hydrography*
Type	Text
Description	This document describes the INSPIRE Data Specification for the spatial data theme *Hydrography*
Contributor	Members of the INSPIRE Thematic Working Group *Hydrography*
Format	Portable Document Format (PDF)
Source	
Rights	Public
Identifier	INSPIRE_DataSpecification_HY_v3.0.1.pdf
Language	En
Relation	Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE)
Coverage	Project duration

Data Specification
Guidelines I.8 Hydrography

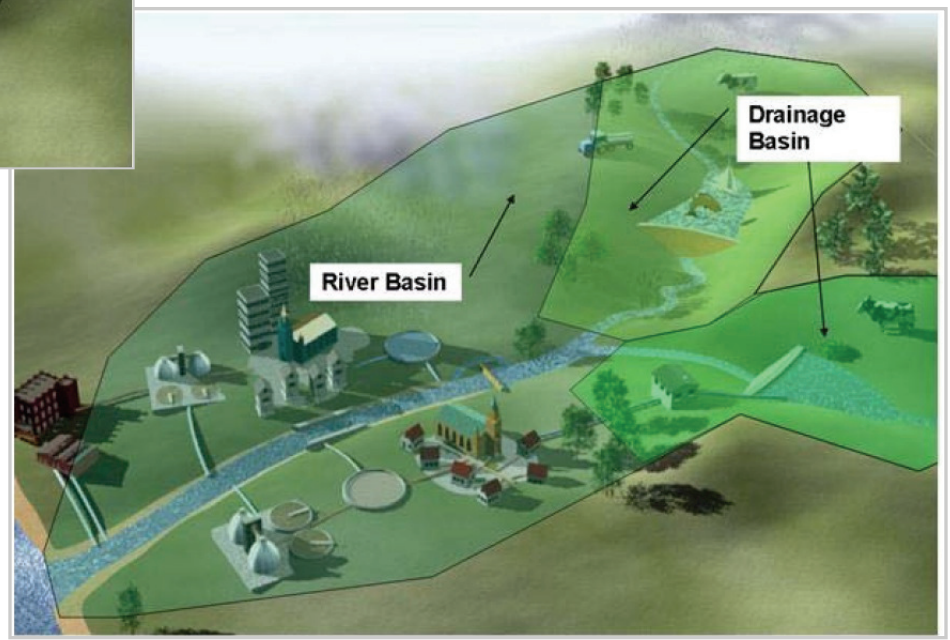
- Structure of the hydrography application schemas



Relationships in the Hydrography application schemas

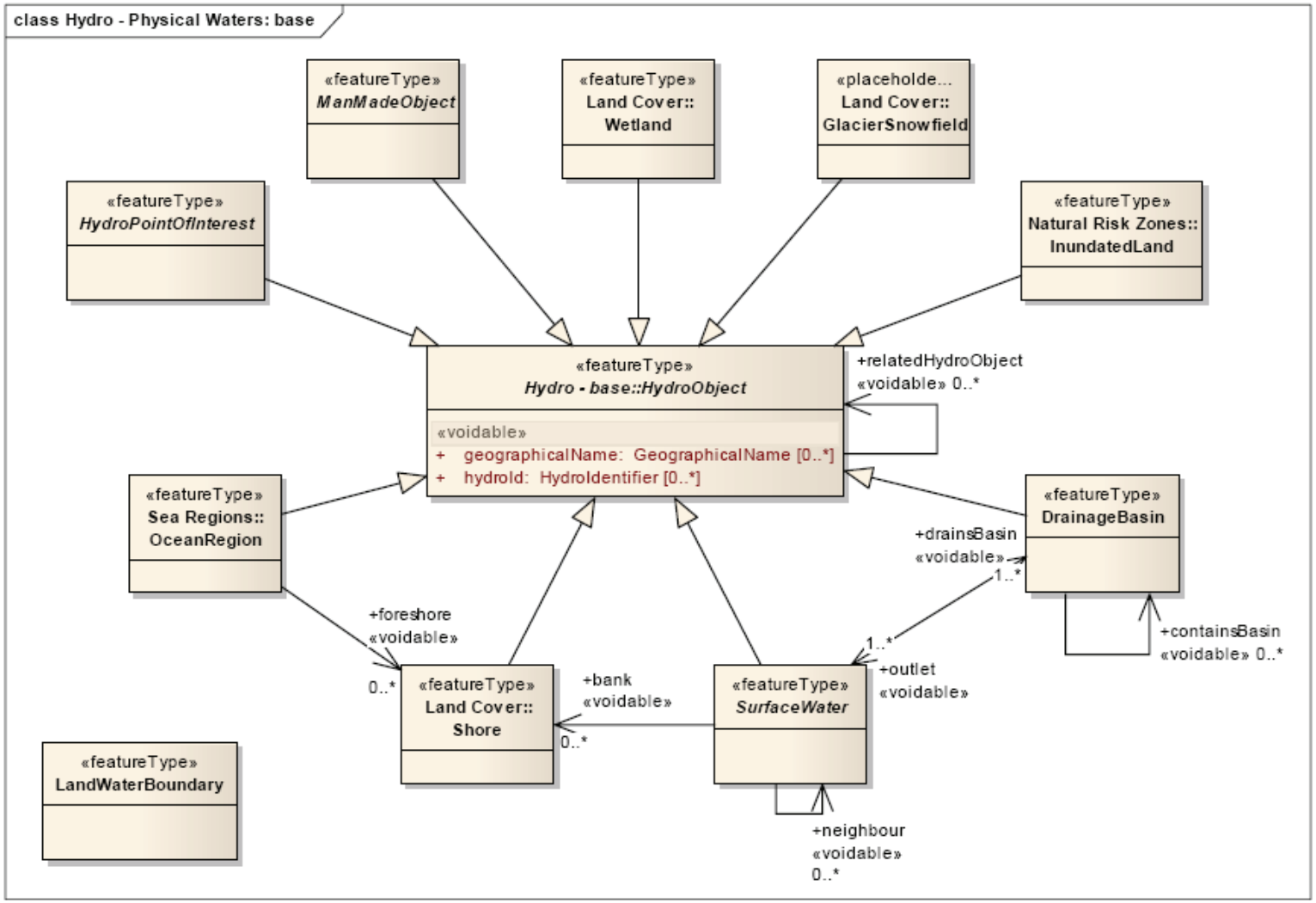


Data Specification
Guidelines I.8 Hydrography. Physical waters

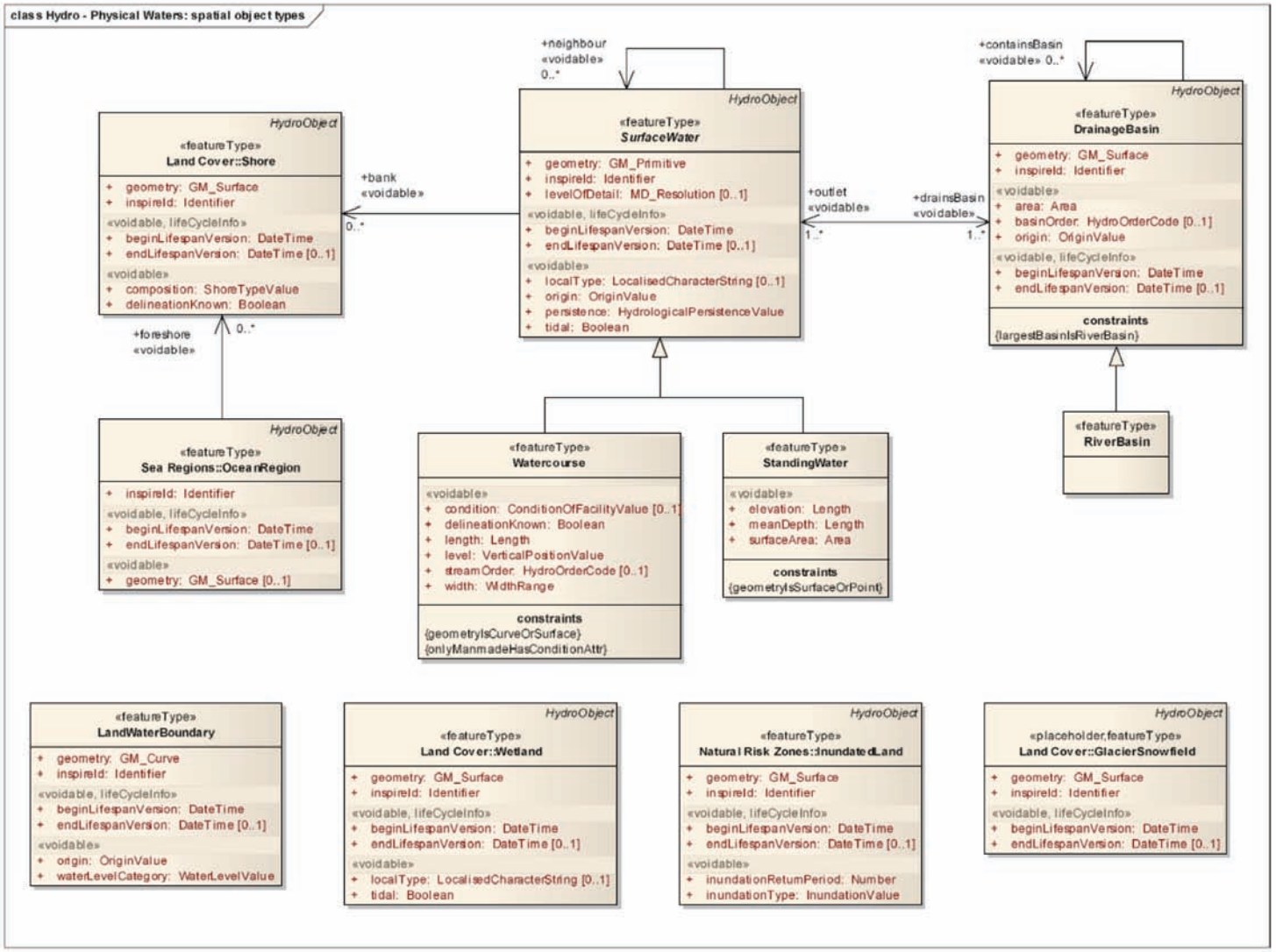


Data Specification
Guidelines I.8 Hydrography. Physical waters

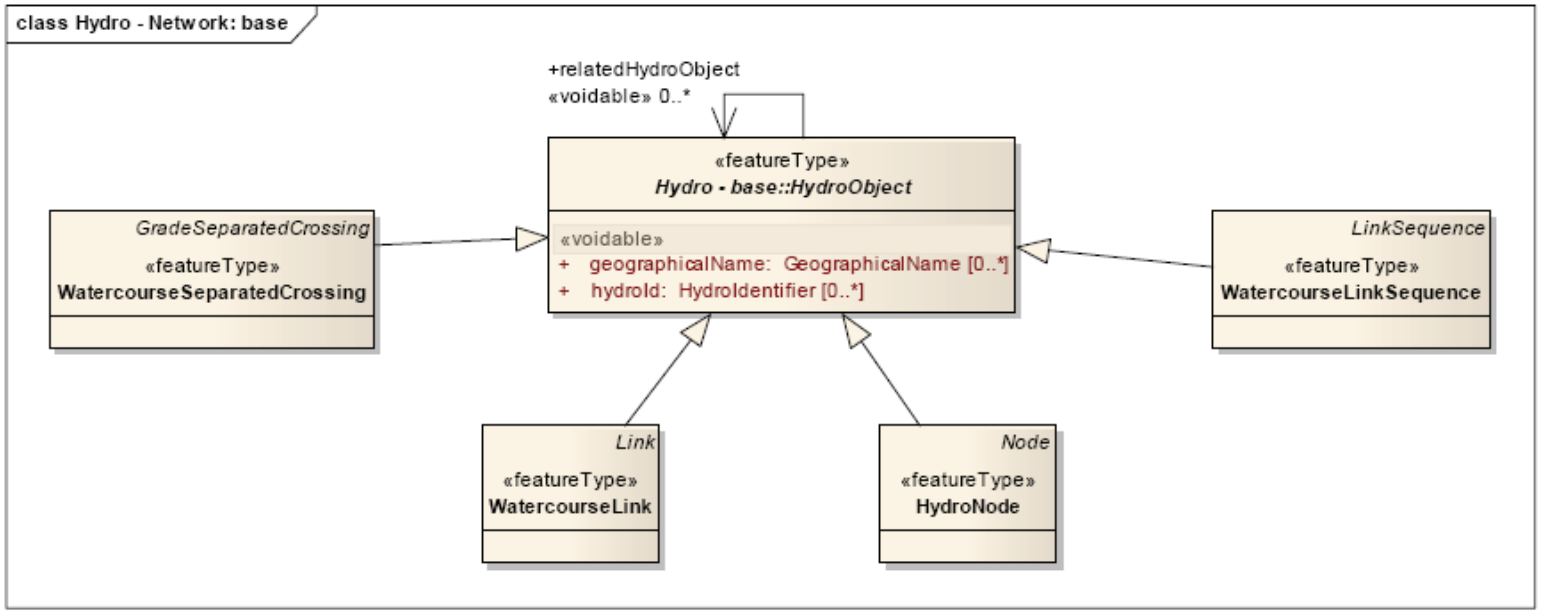
- UML class diagram: Overview of the 'Hydro – Physical Waters' application schema



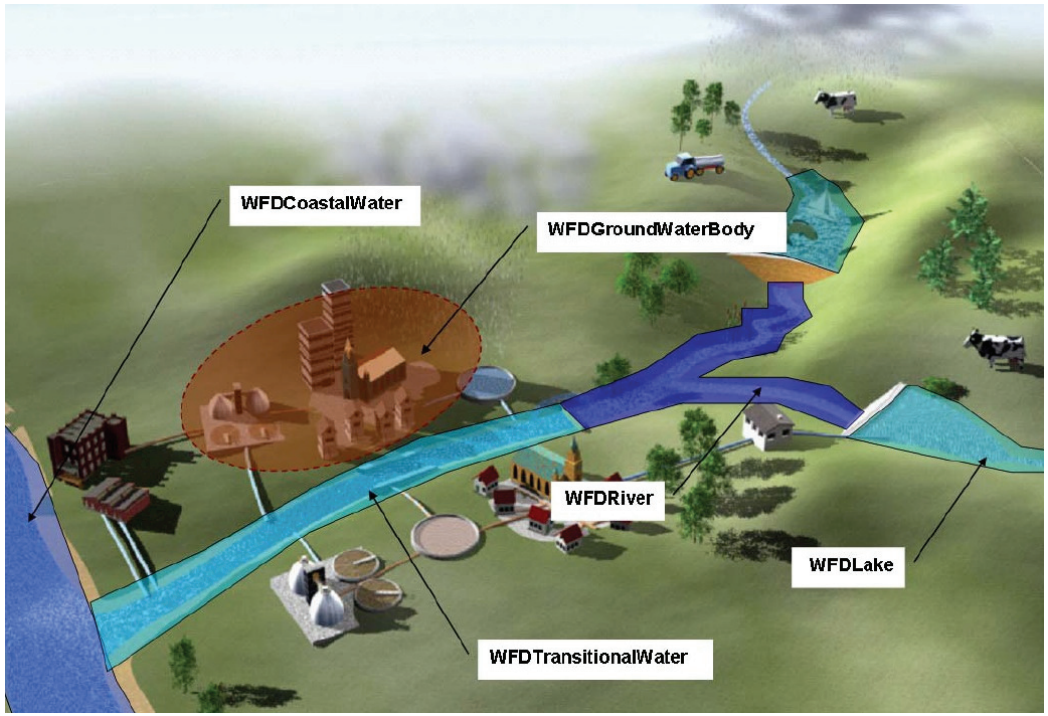
UML class diagram: 'Physical Waters' spatial object types (including related classes from other themes)

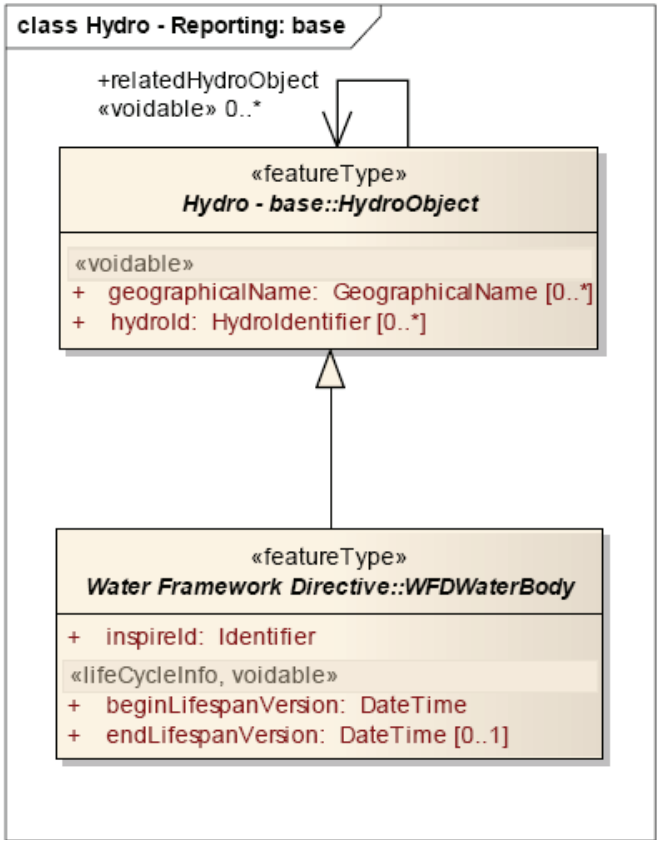


Data Specification
Guidelines I.8 Hydrography. Hydro-network



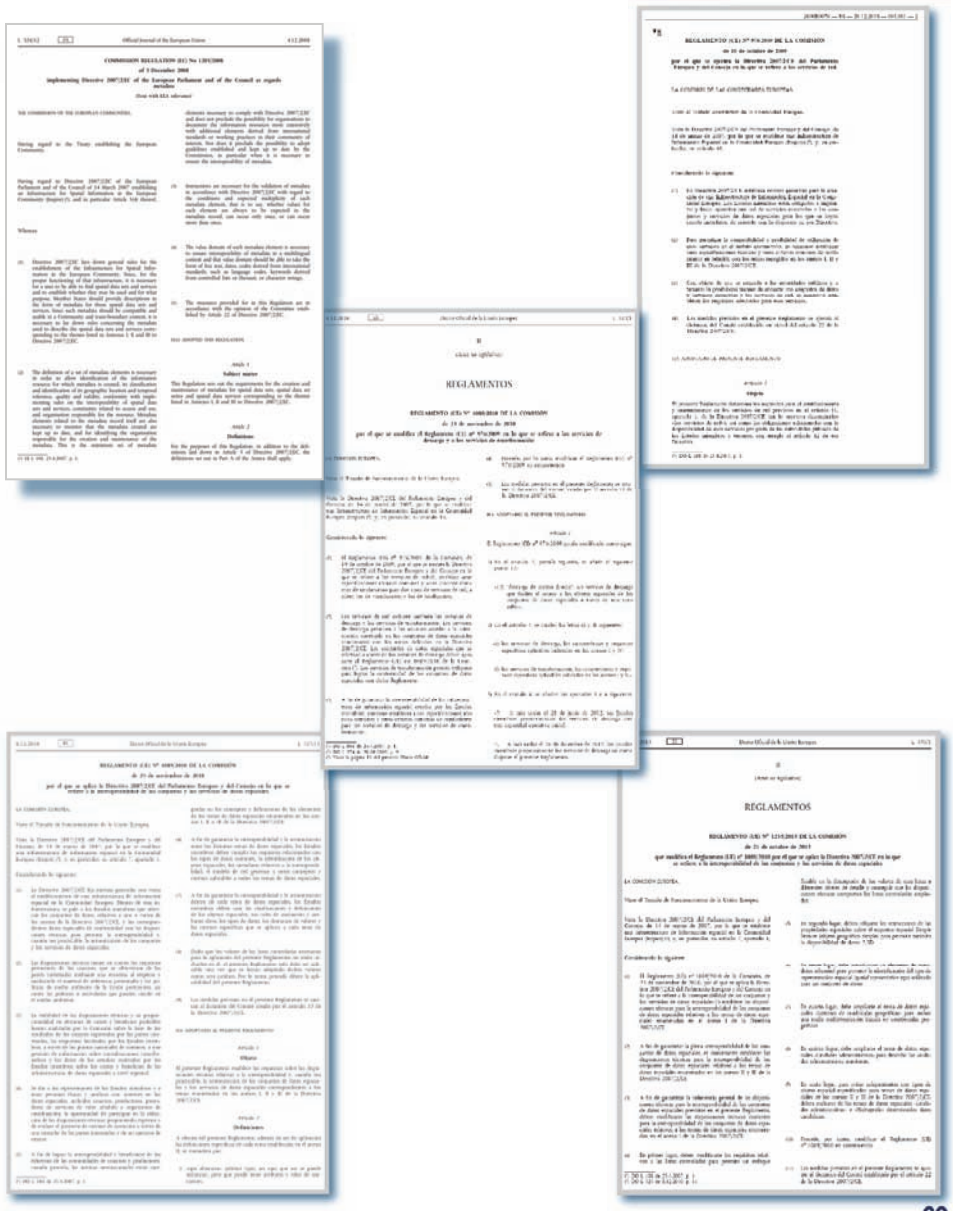
Moved to Annex III.11 through Regulation 1253/2013





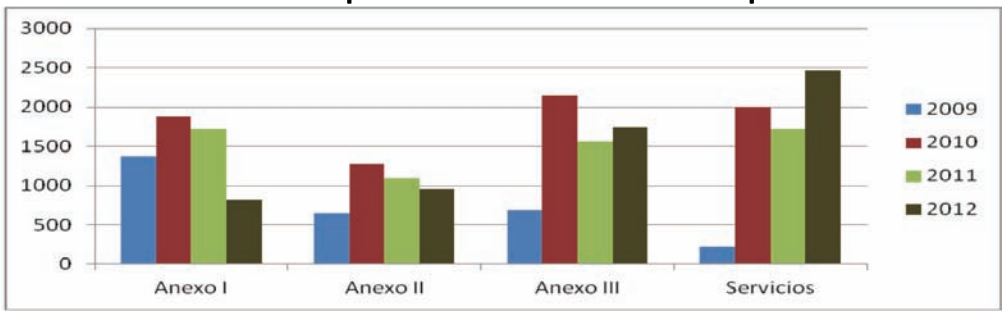
Inspire regulations

- Regulation (EC) No 1205/2008 as regards **metadata**
- Regulation (EC) No 976/2009 as regards the **Network Services**
- Regulation (EC) No 1088/2010 as regards **download services and transformation services**
- Regulation (EC) No 1089/2010 as regards **interoperability** of spatial data sets and services (Annex I Themes)
  - Regulation (UE) No 1253/2013 (Annex II & III Themes)



Inspire reporting Spain

- General evolution of data reported to the European Commission (Spain)



- Annex I.8 Hydrography
  - First years: even no data

More data doesn't necessarily mean more information

  - Year 2010
    - 403 spatial datasets reported
    - 48 considered valid
  - Year 2013
    - 98 spatial datasets reported
    - 62 considered valid & correct

If data is not well catalogued

more data = more confusion = less information

Open collaborative production
Non born initiatives

Open collaborative production
Non born initiatives

Difficulties of public authorities to cover the hole territory or hole information

- **Phytoplankton:** assessment of frequency of algal blooms (WFD requirement)
- **ID-TAX:** not all levels of taxonomic identification had a good photographs
- Collaborative completion of **inventory of pressures** (e.g. abandoned little dams)

Why haven't they succeed yet?

- Difficulties for quality control
  - ✓ Algal blooms: possible confusion in the name of the lake/reservoir, missspellings in names, foam (pollution or algal bloom?)..
  - ✓ ID-TAX photos: possible mistakes of taxonomic classification, mistakes encoding photos…
  - ✓ Small differences in coordinates produce two objects…

- A reviewing system has to be put in place
  - Does it worth the information gained?
  - Need for automated reviewing or volunteer reviewing community or… (any idea?)
- More data can be less information

Some possible conclusions

Shortcomings problems and conclusions

- **First requirement to share information:**
  - Information should exist and have minimum quality requirements
    - Requirements have to be public, well known and stable
    - Share data vs share information

- **Standardization is crucial**
  - The highest binding level the better (law, technical specifications, agreements, guidance documents…)
  - Standardization is of no use if there is no willingness to follow the standards
    - Legal enforcement mechanisms are important
    - Mechanisms to increase **loyalty** are of paramount importance
      - Interpersonal relationships (working groups, seminars…)
      - Education: all levels of society implied

- **The role of ICT**
  - ICT is the main driver that allows information sharing (but just a tool)
  - Collaborative production and management of water information should take advantage of existing ICT developments
  - Focus should be put on institutional arrangements

Loyalty – Institutional loyalty

- With co-workers
- With workers of other levels in the scale of information
- With information needs of others (management, citizens)
- With non binding compliance documents or formats
  - With agreements
  - With guidance documents
  - With information formats
- With law compliance
- Loyalty of citizens with administration (environment protection is a responsibility of all)

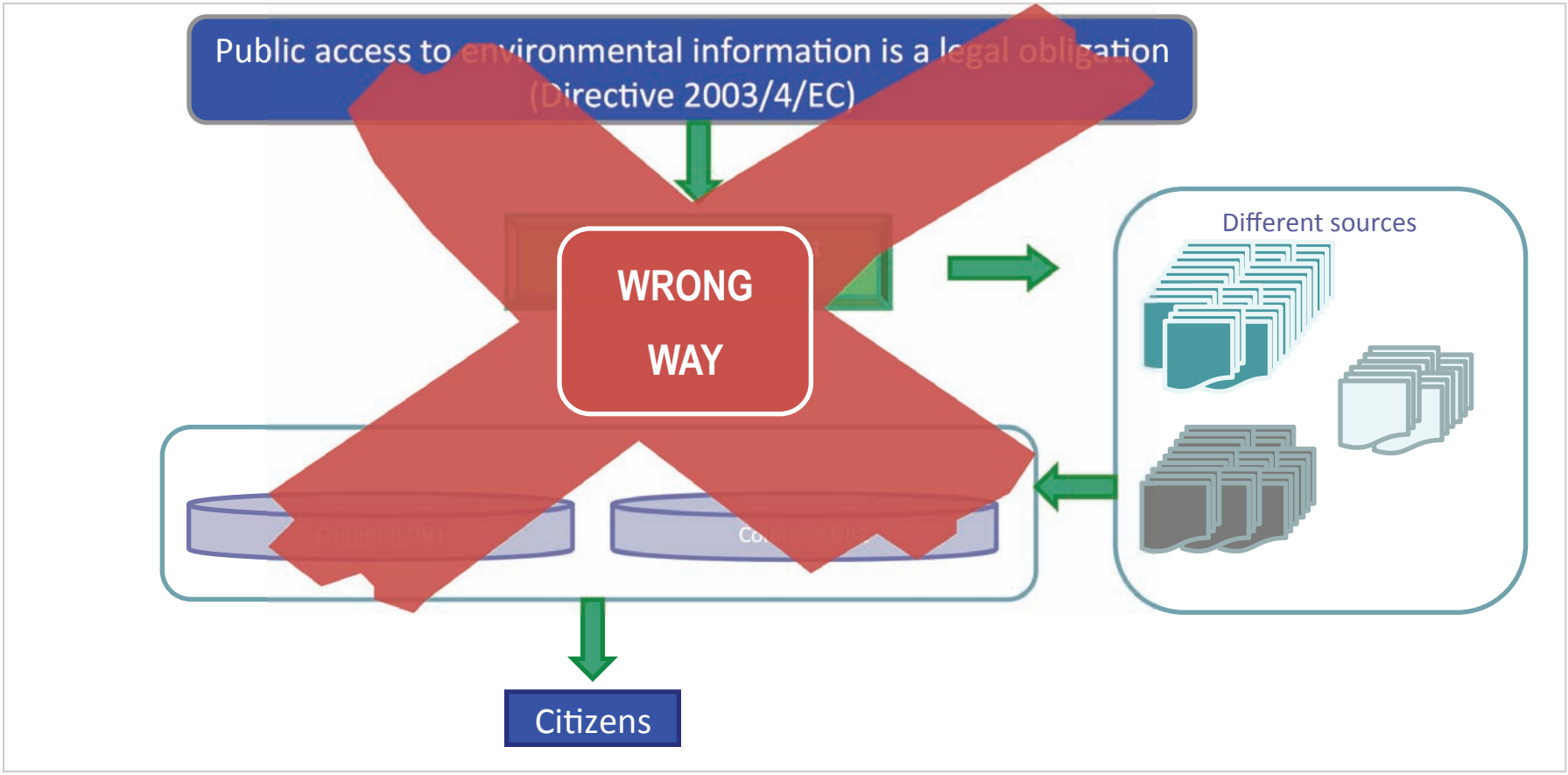
Spanish Constitution

Article 45

1. Everyone has the right to enjoy an environment suitable for the development of the person as well as the duty to preserve it.

2. The public authorities shall concern themselves with the rational use of all natural resources for the purpose of protecting and improving the quality of life and protecting and restoring the environment, supporting themselves on an indispensable collective solidarity.

Public participation and access to data



It is not just an obligation

Public participation and access to data
Conclusions

To make polycentric information available to managers, agencies and the public

- **Data information systems have to offer the data producer an advantage for using it**
- **Data information systems have to take account of data needs of all actors involved**
- **Data collection shouldn't be oriented only to:**
  - ✓ Reporting purposes (compliance reporting should be just one of the outputs the systems)
  - ✓ Comply with public access to environmental data
- **Data should be collected for management, planning or policy definition purposes**
  - Data as a means to an end
  - All levels of decision have to be involved (Policy makers, managers, stakeholders, water users, NGOs, citizens…). Consensus on strategy
- **Reporting has to be a consequence of the work carried out**
  - Reporting shouldn't be a time consuming effort
  - Reporting should be "transparent" for the producer of the information
- **Public access to data has to be seen as a way to improve water management** (public access to information as a means to an end)
  - There is a need that public authorities and citizens believe this way of thinking
- **Public authorities and citizens should have the commitment to work together**
  - Need for loyalty in this relationship


Thank you!
Javier Ruza Rodríguez
Head of Unit for Management and Cooperation
Deputy Directorate-General for Water Planning and Sustainable Use of Water
Directorate-General for Water
Ministry of Agriculture, Food and Environment (Spain)
jruza@magrama.es
Ruza river