

# EauFrance/Sandre – Water Web Services

Water web services description, translated from French to English using Google Translate:

[http://translate.google.com/translate?hl=en&sl=fr&tl=en&u=http%3A%2F%2Fsandre.eaufrance.fr%2Frubrique.php%3Fid\\_rubrique%3D128%26lang%3Dfr](http://translate.google.com/translate?hl=en&sl=fr&tl=en&u=http%3A%2F%2Fsandre.eaufrance.fr%2Frubrique.php%3Fid_rubrique%3D128%26lang%3Dfr)

*Eric Hersh and David Maidment  
The University of Texas at Austin  
Center for Research in Water Resources  
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# Links

Website is the following : <http://sandre.eaufrance.fr/>

Pages concerning data dictionaries are :

[http://sandre.eaufrance.fr/article.php3?id\\_article=57&lang=fr](http://sandre.eaufrance.fr/article.php3?id_article=57&lang=fr)

Pages concerning exchange scenarios :

[http://sandre.eaufrance.fr/rubrique.php3?id\\_rubrique=44&lang=fr](http://sandre.eaufrance.fr/rubrique.php3?id_rubrique=44&lang=fr)

Pages concerning web services :

[http://sandre.eaufrance.fr/rubrique.php3?id\\_rubrique=128&lang=fr](http://sandre.eaufrance.fr/rubrique.php3?id_rubrique=128&lang=fr)

Monitoring station description :

[http://xml.sandre.eaufrance.fr/scenario/quesu/1/sandre\\_sc\\_quesu.xsd](http://xml.sandre.eaufrance.fr/scenario/quesu/1/sandre_sc_quesu.xsd)

Water quality data :

[http://xml.sandre.eaufrance.fr/scenario/sw\\_qu/1/sandre\\_sc\\_wsQualite.xsd](http://xml.sandre.eaufrance.fr/scenario/sw_qu/1/sandre_sc_wsQualite.xsd)

## • Web Service Specifications water quality

The Zander develop specifications for web services of the EIS. In this context, Zander provides the specifications of Web Service water quality on the portal stream. Note that this document is in draft form and is not complete. Only the shallow inland waters theme is complete. This document will be supplemented later by us.

### Presentation Service

The paper specifications web service describes water quality specifications required for transmission of data on water quality for the following topics:

- ▶ Inland surface water, both in rivers and lakes;
- ▶ Groundwater;
- ▶ Transitional waters, coastal and marine \*.

(\*) Not implemented in version 1.0

The term "water quality" for the following compartments:

- ▶ physico-chemical quality of water, both the classical parameters of the analysis (NO<sub>3</sub>, PO<sub>4</sub>, COD ,...) that substances micropollutants;
- ▶ microbiological water quality;
- ▶ Biological quality of waters, both in the form of biological indices (IBGN, IBD, IPR ,...) that faunal lists.

This document takes into account the needs for the implementation of the portal information system streams (SCIA).

### Specifications Service

If using the web service:

- ▶ Search site
- ▶ View a set of basic data;
- ▶ Download a set of basic data delayed;
- ▶ View the sites on a map interface;
- ▶ Counting and sampling sites that meet a criterion
- ▶ View a calculated parameter (indicator)
- ▶ Aggregate data quality of several thematic

The [Web service specifications](#) explain the different operations available for polling service (see below). The structure of response files is also described in detail in this document and files available via URLs.

### Web Service Operations

As a guide, the following transactions are processed in the web service:

- ▶ `getCapabilities ()`: identifies the characteristics of web service broadcaster's data.
- ▶ `getSites ()`: Allows you to search one or more sites by calling one or more criteria. Returns a list of sites with some essential information.
- ▶ `getSiteDescription ()`: Gets the invariant information of a particular site.
- ▶ `getDataAvailability ()`: To obtain information on the number of samples and the number of tests on one or more sites for all available years (per compartment).
- ▶ `getData ()` Gets the data or information on the sampling / analysis or the number of sampling / analysis for a set of measurement sites in one or more criteria.

# Sandre *and* CUAHSI

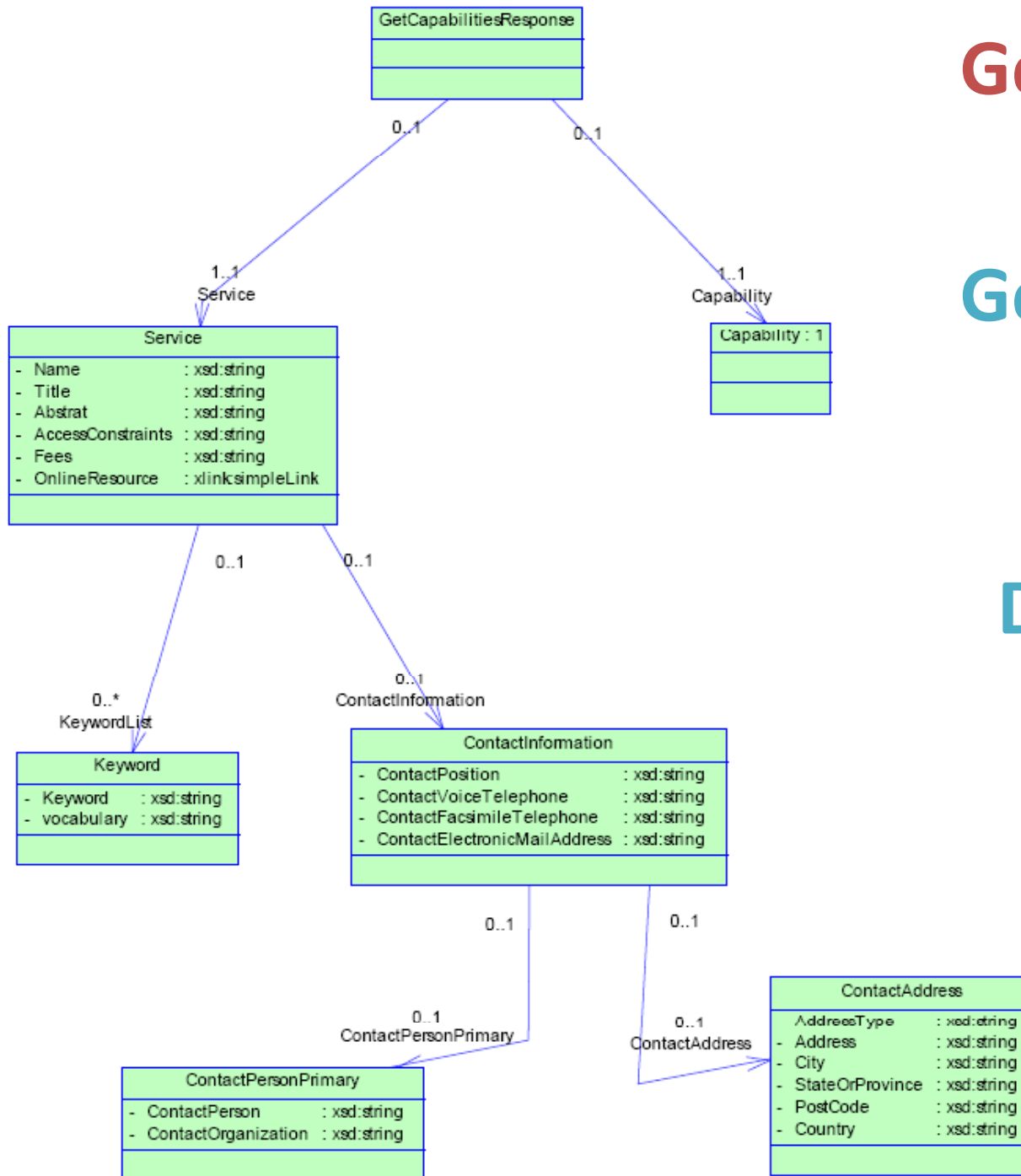


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# GetCapabilities

*equivalent to*  
**GetCapabilities**  
(in HydroExcel)

*and similar to*  
**Data Sources**  
in ODM



# ResumeSites

*equivalent to*

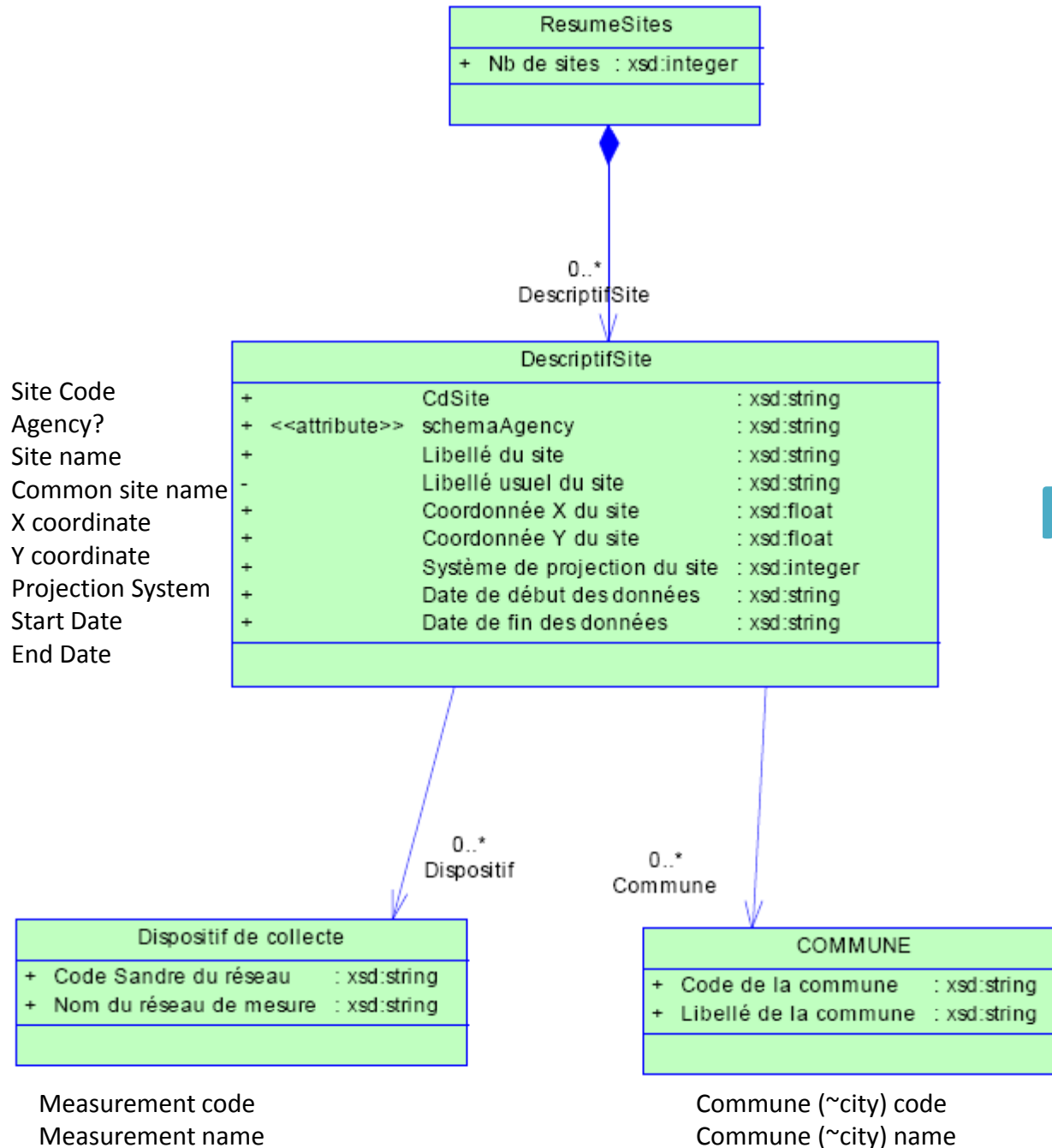
## GetSites

*and similar to*

## Monitoring Site

## Locations

in ODM



SPATIAL FILTER	
+ Numéro de la commune	: IdentierType
+ Numéro du département	: CodeType
+ Numéro de la région	: CodeType
+ Numéro de la circonscription de bassin	: IdentierType
+ Code national de la masse d'eau	: IdentierType
+ Code du secteur hydrographique	: IdentierType
+ Code du sous-secteur hydrographique	: IdentierType
+ Code de la zone hydrographique	: IdentierType
+ Code générique de l'entité hydrographique	: IdentierType
+ Code de l'entité hydrogéologique	: IdentierType
+ Code de la mer	: CodeType
+ Code du bassin (district au sens de la dce)	: CodeType
+ Type de masse d'eau	: CodeType

## Spatial Filter:

By Commune (~City), Department, Region (~State), Basin, Water Body, Hydrographic Section, Hydrologic Entity, Sea, etc, by Code/Number/Type

Thematic Filter	
+ Code de la famille de paramètres	: IdentierType[]
+ Code SANDRE du dispositif de collecte	: IdentierType[]
+ Code du site	: IdentierType
+ Libellé du site	: TextType

## Thematic Filter:

By Parameter Family, Sandre Collecting Entity, Site Code, Site Name

Code Sandre	Libellé
1	Eaux littorales
3.1	Cours d'eau, rivières
3.2	Plans d'eau
4	Eaux souterraines
5	Eaux météoriques [Non autorisé dans la version 1.0.0]

## Domain:

Coastal waters  
Streams and rivers  
Water bodies  
Groundwater  
Atmospheric water (not in this version)

Temporal Filter
+ Date de début des données requises : xsd:string
+ Date de fin des données requises : xsd:string

## Temporal Filter:

Start Date  
End Date



Analytic Filter	
+ Code de la famille de paramètre	: xsd:string[]
+ Code du paramètre	: xsd:integer[]
+ Code du support	: xsd:integer[]
+ Code du taxon	: xsd:integer[]
+ Code de la famille de taxon	: xsd:string[]
+ Type de prélèvement biologique	: xsd:string

## Analytic Filter:

Parameter Family Code

Parameter Code

Support Code?

Taxa Code

Taxonomic Family Code

Type of Biological Sample

Thematic Data Filter	
+ Code SANDRE du dispositif de collecte	: xsd:string[]
+ Qualification du résultat de l'analyse	: xsd:integer[]
+ Statut du résultat	: xsd:integer[]
+ Code de l'intervenant	: xsd:string[]
+ <<attribute>> schemaAgency	: xsd:string
+ <<attribute>> Role	: xsd:string

## Thematic Data Filter:

Measuring Device Code

Analytical Result Quantification?

Result Status

Code involved?

Agency Schema?

Role

Balise parent	Balise	Description	Multiplicité	Commentaires																										
-	<NbSite>	Nb de site	1																											
Descriptif d'un site	NI	Sites		<DataSite>																										
Code du site	1..1	Attribut de l'origine du site en	DataSite	CodeSite																										
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DataSite	Resultats	Synthese sur les résultats	U..N																											
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Resultats	NbAnalyses	Numérique précisant le nombre d'analyses pour l'année et le compartiment concerné	1..1																											

## Aquatic Biology:

- 0 Unknown
- 1 Macrophytes (longitudinal transect) (plants)
- 2 Macrophytes (transverse transect)
- 3 Macroinvertebrates (animals)
- 4 Phytoplankton (drifting organisms)
- 5 Phytobenthos (benthic plants)
- 6 Oligochetes (worms)
- 7 Mollusks (snails, clams, squid, etc)
- 8 Diatoms (algae)
- 9 Macrophytes (plants)
- 10 Zooplankton (drifting animals)
- 100 Physicochemical
- 101 Fish