



Review of the GeoCAP Web Tools for Online Data Exchange and Support

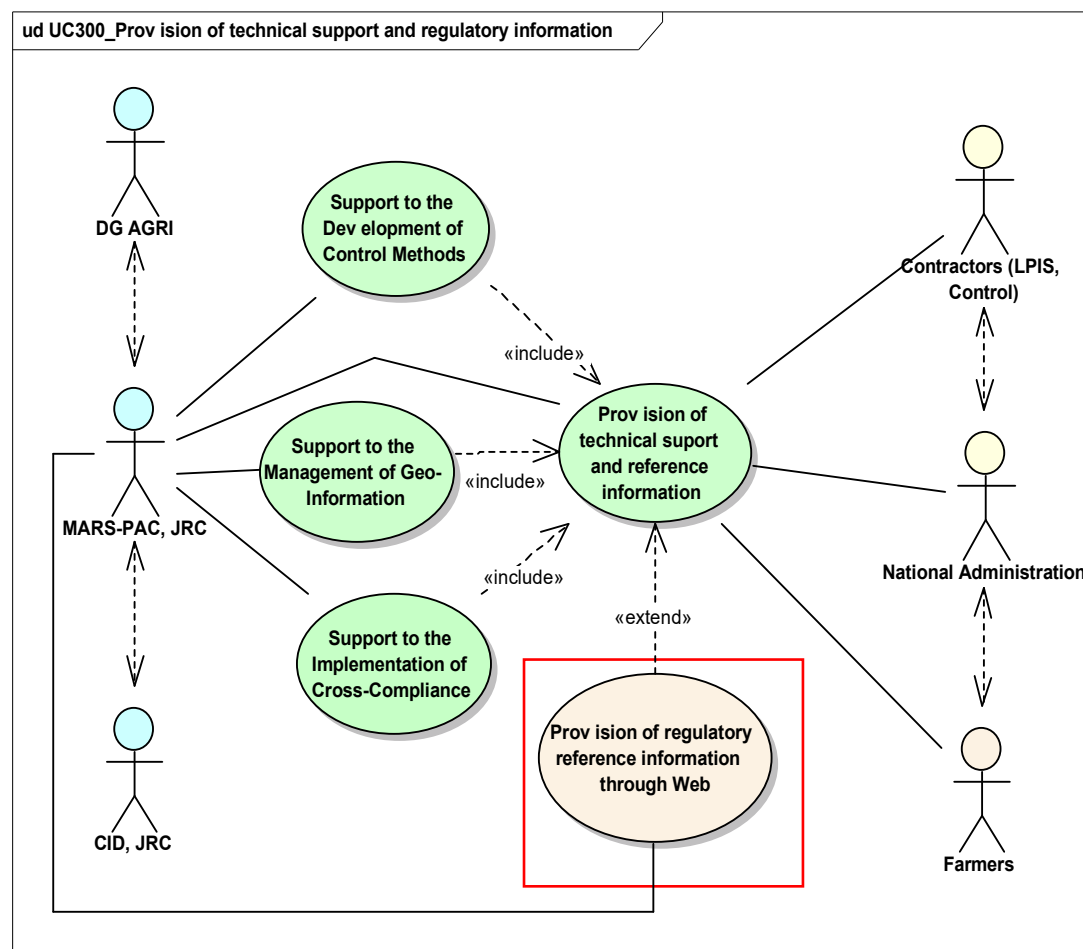
Agriculture Unit, JRC Ispra

Rationale

JRC provides technical **support** to EU Member States, related to CAP implementation.

JRC has better defined **mandate** after Reg. 972/2007 amending Reg. 796/2004

JRC key tool for remote support is the **provision** of reference information via Web



Online tools

- WikiCAP
- LPIS Metadata
- GAEC DB
- New MARS Web Site

WikiCAP - Overview

Online technical and reference documentation, related to the management and control of the EU Common Agriculture Policy

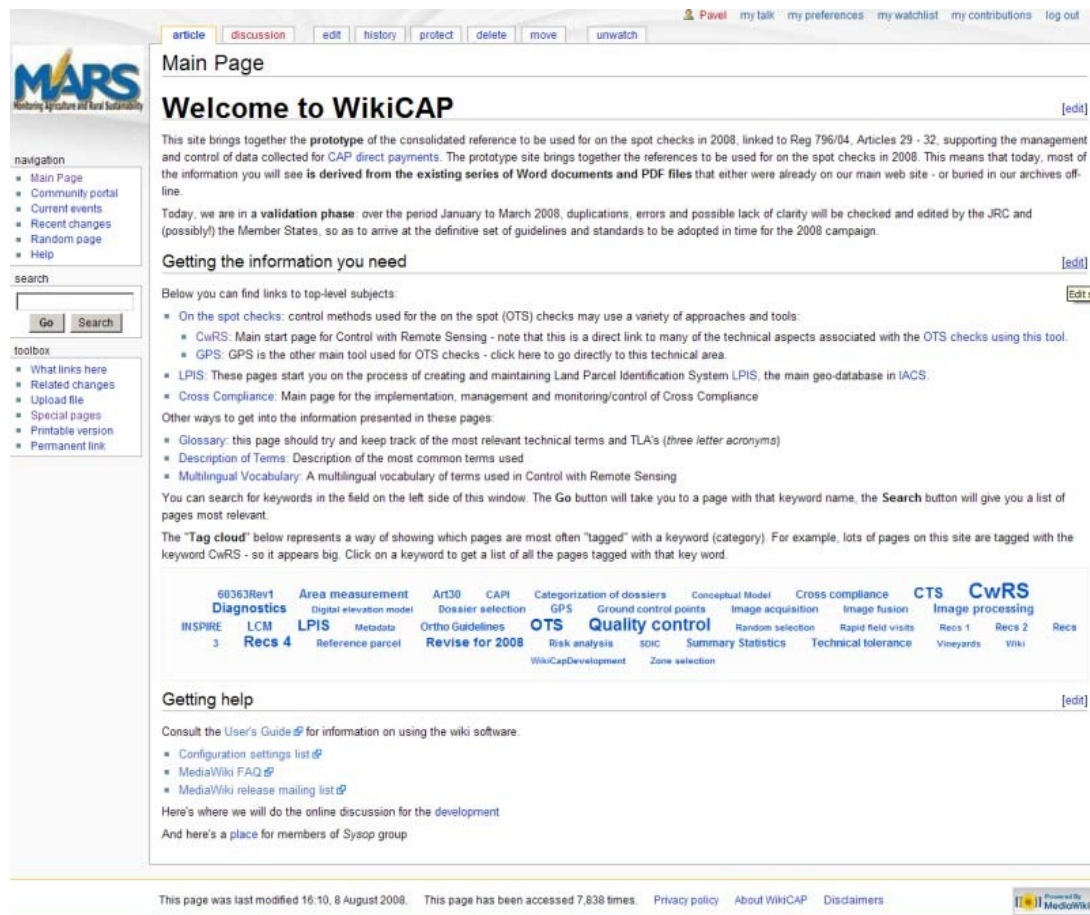
Based on Wiki Technology

Full access to MS Administrations and EC DGs

Read Only access to contractors and other involved parties

Final Version approved on 31 of March 2008

Constantly updated since April 2008



The screenshot shows the WikiCAP Main Page. At the top, there's a navigation bar with links like 'article', 'discussion', 'edit', 'history', 'protect', 'delete', 'move', and 'unwatch'. Below this is the 'Main Page' header and a 'Welcome to WikiCAP' section. The text explains that the site is a prototype for consolidated reference material for CAP spot checks in 2008, linked to Reg 796/04, Articles 29-32. It mentions that the information is derived from existing Word documents and PDF files. A 'validation phase' is noted for January to March 2008, where errors and duplications will be checked. A 'Getting the information you need' section follows, listing topics like 'On the spot checks', 'CwRS', 'GPS', 'LPIS', and 'Cross Compliance'. A 'Tag cloud' is shown with various keywords like '60363Rev1', 'Area measurement', 'Art30', 'CwRS', etc. The page footer includes a 'Getting help' section with links to the User's Guide, Configuration settings, MediaWiki FAQ, and MediaWiki release mailing list. It also states that the page was last modified on 16/10/8 August 2008 and has been accessed 7,838 times.

WikiCAP – Some Statistics

Users:

- Total number of users (incl. admin accounts): 220
- JRC, DG AGRI (RW): 41
- MS (RW): 96
- MS general accounts (RO), contractors (RO): 46
- SDIC group: 36

Total number of created user-groups: 31

Flexible management of the user access to the WikiCAP content through the implemented structure of users-groups

WikiCAP – Some Statistics (2)

Articles:

- Total number of articles: 823 (509 with text information)
 - in Main namespace: 296
 - in SDIC: 56

Images:

- Total number of images: 175
- Linked (used in articles): 76

Revisions (since Oct 2007):

- Total number: 5364
 - For pages in Main namespace: 3748
 - For pages in SDIC namespace: 660

WikiCAP – Some Statistics (3)

Most accessed Categories:

Area measurement

60363Rev1

Art30

Technical tolerance

Quality control

GPS

Most revised categories:

Area measurement

Quality control

GPS

60363Rev1

Art30

Technical tolerance

Scope of MS input:

Number of inputs: **13**

Active persons: **5**

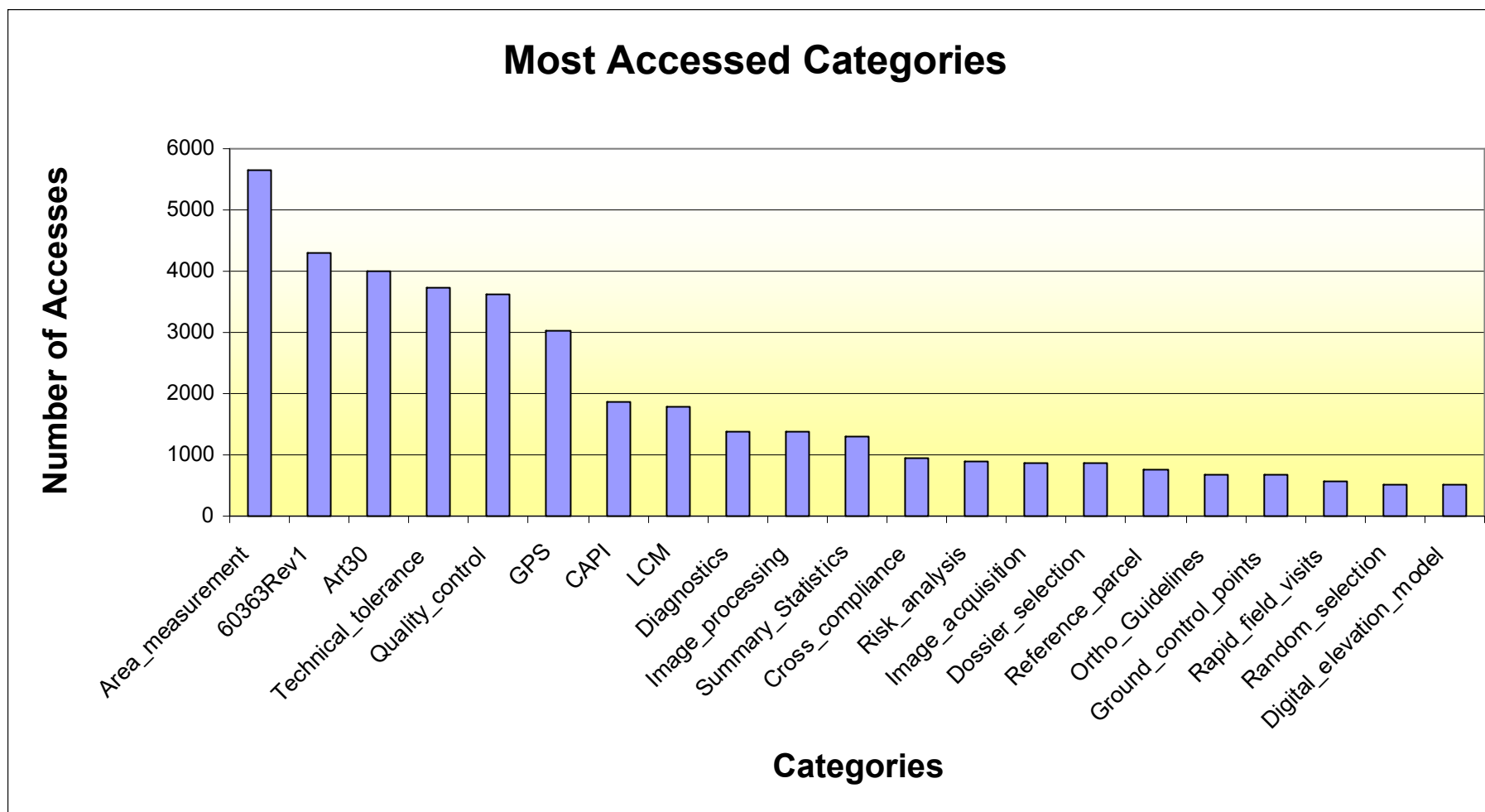
Mostly SDIC

Article vs. Discussion pages:

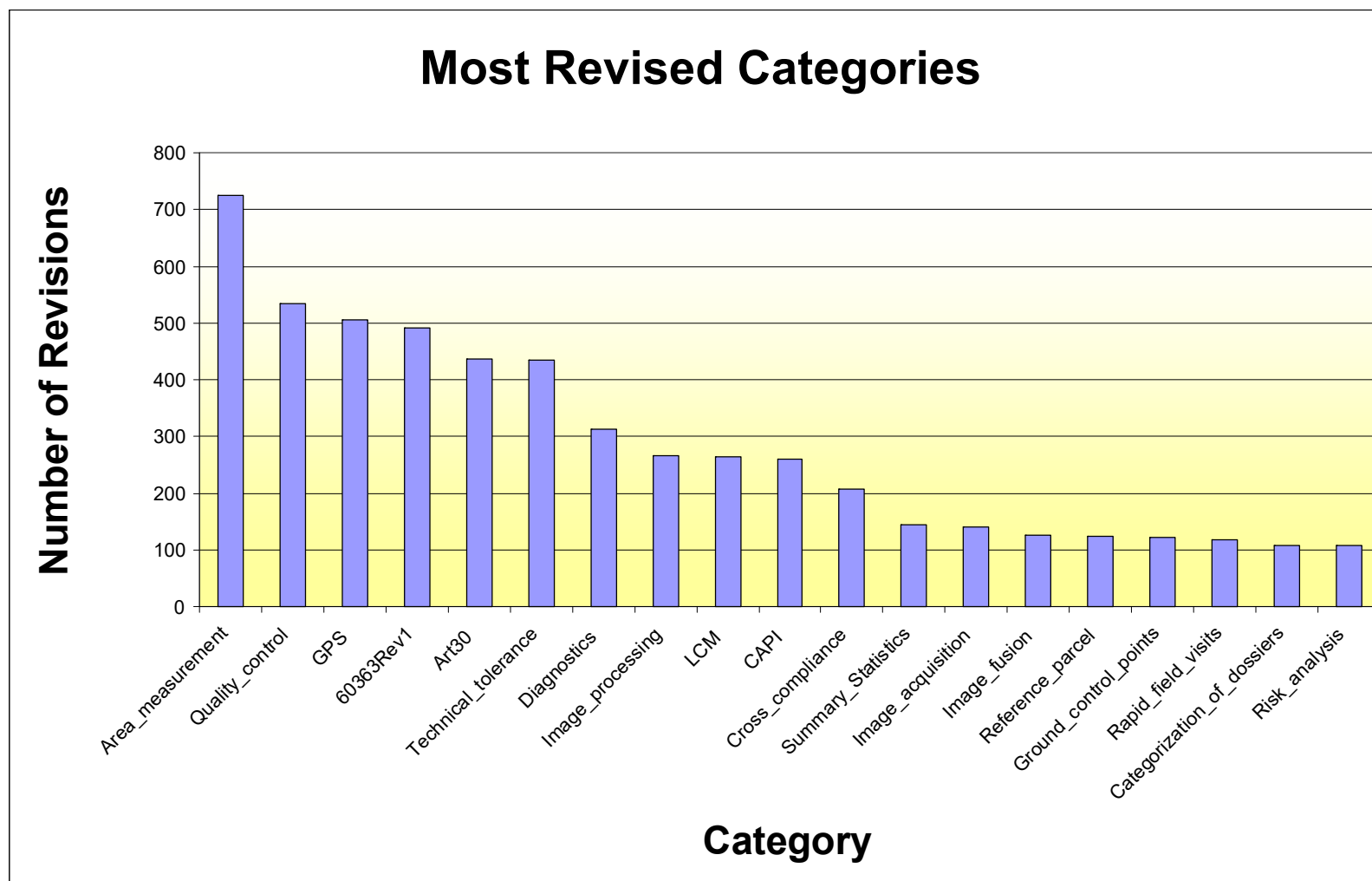
Number of discussion pages: **63**

Number of articles (without images):
509

WikiCAP – Some Statistics (4)



WikiCAP – Some Statistics (5)



WikiCAP - Updates and upgrades

1. New topics

GPS

- Precision and accuracy of GNSS equipment
- How to test GNSS receivers (step by step)

Image processing

- Image Fusion
- Orthoimagery specifications

2. Better structure

More illustrations and graphical examples

3. Better representation

Removal of redundant pages

Optimization of the links between pages

4. Incomming upgrade

Newest versions of software during migration to a new machine

Performance of WikiCAP – We need a feedback from you

3 Questions with predefined options for an answer

17 answers

2. Do you find the information you need using WikiCAP?

Yes

10 (59%)

Not Always

7 (41%)

Rarely

0 (0%)

3. How much time you spend in order to find out the information you need?

Less than 10 min

8 (47%)

Between 10 and 30 min

7 (41%)

More than 30 min

2 (12%)

4. Is the information you need enough?

Yes, in most of the cases

12 (71%)

No, I usually have to ask for additional support

5 (29%)

Major Drawback of WikiCAP reported – Lack of tools for printing or export to document

Framework for data exchange

Used technologies:

- HTML+CSS+JavaScript for building user interface (client side)
- PHP+SQL for data processing (server side)
- SSL to ensure secure connections (both sides)

Main features:

- client-server architecture
- Web user interface
- authentication, authorization and access control
- security and confidentiality (ensured by OpenSSL and md5() function)

Results: development of two web database applications with OpenSource platforms

- GAEC web database
- LPIS web database

LPIS Metadata

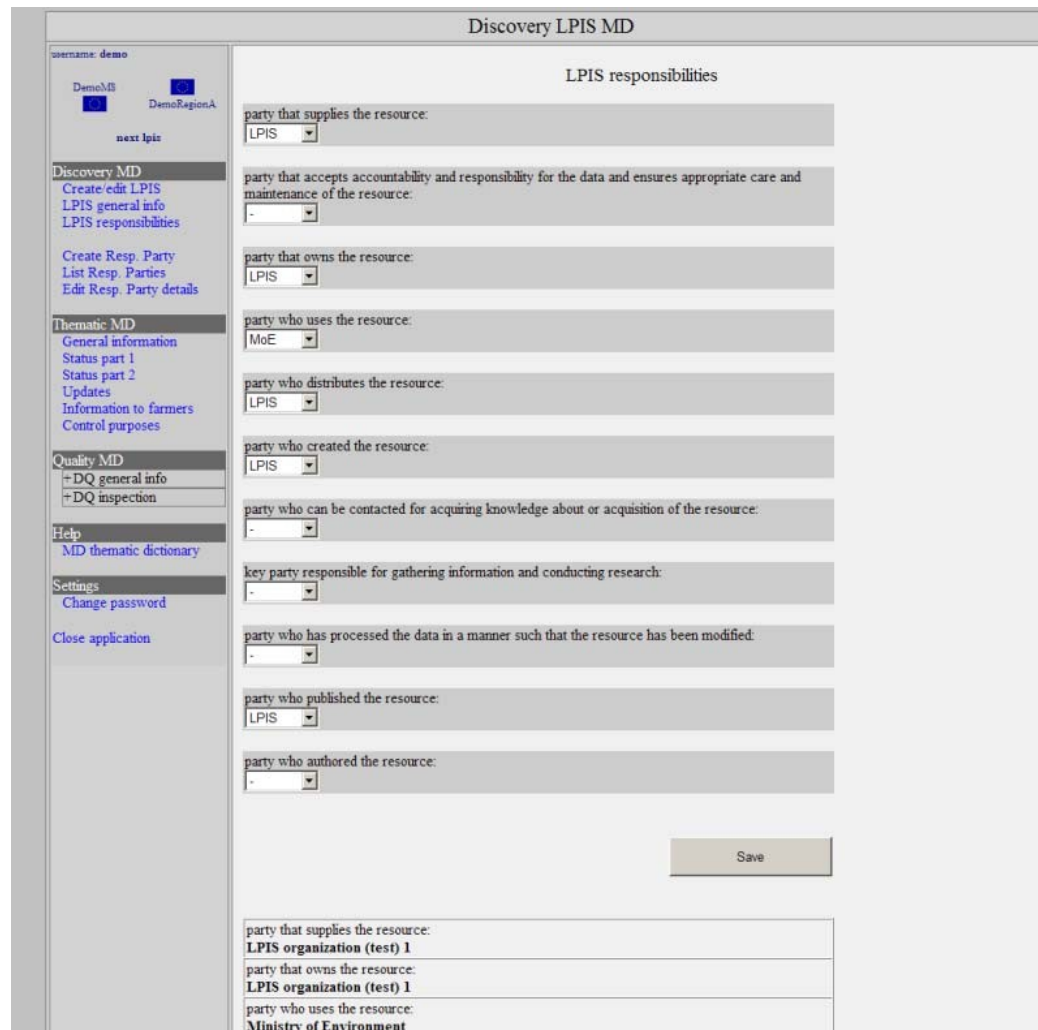
Metadata repository to hold discovery and quality information on the national and regional LPIS systems

Second step of the standardization and harmonisation process for building a conceptual LPIS Core Model (LCM)

Combines:

- implementing rules of the INSPIRE
- directive requirements of relevant ISO standards
- data collected from targeted questionnaires

Total number of operational accounts: 50 (only few of EC, majority of MS)



Discovery LPIS MD

username: demo

DemoMD DemoRegionA

next lpis

Discovery MD

- Create/edit LPIS
- LPIS general info
- LPIS responsibilities

Create Resp. Party

- List Resp. Parties
- Edit Resp. Party details

Thematic MD

- General information
- Status part 1
- Status part 2
- Updates
- Information to farmers
- Control purposes

Quality MD

- +DQ general info
- +DQ inspection

Help

- MD thematic dictionary

Settings

- Change password

Close application

LPIS responsibilities

party that supplies the resource:
LPIS

party that accepts accountability and responsibility for the data and ensures appropriate care and maintenance of the resource:
-

party that owns the resource:
LPIS

party who uses the resource:
MoE

party who distributes the resource:
LPIS

party who created the resource:
LPIS

party who can be contacted for acquiring knowledge about or acquisition of the resource:
-

key party responsible for gathering information and conducting research:
-

party who has processed the data in a manner such that the resource has been modified:
-

party who published the resource:
LPIS

party who authored the resource:
-

Save

party that supplies the resource:
LPIS organization (test) 1

party that owns the resource:
LPIS organization (test) 1

party who uses the resource:
Ministry of Environment

LPIS Metadata – Categories and Content

Discovery: data that enable to locate the Member States LPIS' and communicate to its custodians.

Thematic: Contains the information that is specific for the LPIS

Services: Description of the services run by the administrator of the system

Quality: Holds the quality information of the LPIS in two subdivision:
–A generic part on the quality with policy, organisation and projects
–Description of test procedures, in the ISO19114 and ISO19115 template

LPIS Metadata – Feedback from the SDIC

Legal requirement for member states to fill in the metadata

- INSPIRE calls for the discovery part for all public spatial data. The Thematic data are those from the questionnaire. There is currently not a legal basis for the quality components.

Multi-language support (official languages) for the legally required application

- This is the EU rule, although 23 languages void the idea of sharing information

GAEC DB - Overview and Status

JRC has designed and implemented **DB structure** in order to describe and store the GAEC standards adopted and implemented by the EU Member States:

- Codes tables
- Translation tables for issues and standards

User **interface is in native language**, but with the opportunity to provide also the translation in **English**

Total number of operational accounts: **76** (only few of EC, majority of MS)

GAEC DB – Updates and Follow-up

New items:

- Create a new draft and accept it
- Opportunity to introduce ancillary information:
 - Control points, sanctions, other information

To Do:

- Implement creation documents in pdf based on HTML templates
- Implement messages registering together with mail functions
- Improve CSS structure (colors, fonts, images)

username: demo

DemoMS

EDIT DRAFT

General info

1. Soil erosion

2. Soil organic matter

3. Soil structure

4. Level of maintenance

5. Permanent pasture

Accept draft

See draft

SEE ACCEPTED DRAFTS

Current

REPORTS FOR ALL MSs

Search function

Display GAEC description

SETTINGS

Change password

Close application

EDIT DRAFT

1. SOIL EROSION: PROTECT SOIL THROUGH APPROPRIATE MEASURES

1.1 Minimum soil cover

in native:

Pe timpul iernii, terenul arabil trebuie să fie acoperit cu culturi de toamnă și/sau să rămână nelucrat după recoltare pe cel puțin 20% din suprafața arabilă totală a fermei

in English:

During winter, the arable land shall be covered with winter crops and/or shall be left un-worked after harvesting, on at least 20% of the farm's total arable area;

way of control:

sanction:

additional information:

Update

1.1 Minimum soil cover

in native:

Pe timpul iernii, terenul arabil trebuie să fie acoperit cu culturi de toamnă și/sau să rămână nelucrat după recoltare pe cel puțin 20% din suprafața arabilă totală a fermei

in english:

During winter, the arable land shall be covered with winter crops and/or shall be left un-worked after harvesting, on at least 20% of the farm's total arable area;

appendix delete correct

1.2 Minimum land management reflecting site specific conditions

in native:

Lucrările solului pe terenul arabil cu panta mai mare de 12%, cultivat cu plante prășitoare, se efectuează de-a lungul curbelor de nivel

in english:

The arable land with a slope above 12%, cultivated with row-plants, shall be worked along the level curves

appendix delete correct

New MARS Web Page - Overview

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European Commission > JRC > IPSC > Agriculture Unit

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The Agriculture Unit Mission

We provide scientific and technical support on EU Agriculture and Food Security policies.

- In Europe, the Unit addresses key issues related to the management and control of the Common Agriculture Policy: independent crop yield forecasts, agricultural insurances, standard control methods of area based subsidies, compliance with environment, and effect of climate change. It supports EU projects related to Land Administration, the enlargement process, and the Kopernikus Space Component.
- In developing countries, assistance is given to the EU Food Security Thematic Program with special emphasis on Africa, and to providing building blocks for an European capacity for Global Agriculture Monitoring. The activities of the Unit are based on expertise in agro-meteorological crop modelling, sampling methods, econometric, geomatics (GIS, GPS and ICT), and satellite & airborne remote-sensing (the Unit manages the EC Framework Contracts for the provision of Satellite Remote Sensing data and manages the access/dissemination of EU image data archives).

[read more >>](#)

Shortcuts

- 1 The Agriculture Unit
- 2 AGRI4CAST
- 3 CID
- 4 FOODSEC
- 5 GeoCAP

In Focus

2008 MARS Annual conference

"Geomatics in support of the CAP"

The annual conference "Geomatics in support of the CAP" dealing with CwRS, area aid checks in general and the LPIIS will be held in Ljubljana 3rd-5th Dec 2008.



New Sensors - WorldView1

WorldView1 "Distributed by EURIMAGE S.p.A. © DIGITALGLOBE [2008]" panchromatic, 5 imagery over Maussane, France showing a variety of agricultural conditions including orchards and vineyards

Latest News & Events

GENESI-DR: Data Policy workshop, General Assembly Meeting, Training

GENESI-DR (Ground European Network for Earth Science Interoperations - Digital Repository project with start date 1/1/2008, under [INFRASTRUCTURES-2007-1, Capacity Programme, Information Scientific Digital Repositories] totaling 4.4M € grant, lead by ESA. It concerns...

Open Grant Holder position for Agri4Cast Action

New Grant holder open position about "Adapting biophysical models to simulate farming systems under climate change scenarios" (PhD student).

4th CGMS Expert Meeting (11-12 March 2009)

It is organised by The Agriculture Unit of the Institute for the Protection and Security of the Environment. The meeting will welcome all the persons who are using and developing the crop growth models as well who are interested in sharing their knowledge on this subject...

EFSA Workshop (3-4 February 2009)

This workshop is organized by the FOODSEC project of the JRC, in the frame of an Administrative Arrangement with DG AIDCO for the provision of technical support to food security information assessments in the Horn of Africa.

Green Chemistry Workshop (22 January 2009)

It is organised by the Agriculture Unit of Institute for the Protection and Security of the Environment. The GeoCAP (an Action of the Agriculture Unit of JRC) mission is focused upon GIS technology support of Common Agriculture Policy (CAP) implementation and control, both a...

Workshop on GAEC and FAS implementation in Member States (24-26 November 2008)

The workshop is organised by the GeoCAP action of the Agriculture Unit (IPSC). The aim of this workshop is to have open and constructive exchanges about the practical implementation of the cross-compliance policy with a focus on issues raised in the implementation and control of GAEC r...

Meeting on Climate Change Impacts on European Agriculture

The Agriculture Unit of the IPSC Institute at the Joint Research Centre (Italy) are pleased to inform you that a workshop / brainstorming session will be held in Rome on 10-11 December 2008 on crop simulations for climate change: from GCM grid to field level; from...

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Action GeoCAP

The GeoCAP Action, renamed as of January 2008 from the previous "MARS PAC" action, addresses new information needs for European Policies related to Agriculture and Regional Development, such as Cross Compliance, Farm Advisory System, food quality and product origin traceability. Furthermore, the Action supports future reforms by the definition, development and testing of standardized and sustainable control methods in a variety of agriculture-related areas. The Action also follows future development in Geomatics techniques, and support land administration (cadastre) and multipurpose large scale mapping approaches; common specifications, standard measurement and data management tools, and validated methods will be studied to reinforce the consistency of land parcel identification and measurement across the Union and in Candidate Countries.

[See a full description of the project's 2008 objectives in the [JRC Project Knowledge System](#)]

In order to achieve these goals, the action is divided into three teams:

- **Geo-Information management (GeoInf)**, focused on the support to the main need of organising and making available data to respond to various policy needs, such as the underlying requirements of geo-information management for rural areas, either through the extension of IACS data (particularly LPIIS, and through implementing INSPIRE principles) or through the integration of existing data (e.g. cadastre) and helping to ensure the successful implementation of these key data sets.
- **Development of Controls methods (DCM)**, support to stakeholders with the highly operational control activity carried out by member states, either using remote sensing or GPS tools; the key reference point for defining methods applied under DG AGRI's financing program of the CwRS image purchase; and
- **Agricultural Policy Instruments (API)**, optimisation of the definition of GAECs through exchange of best practices; the support given to the exchange of information or access to geographical database between the competent Control Bodies involved in the Cross-Compliance, or through the establishment of the Farm Advisory System (FAS); the assessment of the permanent grassland ratio maintenance; the development and promotion of methods using traceability, quality and certification at farm/parcel level.

Related to GeoCAP

- 1 [Staff \(17\)](#)
- 2 [Projects \(8\)](#)
- 3 [Bulletins & Publications \(24\)](#)
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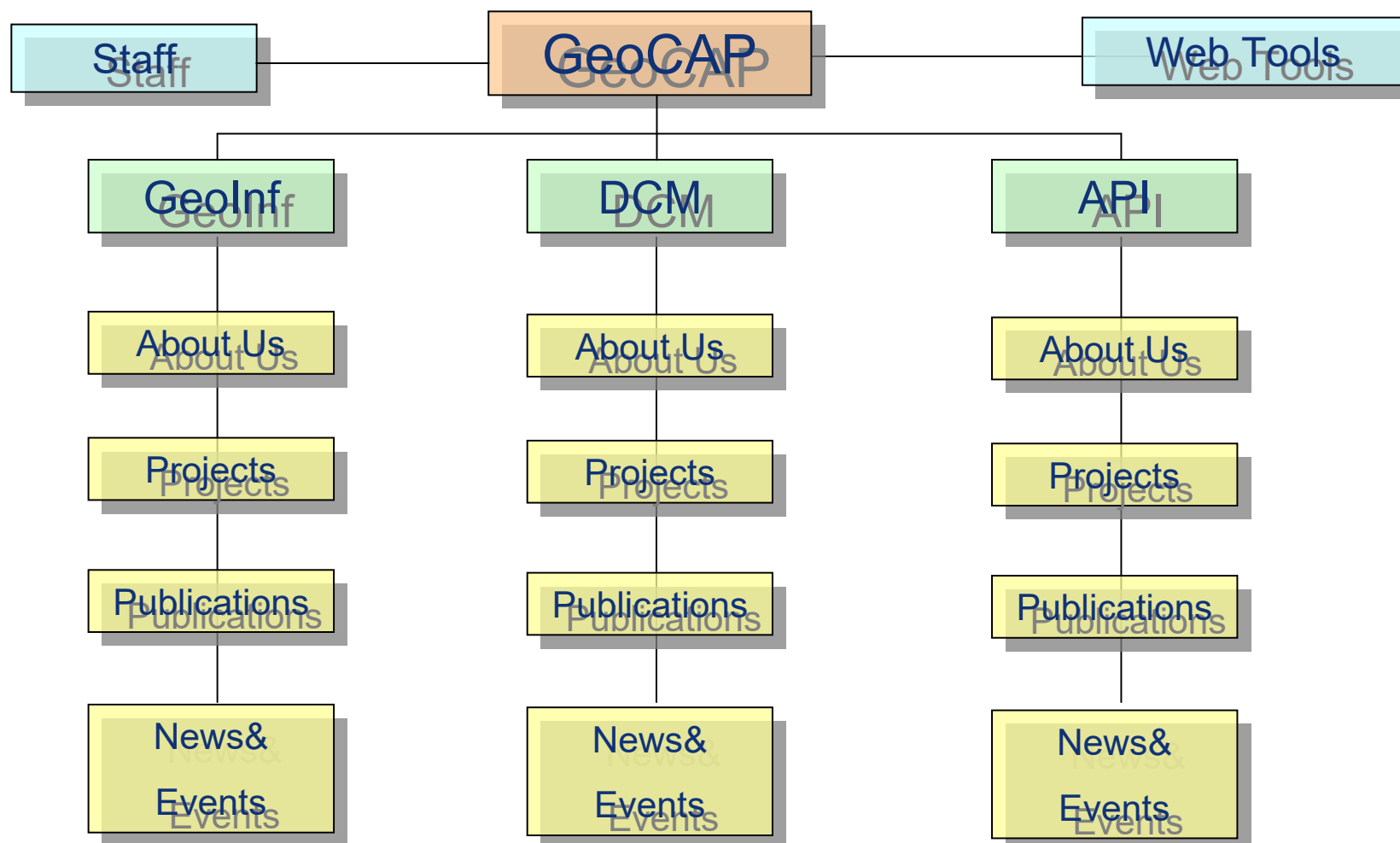
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Third Meeting of the Experts Group on Cross Compliance

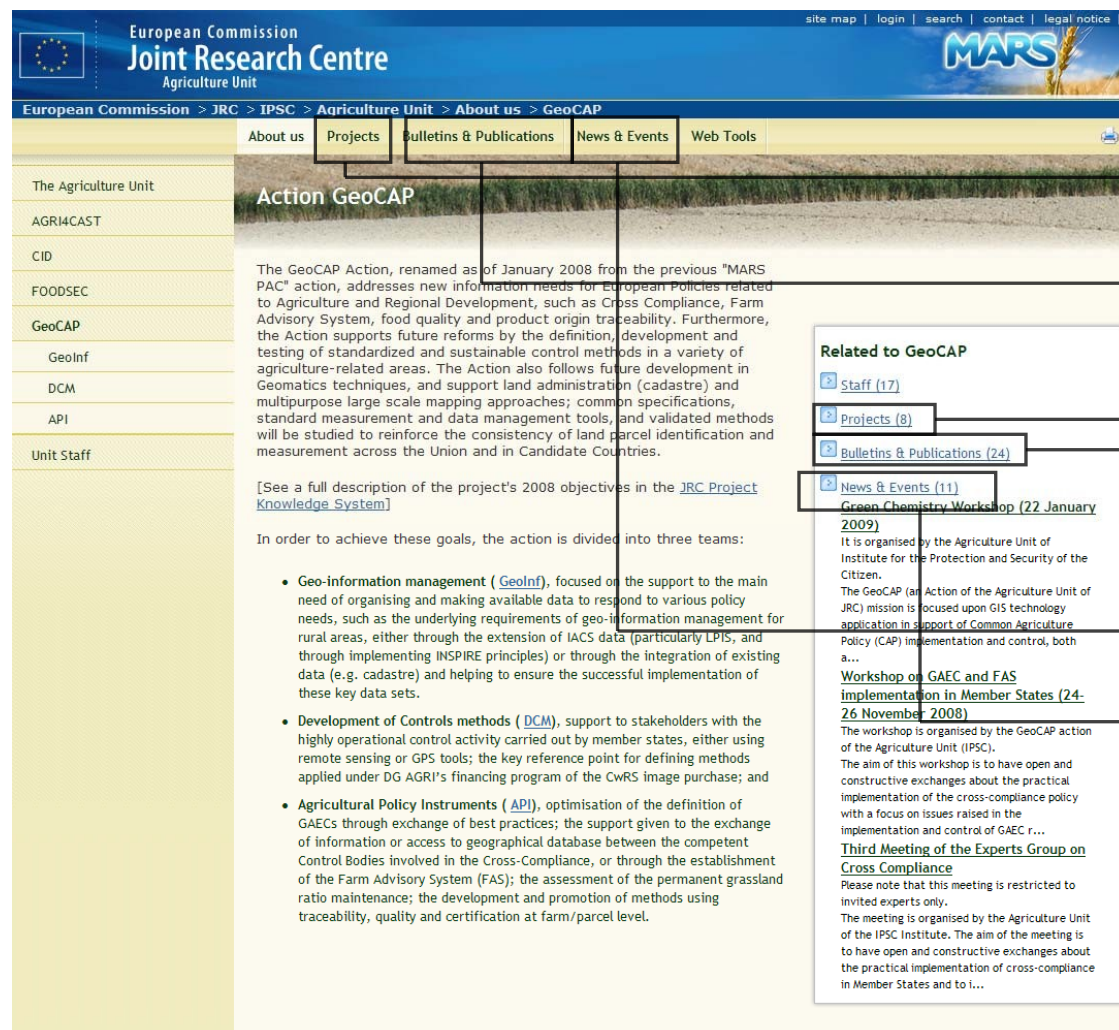
Please note that this meeting is restricted to invited experts only. The meeting is organised by the Agriculture Unit of the IPSC Institute. The aim of the meeting is to have open and constructive exchanges about the practical implementation of cross-compliance in Member States and to...

<http://mars.jrc.ec.europa.eu/mars/About-us/GeoCAP>

New MARS Web Page - Structure



New MARS Web Page - Projects



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GeoCAP
GeoInf
DCM
API
Unit Staff

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Projects

Publications

News & Events

Better structure of the content

New MARS Web Page – Project&Publications



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Projects

Show Projects by:

Actions	Areas	Date
GEOCAP	All	an

Order by : [Name](#)

[Cadastral Projects](#)
Publish date: 24/10/2008 3:59 pm
[Project](#)

[DG AGRI Support](#)
Publish date: 24/10/2008 3:00 pm
[Project](#)

[Area measurements validation scheme](#)
Publish date: 15/10/2008 5:51 pm
 The aim of this project is to provide a way for the "voluntary" certification of tools for area measurement, which can object conditions, and considered therefore fit for the purpose of measurements made in the context of field checks noted in Comr Agriculture Policy.
[Project](#)

[LPIS Creation 2003](#)
Publish date: 21/10/2008 6:06 pm
 The main objective of this project was the define and elaborate the strategies and core methodologies for the initial creation Identification System the EU Member States.
[Project](#)

[LPIS Quality Framework](#)
Publish date: 24/10/2008 3:04 pm
[Project](#)

[LPIS Support to Member States](#)
Publish date: 24/10/2008 3:10 pm
[Project](#)

[Online Tools](#)
Publish date: 24/10/2008 2:54 pm
[Project](#)

[Orthoimagery](#)
Publish date: 24/10/2008 3:17 pm
[Project](#)

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New MARS Web Page – Filtering of Data



The screenshot shows the MARS web page interface. At the top, there is a navigation bar with links: site map, login, search, contact, legal notice. Below this is the European Commission Joint Research Centre Agriculture Unit logo. The main navigation menu includes: About us, Projects, Bulletins & Publications (selected), News & Events, and Web Tools.

The "Bulletins & Publications" section is active, showing a "Show Bulletins & Publications by:" filter. The filter is set to "All" for Actions, Types, Projects, Areas, and Date. The "Actions" filter is expanded, showing a list of categories with checkboxes. The "Types" filter is also expanded, showing a list of document types with checkboxes. The "Projects" filter is set to "All". The "Areas" filter is set to "All". The "Date" filter is set to "any time".

The main content area displays a list of publications. The first publication is titled "Common Technical Specifications for the 2007 Campaign of Remote-Sensing Control of Arable and Forage Land Area-based Subsidies". It includes the publish date (23/10/2008 3:18 pm) and a brief description: "This document describes the common technical specifications for the 2007 campaign of the remote sensing control of agricultural area-based subsidies (referred to as 'remote sensing control' or, simply 'control'). The document has been prepared by the European Commission (Joint R...". A link to the document is provided: "6388_CTS_final_2007.pdf 429.17 kB".

The second publication is titled "Common Technical Specifications for the 2006 Campaign of Remote-Sensing Control of Arable and Forage Land Area-based Subsidies". It includes the publish date (23/10/2008 3:15 pm) and a brief description: "This document describes the common technical specifications for the 2006 campaign of the remote sensing control of agricultural area-based subsidies (referred to as 'remote sensing control' or, simply 'control'). The document has been prepared by the European Commission (Joint Research Centre...".

Filtering and Facet Classification

Filtering of the list, based on:

1. Name of Action
2. Type of document
3. Name of project
4. Geographic region
5. Period of creation



Thank you for your attention!