

SEVENTH FRAMEWORK PROGRAMME

CIP-ICT-PSP-2013-7 Pilot Type B



FARM-ORIENTED OPEN DATA **IN EUROPE**

GLOSSARY



Term	Definition
AGROVOC	Controlled vocabulary covering all areas of interest to the FAO
ARD	Agricultural Research for development
CEN	The European Committee for Standardization or Comité Européen de Normalisation (CEN), is a non-profit organisation whose mission is to foster the European economy in global trading, the welfare of European citizens and the environment by providing an efficient infrastructure to interested parties for the development, maintenance and distribution of coherent sets of standards and specifications.
CHRIS	Compact High Resolution Imaging Spectrometer
CIARD R.I.N.G	Coherence in Information for Agricultural Research of Development Routemat to Information Nodes and Gateways
CSA	The Cloud Security Alliance (CSA) is a not-for-profit organization with a mission to promote the use of best practices for providing security assurance within Cloud Computing, and to provide education on the uses of Cloud Computing to help secure all other forms of computing
DSD	Data Structure Definition
EEA	European Environment Agency (EEA) is an agency of the European Union. Its task is to provide sound, independent information on the environment. It is a major information source for those involved in developing, adopting, implementing and evaluating environmental policy, and also the general public
ELF	European Location Framework
ENVIROFI	ENVIROFI (The Environmental Observation Web and its Service Applications within the Future Internet) is a co-funded research project within the Future Internet Public Private Partnership (FI-PPP) programme of the EU's Seventh Framework Programme (FP7). The project is dedicated to the environmental usage area of the Future Internet. It explores environmental enablers and provides environmental sector requirements to FI-WARE, the FI-PPP core platform project.
Environmental enabler	Something affording or facilitating a capability in the environmental domain or in an environmental application. ENVIROFI project defines the Specific Enablers (SEs) as a reusable and commonly shared functional building blocks serving the environmental and geospatial usage area
ERDDAP	An OPeNDAP server for gridded and tabular data; supports a wide range of output file formats. Developed by NOAA for the marine research sector.
ESA	European Space Agency
FAO	Food and Agriculture Organization
FAOSTAT	FAO Statistical Database
FI-PPP	Future Internet Public-Private Partnership EU program
FIspace	Phase 2 FI-PPP project (continuation of SmartAgriFood), whose goal was to develop a FI-Ware enabled, cloud-based platform for business collaboration using multi-domain trial experiments
GBIF	Global Biodiversity Information Facility is an international open data infrastructure
GEO	Group on Earth Observation. GEO is a voluntary partnership of governments and international organizations, coordinating efforts to build a Global Earth Observation System of Systems, or GEOSS

GEOSS	Global Earth Observation System of Systems. GEOSS is an emerging public infrastructure interconnecting a diverse and growing array of instruments and systems for monitoring and forecasting changes in the global environment. This “system of systems” supports policymakers, resource managers, science researchers and many other experts and decision-makers.
Geolocation	The identification of the real-world geographic location of an object
Georeferencing	Process of connecting a geodataset with spatial reference information (coordinates)
GeoSPARQL	Geographic query language for RDF data standardised by the Open Geospatial Consortium (OGC)
GFAR	Global Forum on Agricultural Research
GIS	Geospatial Information System
GMES	Global Monitoring for Environment and Security. GMES is the European Programme for the establishment of a European capacity for Earth Observation.
GPS	The Global Positioning System (GPS) is a space-based global navigation satellite system (GNSS) that provides location and time information in all weather, anywhere on or near the Earth, where there is an unobstructed line of sight to four or more GPS satellites. It is maintained by the United States government and is freely accessible by anyone with a GPS receiver.
GRC stack	Governance, Risk Management and Compliance (GRC) provides a toolkit for enterprises, cloud providers, security solution providers, IT auditors and other key stakeholders to instrument and assess both private and public clouds against industry established best practices, standards and critical compliance requirements
GVI	Global Vegetation Index
GVPS	Global Vegetation Processing System
FVI	Fractional Vegetation Index
Habitats Directive	Together with the Birds Directive, this directive forms the cornerstone of Europe's nature conservation policy
HR	High Resolution
HTML5	A language for structuring and presenting content for the World Wide Web
HTTP	The Hypertext Transfer Protocol (HTTP) is an application protocol for distributed, collaborative, hypermedia information systems. It is the base of data communication for the World Wide Web.
IMF	International Monetary Fund
INSPIRE	Infrastructure for Spatial Information in the European Community
INSPIRE Directive	Establishes an infrastructure for spatial information in Europe to support Community environmental policies, and policies or activities which may have an impact on the environment.
IPR	Intellectual Property Rights. IPR is a term referring to a number of distinct types of creations of the mind for which a set of exclusive rights are recognized, and the corresponding fields of law.
ISO	International Organization for Standardization. ISO is an international standardsetting body composed of representatives from various national standards organizations.
ISO 19115	International Standard for geographic metadata
ISO/IEC 27001	Part of the family of standards ISO/IEC 27000-series that deal with information se-

	curity
LAI	Left Area Index
LDAP	Lightweight Directory Access Protocol that allows the use of the directory services in simple standardized way
LOD	Linked Open Data
LODE-BD	Linked Open Data-Enabled Bibliographic Data
LP DAAC	NASA Land Processes Distributed Active Archive Center
Management Zones	Homogeneous zones of crop land areas. These management zones (MZ) address spatial variability of crops grouping areas that share similar soil properties in order to apply specific farming practices.
MGVI	Metop Global Vegetation Index
MODIS	Moderate Resolution Imaging Spectroradiometer
NCAP	Network Capable Application Processor
NOAA	The National Oceanic and Atmospheric Administration
NVDI	Normalized Difference Vegetation Index
O&M	Observations and Measurement
OASIS	The Organization for the Advancement of Structured Information Standards (OASIS) is a global consortium that drives the development, convergence, and adoption of e-business and web service standards. With its headquarters in the United States, members of the consortium decide how and what work is undertaken through an open, democratic process
OAuth	Open authorization standard, providing a framework that enables a third-party application to obtain limited access to an HTTP service
OGC	Open Geospatial Consortium, a non-profit, international, voluntary consensus standards organization developing standards for geospatial and location based services
OLI	Operational Land Imager. It is an instrument aboard on Landsat 8 satellite.
OMG	Object Management Group (OMG) is a consortium, originally aimed at setting standards for distributed object-oriented systems, and is now focused on modeling (programs, systems and business processes) and model-based standards.
Ontology	Concepts, their meanings and relations between meanings
OWL	Web Ontology Language.
PWI	Precipitable Water Index
PROV-O	The PROV Ontology (PROV-O) is an OWL 2 ontology that encodes the PROV Data Model, modelling a set of classes, properties, and restrictions that can be used to represent, integrate and interchange provenance information generated in different systems and under different contexts
R2RML	Relational to RDF Mapping Language. Language designed to specify mappings from relational databases to RDF datasets
RF	Radio Frequency
RDF	Resource Description Framework
RDFS	RDF Schema is semantic extension - a collection of RDF resources - of the RDF data model vocabulary
RSS	Really Simple Syndication (RSS) is a family of web feed formats used to publish fre-

	quently updated works — such as blog entries, news headlines, audio, and video — in a standardized format. An RSS document includes full or summarized text, plus metadata such as publishing dates and authorship.
SAR	Synthetic Aperture Radar
SDI	A spatial data infrastructure (SDI) is a data infrastructure implementing a framework of geographic data, metadata, users and tools that are interactively connected in order to use spatial data in an efficient and flexible way. Another definition is the technology, policies, standards, human resources, and related activities necessary to acquire, process, distribute, use, maintain, and preserve spatial data.
SEIS	Shared Environmental Information System
Sensor	Device that receives a signal or stimulus and responds with an electrical signal
SERVUS	Design Methodology for Information Systems based upon Geospatial Serviceoriented Architectures and the Modelling of Use Cases and Capabilities as Resources
SKOS	Simple Knowledge Organisation System is a model for expressing basic structures and contents of concept schemes such as thesauri, classification schemes, subject heading lists, taxonomies, 'folksonomies', other types of controlled vocabulary, and also concept schemes embedded in glossaries and terminologies
SMARTAGRIFOOD (SAF) SMARTAGRIFOOD2 (SAF2)	SmartAgriFood is a phase 1 Future Internet Public-Private Partnership (FI-PPP) project, which investigated how Future Internet ICT (FI-ICT) could address the global challenges of the agri-food sector. SmartAgriFood2 is phase 3 FI-PPP project will expand FISpace functionalities by supporting SMEs and web entrepreneurs (SMWEs) to develop approximately 50 new services or Apps in the area of Smart Farming through an open call proces.
SME	Small Medium Enterprise
SMWE	SMEs and Web Entrepreneurs
SOA	A Service-Oriented Architecture (SOA) is a set of principles and methodologies for designing and developing software in the form of interoperable services. These services are well-defined business functionalities that are built as software components (discrete pieces of code and/or data structures) that can be reused for different purposes. SOA design principles are used during the phases of systems development and integration.
SOS	Sensor observation service, a web service interface specification for discovery and access of sensor observations, real-time or archived
SPARQL	SPARQL Protocol and RDF Query Language. RDF data query and update language that permits to retrieve and manipulate data stored in a RDF graph model.
Spatial Resolution	Refers to the smallest object measure that can be distinguished. For instance, the MODIS instrument works with this resolution modes: 250 m, 500 m, 1.000 m y 5.600 m.
Spectrophotometry	The quantitative measurement of the reflection or transmission properties of a material as a function of wavelength. Ref.: The National Institute of Standards and Technology (NIST) (http://www.nist.gov/pml/div685/grp03/spectrophotometry.cfm)
Spectroradiometer	Instrument for measure the spectral irradiance.
SQL	Structured query language, a database computer declarative language designed for managing data in relational database management systems (RDBMS)
SSO	The Single Sign-On mechanism allows user to authenticate in multiple applications via single login process
SSL	Secure Sockets Layer (SSL) is cryptographic protocol designed to provide communi-

	cation security over the Internet (See TSL)
SWE	Sensor Web Enablement. The concept of the "sensor web" is a type of sensor network that is especially well suited for environmental monitoring. The phrase the "sensor web" is also associated with a sensing system which heavily utilizes the World Wide Web. OGC's Sensor Web Enablement (SWE) framework defines a suite of web service interfaces and communication protocols abstracting from the heterogeneity of sensor (network) communication.
SWOT	The SWOT analysis is a strategic planning method used to evaluate the Strengths, Weaknesses, Opportunities, and Threats involved in a project or in a business venture.
Temporal Resolution	Brings up with the frequency of observation of the same point in the surface of Earth. For example, the temporal resolution could be diary, each 8 or 16 days or yearly, among others.
TIRS	Thermal Infrared Sensor. It is an instrument aboard on Landsat 8 satellite.
Transducer	Coverter of one type of energy into another.
TSL	Transport Layer Security (TLS) and its predecessor, Secure Sockets Layer (SSL), are cryptographic protocols designed to provide communication security over the Internet.
Vegetation Indices	Sensors and onboard satellite instruments related to environmental and Earth observation, measure electromagnetic radiation emitted and reflected by observed objects. Based on these radiometric data it is possible to obtain valuable variables and indicators from the agriculture perspective such as moisture and soil temperature, the vegetation index or even the kind of vegetation and its health. Specifically, Vegetation Indices are based on reflectance differences of the chlorophyll on the spectral intervals corresponding to the Red and the Near Infrared channels. These indices measure the density of vegetation.
VGI	Voluntary Geographic Information. Observational data supplied by volunteer (public) users with specific geo-referencing.
VHR	Very High Resolution
Weather Radar	Weather surveillance radar or Doppler weather radar, is a type of radar used to detect the type and intensity of rainfall.
WEO	World Economic Outlook database
WFD	Water Framework Directive, EU directive to establish a framework for the protection of all waters including rivers, lakes, estuaries, coastal waters and groundwater, and their dependent wildlife/habitats under one piece of environmental legislation
WLAN	Wieless Local Area Network
WPAN	Wireless Personal Area Network
WSN	Wireless Sensors Network
WRF	Weather Research Forecast
XML	Extensible mark-up language, set of rules for encoding documents in machine-readable form