


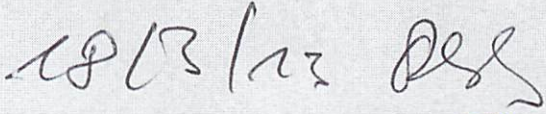
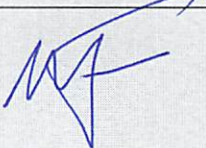


**COMMISSION EUROPÉENNE**  
DIRECTION GÉNÉRALE ENTREPRISES et INDUSTRIE

Industrie aérospatiale, maritime, de sécurité et de défense  
**GMES**

**GMES DATA ACCESS**  
**SPECIFICATIONS OF THE EARTH OBSERVATION NEEDS OVER THE PERIOD 2011-2013**

APPROVAL

Title:	
GMES Data Access Specifications of the Earth observation needs over the period 2011-2013	
Issue 1	Revision 9
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## CHANGE LOG

reason for change	Issue	revision	date
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Incorporation of Comments following the 15th FP7 Space Programme Committee	1	3	18/03/2010
Outcome of meeting EC/ESA of 07/06/2010	1	4	07/06/2010
Outcome of meeting EC/ESA of 22/06/2010 and DG-REGIO input for Urban Atlas	1	5	29/06/2010
Refinement of FP7 downstream projects needs -Version issued for Data Procurement ITT	1	6	4/10/2010
Modification of the référence year, delivery methodology and delivery schedule for the GR pan-European Coverage	1	7	21/12/2010
Modification of the requirements concerning Médium resolution Composites (frequency, coverage, synchronisation with Core_001) as requested by the GMES Land Service	1	8	30/05/2011
Modification of the acquisition Windows for Core001 and Core_003 as requested by the Land service	1	9	13/03/2013

## CHANGE RECORD

Issue 1	Revision 9		
Reason for change	Date	Pages	Paragraph
Modification of the detailed requirement of Core_001 (acquisition time window for Coverage 1, national projections)	13/03/2013	5	2.1 (2) (a)
		13	REQ 5.2.1-1 modified
		14	REQ 5.2.1-5 deleted REQ 5.2.1-6 modified
		15	REQ 5.2.1-8 modified
		Annex 5 and 6	New annex
Update of the list of FP7 projects		7	2.3
Modification of the detailed requirement of Core_003 (acquisition time window, national projections)		5	2.1 (2) (b)
		15	REQ 5.2.3-1 modified
		16	REQ 5.2.3-9 and REQ 5.2.3-10 added
Modification of the overall quota for additional data sets		24	REQ 5.3.6-1 modified

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## **1. INTRODUCTION**

### **1.1. Background**

For an initial period of three years, data access management has been funded through a data access grant between the EC and ESA. Current Earth Observation data is provided to GMES Services through this approach.

As from October 2010 the next step of the EC-ESA cooperation, the delegation agreement, ensures continuity of the data procurement. This new phase intends to widen the scope of the data access to a broader community.

So far the current data access grant approach was dedicated to the specific needs of the FP7 projects, based on a collection of very detailed requirements which was a very long process. In addition the original licenses were limited to the FP7 projects and the re-use of the acquired datasets by other users in the fulfilment of EU Public Tasks was limited due to budget constraints. On this basis, a change of paradigm is required moving to a new concept of Data Warehouse offering two types of datasets common to a broader user community. This is based on two types of data: (i) a fixed part called 'CORE datasets' which are typically well defined large datasets covering the needs of FP7 projects and other users and (ii) a flexible part called 'ADDITIONAL' datasets. This approach should be flexible enough to accommodate further additional requirements or specific requirements which are not covered by the CORE datasets and not known in advance.

### **1.2. Scope and objective**

This document is the “Data Warehouse requirements” referred to in the EC/ESA delegation agreement on the Implementation of the Space Component of GMES (last amended on 15/06/2011).

This document represents the user requirements for Earth Observation data for the period covered by the EC/ESA delegation agreement.

The approach suggested in this document aims at widening, as far as possible, user access along three major principles:

- (1) extension of licences to meet the needs of a wider range of user activities – beyond existing FP7 projects – for the datasets procured under the Data Access Grant;
- (2) depending on the type of service, predefinition of CORE datasets with fixed specifications that represent the common needs of a broad user community;
- (3) Bulk agreement for ADDITIONAL datasets with flexible specifications, e.g. geographical area, under the establishment of predefined quotas.

The requirements take into account the needs of users at large, encompassing the FP7 projects and other GMES connected activities.

The Commission will define in detail the CORE Datasets (cf. § 5.2). By definition, the ADDITIONAL datasets are flexible and are not known in advance, therefore technical details cannot be provided at this stage, but only general requirements (cf. § 5.3) and principles on the quota management mechanism (§5.3.6). The FP7 needs should be reiterated together with the ADDITIONAL datasets.

The approach for the procurement of the two types of datasets will be different: CORE datasets can be procured on the basis of pre-defined specifications, ADDITIONAL datasets through a quota mechanism and bulk agreements with data providers for the provision of data within a financial envelope (§5.3).

The document is structured as follows:

- Section 1 describes the scope and objectives
- Section 2 defines the overall requirements
- Section 3 defines the user categories and the rights of use of the users
- Section 4 defines the services to be offered by the usage types (services)
- Section 5 details the datasets specifications to be procured under the delegation agreement

### **1.3. Applicable and reference documents**

#### *1.3.1. Applicable documents*

AD[1] Project Implementation Plan

#### *1.3.2. Reference documents*

RD[1] Data Access Portfolio Requirement Document, GMES-PMAN-EOPG-RD-08-0002, issue 1.1, 15/03/2009

RD[2] Data Access Portfolio Document, GMES-PMAN-EOPG-TN-07-0003, Issue 1.0, 09/09/2009



## 2. OVERALL REQUIREMENTS

### 2.1. CORE datasets

The requirements for new activities to be considered under the GMES Initial Operations are not fully known in advance. To cope with this situation, and to propose a more robust and cost-effective access mechanism, it is proposed to change the approach with the predefinition of CORE datasets with fixed specifications which will be offered to a broad range of users and activities.

Those CORE dataset specifications should take account of the needs of (i) existing FP7 projects until their termination, (ii) the operational services to be initiated under GIO and (iii) other activities within FP7 to be launched in the continuation of current FP7 projects. It is also enlarged to take account of common needs of user communities:

- (1) Fulfilment of the data needs for establishing an emergency service over the period 01/2012 to 30/04/2014. As a starting point, the data needs can be considered as equivalent to the ones requested by SAFER. The rapid mapping is requiring specific satellite tasking and therefore will be covered under 'ADDITIONAL datasets with pre-defined quotas'. The dataset specifications are detailed under § 5.3.
- (2) Fulfilment of the data needs for establishing the land monitoring services. It should cover:
  - (a) pan-EU High Resolution (HR) image coverage for the requirements of land cover/land cover change activities (Corine: CLC and CLCC), and 5 High Resolution Layers (HRLs) on land cover characteristics (imperviousness, forestry, agriculture (grasslands), permanent wetlands and small water-bodies (cf. details in § 5.2.1). It shall include access to archives of previous coverages (§ 5.2.2).
  - (b) One partial or full European Very High Resolution (VHR) coverage over EU matching the requirements of applications at EU level (Urban Atlas, Land cover on riparian zones for the purpose of biodiversity monitoring, monitoring of coastal areas, risk areas, protected areas (Natura 2000 sites), Land Parcel Identification...) and at national level (§ 5.2.3).
  - (c) For Dynamic Land monitoring: daily Low Resolution (LR) and Medium Resolution (MR) full globe coverage for the production of biogeophysical parameters in the global component of GIO land (similar to the BIOPAR service component from Geoland2) (cf. § 5.2.4 and 5.2.5).
  - (d) For seasonal vegetation monitoring: monthly to 15-days composites of Medium Resolution (MR) full EU coverage during the vegetation period March-October (extension of SATCHMO) (cf. § 5.2.6).

- (e) Outside Europe (Africa): one full sub-Saharan HR coverage. Due to the possible decentralised approach for service implementation, the licensing scheme shall include full access to EU institutions and mandated organisations in the Member States as a baseline (cf. § 5.2.7).
- (3) Fulfilment of the data needs for establishing the marine and atmosphere composition monitoring services through the current MACC and MyOcean projects and their follow-on. The data needs are based on MACC and MyOcean project requirements.(cf. § 5.2.8 and 5.2.9).

## **2.2. ADDITIONAL datasets with predefined quotas**

ADDITIONAL datasets are needed to complement the establishment of land and emergency services, marine and atmosphere composition services, and the security service, as some data characteristics are not known in advance (e.g. satellite tasking for rapid mapping or security applications).

As for the CORE datasets, these ADDITIONAL datasets are expected to fulfil the needs of (i) existing FP7 projects until their termination not covered by the CORE datasets, (ii) the operational services to be initiated under GIO over the post 2010 period and (iii) other activities within FP7 to be launched in the continuation of current FP7 projects. In addition other GMES-related activities (EEA, EMSA, EUSC, FRONTEX...) should be considered as well.

In the absence of specific requirements, it is assumed that the new FP7 projects and GIO activities will use as a priority the aforementioned 'CORE' datasets which will be complemented by predefined quotas to fulfil their specific needs.

Some assumptions have been made for the specification of requirements:

- The envelope estimates should be made on the basis of a combination of statistics and requirements from current FP7 projects, previous projects and other related activities;
- The needs for GMES services in support to crisis management (SAFER, G-MOSAIC and further activities) are considered with the highest priority;
- In addition some specific requirements from EU agencies (EMSA, EUSC, FRONTEX) which could be covered by GMES have been identified;
- Further additional requirements to cover specific 'non-crisis' activities will be considered with medium priority (e.g. specific requirements for GIO Land service not covered by the CORE datasets, or for Downstream FP7 projects);

- The approach with this document is to cover the majority of requirements with CORE and ADDITIONAL datasets; however this might not satisfy 100% of requirements, which should be covered by the projects/services themselves;

### 2.3. FP7 projects

The Delegation Agreement will support the extension or the acquisition of new licences for the needs of the current FP7 projects and those under negotiation beyond 2010. This includes:

- (a) SAFER, MyOcean, G-Mosaic and MACC over the period 10/2010 to 12/2011; MyOcean 2 and MACC II until 30/04/2014.
- (b) Downstream projects DORIS, AQUAMAR, GEO-PICTURES, SubCoast, EVOSS, BIO\_SOS, COBIOS, CRYOLAND, DOLPHIN, EUFODOS, FRESHMON, GLOWASIS, ISAC, MALAREO, MS.MONINA, MYWATER, NEREIDS, RECOVER, REDDAF, REDD-FLAME, REDDINESS, SEAU, SIRIUS, WATPLAN, G-NEXT, G-SEXTANT, IMAGINES, INCREO, LAMPRE, LOBOS, PREFER, SAGRES, SENSUM.

### 2.4. Licensing conditions

The overall principle should be to have a broad access to CORE datasets, whereas access to ADDITIONAL data managed through quotas could be more limited.

Regarding the pan-EU and EU CORE datasets (wall-to-wall HR pan-EU coverage, VHR EU coverages, monthly 15-days HR composites) and the Global MR and LR coverages, the licences should include unrestricted access to the Primary Products and the Altered Products and Derivative Works<sup>1</sup> for EU institutions [EU\_Inst], Public Authorities [Publ\_Auth] and FP7 projects (service providers) [FP7\_Proj]. This should be the case as well for the full sub-Saharan HR coverage, which also includes access for International organisations and NGOs involved in land monitoring activities in these African countries.

Regarding the ADDITIONAL dataset for emergency service activities included in EU Public Tasks, the licences should include unrestricted access to the Primary Products and the Altered Products for EU institutions [EU\_Inst] and FP7 projects (service providers) [FP7\_Proj].

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<sup>1</sup>– it is considered that there is unrestricted access to derivative works in all further discussion in the document

### **3. USER CATEGORIES AND USAGE RIGHTS**

Five User types are defined under the DA, as indicated below. The sections below also define the usage allowed by each user category. These user categories are referred to in the specification by their abbreviation in square brackets.

#### **3.1. Participants to a project financed under FP7 [FP7\_Proj]**

This includes any natural or legal person officially registered as participant of a project funded under the 7<sup>th</sup> FP Space theme.

Participants to a project financed under FP7 may use the Primary Products and Altered Products for activities within the project.

#### **3.2. Institutions and bodies of the EU [EU\_Inst]**

It includes:

- (1) The European Institutions set up under the EU Treaties;
- (2) Agencies set up under the EU Treaties.

The institutions and bodies of the EU, as well as their contractors may Use the Primary Product and Altered Products for activities whose purpose is within the EU Public tasks (development, implementation and monitoring of policies and related activities as defined by the EU Treaties and subsequent EU legislation).

#### **3.3. Public authority [Public\_Auth]:**

Public authorities include:

- (1) Any government or other public administration of States participating in FP7 or participating in the GMES Space Component, including public advisory bodies, at national, regional or local level. This is without prejudice to the right of the Commission to establish the priority list of the beneficiaries who are entitled to receive the data;
- (2) any natural or legal person performing public administrative functions under national law, including specific duties, activities or services in relation to an EU policy;
- (3) any natural or legal person having public responsibilities or functions, or providing public services relating to an EU policy under the control of a body or person falling within (1) or (2), such as a contractor of a public authority;
- (4) Any research and academic organisation.

Public authorities as well as their contractors may Use the Primary Product and Altered Products for activities whose purpose is within the EU Public tasks.

### **3.4. International Organisations and NGOs [INT\_ORG\_NGO]**

These bodies are defined as:

- (1) Any International Governmental Organisation created by an international treaty which can be looked up in the UN online database of treaties. Specialised agencies of the UN are included;
- (2) Any International Non Governmental Organisation specialised in humanitarian or development activities.

International Organisations, Non-governmental Organisation as well as their contractors may Use the Primary Product and Altered Products for activities whose purpose is within the EU Public tasks.

### **3.5. Public [Public]**

Any natural or legal person.

Any natural or legal person may Use the Primary Product and Altered Products derived from it for non-commercial activities.

## **4. USAGE TYPES (SERVICES), OR USE DEFINITION**

The usage types have been defined adhering to the INSPIRE nomenclature. For each dataset the usage type per user category should be specified.

### **4.1. DISCOVERY Service:**

Spatial data services making it possible to search for spatial datasets and services on the basis of the content of the corresponding metadata and to display the content of the metadata.

All users can access such services.

### **4.2. VIEW Service**

The VIEW service shall make possible, as a minimum, to display, navigate, zoom in/out, pan, or overlay viewable spatial data sets and to display legend information and any relevant content of metadata

### **4.3. DOWNLOAD Service:**

The DOWNLOAD service shall allow the beneficiary:

- (1) to make an unlimited number of copies of the Primary Product as needed (archiving and backup purposes included);
- (2) to install on as many individual computers as needed, including internal computer network;
- (3) to alter or modify the Primary Product by invoking a computer application to produce Altered Products and Derivative work;

- (4) to post Metadata of the Primary Product or its Altered Products on an internet website with the display of the following credit: “includes material (c) Mission name (year of acquisition), all rights reserved”;
- (5) to make hard copies or to display on an internet web site a Representation of any extract of the Primary Product or its Altered Products at any resolution, with the display of the following credit: “includes material (c) Mission name (year of acquisition), all rights reserved”; the data received by client applications, through above internet posting, should be such that it is not possible to use/generate back the Primary or Altered Products;
- (6) to Use the Primary Product or its Altered Products for internal or external demonstration purposes; and
- (7) to retain all Intellectual Property Rights associated with any Derivative work developed on the basis of the Product.

## 5. DATASETS REQUIREMENTS

This section provides the definition of datasets. The objective of this section is to provide the user requirements, identifying **the criteria, which will have a significant impact on the cost of data**. This should give sufficient details to derive technical specification as input for the procurement.

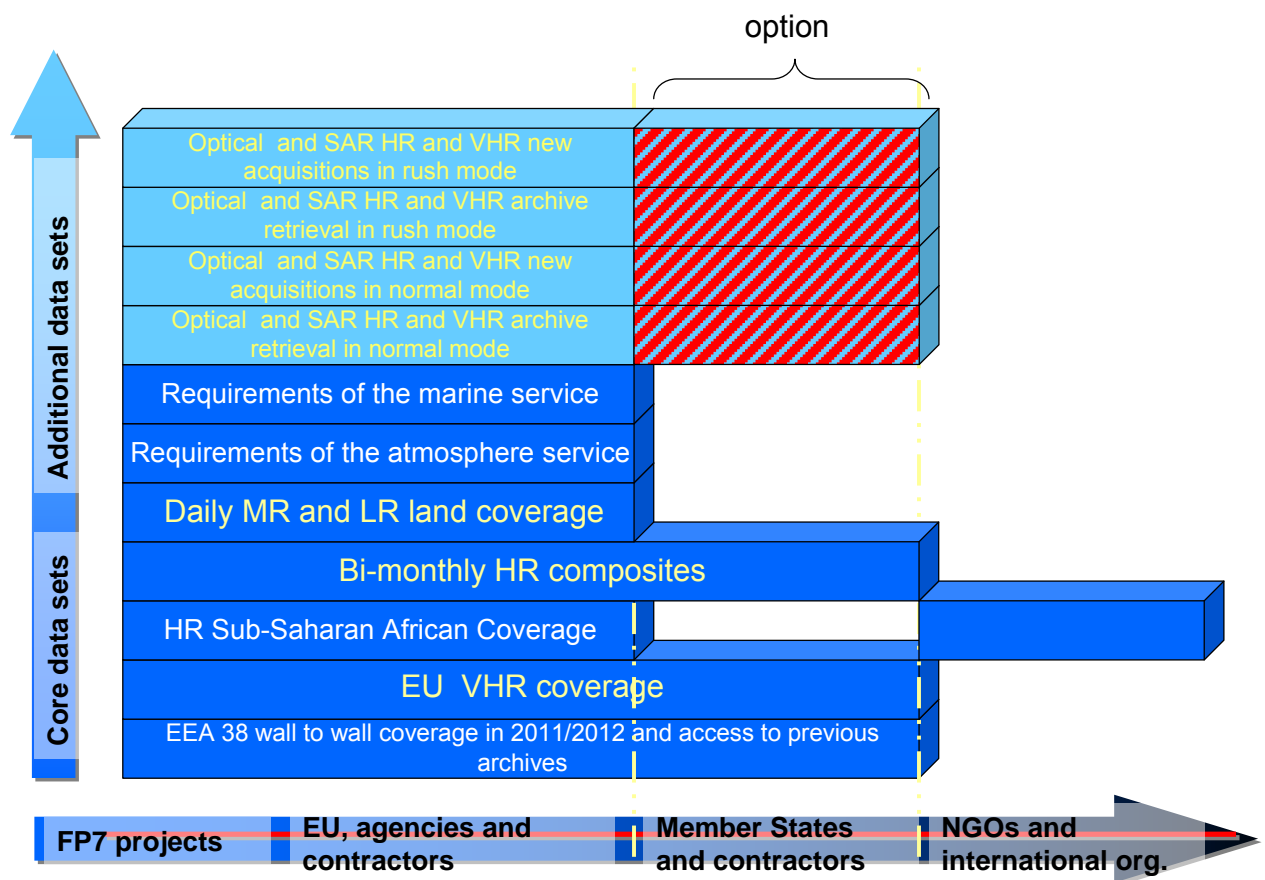


Figure 1: licensing scheme and data needs synthesis

## 5.1. Data characteristics, definitions

Each dataset detailed in Annexes is specified according to a specific template. The template includes the following information:

- (1) **ID #:** Specifies the ID of the dataset, according to project acronym\_sequential numbering.
- (2) **Title Dataset:** Specifies the title of the dataset.
- (3) **Description Dataset:** Describes the content of the dataset and specifies the main application(s) served by the dataset (e.g. soil sealing, EEA 38 land coverage, etc).
- (4) **Usage:** Specifies usage (services) allowed for each user category. User categories and usage (services) are defined in section 3.
- (5) **Priority:** Specifies the priority of the dataset. Possible values are Low, Medium or High. Note: this is a general marking of the datasets versus other datasets.
- (6) **Area of interest & Estimated surface:** Specifies the area of interest (e.g. EEA 38, EU-27 plus 3 the Candidate Countries (Turkey, Croatia, and the Former Yugoslav Republic of Macedonia), Africa, Romania, etc.) and the estimated area which needs to be covered (e.g. 5 M sq km, etc.). Whenever possible, this information will be accompanied by a shapefile. This information will be complemented by the following sub-elements:
  - (a) Area name: Well known name e.g. EU27 plus 3, EEA38, etc.
  - (b) Shapefile Name: If shapefile exists.
  - (c) Km2: Dataset size in km2.
  - (d) BOX: Delimited by N/S E/W coordinates.
  - (e) Contiguous: Yes if area is one block.
  - (f) Non-Contiguous: Approximate size of smallest contiguous zone over the AOI, and number of different AOIs.
  - (g) Non contiguous grid: statistically sample grid – grid size.
- (7) **Optical characteristics:** Spectral Bands – placed in order as appears on electromagnetic spectrum, and include red-edge, max. elevation angle, Cloud Cover, composite characteristic. This information will distinguish “mandatory bands to execute the service” from “nice-to-have bands”. A field for entering MANDATORY is included for the different bands.

- (8) **Radar characteristics:** Specifies the radar bands of the sensor(s) that makes the dataset. It includes the frequency band (e.g. X or C), the polarisation (Single, Dual, or Quad, stating combination), and whether INSAR is required.
- (9) **Resolution spatial:** Specifies the resolution of the sensor(s) that makes the dataset. Possible values are:
- (a) VHR1:  $\leq 1\text{m}$
  - (b) VHR2:  $>1\text{m} - \leq 4\text{m}$
  - (c) HR1:  $>4\text{m} - \leq 10\text{m}$
  - (d) HR2:  $>10\text{m} - \leq 30\text{m}$
  - (e) MR1:  $>30\text{m} - \leq 100\text{m}$
  - (f) MR2:  $>100\text{m} - \leq 300\text{m}$
  - (g) LR:  $>300\text{m}$
- (10) **Updating frequency:** Specifies the revisit mapping over the area of interest and constraints (if any). For example, the dataset shall be acquired every year during the vegetation season (April –Sept).
- (11) **Accuracy product:** Includes the radiometric resolution (i.e. bits/pixel required, saturation %) and the geometric accuracy (max. allowed absolute 1-D RMSE threshold in meter).
- (12) **Acquisition programming:** Specifies the acquisition programming for making the dataset. Possible values are Archive, Standard programming, Priority programming.
- (13) **Lead time:** Specifies the time before programming, with reference to the dataset.
- (14) **Production time:** Specifies the delay for delivery of data after acquisition. Possible values are:
- (a) ***NRT15min:*** Newly acquired data are made available within 15 min from sensing
  - (b) ***NRT30min:*** Newly acquired data are made available within 30 min from sensing
  - (c) ***NRT1h:*** Newly acquired data are made available within 1 hour from sensing.
  - (d) ***NRT3h:*** Newly acquired data are made available within 3 hours from sensing.
  - (e) ***Fast24h:*** Newly acquired data are made available within 24 hours from sensing.



- (f) **Fast48h:** Newly acquired data are made available within 48 hours from sensing.
  - (g) **Normal:** Newly acquired data are made available less than a week after sensing, with a target of 48-72h hours. This category typically includes fresh data systematically refined off-line with consolidated auxiliary data. Timeliness for refinement depends on the availability of auxiliary data and is to be defined on a Dataset basis. Archive Normal is placed in this category even though data shall be made available within 24 hours after data request.
  - (h) **Cumulative:** For cumulative datasets, products are made available only at completion of the pre-agreed coverage. This delivery mode is used typically for Land Services. Data are made available by default 2 months after closure of acquisition windows unless otherwise specified in the dedicated sections.
  - (i) **Rush archive:** Archived data are made available as soon as possible after (acknowledgement of) data request. Usually this specification applies for emergency requests.
- (15) **Delivery media:** Specifies the media for delivery (e.g., DVD, tape, ftp get, ftp push or OGC service).
  - (16) **Processing:** Specifies the level of pre- processing to be done by the Space Component. This includes bundling, pan-sharpening, and tbc LUT stretching, tbc atmospheric correction, ortho-rectification, and mosaicking. For orthorectification a field MANDATORY has been included.
  - (17) **Reference data to be used:** Specifies the characteristics of reference data and Digital elevation model (Ground control points – GCP- planimetric accuracy, GCP source, DEM source, DEM vertical accuracy). Free text is given for comments and eventual licence restrictions/cost.
  - (18) **Auxiliary information:** Provides ADDITIONAL information for specifying the dataset. (Free text.)
  - (19) **Data type Sensor:** Describes if multiple sensors are allowed.

## 5.2. Fixed / CORE Dataset requirements

### 5.2.1. Optical HR Pan EU coverage (CORE\_001a / CORE\_001b)

**REQ-5.2.1-1** Two seasonal coverages of Optical pan Europe HR1/2 (5.8 M Km<sup>2</sup>) (two coverages, each fully within the vegetation season either in 2011 or in 2012, separated by at least 6 weeks; preferably one coverage within the narrow acquisition windows, and mandatory both

within the limits of the extended acquisition windows) shall be provided for the continuation of Corine like exercises and the production of HRLs on land cover characteristics by EU, EEA and Member States. Gap filling shall be acquired in 2013. Three options should be considered:

Option 1: (i) one optical HR1 coverage with SWIR in season 1 (CORE\_001a) and (ii) one optical HR2 coverage without SWIR in season 2 (CORE\_001b).

Option 2: Two coverages in HR2 with SWIR in season 1 and 2 (CORE\_001b).

Option 3: One coverage in HR2 with SWIR in season 1 and one coverage in HR2 without SWIR in season 2.

**REQ-5.2.1-2** Multi-user licenses should be acquired to cover as a baseline all relevant activities of users in [EU\_Inst], [Publ\_Auth] and [FP7\_Proj] (download service). [Public] should have access in DISCOVERY mode. VIEW mode should however be considered an option towards [Public] and will be used if affordable

**REQ-5.2.1-3** The images should be delivered per "large region"<sup>2</sup> and production time for the coverage in season 1 of reference year<sup>3</sup> respectively should not exceed 30 days after the closure of the actual acquisition window. Delivery of coverage 2 should be no later than the end of the reference year, -. Partial deliveries per smaller areas of minimum 2500 sqkm are acceptable.

**REQ-5.2.1-4** Cloud coverage should not exceed 5% per country.

**REQ-5.2.1-5** Deleted

**REQ-5.2.1-6** The images should be ortho-rectified both in European and 39 national projections as defined in Annex 6.

**REQ-5.2.1-7** For each season the acquisition strategy should take into account the capacities of the sensors to complete the coverage within the acquisition windows, using one sensor as a baseline completed with additional sensors to fill the gaps. The management of acquisition should be flexible enough to revise dynamically the acquisition plan and complete the coverage within the

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<sup>2</sup> The map of the "large regions" is provided in Annex 4, and the corresponding shapefile provided with the electronic version of this document.

<sup>3</sup> Reference year being either 2011 or 2012.

acquisition period using programming capacities if required (multi-tasking approach).

**REQ-5.2.1-8** The detailed requirements are provided in Annex 1 under the reference CORE\_001a and b and in Annex 5.

**REQ-5.2.1-9** The number of large regions to be delivered in 2011 shall cover a minimum area of 2 million square kilometres.

5.2.2. *Access to former pan EU coverage archives (CORE\_002)*

**REQ-5.2.2-1** Access to Image 2000, Image2006 and Image2009 archive for [EU\_Inst], [Publ\_Auth] and [FP7\_Proj] and [Public] at the same conditions as specified in REQ-5.2.1-2, shall be provided by extending the existing licenses if required.

**REQ-5.2.2-2** The detailed requirements are provided in Annex 1 under the reference CORE\_002.

5.2.3. *Optical VHR2 coverage over EU (CORE\_003a / CORE\_003b)*

**REQ-5.2.3-1** An Optical VHR2 coverage over EU 27 plus 3 Candidate Countries (4.5 M Km<sup>2</sup>) shall be provided to cover the requirements of various services :

- a. Land applications at EU level (Urban Atlas, land cover over riparian zones for the purpose of biodiversity monitoring, monitoring of coastal areas, risk areas, protected areas (Natura 2000 sites), Land Parcel Identification...) and at national level;
- b. Emergency response service: the objective is to have a continuous update of image archive for reference mapping.

The acquisition strategy could be completed within 3 years (e.g. 1/3 of EU covered each year).

**REQ-5.2.3-2** The detailed requirements are provided in Annex 1 under the reference CORE\_003a.

**REQ-5.2.3-3** In case REQ-5.2.3-2 is not achievable (full EU27 plus 3 coverage VHR2), requirements as specified in CORE\_003b shall apply. Requirements should be identical to those applied for Urban Atlas 2006. In such case, 200 additional hot spots of 2500 sqkm each will be covered by additional data sets.

**REQ-5.2.3-4** The images shall be delivered on a quarterly basis and production time shall not exceed 30 days. A continuous acquisition strategy and resulting delivery strategy is assumed. On average, delivery of 400000 sqkm is

expected per quarter. Delivered datasets shall be bigger than 2500 sqkm.

**REQ-5.2.3-5** Cloud coverage should not exceed 5% per country, and no more than 5% over the areas defined in REQ-5.2.3-3.

**REQ-5.2.3-6** For Core\_003a, the images should be ortho-rectified to an accuracy better than 5m rmse (absolute 1-D value<sup>4</sup>) and provided both in European and 27 plus 3 national projections as specified in Annex 6. For areas defined in REQ-5.2.3-3, an image to image accuracy of 1 pixel or better has to be achieved with respect to Urban Atlas 2006.

**REQ-5.2.3-7** For each season the acquisition strategy should take into account the capacities of the sensors to complete the coverage within the acquisition windows and should ensure a 5 years time difference with respect to the actual acquisitions of Urban Atlas2006 to the maximum possible extent. The management of acquisition should be flexible enough to revise dynamically the acquisition plan and complete the coverage within the acquisition period using programming capacities if required (multi-tasking approach). Seasonal snow shall be avoided.

**REQ-5.2.3-8** Multi-user licenses should be acquired to cover as a baseline all relevant activities of users in [EU\_Inst], [Publ\_Auth] and [FP7\_Proj] (download service). [Public] should have access in DISCOVERY mode. VIEW mode should however be considered an option towards [PUBLIC] and will be used if affordable

**REQ-5.2.3-9** The acquisition of Core\_003a shall be performed within the same extended acquisition windows than Core\_001, for the purposes of the local component Land Cover/Use on riparian zones.

**REQ-5.2.3-10** As an option, Core\_003 shall be extended to the full EEA39 coverage.

#### 5.2.4. *Optical worldwide LR coverage (CORE\_004 and 5)*

**REQ-5.2.4-1** A daily worldwide coverage in LR data with imaging multi-spectral radiometers shall be provided for the

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<sup>4</sup> "absolute 1-d value" means rmse computed between output images and reference checkpoints which should have 5 times better accuracy than the required tolerable rmse. The rmse value should be valid in both X- and Y- directions separately.

production of biogeophysical parameters as specified in Annex 1 under the reference CORE\_004

**REQ-5.2.4-2** The data should be delivered within 24h after the acquisition (Fast24h)

**REQ-5.2.4-3** Archive data (10 years) shall also be provided as specified in Annex 1 under the reference CORE\_005, as an extension of the current DA grant (LMCS\_006b).

**REQ-5.2.4-4** Any complementary requirement not specified in this document shall be identical to requirement LMCS\_006b of RD[1].

**REQ-5.2.4-5** Authorised users for DOWNLOAD service are [EU\_Inst], and [FP7\_Proj]. In addition [Publ\_Auth] and [Public] should have access to DISCOVERY service.

#### 5.2.5. *Optical worldwide MR coverage (CORE\_006 / CORE\_007)*

**REQ-5.2.5-1** A worldwide coverage in MR data with imaging multi-spectral radiometers shall be provided for the production of biogeophysical parameters as specified in Annex 1 under the reference CORE\_006.

**REQ-5.2.5-2** The data should be delivered within 24h after the acquisition (Fast24h)

**REQ-5.2.5-3** Bi-monthly and bi-weekly composites<sup>5</sup> shall be delivered in normal mode.

**REQ-5.2.5-4** Archive data (from 01/2007) shall also be provided as specified in Annex 1 under the reference CORE\_007, as an extension of the current DA grant (LMCS\_006a).

**REQ-5.2.5-5** Any complementary requirement not specified in this document shall be identical to requirement LMCS\_006a of RD[1].

**REQ-5.2.5-6** Authorised users for DOWNLOAD service are [EU\_Inst], and [FP7\_Proj]. In addition [Publ\_Auth] and [Public] should have access to DISCOVERY service.

#### 5.2.6. *European HR composites (CORE\_008)*

**REQ-5.2.6-1** Composites of optical MR1 (AWIFS type) full EU coverage shall be provided during the vegetation period

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<sup>5</sup> See definition in Annex 3

March-October, as specified in Annex 1 under the reference CORE\_008

- REQ-5.2.6-2** Composites shall be provided on a monthly basis.
- REQ-5.2.6-3** Multi-user licenses should be acquired to cover as a baseline all relevant activities (download service) of authorised users which are by order of priority (i) [EU\_Inst], and [FP7\_Proj] and (ii) [Publ\_Auth]. [Public] should have access in DISCOVERY mode. VIEW mode should however be considered an option towards [Public] and will be used if affordable
- REQ-5.2.6-4** The repetition cycle has a higher priority than the license extension.
- REQ-5.2.6-5** Cloud coverage should not exceed 20% per product.
- REQ-5.2.6-6** The area to be covered by the MR1 composites shall be temporally and spatially synchronised with Core\_001. (i.e. 8 MR1 composites shall be provided in 2011 over the Core\_001 areas acquired in 2011, and 8 MR1 composites shall be acquired in 2012 over the Core\_001 areas acquired in 2012).

5.2.7. *Sub-Saharan Optical coverage (CORE\_009)*

- REQ-5.2.7-1** One full sub-Saharan optical HR2 coverage shall be provided, as specified in Annex 1 under the reference CORE\_009.
- REQ-5.2.7-2** Cloud coverage should not exceed 20% per country. There should not be haze.
- REQ-5.2.7-3** Data should be preferably acquired during the dry seasons for the regions with seasonal climate (outside the equatorial belt). For the northern hemisphere the dry season usually extends from October/November to March/April. For the southern hemisphere the dry season usually extends from June/July to August/September. The acquisition strategy should prefer the beginning or the end of the dry season and avoid the middle of the dry season.
- REQ-5.2.7-4** The images should be delivered on a quarterly basis. A continuous acquisition strategy and resulting delivery strategy is assumed. On average, delivery of 2 mio. sqkm is expected per quarter.
- REQ-5.2.7-5** For each season the acquisition strategy should take account the capacities of the sensors to complete the coverage within the acquisition windows, using one

sensor as a baseline completed with additional sensors to fill the gaps. The management of acquisition should be flexible enough to revise dynamically the acquisition plan and complete the coverage within the acquisition period using programming capacities if required (multi-tasking approach).

**REQ-5.2.7-6** Authorised users are by order of priority:  
1./ [EU\_Inst] and, [FP7\_Proj] (DOWNLOAD service)  
2./ DOWNLOAD service for a limited number of authorised users from [INT\_ORG\_NGO] in Africa (no more than 10-15 organisations)  
3./ Access to DISCOVERY mode for [Public], access in VIEW mode to [Publ\_Auth] as an option if affordable

**REQ-5.2.7-7** Access to the data set defined under reference DAP\_MG2\_25 in RD[2] shall be provided for the authorised users defined in REQ-5.2.7-6 by extending the existing licenses.

#### 5.2.8. *Marine requirements*

**REQ-5.2.8-1** The requirements identified in section 3.1 of RD[1] shall apply, as a continuation of the activities undertaken under the MyOcean FP7 project: (i) Sea Ice monitoring datasets (MCS\_002a, MCS\_002b, MCS\_002c, MCS\_002d, MCS\_002e, MCS\_002f, MCS\_002g, MCS\_002h), (ii) Global and Regional Sea Level (MCS\_003), Global and Regional sea Surface temperature (MCS\_004), Global and Regional Sea Ocean Colour (MCS\_005 and MCS\_016).

**REQ-5.2.8-2** Enough flexibility shall be introduced to allow to regularly update the areas identified in requirements MCS\_002a to MCS\_002h, according to the sea ice coverage.

**REQ-5.2.8-3** Authorised users are [EU\_Inst] and [FP7\_Proj] (download service)

#### 5.2.9. *Atmosphere requirements*

**REQ-5.2.9-1** The requirements identified in section 6.1 of RD[1] shall be fulfilled

**REQ-5.2.9-2** Authorised users are [EU\_Inst] and [FP7\_Proj] (download service )

**REQ-5.2.9-3** Timeliness requirements shall have precedence over amount of data

### 5.3. Flexible / ADDITIONAL datasets requirements

Dataset in rush mode will serve the objectives of the ERCS (Safer and its continuation under GIO) and the security services mainly. Both archived data and new tasked satellite data (new acquisitions) shall be made available.

The objective of data sets in standard mode is to allow beneficiaries to access to contributing missions archive in optical and SAR HR1/2 and VHR1/2: in order to be able to build time series, make comparisons etc... and to feed users with new ADDITIONAL images both, for emergency and security (outside crisis phase) and land services worldwide

Overall requirements are:

**REQ-5.3.1-1** ADDITIONAL datasets shall be provided in order to serve the objectives of the GMES services (implemented through either FP7 projects or through the GMES program initial operations) and some requirements specific to EU agencies (e.g. EMSA, EUSC, FRONTEX). Additional data sets are split into categories, according to their timeliness requirements: rush mode or standard mode.

**REQ-5.3.1-2** Authorised users of Additional data sets are [EU\_Inst] and [FP7\_Proj] (download service). As an option, access to [Publ\_Auth] shall be provided (download service).

**REQ-5.3.1-3** Data sets shall be made available on demand from the beneficiary.

**REQ-5.3.1-4** Data ordering and associated timeliness requirements for rush mode data require a 24h/7 service availability (including the GCMs).

**REQ-5.3.1-5** Timeliness requirements have precedence over data volume

#### 5.3.2. *Archive rush retrieval*

**REQ-5.3.2-1** The targeted timeliness for archive retrieval in rush mode shall be 1.5 hours from request. For the period 2010-2013, archive retrieval not older than 24 hours are acceptable.

**REQ-5.3.2-2** Archived data should not be older than 3 years over EEA38, and should not be older than 5 years over high risk areas as defined by the Emergency Core service outside EEA38.



**REQ-5.3.2-3** Archived data should be made available over the whole world.

**REQ-5.3.2-4** The following archived data shall be made available

- a) Optical HR1 data as specified in Annex 2 under the reference ADD\_001a
- b) Optical HR2 data as specified in Annex 2 under the reference ADD\_001b
- c) Optical VHR1 data as specified in Annex 2 under the reference ADD\_003a
- d) Optical VHR2 data as specified in Annex 2 under the reference ADD\_003b
- e) SAR HR1 data as specified in Annex 2 under the reference ADD\_005a
- f) SAR HR2 data as specified in Annex 2 under the reference ADD\_005b
- g) SAR VHR1 data as specified in Annex 2 under the reference ADD\_007a
- h) SAR VHR2 data as specified in Annex 2 under the reference ADD\_007b

*5.3.3. New acquisitions in rush mode*

**REQ-5.3.3-1** The targeted timeliness for new acquisitions in rush mode shall be 16 hours from request. For the period 2010-2013, new acquisitions not older than 72 hours are acceptable.

**REQ-5.3.3-2** The following new acquisition in rush mode shall be made available

- a) Optical HR1 data as specified in Annex 2 under the reference ADD\_002\_a
- b) Optical HR2 data as specified in Annex 2 under the reference ADD\_002\_b
- c) Optical VHR1 data as specified in Annex 2 under the reference ADD\_004a
- d) Optical VHR2 data as specified in Annex 2 under the reference ADD\_004b
- e) SAR HR1 data as specified in Annex 2 under the reference ADD\_006\_a

- f) SAR HR2 data as specified in Annex 2 under the reference ADD\_006\_b
- g) SAR VHR1 data as specified in Annex 2 under the reference ADD\_008a
- h) SAR VHR2 data as specified in Annex 2 under the reference ADD\_008b

**REQ-5.3.3-3** In case of conflict, [EU\_Inst] and [FP7\_Proj] implementing the ERCS and the security services shall have precedence over other beneficiaries in requesting new acquisitions.

**REQ-5.3.3-4** Timeliness requirements and compliance with quality requirements for a given request shall have precedence over the number of requests being served.

#### 5.3.4. *Archive standard retrieval*

**REQ-5.3.4-1** Archived data should not be older than 3 years over EEA38, and should not be older than 5 years over high risk areas as defined by the Emergency Core service outside EEA38.

**REQ-5.3.4-2** Archived data shall be made available over the whole world.

**REQ-5.3.4-3** The following archived data shall be made available

- a) Optical HR1 data as specified in Annex 2 under the reference ADD\_009a
- b) Optical HR2 data as specified in Annex 2 under the reference ADD\_009b
- c) Optical VHR1 data as specified in Annex 2 under the reference ADD\_011a
- d) Optical VHR2 data as specified in Annex 2 under the reference ADD\_011b
- e) SAR HR1 data as specified in Annex 2 under the reference ADD\_013a
- f) SAR HR2 data as specified in Annex 2 under the reference ADD\_013b
- g) SAR VHR1 data as specified in Annex 2 under the reference ADD\_015a
- h) SAR VHR2 data as specified in Annex 2 under the reference ADD\_015b

- i) SAR\_MR1 data as specified in Annex 2 under the reference ADD\_019a
- j) SAR\_MR2 data as specified in Annex 2 under the reference ADD\_019b
- k) Optical\_MR1 data as specified in Annex 2 under the reference ADD\_020a
- l) Optical\_MR2 data as specified in Annex 2 under the reference ADD\_020b

5.3.5. *New acquisitions in standard mode*

**REQ-5.3.5-1** The following new acquisition in standard mode shall be made available:

- a) Optical HR1 data as specified in Annex 2 under the reference ADD\_010a
- b) Optical HR2 data as specified in Annex 2 under the reference ADD\_010b
- c) Optical VHR1 data as specified in Annex 2 under the reference ADD\_012a
- d) Optical VHR2 data as specified in Annex 2 under the reference ADD\_012b
- e) SAR HR1 data as specified in Annex 2 under the reference ADD\_014a
- f) SAR HR2 data as specified in Annex 2 under the reference ADD\_014b
- g) SAR VHR1 data as specified in Annex 2 under the reference ADD\_016a
- h) SAR VHR2 data as specified in Annex 2 under the reference ADD\_016b
- m) SAR\_MR1 data as specified in Annex 2 under the reference ADD\_017a
- n) SAR\_MR2 data as specified in Annex 2 under the reference ADD\_017b
- o) Optical\_MR1 data as specified in Annex 2 under the reference ADD\_018a
- p) Optical\_MR2 data as specified in Annex 2 under the reference ADD\_018b

**REQ-5.3.5-2** In case of conflict, [EU\_Inst] and [FP7\_Proj] implementing the ERCS and the security services shall have precedence over other beneficiaries in requesting new acquisitions

5.3.6. *Quota management*

**REQ-5.3.6-1** The overall quota for ADDITIONAL datasets is defined in the table below

**ESTIMATED ENVELOPE OF ADDITIONAL DATA FOR THE PERIOD 2011-2013 (area in km<sup>2</sup>)**

<b>Additional dataset</b>	<b>code</b>	<b>TOTAL</b>
Archive_rush_Optical_HR1	ADD_001a	151.162
Archive_rush_Optical_HR2	ADD_001b	323.385
Archive_rush_Optical_VHR1	ADD_003a	43.131
Archive_rush_Optical_VHR2	ADD_003b	230.857
Archive_rush_SAR_HR1	ADD_005a	226.556
Archive_rush_SAR_HR2	ADD_005b	997.188
Archive_rush_SAR_VHR1	ADD_007a	13.350
Archive_rush_SAR_VHR2	ADD_007b	94.000
New acquisition_rush_Optical_HR1	ADD_002a	515.865
New acquisition_rush_Optical_HR2	ADD_002b	522.039
New acquisition_rush_Optical_VHR1	ADD_004a	41.424
New acquisition_rush_Optical_VHR2	ADD_004b	61.498
New acquisition_rush_SAR_HR1	ADD_006a	378.188
New acquisition_rush_SAR_HR2	ADD_006b	2.159.688
New acquisition_rush_SAR_VHR1	ADD_008a	17.359
New acquisition_rush_SAR_VHR2	ADD_008b	283.600
Archive_standard_Optical_HR1	ADD_009a	838.762
Archive_standard_Optical_HR2	ADD_009b	1.301.938
Archive_standard_Optical_VHR1	ADD_011a	146.837
Archive_standard_Optical_VHR2	ADD_011b	429.793
Archive_standard_SAR_HR1	ADD_013a	417.407
Archive_standard_SAR_HR2	ADD_013b	2.309.024

Archive_standard_SAR_VHR1	ADD_015a	14.572
Archive_standard_SAR_VHR2	ADD_015b	479.818
New acquisition_standard_Optical_HR1	ADD_010a	1.527.057
New acquisition_standard_Optical_HR2	ADD_010b	5.345.376
New acquisition_standard_Optical_VHR1	ADD_012a	119.615
New acquisition_standard_Optical_VHR2	ADD_012b	372.932
New acquisition_standard_SAR_HR1	ADD_014a	1.743.275
New acquisition_standard_SAR_HR2	ADD_014b	5.351.639
New acquisition_standard_SAR_VHR1	ADD_016a	25.847
New acquisition_standard_SAR_VHR2	ADD_016b	1.050.004
New acquisition_standard_SAR_MR1	ADD_017a	1.612.500
New acquisition_standard_SAR_MR2	ADD_017b	9.640.000
New acquisition_standard_Optical_MR1	ADD_018a	0
New acquisition_standard_Optical_MR2	ADD_018b	0
Archive_standard_SAR_MR1	ADD_019a	0
Archive_standard_SAR_MR2	ADD_019b	6.200.000
Archive_standard_Optical_MR1	ADD_020a	0
Archive_standard_Optical_MR2	ADD_020b	0

**REQ-5.3.6-2** In case REQ-5.2.3-3 is implemented, additional 500,000 km<sup>2</sup> of the data set ADD\_012b shall be made available.

**REQ-5.3.6-3** The quota mechanism shall ensure that all needs of the emergency and security services are fulfilled, with priority given to crisis phase.

**REQ-5.3.6-4** For other services, a maximum quota will be assigned and shall be managed on a per service basis. They will be informed in advance of the overall envelope of quotas per type of datasets allocated to their activities (based on the initial estimate of their requirements).

**REQ-5.3.6-5** A continuous monitoring of the consumption of the quotas shall be maintained on a per service basis and make this information available to the services.

**REQ-5.3.6-6** At regular intervals (e.g. 6 months or one year) the quota consumption should be assessed by the EC and ESA, in order to take corrective measures if required

**REQ-5.3.6-7** Services will be responsible for managing themselves their own annual quotas, under the control of ESA. As a first step the beneficiary will approach ESA with a requirement for a certain area to be covered with certain data types in a certain time frame.. The Operations team will issue the orders to the GMES Contributing Missions, and will inform the beneficiary of the progress status on a regular basis..

# **Annexes**

## **Annex 1. DETAILED CORE DATASETS SPECIFICATIONS**

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Land Monitoring service	Medium	Incidental (One time event)					2
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>		<b>North</b>	<b>East</b>	
Optical HR1 EEA 38 coverage for the continuation of Corine like projects by EU, EEA, MS (2011, 2012)		1/03/2011 1/10/2012			EEA 39		
					<b>South</b>		
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>					
see AOI	Contiguous	Full coverage					
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
CUMULATIVE							
		<b>Maximum</b>					
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>
HR1 (4m < x • 10m)	Standard		5%	20 m		5%	8
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> NO <b>Pansharpen:</b> Allowed <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> Mandatory <b>Multiple sensors allowed</b> YES		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
Optical							
SWIR	<b>Polarimetry</b>						
VNIR	<b>Insar</b> <input type="checkbox"/>						
		RADAR					
<b>GCP planimetric accuracy:</b>		<b>Comments about reference datasets to be used</b>					
<b>GCP source:</b>		see req-5.2.1-6					
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>	CORE_001a is for 1st coverage for option 1 in REQ-5.2.1-1. The non-orthorectified images should also be made available.						



<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Land Monitoring service	Medium	Incidental (One time event)					3
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>		<b>North</b>	<b>East</b>	
Optical HR2 EEA38 EU coverage for the cont. of Corine like projects by EU, EEA, MS (2011, 2012)		1/03/2011 1/10/2012			EEA 39		
					<b>South</b>		
<b>Shapefile</b>		<b>Coverage</b>	<b>Surface</b>				
see AOI		Contiguous	Full coverage				
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
CUMULATIVE							
		<b>Maximum</b>					
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	
HR2 (10m < x • 30m)	Standard		5%	20 m		5%	
						<b>Bits/pixe</b>	
						8	
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> NO <b>Pansharpen:</b> Allowed <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> Mandatory <b>Multiple sensors allowed</b> YES		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
Optical							
SWIR	<b>Polarimetry</b>						
VNIR	<b>Insar</b> <input type="checkbox"/>						
		<b>Comments about reference datasets to be used</b>					
<b>GCP planimetric accuracy:</b>		see req-5.2.1-6					
<b>GCP source:</b>							
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>	CORE_001b is for 2nd coverage for option 1 in REQ-5.2.1-1, for both coverages (SWIR mandatory for both coverages) for option 2, or for both coverages (SWIR mandatory only in first coverage) for option 3. Detailed requirements identical to Image2009. The non-orthorectified images should also be made available						

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Land Monitoring service	High	Incidental (One time event)					6
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>		<b>East</b>		
License extension to Image 2000, Image 2006, and 2009		1/01/2006 31/12/2006	EEA 39				
			<b>South</b>				
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>					
Not provided	Contiguous	Full coverage					
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
NORMAL							
			<b>Maximum</b>				
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>
HR2 (10m < x • 30m)	Archive		5%	15 m		5%	8
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> NO <b>Pansharpen:</b> NO <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> Mandatory <b>Multiple sensors allowed</b> YES		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
Optical							
SWIR*	<b>Polarimetry</b>						
VNIR*	<b>Insar</b> <input type="checkbox"/>						
*mandatory							
<b>GCP planimetric accuracy:</b> 7 m	<b>GCP source:</b> map, adequate reference		<b>Comments about reference datasets to be used</b>				
<b>DEM source:</b> SRTM v4	<b>DEM vertical accuracy:</b> 14 m						
<b>OGC view service reference:</b>							
<b>Comments:</b>	the products are already produced and paid for once, and in archive. The cost here should be only license extension.						

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>											
Land Monitoring service	High	Incidental (One time event)					4											
<b>Dataset description</b>		<b>Acquisition windows</b>	<table border="1"> <tr> <td><b>North</b></td> <td></td> <td></td> </tr> <tr> <td><b>West</b></td> <td>EU 27 + 3CC</td> <td><b>East</b></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td><b>South</b></td> <td></td> <td></td> </tr> </table>				<b>North</b>			<b>West</b>	EU 27 + 3CC	<b>East</b>				<b>South</b>		
<b>North</b>																		
<b>West</b>	EU 27 + 3CC	<b>East</b>																
<b>South</b>																		
VHR2 coverage for Land "hot spots" i.e. Urban Atlas, coastal areas, risk areas, protected areas (Natura 2000).		15/01/2011 15/12/2013																
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>																
see AOI	Contiguous	Full coverage																
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>														
NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD														
<b>Prod. time</b>	<b>Processing comments</b>																	
CUMULATIVE																		
				<b>Maximum</b>														
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>											
VHR2 (1m < x • 4m)	Priority	90 days	5%	5 m	70°	5%	8											
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> NO <b>Pansharpen:</b> Allowed <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> YES <b>Orthorectification:</b> Mandatory <b>Multiple sensors allowed</b> YES		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)														
Optical																		
VNIR*	<b>Polarimetry</b>																	
PAN	<b>Insar</b> <input type="checkbox"/>																	
		RADAR																
*mandatory																		
<b>GCP planimetric accuracy:</b> 2 m			<b>Comments about reference datasets to be used</b>															
<b>GCP source:</b>			see req-5.2.3-6															
<b>DEM source:</b>																		
<b>DEM vertical accuracy:</b> 5 m																		
<b>OGC view service reference:</b>																		
<b>Comments:</b>	Data set to be acquired over three years. Pan-sharpening is allowed to reach the required resolution. The non-orthorectified images should also be made available.																	

**CORE\_003b EU\_VHR2\_hotspots**

Occurrences **x1**

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>								
Urban Atlas	High	Incidental (One time event)					16								
<b>Dataset description</b>		<b>Acquisition windows</b>	<table border="1"> <tr> <td><b>North</b></td> <td></td> <td></td> </tr> <tr> <td><b>West</b></td> <td>Europe</td> <td><b>East</b></td> </tr> <tr> <td></td> <td><b>South</b></td> <td></td> </tr> </table>				<b>North</b>			<b>West</b>	Europe	<b>East</b>		<b>South</b>	
<b>North</b>															
<b>West</b>	Europe	<b>East</b>													
	<b>South</b>														
This dataset should be considered as an alternative to CORE_003a. In such case, 500000 km2 of VHR2 additional data set shall be made available.		15/01/2011 15/12/2013													
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>													
Same as Urban Atlas 2006	Grid_Non-Contiguous	500000km <sup>2</sup> with single areas in average of 2500km <sup>2</sup>													
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>											
NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD											
<b>Prod. time</b>	<b>Processing comments</b>														
CUMULATIVE															
		<b>Maximum</b>													
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>								
VHR2 (1m < x • 4m)	Priority	90 days	5%	5 m	70°	5%	8								
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> NO <b>Pansharpen:</b> Allowed <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> YES <b>Orthorectification:</b> Mandatory <b>Multiple sensors allowed</b> YES		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)											
Optical															
VNIR*	<b>Polarimetry</b>														
PAN	<b>Insar</b> <input type="checkbox"/>														
		RADAR													
<b>GCP planimetric accuracy:</b>		<b>Comments about reference datasets to be used</b>													
<b>GCP source:</b>		see req-5.2.3-6													
<b>DEM source:</b>															
<b>DEM vertical accuracy:</b>															
<b>OGC view service reference:</b>															
<b>Comments:</b>	Reference Year is 2012. Pan-sharpening is allowed to reach the required resolution.														

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Land Monitoring service	High	Daily (Daily or less)					5
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>		<b>World</b>	<b>East</b>	
Daily coverage in LR delivery NRT, dataset used for production of biogeophysical parameters, ECVs for global land monitoring		1/10/2010 31/12/2013					
					<b>South</b>		
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>					
Not provided	Contiguous	Full coverage					
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
FAST_24h	TOA refl. (L1A),S1, S10						
		<b>Maximum</b>					
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	
LR (x > 300m)	Archive	90 days	20%	200 m		5%	
				<b>Bits/pixe</b>			
				8			
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> NO <b>Pansharpen:</b> NO <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> NO		<b>Composite:</b> Daily composite <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
Optical							
TIR							
MIR							
SWIR							
VNIR	<b>Insar</b> <input type="checkbox"/>	<b>Bundle:</b> NO <b>Pansharpen:</b> NO <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> NO		<b>Composite:</b> Daily composite <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
*mandatory							
<b>GCP planimetric accuracy:</b>	<b>Comments about reference datasets to be used</b>						
<b>GCP source:</b>							
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>	See LMCS_006b of RD[1] for further details						

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>								
Land Monitoring service	High	Daily (Daily or less)					8								
<b>Dataset description</b>		<b>Acquisition windows</b>		<table border="1"> <tr> <td><b>North</b></td> <td></td> <td></td> </tr> <tr> <td><b>West</b></td> <td>World</td> <td><b>East</b></td> </tr> <tr> <td></td> <td><b>South</b></td> <td></td> </tr> </table>			<b>North</b>			<b>West</b>	World	<b>East</b>		<b>South</b>	
<b>North</b>															
<b>West</b>	World	<b>East</b>													
	<b>South</b>														
Archives of Low resolution data (time series) for Global Land monitoring (Biophysical parameters, ECVs)		1/01/2000 1/10/2010													
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>													
Not provided	Contiguous	Full coverage													
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>											
NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD											
<b>Prod. time</b>	<b>Processing comments</b>														
NORMAL	TOA refl. (L1A),S1, S10														
				<b>Maximum</b>											
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>								
LR (x > 300m)	Archive	30 days	20%	200 m		5%	8								
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> NO <b>Pansharpen:</b> NO <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed:</b> NO		<b>Composite:</b> Daily composite <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)											
<i>Optical</i>															
TIR	<b>Polarimetry</b>														
MIR	<b>Insar</b> <input type="checkbox"/>														
SWIR		<b>RADAR</b>													
VNIR															
*mandatory															
<b>GCP planimetric accuracy:</b>	<b>Comments about reference datasets to be used</b>     														
<b>GCP source:</b>															
<b>DEM source:</b>															
<b>DEM vertical accuracy:</b>															
<b>OGC view service reference:</b>															
<b>Comments:</b>															

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Land Monitoring service	High	Daily (Daily or less)					9
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>		<b>World</b>	<b>East</b>	
Medium resolution data for Global Land monitoring (Biophysical parameters, ECVs). Taken as MR2 res. 100-300m should be free of charge (?)		1/10/2010 31/12/2013					
<b>Shapefile</b>		<b>Coverage</b>	<b>Surface</b>				
Not provided		Contiguous	Full coverage				
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
FAST_24h	TOA, S1, S10, surf.refl MERIS, TOC TERRA/ACQUA						
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Maximum</b>				<b>Bits/pixe</b>
MR2 (100m < x • 300	Archive	90 days	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	8
			20%	100 m		5%	
<b>Bands</b>	<b>Polarization</b>	<b>Bundle: NO</b>		<b>Composite: Daily composite</b>			
Optical		<b>Pansharpen: NO</b>		<b>Mosaic: NO</b>			
SWIR	<b>Polarimetry</b>	<b>Lookup table stretch: NO</b>		<b>Delivery: FTP (Online download)</b>			
VNIR		<b>Atmospheric correction: NO</b>					
	<b>Insar</b> <input type="checkbox"/>	<b>Orthorectification: NO</b>					
		<b>Multiple sensors allowed NO</b>					
*mandatory							
<b>GCP planimetric accuracy:</b>			<b>Comments about reference datasets to be used</b>				
<b>GCP source:</b>							
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>	See LMCS_006a of RD[1] for further details						

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>											
Land Monitoring service	High	Daily (Daily or less)					10											
<b>Dataset description</b>		<b>Acquisition windows</b>		<table border="1"> <tr> <td><b>North</b></td> <td></td> <td></td> </tr> <tr> <td><b>West</b></td> <td>World</td> <td><b>East</b></td> </tr> <tr> <td></td> <td><b>South</b></td> <td></td> </tr> </table>		<b>North</b>			<b>West</b>	World	<b>East</b>		<b>South</b>		Medium resolution data for Global Land monitoring (Biophysical parameters, ECVs) / licensing uplift of archive data. Taken as MR2 res. 100-300m should be free of charge (?)		1/01/2000 1/10/2010	
<b>North</b>																		
<b>West</b>	World	<b>East</b>																
	<b>South</b>																	
<b>Shapefile</b>		<b>Coverage</b>	<b>Surface</b>															
Not provided		Contiguous	Full coverage															
<b>FP7 projects</b>		<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>													
NONE DISCOVERY VIEW DOWNLOAD		NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD													
<b>Prod. time</b>		<b>Processing comments</b>																
NORMAL		TOA, S1, S10, surf.refl MERIS, TOC TERRA/ACQUA																
		<b>Maximum</b>																
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>											
MR2 (100m < x • 300	Archive	30 days	20%	100 m		5%	8											
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> NO <b>Pansharpen:</b> NO <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> NO		<b>Composite:</b> Daily composite <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)														
Optical																		
SWIR	<b>Polarimetry</b>																	
VNIR	<b>Insar</b> <input type="checkbox"/>																	
		RADAR																
<b>GCP planimetric accuracy:</b>		<b>Comments about reference datasets to be used</b>																
<b>GCP source:</b>																		
<b>DEM source:</b>																		
<b>DEM vertical accuracy:</b>																		
<b>OGC view service reference:</b>																		
<b>Comments:</b>																		

\*mandatory



**CORE\_008 EU\_MR1\_seasonal\_monitoring**

Occurrences **x8**

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Land Monitoring service	Medium	Monthly (Every month)					11
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>		<b>East</b>		
Dynamic monitoring of vegetation during the vegetation period (March-October): Monthly composites of optical MR1 (AWIFS type)		1/03/2011 31/10/2011	EEA 39				
			<b>South</b>				
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>					
Not provided	Contiguous	Full coverage					
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
NORMAL	L1B, L3						
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Maximum</b>				<b>Bits/pixe</b>
MR1 (30m < x • 100m)	Standard		<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	8
			20%	20 m		5%	
<b>Bands</b>	<b>Polarization</b>	<b>Bundle: NO</b>		<b>Composite: Monthly composite</b>			
Optical		<b>Pansharpn: NO</b>		<b>Mosaic: NO</b>			
SWIR*	<b>Polarimetry</b>	<b>Lookup table stretch: NO</b>		<b>Delivery: FTP (Online download)</b>			
VNIR*		<b>Atmospheric correction: YES</b>					
	<b>Insar</b> <input type="checkbox"/>	<b>Orthorecton: Mandatory</b>					
		<b>Multiple sensors allowed NO</b>					
*mandatory							
<b>GCP planimetric accuracy: 7 m</b>			<b>Comments about reference datasets to be used</b>				
<b>GCP source: map, adequate reference</b>							
<b>DEM source: SRTM v4</b>							
<b>DEM vertical accuracy: 14 m</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>	- in 2011: 8 times 1/3 of Europe (the same 1/3 that will be covered by 2011 HR images (cfr core 001) - in 2012: 8 times 2/3 of Europe (the same 2/3 that will be covered by 2012 HR images (cfr core_001) Remarks: The spring part of the coverage is the more important part (March up to May/June)						

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
GMES Africa	Medium	Incidental (One time event)					12
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>		<b>East</b>		
Sub-Saharan coverage		1/01/2011 31/12/2013	Africa				
			<b>South</b>				
<b>Shapefile</b>		<b>Coverage</b>	<b>Surface</b>				
Not provided		Contiguous	30300000km <sup>2</sup>				
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>		<b>Processing comments</b>					
NORMAL							
				<b>Maximum</b>			
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	
HR2 (10m < x • 30m)	Standard	90 days	20%	20 m		5%	
						<b>Bits/pixe</b>	
						8	
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> NO <b>Pansharpen:</b> Allowed <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> Mandatory <b>Multiple sensors allowed</b> NO		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
Optical							
SWIR	<b>Polarimetry</b>						
VNIR*	<b>Insar</b> <input type="checkbox"/>						
		<b>Comments about reference datasets to be used</b>					
<b>GCP planimetric accuracy:</b> 7 m							
<b>GCP source:</b> map, adequate reference							
<b>DEM source:</b> SRTM or equivalent							
<b>DEM vertical accuracy:</b> 14 m							
<b>OGC view service reference:</b>							
<b>Comments:</b>	Acquisition windows will be further specified. Download for [Int Org] is optional (approximately 10 other organisations over Africa)						

\*mandatory

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>										
GMES Africa	Medium	Incidental (One time event)					14										
<b>Dataset description</b>		<b>Acquisition windows</b>	<table border="1"> <tr> <td><b>North</b></td> <td></td> <td></td> </tr> <tr> <td><b>West</b></td> <td></td> <td><b>East</b></td> </tr> <tr> <td></td> <td></td> <td><b>South</b></td> </tr> </table>		<b>North</b>			<b>West</b>		<b>East</b>			<b>South</b>				
<b>North</b>																	
<b>West</b>		<b>East</b>															
		<b>South</b>															
Archive of 2009-10 DMC2 sub-Saharan coverage / license extension		1/01/2009 31/12/2010															
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>															
Not provided	Contiguous	30300000km <sup>2</sup>															
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>													
NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD													
<b>Prod. time</b>	<b>Processing comments</b>																
NORMAL																	
		<b>Maximum</b>															
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>										
HR2 (10m < x • 30m)	Archive	30 days	20%	20 m		5%	8										
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> NO <b>Pansharpen:</b> Allowed <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> Mandatory <b>Multiple sensors allowed</b> NO		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)													
Optical																	
SWIR	<b>Polarimetry</b>																
VNIR*	<b>Insar</b> <input type="checkbox"/>																
		RADAR															
<b>GCP planimetric accuracy:</b> 7 m		<b>Comments about reference datasets to be used</b>															
<b>GCP source:</b> map. Adequate ref.																	
<b>DEM source:</b> SRTM																	
<b>DEM vertical accuracy:</b> 14 m																	
<b>OGC view service reference:</b>																	
<b>Comments:</b>	Extension of licenses for Archive of African Coverage 2009. Download for [Int Org] is optional (approximately 10 other organisations over Africa) - Technical characteristics are identical to DAP_MG2_25																

**Annex 2. DETAILED ADDITIONAL DATASETS SPECIFICATIONS**

**ADD\_001a HR1\_optical\_archive\_rush**

**Occurrences x1**

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Emergency service	High	Incidental (One time event)					17
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>	<b>World</b>	<b>East</b>		
HR1 optical rush archive retrieval							
				<b>South</b>			
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>					
to be provided at request time	Non-Contiguous	584000km <sup>2</sup> with single areas in average of 2500km <sup>2</sup>					
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
ARCH_RUSH	Production time should be 1.5 hrs ; bundle OK						
		<b>Maximum</b>					
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>
HR1 (4m < x • 10m)	Archive		20%			5%	8
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> YES <b>Pansharpen:</b> Allowed <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
<i>Optical</i>							
VNIR	<b>Polarimetry</b>						
	<b>Insar</b> <input type="checkbox"/>						
		<b>RADAR</b>					
<b>GCP planimetric accuracy:</b>		<b>Comments about reference datasets to be used</b>					
<b>GCP source:</b>		No orthorectification needed					
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>							

\*mandatory

**ADD\_001b HR2\_optical\_archive\_rush**

**Occurrences x1**

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Emergency service	Medium	Incidental (One time event)					18
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>North</b>				
HR2 optical rush archive retrieval			<b>West</b>	World	<b>East</b>		
				<b>South</b>			
<b>Shapefile</b>		<b>Coverage</b>	<b>Surface</b>				
to be provided at request time		Non-Contiguous	681000km <sup>2</sup> with single areas in average of 2500km <sup>2</sup>				
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD	NONE DISCOVERY VIEW DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
ARCH_RUSH	Production time should be 1.5 hrs ; bundle OK						
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Maximum</b>			<b>Bits/pixe</b>	
HR2 (10m < x • 30m)	Archive		<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	
			20%			5%	
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> YES <b>Pansharpen:</b> Allowed <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
<i>Optical</i>							
<b>VNIR*</b>	<b>Polarimetry</b>						
	<b>Insar</b> <input type="checkbox"/>						
	<b>RADAR</b>						
<b>GCP planimetric accuracy:</b>		<b>Comments about reference datasets to be used</b>					
<b>GCP source:</b>		No orthorectification needed					
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>							

\*mandatory

**ADD\_002a HR1\_optical\_rapid**

**Occurrences x1**

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Emergency service	High	Incidental (One time event)					19
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>	<b>World</b>	<b>East</b>		
HR1 optical rapid tasking							
				<b>South</b>			
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>					
to be provided at request time	Non-Contiguous	2162000km <sup>2</sup> with single areas in average of 2500km <sup>2</sup>					
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
FAST_24h	Production time should be 16 hrs ; bundle OK						
			<b>Maximum</b>				
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>
HR1 (4m < x • 10m)	Priority		20%			5%	8
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> YES <b>Pansharpen:</b> Allowed <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
<i>Optical</i>							
<b>VNIR*</b>	<b>Polarimetry</b>						
	<b>Insar</b> <input type="checkbox"/>						
		<b>RADAR</b>					
<b>GCP planimetric accuracy:</b>			<b>Comments about reference datasets to be used</b>				
<b>GCP source:</b>			No orthorectification needed				
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>							

\*mandatory

**ADD\_002b HR2\_optical\_rapid**

**Occurrences x1**

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>				<b>ID</b>	
Emergency service	Medium	Incidental (One time event)				20	
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>	<b>World</b>	<b>East</b>		
HR2 optical rapid tasking;							
				<b>South</b>			
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>					
to be provided at request time	Non-Contiguous	894000km <sup>2</sup> with single areas in average of 2500km <sup>2</sup>					
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
ARCH_RUSH	Production time should be 1.5 hrs ; bundle OK						
		<b>Maximum</b>					
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>
HR2 (10m < x • 30m)	Priority		20%			5%	8
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> YES <b>Pansharpen:</b> Allowed <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
<i>Optical</i>							
<b>VNIR*</b>	<b>Polarimetry</b>						
	<b>Insar</b> <input type="checkbox"/>						
		<b>RADAR</b>					
<b>GCP planimetric accuracy:</b>		<b>Comments about reference datasets to be used</b>					
<b>GCP source:</b>		No orthorectification needed					
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>							

\*mandatory



**ADD\_003a VHR1\_archive\_rush**

**Occurrences x1**

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>	
Emergency service	High	Incidental (One time event)					29	
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>	<b>World</b>	<b>East</b>			
VHR1 archive rush retrieval								
				<b>South</b>				
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>						
to be provided at request time	Non-Contiguous	36000km <sup>2</sup> with single areas in average of 100km <sup>2</sup>						
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>				
NONE	NONE	NONE	NONE	NONE				
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY				
VIEW	VIEW	VIEW	VIEW	VIEW				
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD				
<b>Prod. time</b>	<b>Processing comments</b>							
FAST_24h	Production time should be 1.5 hrs ; bundle OK							
			<b>Maximum</b>					
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>	
VHR1 (x • 1m)	Archive		20%			5%	11	
<b>Bands</b>	<b>Polarization</b>	<b>RADAR</b>		<b>Bundle:</b> YES <b>Pansharpen:</b> Allowed <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES			<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)	
<i>Optical</i>								
<b>VNIR*</b>	<b>Polarimetry</b>							
	<b>Insar</b> <input type="checkbox"/>							
*mandatory								
<b>GCP planimetric accuracy:</b>			<b>Comments about reference datasets to be used</b>					
<b>GCP source:</b>			No orthorectification needed					
<b>DEM source:</b>								
<b>DEM vertical accuracy:</b>								
<b>OGC view service reference:</b>								
<b>Comments:</b>								

**ADD\_003b VHR2\_archive\_rush**

**Occurrences x1**

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Emergency service	High	Incidental (One time event)					21
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>	<b>World</b>	<b>East</b>		
VHR2 rapid archive retrieval							
				<b>South</b>			
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>					
to be provided at request time	Non-Contiguous	34000km <sup>2</sup> with single areas in average of 400km <sup>2</sup>					
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
ARCH_RUSH	Production time should be 1.5 hrs ; bundle OK						
			<b>Maximum</b>				
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>
VHR2 (1m < x • 4m)	Archive		20%			5%	11
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> YES <b>Pansharpen:</b> Allowed <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
<i>Optical</i>							
<b>VNIR*</b>	<b>Polarimetry</b>						
	<b>Insar</b> <input type="checkbox"/>						
		<b>RADAR</b>					
<b>GCP planimetric accuracy:</b>			<b>Comments about reference datasets to be used</b>				
<b>GCP source:</b>			No orthorectification needed				
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>							

\*mandatory

**ADD\_004a VHR1\_optical\_rapid**

**Occurrences x1**

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Emergency service	High	Incidental (One time event)					30
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>	<b>World</b>	<b>East</b>		
VHR1 optical rapid tasking							
				<b>South</b>			
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>					
to be provided at request time	Non-Contiguous	91000km <sup>2</sup> with single areas in average of 100km <sup>2</sup>					
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
FAST_24h	Production time should be 16 hrs ; bundle OK						
			<b>Maximum</b>				
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>
VHR1 (x • 1m)	Priority		20%			5%	11
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> YES <b>Pansharpen:</b> Allowed <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
<i>Optical</i>							
<b>VNIR*</b>	<b>Polarimetry</b>						
	<b>Insar</b> <input type="checkbox"/>						
		<b>RADAR</b>					
<b>GCP planimetric accuracy:</b>			<b>Comments about reference datasets to be used</b>				
<b>GCP source:</b>			No orthorectification needed				
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>							

\*mandatory

**ADD\_004b VHR2\_optical\_rapid**

**Occurrences x1**

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Emergency service	High	Incidental (One time event)					22
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>	<b>World</b>	<b>East</b>		
VHR2 optical rapid tasking;							
				<b>South</b>			
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>					
to be provided at request time	Non-Contiguous	86000km <sup>2</sup> with single areas in average of 100km <sup>2</sup>					
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
FAST_24h	Production time should be 16 hrs ; bundle OK						
		<b>Maximum</b>					
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>
VHR2 (1m < x • 4m)	Priority		20%			5%	11
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> YES <b>Pansharpen:</b> Allowed <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
<i>Optical</i>							
<b>VNIR*</b>	<b>Polarimetry</b>						
	<b>Insar</b> <input type="checkbox"/>						
		<b>RADAR</b>					
<b>GCP planimetric accuracy:</b>		<b>Comments about reference datasets to be used</b>					
<b>GCP source:</b>		No orthorectification needed					
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>							

\*mandatory

**ADD\_005a SAR\_HR1\_archive\_rush**

**Occurrences x1**

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Emergency service	High	Incidental (One time event)					24
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>	<b>World</b>	<b>East</b>		
SAR HR1 rapid archive retrieval							
				<b>South</b>			
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>					
to be provided at request time	Non-Contiguous	1066000km <sup>2</sup> with single areas in average of 2500km <sup>2</sup>					
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
ARCH_RUSH	Production time should be 1.5 hrs						
			<b>Maximum</b>				
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>
HR1 (4m < x • 10m)	Archive		20%				8
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> NO <b>Pansharpen:</b> NO <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
Radar							
X	<b>Polarimetry</b>						
C	<b>Insar</b> <input type="checkbox"/>						
*mandatory							
<b>GCP planimetric accuracy:</b>			<b>Comments about reference datasets to be used</b>				
<b>GCP source:</b>			No orthorectification needed				
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>							

**ADD\_005b SAR\_HR2\_archive\_rush**

**Occurrences x1**

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Emergency service	High	Incidental (One time event)					23
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>	<b>World</b>	<b>East</b>		
SAR HR2 rapid archive retrieval							
				<b>South</b>			
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>					
to be provided at request time	Non-Contiguous	175000km <sup>2</sup> with single areas in average of 2500km <sup>2</sup>					
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
ARCH_RUSH	Production time should be 1.5 hrs						
			<b>Maximum</b>				
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>
HR2 (10m < x • 30m)	Archive		20%				8
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> NO <b>Pansharpen:</b> NO <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
Radar							
X	<b>Polarimetry</b>						
C	<b>Insar</b> <input type="checkbox"/>						
*mandatory							
<b>GCP planimetric accuracy:</b>			<b>Comments about reference datasets to be used</b>				
<b>GCP source:</b>			No orthorectification needed				
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>							

**ADD\_006a SAR\_HR1\_rapid**

**Occurrences x1**

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Emergency service	Medium	Incidental (One time event)					26
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>	<b>World</b>	<b>East</b>		
SAR HR1 rapid tasking;							
				<b>South</b>			
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>					
to be provided at request time	Non-Contiguous	899000km <sup>2</sup> with single areas in average of 2500km <sup>2</sup>					
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
FAST_24h	Production time should be 16 hrs						
			<b>Maximum</b>				
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>
HR1 (4m < x • 10m)	Priority		20%				8
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> NO <b>Pansharpen:</b> NO <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
Radar							
X	<b>Polarimetry</b>						
C	<b>Insar</b> <input type="checkbox"/>						
*mandatory							
<b>GCP planimetric accuracy:</b>			<b>Comments about reference datasets to be used</b>				
<b>GCP source:</b>			No orthorectification needed				
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>							

**ADD\_006b SAR\_HR2\_rapid**

**Occurrences x1**

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Emergency service	High	Incidental (One time event)					25
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>	<b>World</b>	<b>East</b>		
SAR HR2 rapid tasking;							
				<b>South</b>			
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>					
to be provided at request time	Non-Contiguous	675000km <sup>2</sup> with single areas in average of 2500km <sup>2</sup>					
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
FAST_24h	Production time should be 16 hrs						
			<b>Maximum</b>				
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>
HR2 (10m < x • 30m)	Priority		20%				8
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> NO <b>Pansharpen:</b> NO <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
Radar							
X	<b>Polarimetry</b>						
C	<b>Insar</b> <input type="checkbox"/>						
*mandatory							
<b>GCP planimetric accuracy:</b>			<b>Comments about reference datasets to be used</b>				
<b>GCP source:</b>			No orthorectification needed				
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>							



**ADD\_007a SAR\_VHR1\_archive\_rush**

**Occurrences x1**

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Emergency service	High	Incidental (One time event)					31
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>	<b>World</b>	<b>East</b>		
SAR VHR1 rapid archive retrieval							
				<b>South</b>			
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>					
to be provided at request time	Non-Contiguous	27000km <sup>2</sup> with single areas in average of 100km <sup>2</sup>					
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
ARCH_RUSH	Production time should be 1.5 hrs						
			<b>Maximum</b>				
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>
VHR1 (x • 1m)	Archive		20%				
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> NO <b>Pansharpen:</b> NO <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
Radar							
X*	<b>Polarimetry</b>						
	<b>Insar</b> <input type="checkbox"/>						
*mandatory							
<b>GCP planimetric accuracy:</b>			<b>Comments about reference datasets to be used</b>				
<b>GCP source:</b>			No orthorectification needed				
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>							

**ADD\_007b SAR\_VHR2\_archive\_rush**

**Occurrences x1**

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Emergency service	High	Incidental (One time event)					27
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>	<b>World</b>	<b>East</b>		
SAR VHR2 rapid archive retrieval							
				<b>South</b>			
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>					
to be provided at request time	Non-Contiguous	79000km <sup>2</sup> with single areas in average of 100km <sup>2</sup>					
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
ARCH_RUSH	Production time should be 1.5 hrs						
			<b>Maximum</b>				
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>
VHR2 (1m < x • 4m)	Archive		20%				
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> NO <b>Pansharpen:</b> NO <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
Radar							
X*	<b>Polarimetry</b>						
	<b>Insar</b> <input type="checkbox"/>						
		RADAR					
<b>GCP planimetric accuracy:</b>			<b>Comments about reference datasets to be used</b>				
<b>GCP source:</b>			No orthorectification needed				
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>							

\*mandatory

**ADD\_008a SAR\_VHR1\_rapid**

**Occurrences x1**

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Emergency service	High	Incidental (One time event)					28
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>	<b>World</b>	<b>East</b>		
SAR VHR1 rapid tasking							
				<b>South</b>			
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>					
to be provided at request time	Non-Contiguous	38000km <sup>2</sup> with single areas in average of 100km <sup>2</sup>					
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
FAST_24h	production time should be 16 hrs						
			<b>Maximum</b>				
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>
VHR1 (x • 1m)	Priority		20%				8
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> NO <b>Pansharpen:</b> NO <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
Radar							
X*	<b>Polarimetry</b>						
	<b>Insar</b> <input type="checkbox"/>						
*mandatory							
<b>GCP planimetric accuracy:</b>			<b>Comments about reference datasets to be used</b>				
<b>GCP source:</b>			No orthorectification needed				
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>							

**ADD\_008b SAR\_VHR2\_rapid**

**Occurrences x1**

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Emergency service	High	Incidental (One time event)					32
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>	<b>World</b>	<b>East</b>		
SAR VHR2 rapid tasking							
				<b>South</b>			
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>					
to be provided at request time	Non-Contiguous	93000km <sup>2</sup> with single areas in average of 100km <sup>2</sup>					
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
FAST_24h	production time should be 16 hrs						
			<b>Maximum</b>				
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>
VHR2 (1m < x • 4m)	Priority		20%				8
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> NO <b>Pansharpen:</b> NO <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
Radar							
X*	<b>Polarimetry</b>						
	<b>Insar</b> <input type="checkbox"/>						
		RADAR					
<b>GCP planimetric accuracy:</b>			<b>Comments about reference datasets to be used</b>				
<b>GCP source:</b>			No orthorectification needed				
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>							

\*mandatory

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Emergency service	High	Incidental (One time event)					49
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>	<b>World</b>	<b>East</b>		
HR1 optical normal archive retrieval							
				<b>South</b>			
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>					
to be provided at request time	Non-Contiguous	1964000km <sup>2</sup> with single areas in average of 2500km <sup>2</sup>					
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
NORMAL							
				<b>Maximum</b>			
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>
HR1 (4m < x • 10m)	Archive		20%			5%	8
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> YES <b>Pansharpen:</b> Allowed <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
<i>Optical</i>							
<b>VNIR*</b>	<b>Polarimetry</b>						
	<b>Insar</b> <input type="checkbox"/>						
		<b>RADAR</b>					
<b>GCP planimetric accuracy:</b>			<b>Comments about reference datasets to be used</b>				
<b>GCP source:</b>			No orthorectification needed				
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>							

\*mandatory

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Emergency service	Medium	Incidental (One time event)					50
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>	<b>World</b>	<b>East</b>		
HR2 optical normal archive retrieval							
				<b>South</b>			
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>					
to be provided at request time	Non-Contiguous	533000km <sup>2</sup> with single areas in average of 2500km <sup>2</sup>					
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
NORMAL							
				<b>Maximum</b>			
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>
HR2 (10m < x • 30m)	Archive		20%			5%	8
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> YES <b>Pansharpen:</b> Allowed <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
<i>Optical</i>							
<b>VNIR*</b>	<b>Polarimetry</b>						
	<b>Insar</b> <input type="checkbox"/>						
		<b>RADAR</b>					
<b>GCP planimetric accuracy:</b>		<b>Comments about reference datasets to be used</b>					
<b>GCP source:</b>		No orthorectification needed					
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>							

\*mandatory

**ADD\_010a HR1\_optical\_standard\_new**

**Occurrences x1**

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Emergency service	High	Incidental (One time event)					51
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>	<b>World</b>	<b>East</b>		
HR1 optical new tasking in normal mode							
				<b>South</b>			
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>					
to be provided at request time	Non-Contiguous	684000km <sup>2</sup> with single areas in average of 2500km <sup>2</sup>					
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
NORMAL							
				<b>Maximum</b>			
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>
HR1 (4m < x • 10m)	Standard		20%			5%	8
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> YES <b>Pansharpen:</b> Allowed <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
<i>Optical</i>							
<b>VNIR*</b>	<b>Polarimetry</b>						
	<b>Insar</b> <input type="checkbox"/>						
		<b>RADAR</b>					
<b>GCP planimetric accuracy:</b>			<b>Comments about reference datasets to be used</b>				
<b>GCP source:</b>			No orthorectification needed				
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>							

\*mandatory

**ADD\_010b HR2\_optical\_standard\_new**

**Occurrences x1**

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Emergency service	Medium	Incidental (One time event)					52
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>	<b>World</b>	<b>East</b>		
HR2 optical new tasking in normal mode							
				<b>South</b>			
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>					
to be provided at request time	Non-Contiguous	1843000km <sup>2</sup> with single areas in average of 2500km <sup>2</sup>					
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
NORMAL	Fast_24h production time shall also be possible						
				<b>Maximum</b>			
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>
HR2 (10m < x • 30m)	Standard		20%			5%	8
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> YES <b>Pansharpen:</b> Allowed <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
<i>Optical</i>							
<b>VNIR*</b>	<b>Polarimetry</b>						
	<b>Insar</b> <input type="checkbox"/>						
		<b>RADAR</b>					
<b>GCP planimetric accuracy:</b>		<b>Comments about reference datasets to be used</b>					
<b>GCP source:</b>		No orthorectification needed					
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>							

\*mandatory



<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Emergency service	High	Incidental (One time event)					61
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>	<b>World</b>	<b>East</b>		
VHR1 archive normal retrieval							
				<b>South</b>			
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>					
to be provided at request time	Non-Contiguous	117000km <sup>2</sup> with single areas in average of 100km <sup>2</sup>					
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
NORMAL							
				<b>Maximum</b>			
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>
VHR1 (x • 1m)	Archive		20%			5%	11
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> YES <b>Pansharpen:</b> Allowed <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
<i>Optical</i>							
<b>VNIR*</b>	<b>Polarimetry</b>						
	<b>Insar</b> <input type="checkbox"/>						
		<b>RADAR</b>					
<b>GCP planimetric accuracy:</b>			<b>Comments about reference datasets to be used</b>				
<b>GCP source:</b>			No orthorectification needed				
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>							

\*mandatory

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Emergency service	High	Incidental (One time event)					53
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>	<b>World</b>	<b>East</b>		
VHR2 archive normal retrieval							
				<b>South</b>			
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>					
to be provided at request time	Non-Contiguous	46000km <sup>2</sup> with single areas in average of 400km <sup>2</sup>					
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
NORMAL							
				<b>Maximum</b>			
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>
VHR2 (1m < x • 4m)	Archive		20%			5%	11
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> YES <b>Pansharpen:</b> Allowed <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
<i>Optical</i>							
<b>VNIR*</b>	<b>Polarimetry</b>						
	<b>Insar</b> <input type="checkbox"/>						
		<b>RADAR</b>					
<b>GCP planimetric accuracy:</b>			<b>Comments about reference datasets to be used</b>				
<b>GCP source:</b>			No orthorectification needed				
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>							

\*mandatory

**ADD\_012a VHR1\_optical\_standard\_new**

**Occurrences x1**

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Emergency service	High	Incidental (One time event)					62
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>	<b>World</b>	<b>East</b>		
VHR1 optical new tasking in normal mode							
				<b>South</b>			
<b>Shapefile</b>		<b>Coverage</b>	<b>Surface</b>				
to be provided at request time		Non-Contiguous	64000km <sup>2</sup> with single areas in average of 100km <sup>2</sup>				
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>		<b>Processing comments</b>					
NORMAL							
		<b>Maximum</b>					
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>
VHR1 (x • 1m)	Standard		20%			5%	11
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> YES <b>Pansharpen:</b> Allowed <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
<i>Optical</i>							
<b>VNIR*</b>	<b>Polarimetry</b>						
	<b>Insar</b> <input type="checkbox"/>						
		<b>RADAR</b>					
<b>GCP planimetric accuracy:</b>		<b>Comments about reference datasets to be used</b>					
<b>GCP source:</b>		No orthorectification needed					
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>							

\*mandatory

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Emergency service	High	Incidental (One time event)					54
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>	<b>World</b>	<b>East</b>		
VHR2 optical rapid tasking;							
				<b>South</b>			
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>					
to be provided at request time	Non-Contiguous	488000km <sup>2</sup> with single areas in average of 100km <sup>2</sup>					
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
NORMAL							
			<b>Maximum</b>				
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>
VHR2 (1m < x • 4m)	Standard		20%			5%	11
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> YES <b>Pansharpen:</b> Allowed <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
<i>Optical</i>							
<b>VNIR*</b>	<b>Polarimetry</b>						
	<b>Insar</b> <input type="checkbox"/>						
		<b>RADAR</b>					
<b>GCP planimetric accuracy:</b>			<b>Comments about reference datasets to be used</b>				
<b>GCP source:</b>			No orthorectification needed				
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>							

\*mandatory

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Emergency service	High	Incidental (One time event)					56
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>	<b>World</b>	<b>East</b>		
SAR HR1 normal archive retrieval							
				<b>South</b>			
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>					
to be provided at request time	Non-Contiguous	739000km <sup>2</sup> with single areas in average of 2500km <sup>2</sup>					
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
NORMAL							
				<b>Maximum</b>			
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>
HR1 (4m < x • 10m)	Archive		20%				8
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> NO <b>Pansharpen:</b> NO <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
Radar							
X	<b>Polarimetry</b>						
C	<b>Insar</b> <input type="checkbox"/>						
<b>GCP planimetric accuracy:</b>			<b>Comments about reference datasets to be used</b>				
<b>GCP source:</b>			No orthorectification needed				
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>							

\*mandatory

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Emergency service	High	Incidental (One time event)					55
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>	<b>World</b>	<b>East</b>		
SAR HR2 archive normal retrieval							
				<b>South</b>			
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>					
to be provided at request time	Non-Contiguous	123000km <sup>2</sup> with single areas in average of 2500km <sup>2</sup>					
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
NORMAL							
		<b>Maximum</b>					
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	
HR2 (10m < x • 30m)	Standard		20%			8	
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> NO <b>Pansharpen:</b> NO <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
<i>Radar</i>							
X	<b>Polarimetry</b>						
C	<b>Insar</b> <input type="checkbox"/>						
		<b>RADAR</b>					
		*mandatory					
<b>GCP planimetric accuracy:</b>			<b>Comments about reference datasets to be used</b>				
<b>GCP source:</b>			No orthorectification needed				
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>							

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Emergency service	Medium	Incidental (One time event)					58
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>	<b>World</b>	<b>East</b>		
SAR HR1 new tasking in normal mode							
				<b>South</b>			
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>					
to be provided at request time	Non-Contiguous	1080000km <sup>2</sup> with single areas in average of 2500km <sup>2</sup>					
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
NORMAL							
				<b>Maximum</b>			
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>
HR1 (4m < x • 10m)	Standard		20%				8
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> NO <b>Pansharpen:</b> NO <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
Radar							
X	<b>Polarimetry</b>						
C	<b>Insar</b> <input type="checkbox"/>						
<b>GCP planimetric accuracy:</b>		<b>Comments about reference datasets to be used</b>					
<b>GCP source:</b>		No orthorectification needed					
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>							

\*mandatory

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Emergency service	High	Incidental (One time event)					57
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>	<b>World</b>	<b>East</b>		
SAR HR2 new tasking in normal mode							
				<b>South</b>			
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>					
to be provided at request time	Non-Contiguous	2023000km <sup>2</sup> with single areas in average of 2500km <sup>2</sup>					
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
NORMAL							
			<b>Maximum</b>				
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>
HR2 (10m < x • 30m)	Standard		20%				8
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> NO <b>Pansharpen:</b> NO <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
Radar							<b>RADAR</b>
X	<b>Polarimetry</b>						
C	<b>Insar</b> <input type="checkbox"/>						
<b>GCP planimetric accuracy:</b>		<b>Comments about reference datasets to be used</b>					
<b>GCP source:</b>		No orthorectification needed					
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>							

\*mandatory





<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Emergency service	High	Incidental (One time event)					59
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>	<b>World</b>	<b>East</b>		
SAR VHR2 normal archive retrieval							
				<b>South</b>			
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>					
to be provided at request time	Non-Contiguous	20000km <sup>2</sup> with single areas in average of 100km <sup>2</sup>					
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
NORMAL							
				<b>Maximum</b>			
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>
VHR2 (1m < x • 4m)	Archive		20%				
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> NO <b>Pansharpen:</b> NO <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
Radar							
X							
	<b>Polarimetry</b>						
	<b>Insar</b> <input type="checkbox"/>						
*mandatory							
<b>GCP planimetric accuracy:</b>			<b>Comments about reference datasets to be used</b>				
<b>GCP source:</b>			No orthorectification needed				
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>							

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Emergency service	High	Incidental (One time event)					60
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>	<b>World</b>	<b>East</b>		
SAR VHR1 new tasking in normal mode							
				<b>South</b>			
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>					
to be provided at request time	Non-Contiguous	31000km <sup>2</sup> with single areas in average of 100km <sup>2</sup>					
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
NORMAL							
				<b>Maximum</b>			
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>
VHR1 (x • 1m)	Standard		20%				8
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> NO <b>Pansharpen:</b> NO <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
Radar							
X							
	<b>Polarimetry</b>						
	<b>Insar</b> <input type="checkbox"/>						
*mandatory							
<b>GCP planimetric accuracy:</b>			<b>Comments about reference datasets to be used</b>				
<b>GCP source:</b>			No orthorectification needed				
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>							

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Emergency service	High	Incidental (One time event)					64
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>	<b>World</b>	<b>East</b>		
SAR VHR2 new tasking in normal mode							
				<b>South</b>			
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>					
to be provided at request time	Non-Contiguous	202000km <sup>2</sup> with single areas in average of 100km <sup>2</sup>					
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
NORMAL							
			<b>Maximum</b>				
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>
VHR2 (1m < x • 4m)	Standard		20%				8
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> NO <b>Pansharpen:</b> NO <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> One time acquisition <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
Radar							
X							
	<b>Polarimetry</b>						
	<b>Insar</b> <input type="checkbox"/>						
*mandatory							
<b>GCP planimetric accuracy:</b>			<b>Comments about reference datasets to be used</b>				
<b>GCP source:</b>			No orthorectification needed				
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>							



<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Marine service	Medium	Incidental (One time event)					66
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>	<b>World</b>	<b>East</b>		
<b>Shapefile</b>		<b>Coverage</b>	<b>Surface</b>				
Not provided		Non-Contiguous	5600000km <sup>2</sup> with single areas in average of km <sup>2</sup>				
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>		<b>Processing comments</b>					
NORMAL							
		<b>Maximum</b>					
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>
MR2 (100m < x • 300	Standard		20%				
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> NO <b>Pansharpen:</b> NO <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
Radar							
C							
	<b>Polarimetry</b>	<b>Insar</b> <input type="checkbox"/>					
*mandatory							
<b>GCP planimetric accuracy:</b>			<b>Comments about reference datasets to be used</b>				
<b>GCP source:</b>							
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>	30% of the data should be made available in NRT 1h. In that case, satellite data will be asquired directly by the beneficiary. It is assumed that data originates from ESA satellites sensors						

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Marine service	Low	Incidental (One time event)					67
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>	<b>World</b>	<b>East</b>		
<b>Shapefile</b>		<b>Coverage</b>	<b>Surface</b>				
Not provided			0km <sup>2</sup>				
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>		<b>Processing comments</b>					
NORMAL							
		<b>Maximum</b>					
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>
MR1 (30m < x • 100m)	Standard		20%				
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> NO <b>Pansharpen:</b> NO <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
Optical							
VNIR	<b>Polarimetry</b>						
	<b>Insar</b> <input type="checkbox"/>						
		RADAR					
<b>GCP planimetric accuracy:</b>		<b>Comments about reference datasets to be used</b>					
<b>GCP source:</b>							
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>							





<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
	Low	Incidental (One time event)					69
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>	<b>World</b>	<b>East</b>		
<b>Shapefile</b>		<b>Coverage</b>	<b>Surface</b>				
Not provided			0km <sup>2</sup>				
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
NORMAL							
			<b>Maximum</b>				
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>
MR1 (30m < x • 100m)	Standard		20%				
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> NO <b>Pansharpen:</b> NO <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
<i>Optical</i>							
VNIR	<b>Polarimetry</b>						
	<b>Insar</b> <input type="checkbox"/>						
		RADAR					
<b>GCP planimetric accuracy:</b>		<b>Comments about reference datasets to be used</b>					
<b>GCP source:</b>							
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>							

\*mandatory

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
Marine service	Medium	Incidental (One time event)					70
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>	<b>World</b>	<b>East</b>		
<b>Shapefile</b>		<b>Coverage</b>	<b>Surface</b>				
Not provided		Non-Contiguous	1600000km <sup>2</sup> with single areas in average of km <sup>2</sup>				
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>		<b>Processing comments</b>					
NORMAL							
		<b>Maximum</b>					
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>
MR2 (100m < x • 300	Archive		20%				
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> NO <b>Pansharpen:</b> NO <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
Radar							
C							
	<b>Polarimetry</b>						
	<b>Insar</b> <input type="checkbox"/>						
*mandatory							
<b>GCP planimetric accuracy:</b>		<b>Comments about reference datasets to be used</b>					
<b>GCP source:</b>							
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>							

ADD\_020a

Optical\_MR1\_archive\_Standard

Occurrences

x1

<b>Service</b>	<b>Dataset priority</b>	<b>Update frequency</b>					<b>ID</b>
	Low	Incidental (One time event)					71
<b>Dataset description</b>		<b>Acquisition windows</b>	<b>West</b>	<b>North</b>	<b>East</b>		
				<b>South</b>			
<b>Shapefile</b>	<b>Coverage</b>	<b>Surface</b>					
Not provided		0km <sup>2</sup>					
<b>FP7 projects</b>	<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE	NONE	NONE	NONE	NONE			
DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW	VIEW	VIEW	VIEW	VIEW			
DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>	<b>Processing comments</b>						
NORMAL							
			<b>Maximum</b>				
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>
MR1 (30m < x • 100m)	Standard		20%				
<b>Bands</b>	<b>Polarization</b>	<b>Bundle:</b> NO <b>Pansharpen:</b> NO <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)			
Optical							
VNIR	<b>Polarimetry</b>						
	<b>Insar</b> <input type="checkbox"/>						
			<b>Comments about reference datasets to be used</b>				
<b>GCP planimetric accuracy:</b>							
<b>GCP source:</b>							
<b>DEM source:</b>							
<b>DEM vertical accuracy:</b>							
<b>OGC view service reference:</b>							
<b>Comments:</b>							

\*mandatory

ADD\_020b

Optical\_MR2\_archive\_Standard

Occurrences

x1

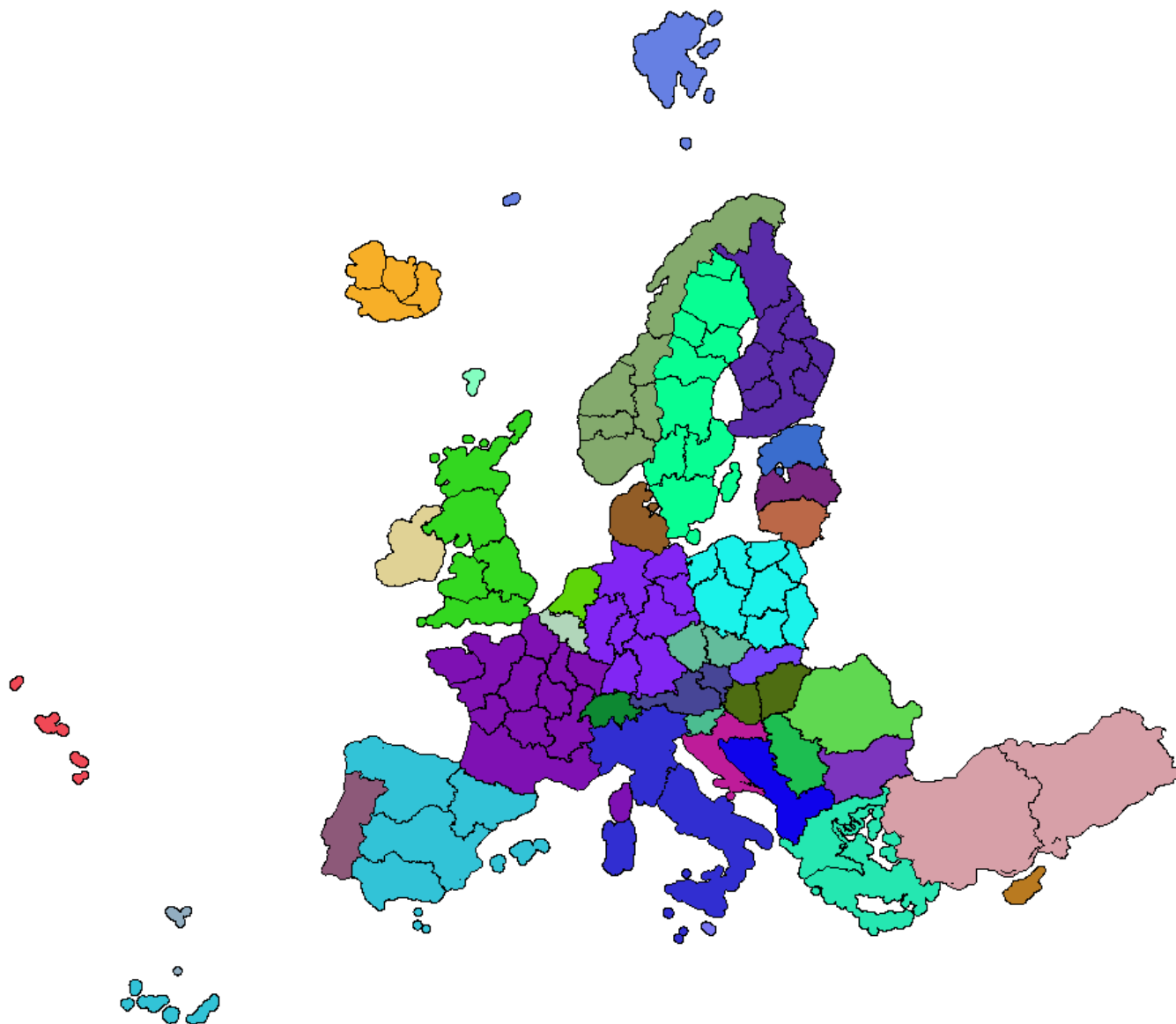
<b>Service</b>		<b>Dataset priority</b>	<b>Update frequency</b>			<b>North</b>		<b>ID</b>
		Low	Incidental (One time event)					72
<b>Dataset description</b>			<b>Acquisition windows</b>	<b>West</b>		<b>East</b>		
						<b>South</b>		
<b>Shapefile</b>		<b>Coverage</b>	<b>Surface</b>					
Not provided			0km <sup>2</sup>					
<b>FP7 projects</b>		<b>EU Institutions</b>	<b>Public Authority</b>	<b>Int. Org.</b>	<b>Public</b>			
NONE		NONE	NONE	NONE	NONE			
DISCOVERY		DISCOVERY	DISCOVERY	DISCOVERY	DISCOVERY			
VIEW		VIEW	VIEW	VIEW	VIEW			
DOWNLOAD		DOWNLOAD	DOWNLOAD	DOWNLOAD	DOWNLOAD			
<b>Prod. time</b>		<b>Processing comments</b>						
NORMAL								
			<b>Maximum</b>					
<b>Resolution</b>	<b>Programming</b>	<b>Lead time</b>	<b>Cloud %</b>	<b>Rmse</b>	<b>Elev. angl</b>	<b>Sat. pixels</b>	<b>Bits/pixe</b>	
()	Standard		20%					
<b>Bands</b>	<b>Polarization</b>	<b>RADAR</b>		<b>Bundle:</b> NO <b>Pansharpen:</b> NO <b>Lookup table stretch:</b> NO <b>Atmospheric correction:</b> NO <b>Orthorectification:</b> NO <b>Multiple sensors allowed</b> YES		<b>Composite:</b> <b>Mosaic:</b> NO <b>Delivery:</b> FTP (Online download)		
Optical								
VNIR	<b>Polarimetry</b>							
	<b>Insar</b> <input type="checkbox"/>							
<b>GCP planimetric accuracy:</b>		<b>Comments about reference datasets to be used</b>						
<b>GCP source:</b>								
<b>DEM source:</b>								
<b>DEM vertical accuracy:</b>								
<b>OGC view service reference:</b>								
<b>Comments:</b>								

\*mandatory

### Annex 3. DEFINITIONS

- (1) **Primary Product:** shall mean any original Spatial data set originating from a GMES Contributing Mission Entity (GCME) and provided by ESA/GCME to the beneficiary. A Primary Product is understood to include spacecraft and instrument data and is a mono-mission Level 1 or Level 2 (with exceptional provision of higher-level products such as mono-mission Level 3 on a case-by-case basis).
- (2) **Altered Product:** Products derived from Primary products retaining an existing clear correlation to the original sensor pixel information. Examples: histogram stretched images, orthorectified images, resampled and rescaled images, mosaics.
- (3) **Derivative works:** Products derived from Primary Products or Altered Products and which do not have a traceable correlation with the original sensor pixel information. Examples: land cover classifications, vegetation indexes.
- (4) **Metadata:** Information describing spatial data sets and spatial data services and making it possible to discover, inventory and use them. In the case of spatial data set, metadata may include a preview of the full dataset.
- (5) **EU Public tasks:** The development, implementation and monitoring of policies and related activities as defined by the EC Treaty and subsequent Community legislation.
- (6) **Spatial Data Sets, Spatial data and Spatial Data Services:** As defined in Directive 2007/2/EC of 14/3/2007.
- (7) **Representation :** A Representation (of a product) shall mean a raster (e.g. JPG or TIFF format) or PDF file of any *Primary or Altered Product* whose printout does not exceed A3 paper format with the exception of posters, which may be up to A0 format) and not containing more imagery than necessary to achieve respectable prints for non-commercial purposes
- (8) **Composite :** multi-scene or multi-image aggregation over the same scene/image. Usually used to remove clouds for optical sensors. Can be applied to different sensors, but is preferably based on the same sensor. A composite is multi-temporal (made of several scenes/images acquired at different dates).
- (9) **Mosaic:** multi-scene or multi-image aggregation to cover a larger area than a given scene/image. Can be applied to different sensors. A mosaic is generally mono temporal (or made of scenes/images collected within a given time period that can range from few days to season).

**Annex 4. MAP OF "LARGE REGIONS" FOR CORE\_001**



**Annex 5. CORE\_001 : COMPLEMENTARY REQUIREMENTS**

<b>Geo-location accuracy:</b>	Around 1/3 pixel	<b>Map Scale:</b>	1/50.000			
<b>Delivery Mechanism:</b>	On-line availability, Media					
<b>Spatial Arrangement</b>	Contiguous/Coverage type					
<b>Area of Interest (Aoi)</b>	39 European states, ~5.8 Mio km2: Albania, Austria , Belgium , Bosnia and Herzegovina , Bulgaria , Croatia , Cyprus , Czech Republic , Denmark , Estonia , Finland, Finland, France, Germany , Greece , Hungary , Iceland , Ireland , Italy, Kosovo under the UN Security Council Resolution 1244/99, Latvia , Liechtenstein , Lithuania , Luxembourg , Malta , Montenegro , Netherlands , Norway , Poland , Portugal , Republic of Macedonia , Romania , Serbia and Montenegro , Slovakia , Slovenia , Spain , Sweden , Switzerland , Turkey , United Kingdom [including all islands of those countries , e.g. Azores, Madeira, Canary, Balears, Greek islands, Corsica, Sardinia etc. + French Overseas Department but excluding French Overseas Territories]					
<b>Country temporal window (Coverage 1 &amp; 2)</b>	within following 39 narrow + extended windows: COV1 within narrow windows; COV2: 6 weeks apart from COV1, either upfront or after actual COV1 acquisition, COV2 preferably still within narrow windows (if feasible at all), but mandatory within the limits of the extended windows					
	<b>Country</b>	<b>Code</b>	<b>Extended window: Start</b>	<b>Narrow window: Start</b>	<b>Narrow window: End</b>	<b>Extended window: End</b>
	Albania	AL	15-Jun	01-Jul	31-Jul	15-Aug
	Austria West (<13°E)	AT_W	15-Jun	01-Jul	15-Aug	31-Aug

Austria East (>13°E)	AT_E	15-Jun	15-Jun	15-Aug	15-Sep
Belgium	BE	01-Jun	15-Jun	15-Sep	15-Sep
Bosnia and Herzegovina	BA	01-Jun	15-Jun	15-Aug	15-Sep
Bulgaria	BG	01-Jun	15-Jun	15-Sep	15-Sep
Croatia	HR	01-Jun	15-Jun	15-Sep	15-Sep
Cyprus	CY	01-May	01-Jun	31-Jul	15-Aug
Czech Republic	CZ	01-Jun	15-Jun	15-Sep	15-Sep
Denmark	DK	05-Jun	15-Jun	15-Sep	15-Sep
Estonia	EE	05-Jun	15-Jun	15-Aug	31-Aug
Finland North	FI_N	20-Jun	01-Jul	10-Aug	15-Aug
Finland Central	FI_C	15-Jun	01-Jul	10-Aug	15-Aug
Finland South	FI_S	05-Jun	01-Jul	10-Aug	20-Aug
France North	FR_N	01-Jun	15-Jun	15-Sep	15-Sep
France South	FR_S	01-Jun	15-Jun	15-Sep	15-Sep
Germany	DE	01-Jun	15-Jun	15-Sep	15-Sep
Greece	GR	01-May	01-Jul	31-Jul	15-Aug
Hungary	HU	01-Jun	15-Jun	15-Sep	15-Sep
Iceland	IS	01-Jul	15-Jul	15-Sep	30-Sep
Ireland	IE	01-Jun	15-Jun	15-Sep	15-Sep
Italy North (> 41°N)	IT_N	15-Jun	15-Jun	15-Aug	15-Aug
Italy South (< 41°N)	IT_S	01-May	01-Jul	31-Jul	15-Aug
Kosovo	XK	01-Jun	15-Jun	31-Aug	15-Sep
Latvia	LV	05-Jun	15-Jun	15-Aug	31-Aug
Liechtenstein	LI	15-Jun	15-Jun	15-Aug	15-Sep
Lithuania	LT	05-Jun	15-Jun	15-Aug	31-Aug



Luxembourg	LU	01-Jun	15-Jun	15-Sep	15-Sep
Malta	MT	01-May	01-Jun	31-Jul	15-Aug
Macedonia (Republic of)	MK	01-Jun	15-Jun	31-Aug	15-Sep
Montenegro	ME	01-Jun	15-Jun	15-Aug	31-Aug
Netherlands	NL	01-Jun	15-Jun	15-Sep	15-Sep
Norway North (> 65°N)	NO_N	01-Jul	05-Jul	10-Aug	15-Aug
Norway South (< 65°N)	NO_S	01-Jul	05-Jul	10-Aug	31-Aug
Poland	PL	01-Jun	15-Jun	15-Sep	15-Sep
Portugal	PT	15-May	01-Jul	15-Aug	15-Aug
Romania	RO	01-Jun	15-Jun	15-Sep	15-Sep
Serbia	RS	01-Jun	15-Jun	15-Sep	15-Sep
Slovakia	SK	01-Jun	15-Jun	15-Sep	15-Sep
Slovenia	SI	15-Jun	15-Jun	15-Sep	15-Sep
Spain	ES	15-May	01-Jul	31-Jul	15-Aug
Sweden North (> 65°N)	SE_N	01-Jul	05-Jul	10-Aug	15-Aug
Sweden Central (61°N - 65° N)	SE_C	01-Jul	05-Jul	10-Aug	31-Aug
Sweden South (< 61°N)	SE_S	05-Jun	15-Jun	15-Aug	15-Sep
Switzerland	CH	15-Jun	01-Jul	15-Aug	31-Aug
Turkey West (< 30°E)	TR_W	15-May	01-Jul	31-Jul	15-Aug
Turkey Central-West (30°E - 35°E)	TR_C-W	01-Jun	15-Jun	15-Aug	31-Aug

Turkey Central-East (35°E - 40°E)	TR_C-E	15-Jun	15-Jun	15-Aug	31-Aug
Turkey East (>40°E)	TR_E	01-Jul	01-Jul	31-Jul	15-Aug
United Kingdom North (Scotland + N. Ireland)	UK_N	15-Jun	15-Jun	15-Sep	15-Sep
United Kingdom South (England + Wales)	UK_S	01-Jun	15-Jun	15-Sep	15-Sep

**Processing level**

**Dataset 1: Level1:** Reconstructed unprocessed data at full resolution, time- referenced, and annotated with ancillary information, including radiometric and geometric calibration coefficients and geo-referencing parameters (e.g. ephemeris) computed and appended but not applied to the Level 0 data./

Radiometrically corrected and calibrated data in physical units at full instrument resolution as acquired.

**Dataset 2, Option 1** : Orthorectified with GCM owned DEM, GCPs, IMAGE2006 Reference, in European projection and in 39 National projections, each directly derived, Normalised to nominal satellite reflectance (at sensor)

**Dataset2, Option 2**: Orthorectified with GSC-DA provided DEM (SRTM V3 OR EuroDEM), IMAGE2006 GCPs database, Reference, in European projection and in 39 National projections, each directly derived Normalised to nominal satellite reflectance (at sensor)

	General remark: No mosaic of scenes required.
<b>Product formats</b>	<p><b>Product Format: BIL, GEOTIFF always with DIMAP header containing full metadata, File naming and organisation requirements: unique identification of scenes (e.g. file name coded by sensor, date of acquisition and path/row reference):</b></p> <p>Minimum information needed in a filename:</p> <ul style="list-style-type: none"> <li>• Satellite (shortened code)</li> <li>• Sensor code and number (if several cameras), sensor mode</li> <li>• Scene (GRS reference) [in accordance to the standard of the specific sensor including scene offset in percent or ten percent steps]; an alternative might be center lat/lon but may become too long</li> <li>• Date of acquisition (YYYYMMDD)</li> <li>• E.g. satN_GRS_YYYYMMDD_HHMMSS_cameranumber_mode_sceneoffset</li> </ul> <p><b>Metadata:</b> Delivery of standardized and complete metadata (especially information on scene parameters (acquisition date/time, sensor, GRS reference, angle of incidence&amp; cloud/snow coverage, shift according to standard scene, number of bands, geo-location accuracies, pre-processing, calibration information...)) in XML format following DIMAP standard. Additional discussion for final definition required.</p>
<b>Product quality</b>	<p>Sun elevation angle &gt; 23° (shadows)</p> <p>Incidence/Pointing angle &lt; 30° (distortions)</p> <p>Cloud coverage &lt; 5% per country; no haze;</p> <p>Snow coverage (for northern countries) &lt; 10 % [- only with glaciers and perennial snow]</p> <p>As few images as possible</p>

References:

- • IMAGE2006 coverage1 (20m res.; accuracy ~10m RMSExy )
- • DEMs:
  - National DEMs OR
  - EuroDEM OR
  - SRTM-C band Version 2 (NASA) improved by MONAPRO, GLOBE, SRTM-X

Accuracy required: < 10m RMSExy

RMSE for each product shall be less than 10m versus the Reference of IMAGE2006 (1st coverage)

