Satellite Product Essential Information

# Introduction

This document contains the list of essential information categories and attributes defined by the CGMS TF-MI used to describe Satellite data product.

Once defined this information has to be mapped into the ISO Model. If controlled vocabulary lists (as ISO code lists) are defined from some attributes, the TF-MI needs to understand how those code lists will be managed and controlled in the future (via the CGMS or a WMO Expert Team).

The information has currently been defined in 4 categories: Spacecraft, Instrument, Product and Application Information.

To Do for each CGMS TF-MI member:

Enable the track changes with your name to allow a clean merge of the document

* Please review the list of information: amend and comments with the track changes when necessary,
* Add additional information / categories when necessary,
* Answer with the questions regarding the necessity of the attribute with a comment,
* Develop different code lists based on existing ones.

# Information Categories

## Spacecraft information

|  |  |  |  |
| --- | --- | --- | --- |
| **attribute** | **controlled vocabulary** | **Example** | **comment** |
| Satellite name  (Full name) | No | Meteorological operational satellite - A | Is this necessary? |
| Satellite name (Acronym) | No | Metop-A |  |
| Satellite type | No | ? | What is expected for this item? |
| Orbit | Yes | Sunsynchronous orbit | ECT is necessary for sunsynchronous,  Longitude is necessary for geostationary,  Many type of orbit and related necessary information exist… |
| Operating agency |  | EUMETSAT, ESA |  |
| Launch date |  | 2006-10-19 | Is this necessary? |
| Designed end of life |  | ≧2014 | Is this necessary? |
|  |  |  |  |

### Orbit Controlled Vocabulary List

|  |  |
| --- | --- |
| **Value** | **Description** |
| GEO | 24-h period, equatorial eastbound, stationary over a specified longitude (need longitude to fully qualify the GEO orbit) |

## Instrument information

|  |  |  |  |
| --- | --- | --- | --- |
| **attribute** | **Controlled vocabulary** | **Example** | **comment** |
| Instrument name  (Full name) | No | Advanced Microwave Sounding Unit - A | Is this necessary? |
| Instrument name (Acronym) |  | AMSU-A |  |
| Instrument type | Yes ? | MW sounding radiometer, cross-track scanning | This item should be consistent with OSCAR; http://www.wmo-sat.info/oscar/instrumenttypes |
| Providing agency |  | NOAA | Is this necessary? |
| Resolution |  | 48km IFOV |  |
| Coverage |  | Near-global coverage |  |
| Cycle |  | Twice /day |  |
| Scanning technique |  | Cross-track |  |
|  |  |  |  |

### Instrument Type Controlled Vocabulary List

|  |  |
| --- | --- |
| **Value** | **Description** |
| Please add | Please describe |

## Product information

|  |  |  |  |
| --- | --- | --- | --- |
| **attribute** | **Controlled vocabulary** | **Example** | **comment** |
| Product type |  | Cloud, fire detection, … | This item should be consistent with domain tags of Product Access Guide; http://www.wmo-sat.info/product-access-guide/advanced-search |
| Product name |  |  |  |
| Product level |  | Such as  Level-0, 1A, 1B, 1C, 1D, 2 | Is there clear definition for every users’ reference? |
| Mission life time |  | From: 20xx-xx-xx  Until: | From when and until when the data is going to be produced |
| Associated auxiliary data for calibration |  |  | Please give some examples. |
| Processing software information |  | Such as name, version, type | Please give some examples. |
| Categorization to relate several products of the same type |  |  | Please give some examples and comments. |
| Associated products |  |  | Please give some examples and comments. |
| Area of product |  | Global, Specific region (lat, lon), … | Area of product and coverage of observation is not necessarily same. |
| Resolution of product  (Spatial/Vertical) |  |  | Resolution of product and observation is not necessarily same. |
| Cycle of product |  |  | Cycle of product and observation is not necessarily same. |
| Latency |  |  | The time from the end of observation to the start of product distribution/dissemination. |
| Data access (Real time access) |  |  | Please give some examples and comments. |
| Data access (Archive access) |  |  | Please give some examples and comments. |
| Data format |  | BUFR, GRIB, … | Reference is needed. |
| Producing agency |  |  | This could be different with satellite operating agency. |

## Application/Theme information

Add application/theme information to categorize the products by field of application and physical domain information

|  |  |  |  |
| --- | --- | --- | --- |
| **attribute** | **Controlled vocabulary** | **Example** | **comment** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |