

IDOC General guidelines for new services



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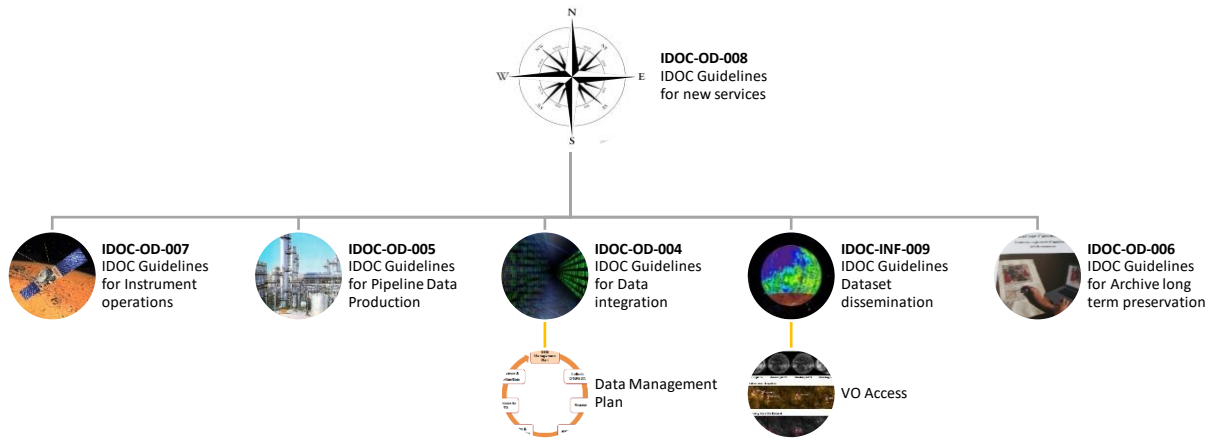
1 SCOPE OF THE DOCUMENT

This document is a guideline to a decision-maker seeking the implementation of a dataset service at IDOC. This service can be about:

- **Instrument Operation** is the service called when IDOC will be responsible to operate a space instrument. This service includes going through the process of best observations determinations considering the constraints of the spacecraft (other instruments, orientation, trajectory, power, available data stream, etc) and observed objects. Once this has been done, it will securely ensure the translation of these observational elements towards a telecommand stream, validating it against instrument limitations. It will then dispatch this stream to the appropriate space agency and will monitor its execution.
- **Pipeline data production** is the service called when a dataset is to be built in the IDOC infrastructure. It can be from level 0 data or from a dataset already hosted at IDOC. IDOC has to produce a set of interdependent tasks leading to the production of data which are named as a “pipeline”. This service thus includes all applications, than can operate on raw data or an existing dataset to build a new dataset..
- **Data integration** is the service called when an existing external dataset is to be integrated in the IDOC infrastructure. As this external dataset might not be complete, organized, documented, or presents other insufficiencies for long-term preservation (metadata, format, ..), processes are applied to remove or mitigate these defects. The implementation of this service may involve the implementation of the pipeline service and may lead to the creation of a data management plan.
- **Dataset dissemination** is the service in which an application is built to allow users to access a dataset hosted at IDOC. This application can be a simple interface to request a database but might also allow users to trigger added value processing of a part of the dataset. As far as possible, this dissemination will be integrated into the available virtual observatories of the theme concerned, or at least will also be accessible through web services.
- **Dataset Archive long term preservation** deals with the ability to enable effective use of the data hosted at IDOC in the long term.

This document details the general principles implemented at IDOC regarding the dataset management. It also include general questions to be answered to and inputs to be given before IDOC starts to implement the requested service.

In addition, for a specific service, complementary guidelines provide more specific items to be questioned and answered to. The next schema gives the relationship between the service, the hierarchy of the guidelines documents and the requirement document (:”the plan”) to be provided.



2 APPLICABLE DOCUMENTS

	Référence	Titre
AD1	IDOC-LI-000	IDOC item list

3 REFERENCE DOCUMENTS

	Référence	Titre
RD1	IDOC-EX-001	IDOC description executive summary
RD2	IDOC-OD-002	IDOC Risk analysis and management
RD3	IDOC-OD-003	IDOC General principles applicable to project design
RD4	IDOC-OD-004	IDOC Guidelines for new Data integration
RD5	IDOC-OD-005	IDOC Guidelines for new Pipeline Data Production
RD6	IDOC-OD-006	IDOC Guidelines for new archive long term preservation
RD7	IDOC-OD-007	IDOC Guidelines for new instrument operations
RD8	IDOC-OD-008	IDOC Guidelines for new services
RD9	IDOC-INF-009	IDOC Guidelines for dataset dissemination
RD10	IDOC-INF-010	IDOC Organigramme
RD11		REGARDS – A generic CATALOG ACCESS SYSTEM AND data VALORIZATION tool

4 GENERAL PROCESSES

4.1 DETERMINATION OF SERVICE SCOPE

These guidelines are based on principles and rules for implementation. In order to adapt these principles and rules to the specificities of the application being assessed, the documents list parameters or state a set of questions in the chapter(s) « PROCEDURE TO PREPARE ». Identifying the appropriate parameters and their values and answering the questions allows the service to be finely defined.

The process is for the customer to interact iteratively with the IDOC Scientific and/or Technical leader until all questions are answered to the satisfaction of all those involved for a consumption of resources compatible with what is available for the project concerned.

Once this iterative process has been completed, it can be formalized in its service objectives.

4.2 IMPLEMENTATION OF SERVICE

The project can then be implemented according to the development rules described for IDOC, before going into production, and this also in compliance with the recommendations and protocols in progress within IDOC.

4.3 SERVICE FOLLOW-UP

At regular intervals, and never more than one year, the operating conditions of the service are reassessed in their scientific and technical context.

Any feedback, suggestions, etc. are added to the problems encountered during the operation of the services in order to establish a prioritised schedule of actions.

These actions are confronted with IDOC's overall workload, other requests priorities and available resources to integrate an implementation schedule broken down into actions in the project monitoring tool (redmine).