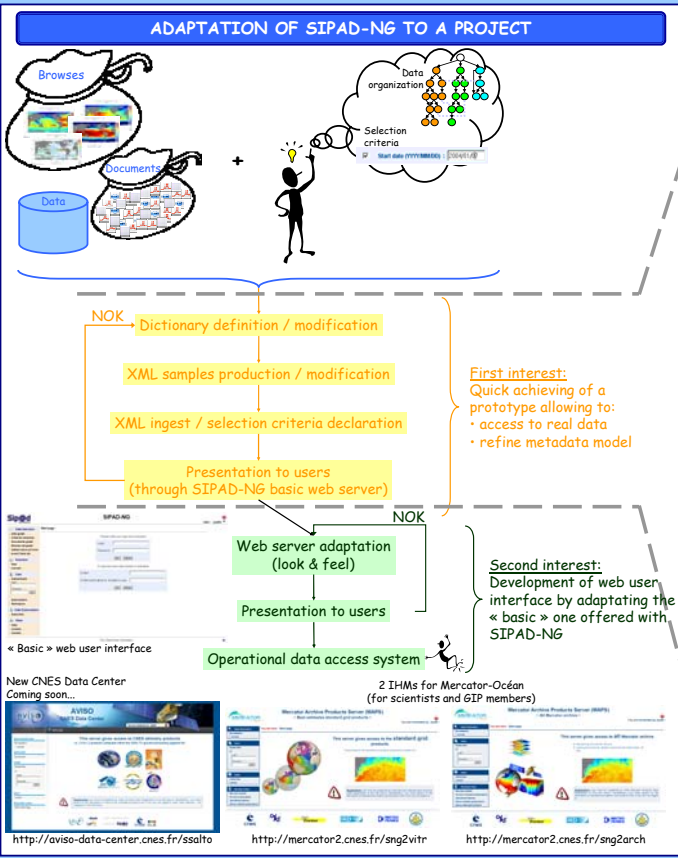
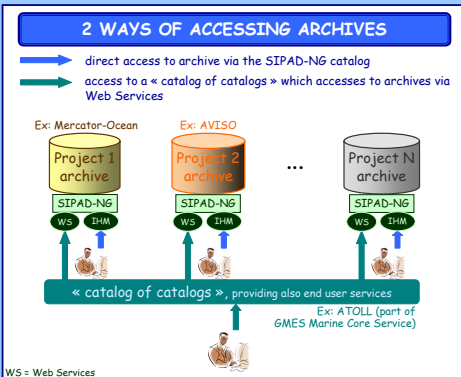
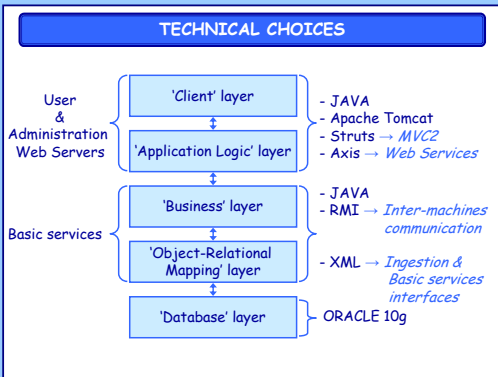
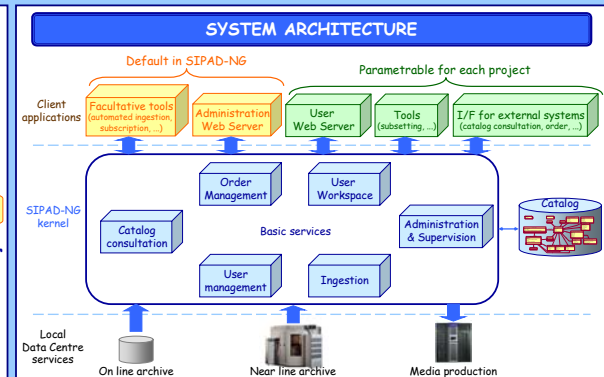
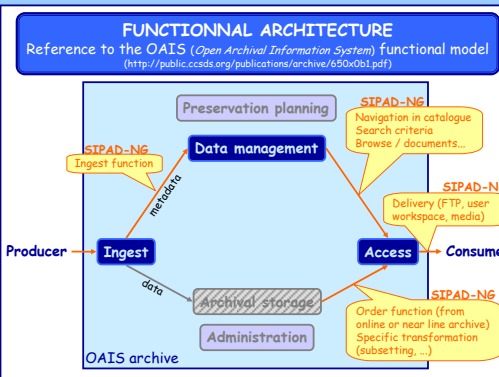
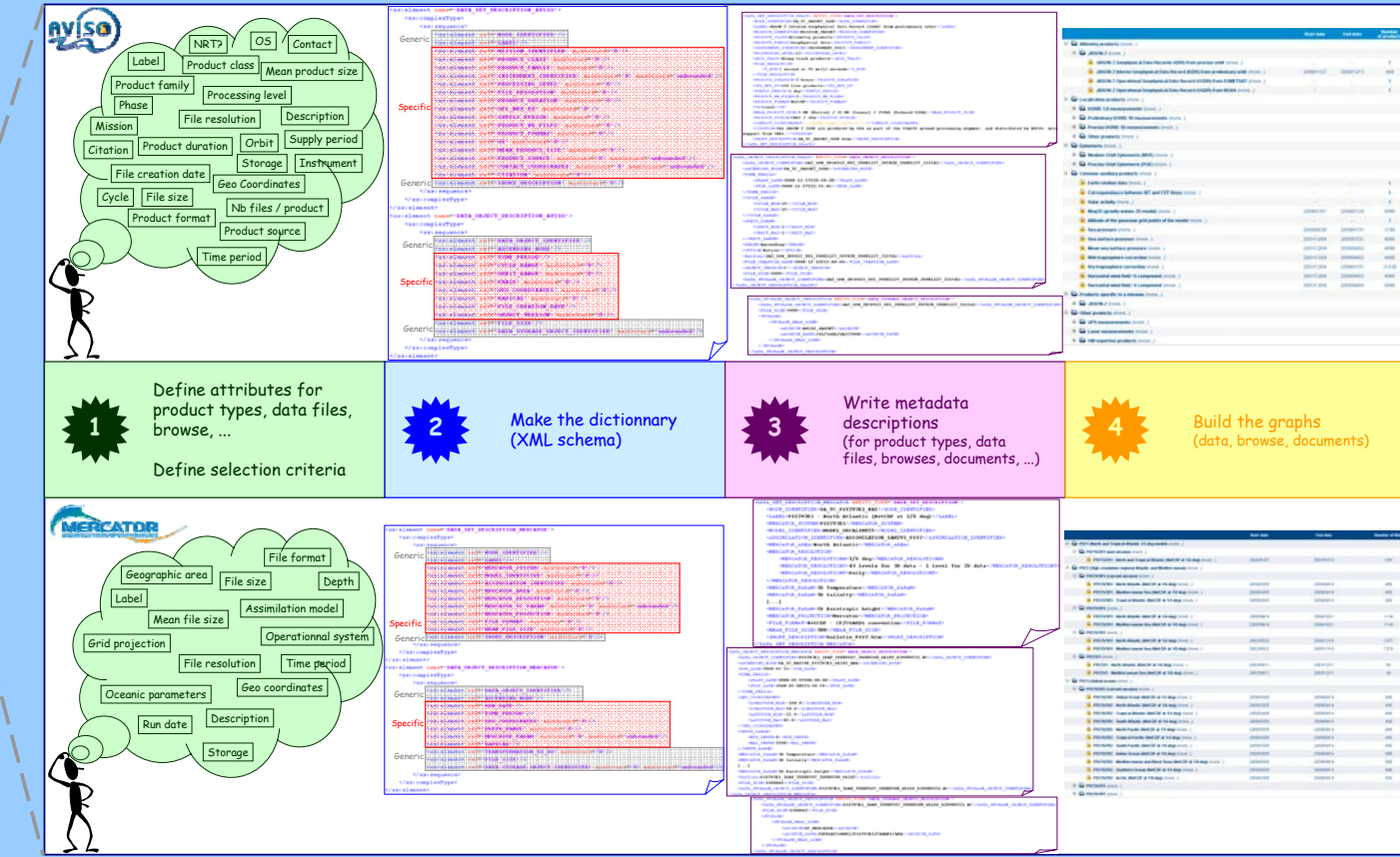


ABSTRACT - SIPAD-NG ("Système d'Information, de Préservation et d'Accès aux Données - Nouvelle Génération" - "Information System for Data Preservation and Access - New Generation") is a generic software system allowing web consultation of scientific data catalogs and access to these data. SIPAD-NG is an "on the shelf" software that can be used by Data Centres from any scientific domain. Currently, SIPAD-NG is operational for accessing data from CNES/CNRS Plasma Physics Data Centre, Mercator-Ocean and soon for CNES altimetry products and CNES/IFREMER SMOS products. The SIPAD-NG kernel is composed of "basic services" that offer the standard functions of a data management system: mechanisms for searching for relevant data, data selection and ordering, long-term archiving, etc... These "basic services" provide interfaces that allow various types of "client applications" to use them: web servers, science processing software, remote applications, etc... This architecture provides Data Centres with a software system that can be adapted to their needs and enhanced over time by: metadata catalog parameterization, customisation of the web server, adding of client applications and specific software. We describe SIPAD-NG characteristics in terms of functionalities, architectural design and technological choices. An example of instantiation for Oceanography applications (Mercator-Ocean and altimetry) is detailed.

AVISO Data Dictionary: Label, Product class, Mean product size, Processing level, File resolution, Description, Mission, Product duration, Orbit, Supply period, File creation date, Geo Coordinates, Storage, Instrument, Cycle, File size, Nb files / product, Product format, Product source, Time period

Mercator Data Dictionary: File format, Geographic area, File size, Depth, Label, Mean file size, Assimilation model, Grid projection, File resolution, Operational system, Oceanic parameters, Geo coordinates, Run date, Description, Storage

4-Step Process:

1. Define attributes for product types, data files, browse, ... Define selection criteria
2. Make the dictionary (XML schema)
3. Write metadata descriptions (for product types, data files, browses, documents, ...)
4. Build the graphs (data, browse, documents)

XML Schemas: Generic and Specific schemas for AVISO and Mercator data.