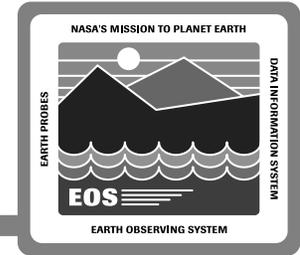


Incremental Track Status

John Farley

16 February 1995

Incremental Track Status

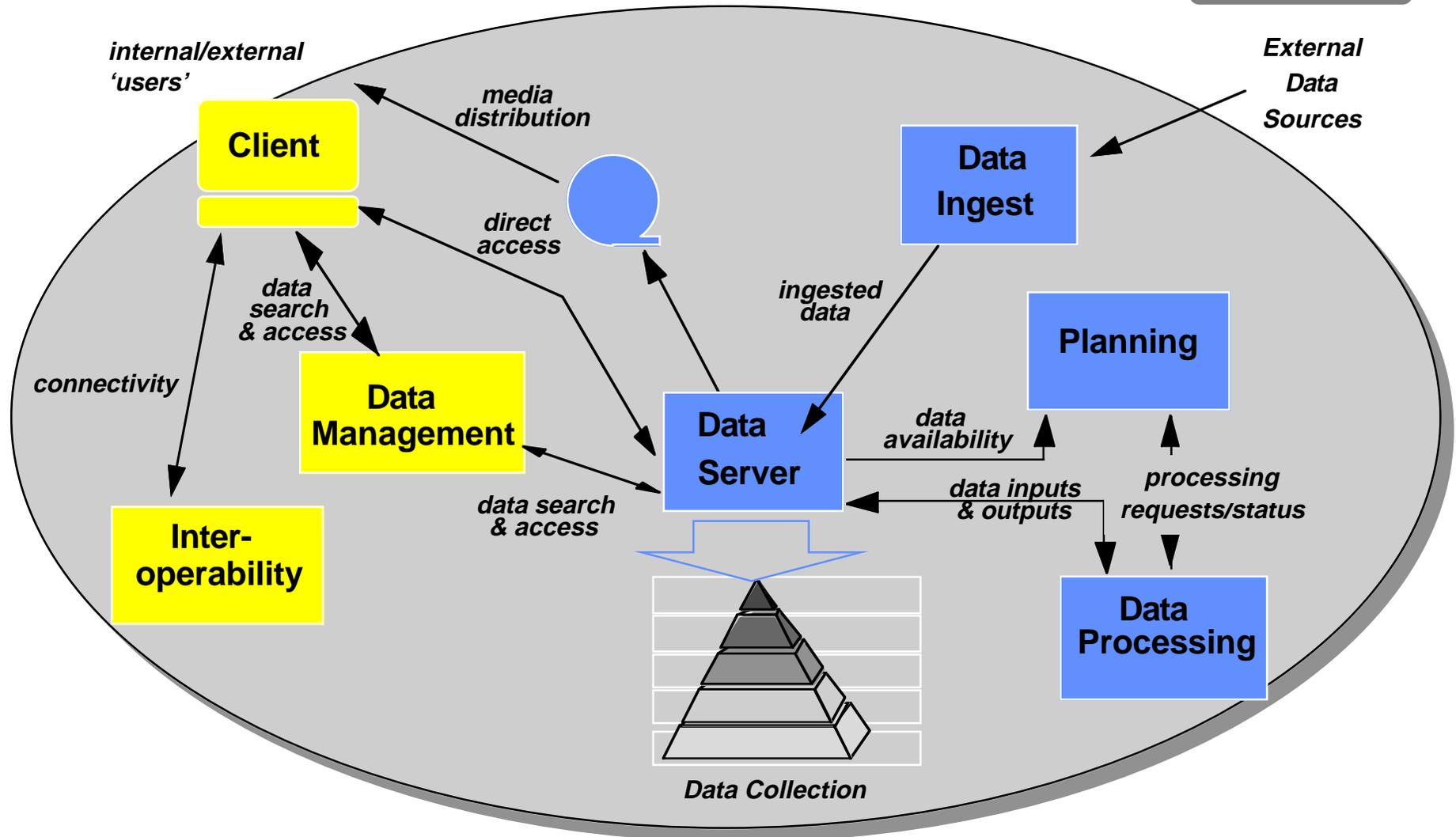
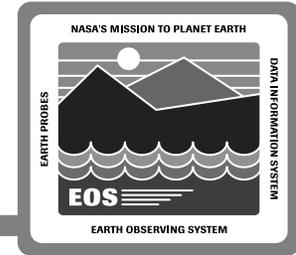


Agenda

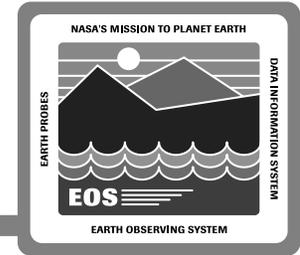
- **Overview of Incremental Components**
- **Status**
- **Schedule**
- **Design Issues**

Caveat: Release B Focus

Overview Of Incremental Components



Client Subsystem Overview



Human Interface into EOSDIS services

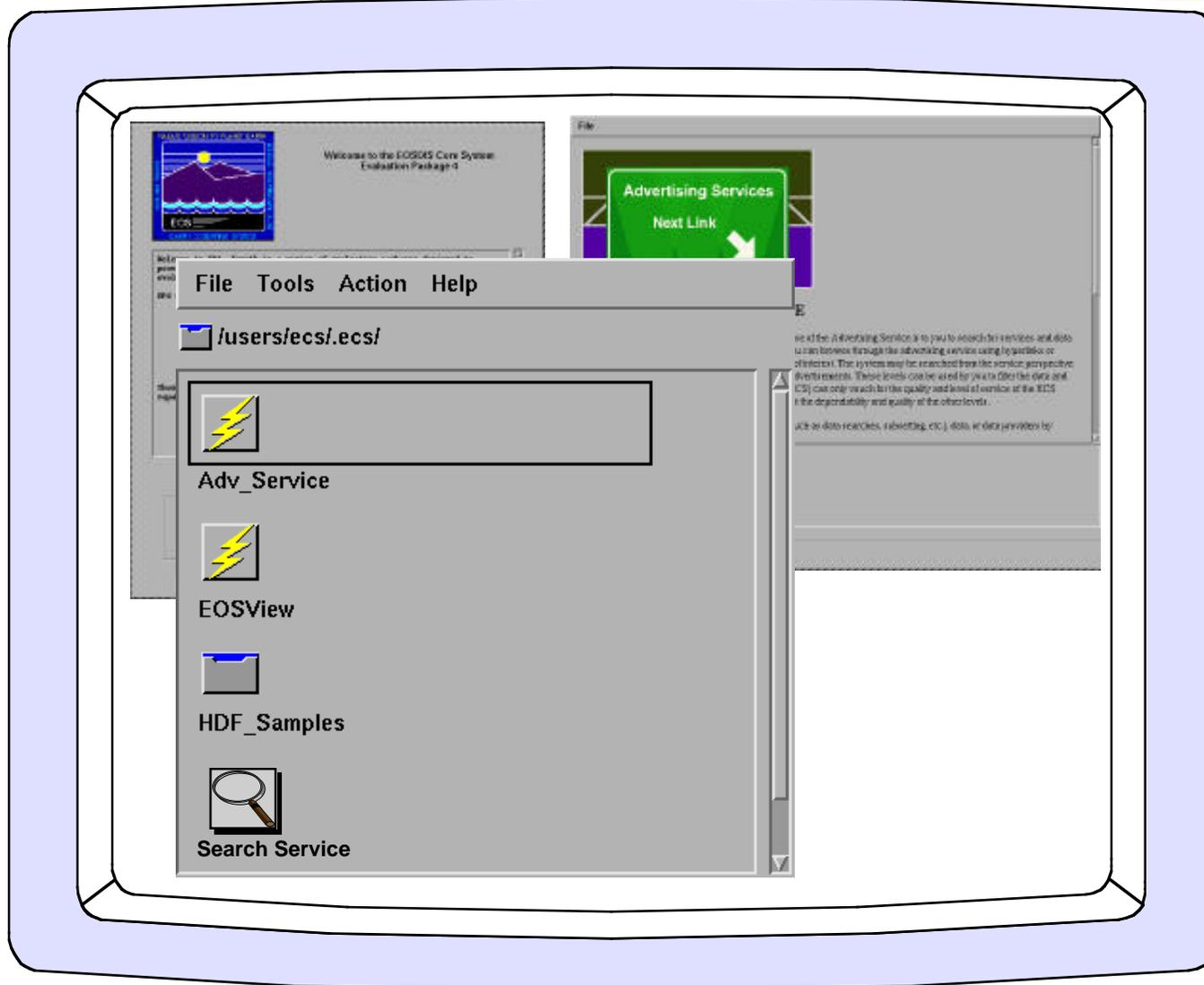
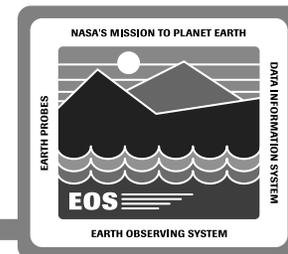
Desktop framework

- **Container, Document, and Application Object classes**
- **Provides dynamic associations between objects and tools**
- **Desktop Manager**

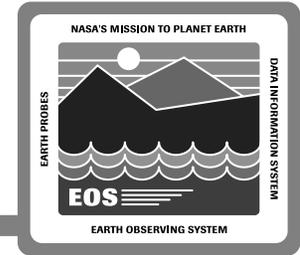
Workbench components

- **User interfaces to ECS services**
 - e.g., **Query Tool, Visualization Tool, Advertising Tool, etc.**
- **Extensible for custom and OTS tool integration**

Client Prototype



Interoperability Subsystem Overview

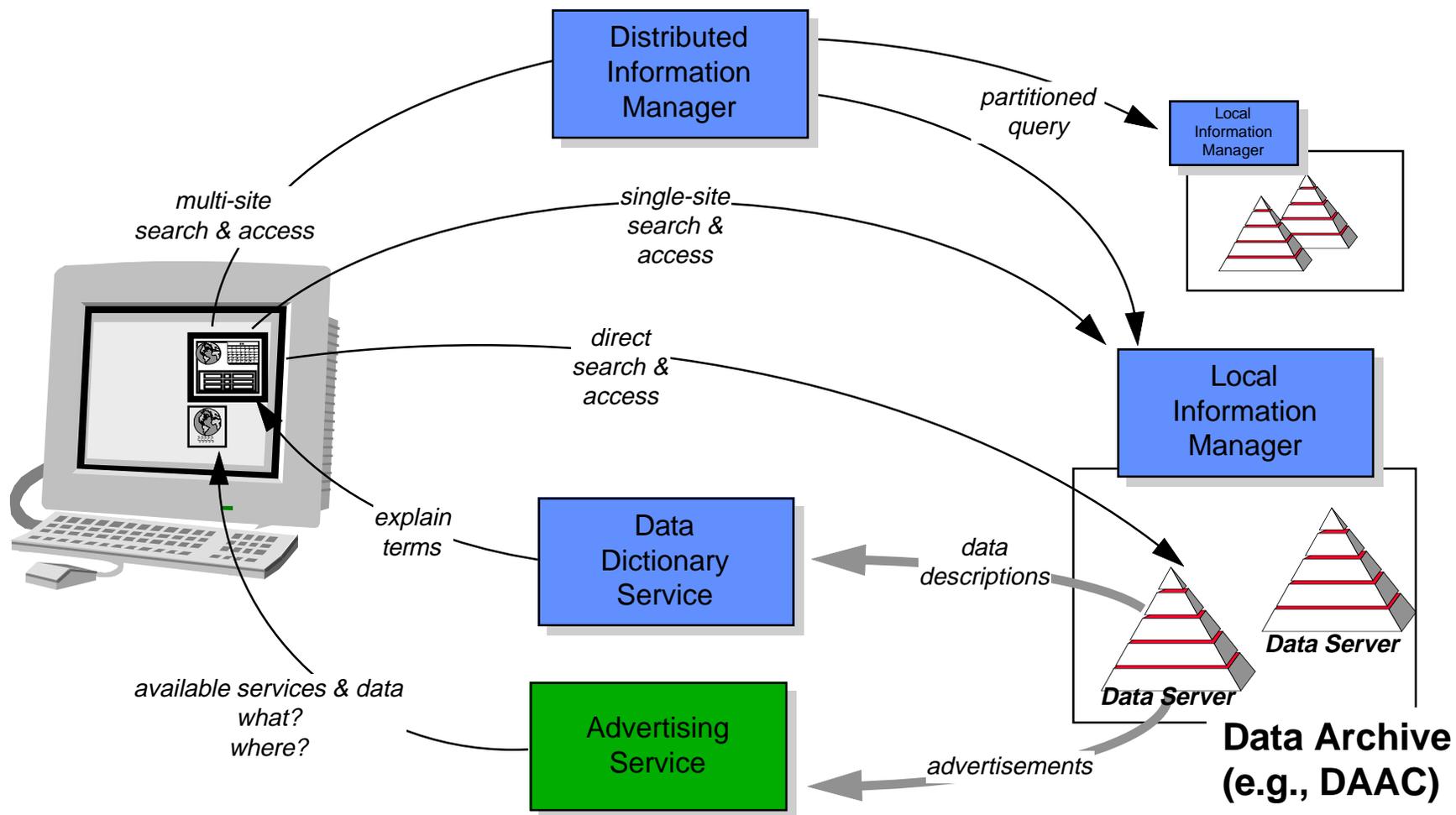
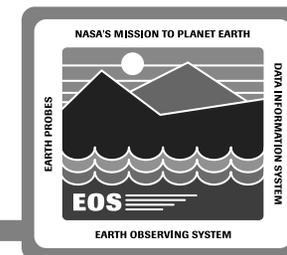


Advertising Service

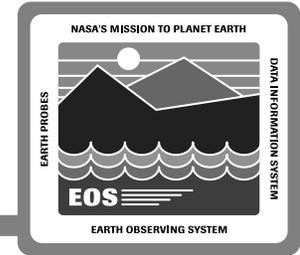
- **Provide an integrated view of the data and service network**
 - **Maintains advertisements for Data, Services and Providers**
- **Allow for an extensible provider network**



Data Management & Interoperability



Data Management Subsystem Overview



Make the location and organization of data transparent

Distributed Information Manager (DIM)

- **Client's agent for distributed inter-site search and access requests**

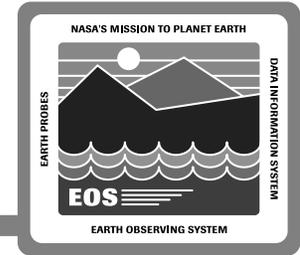
Local Information Manager (LIM)

- **Client's agent for distributed intra-site search and access requests**
- **Provider site control point for local query management**
- **Integrated view of local data holdings**

Data Dictionary Service (DDS)

- **Provides access to definitions of data & operations**
 - **data objects, data relationships, access operations**
 - **e.g., list of attributes for a given product, with their definitions**

Increment 0 Status



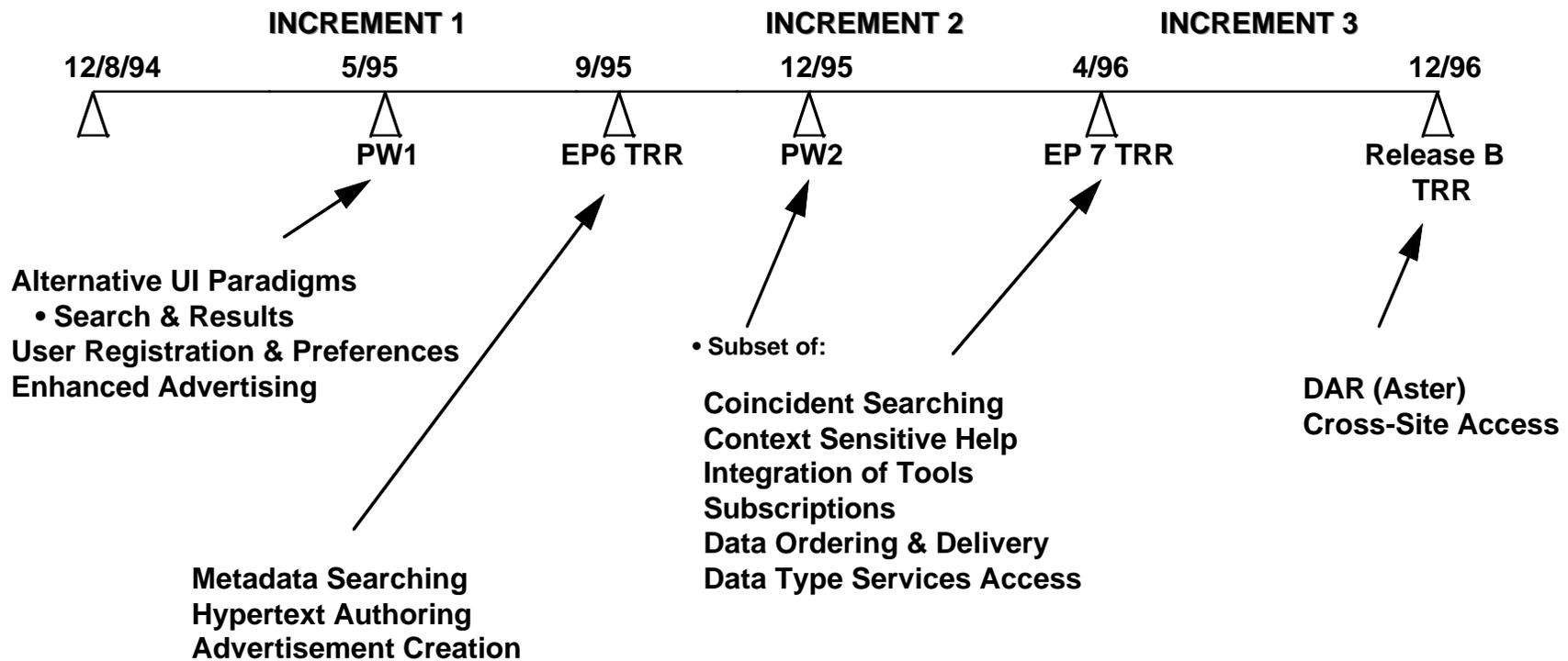
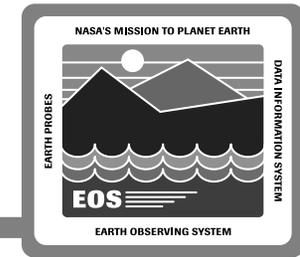
EP4 Delivered for Science Advisor Evaluation on 1/11/95

- **On-Line User Survey Status (20 Days of Evaluations - 18 People)**
 - **Generally pleased with overall structure and design**
 - **Positive reaction to use of a MOSAIC Interface**
 - **Concerns about how interface will look with large number of services and icons**
 - **Average ratings to date on 27 questions are positive or neutral**

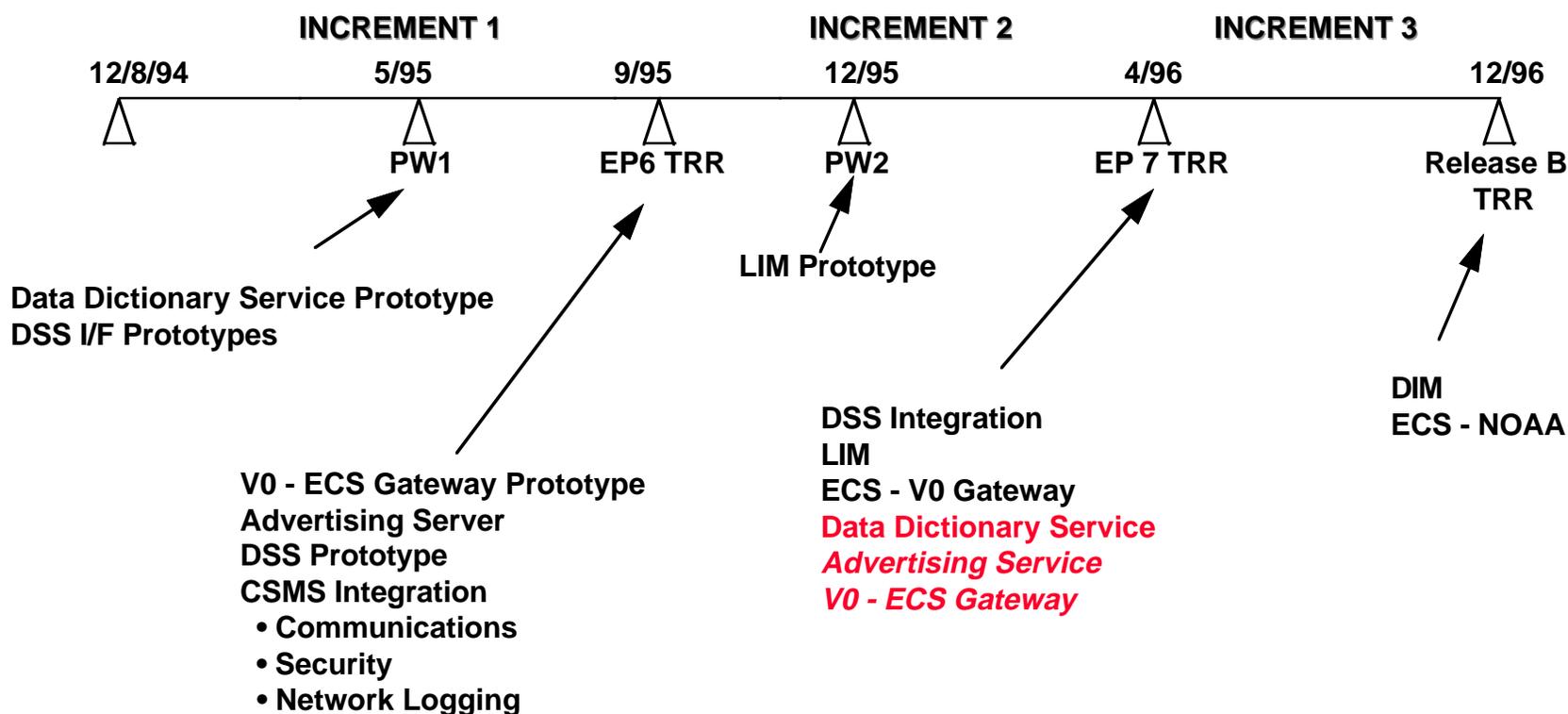
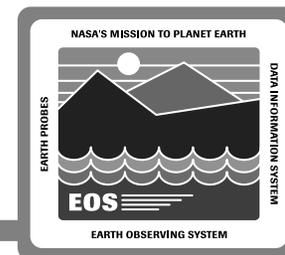
Scenarios, Object Models, Design Docs Incorporated into Software Development Folders

Initial Requirements Analysis for Release B Functionality Complete

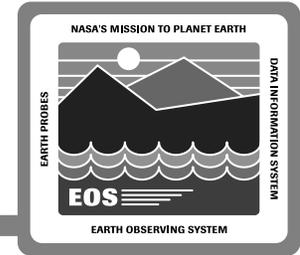
Key Features Schedule (User Perspective)



Key Features Schedule (Internals)



One-Stop Shopping



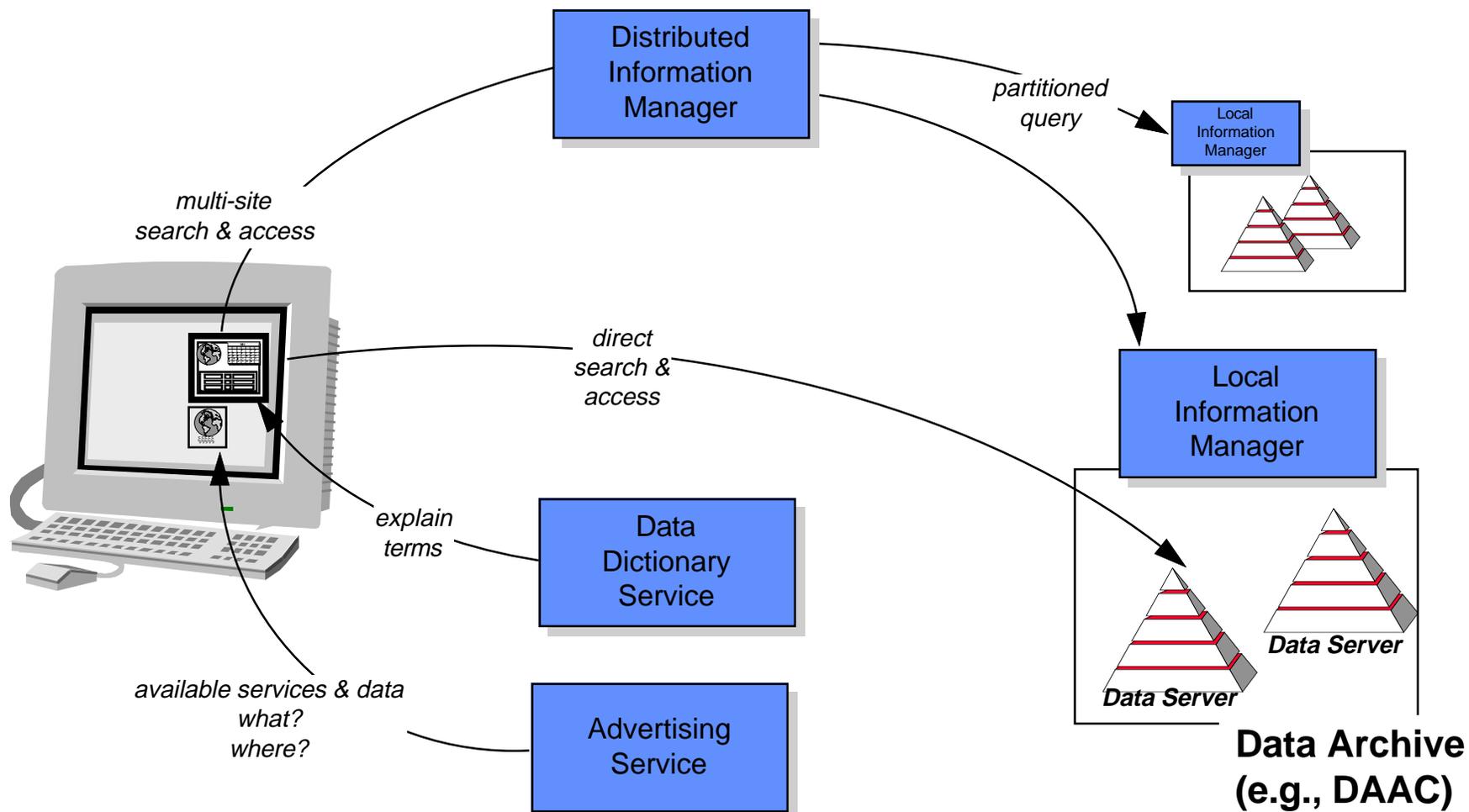
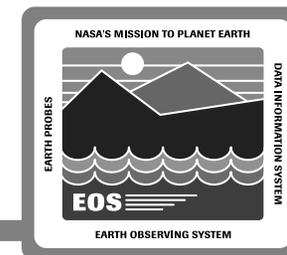
- Evolution of V0 inventory level query
- Single search interface to all ECS holdings (as well as to all inter-operable sites)
- Provide complete transparency of data location
- One query can specify constraints for both core and product specific attributes
- Does not preclude direct data server access

Implications

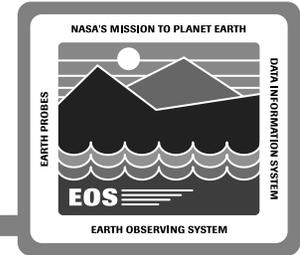
- Core and product specific attributes will be available at the client



One-Stop Shopping Overview



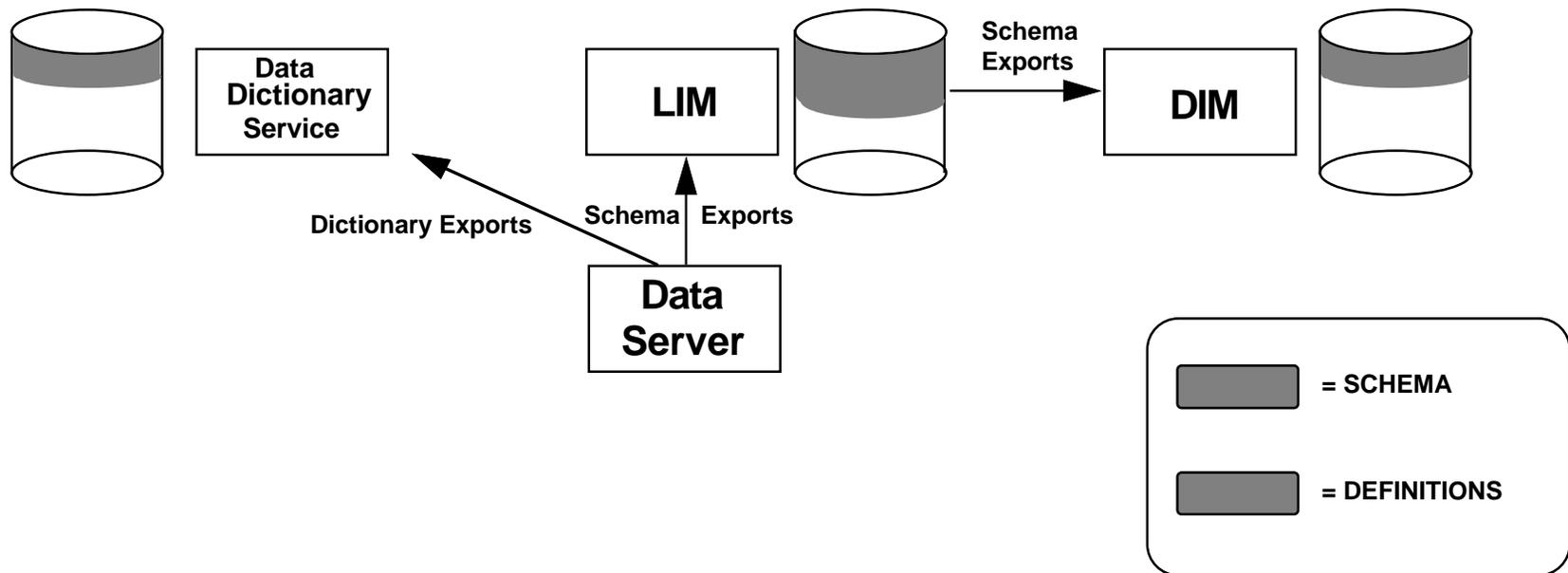
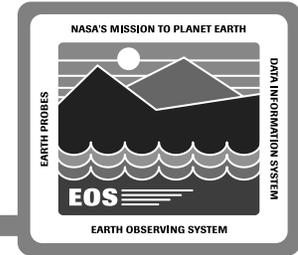
Data Management Unified Database



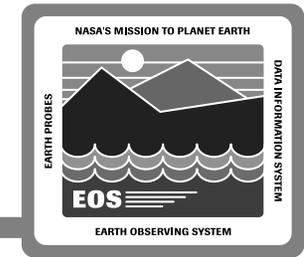
Approach

- **Use Distributed DBMS technology**
- **Reduce number of separate databases**
- **Architectural components (e.g. LIMs, DIMs) become applications that provide a view into a distributed database**

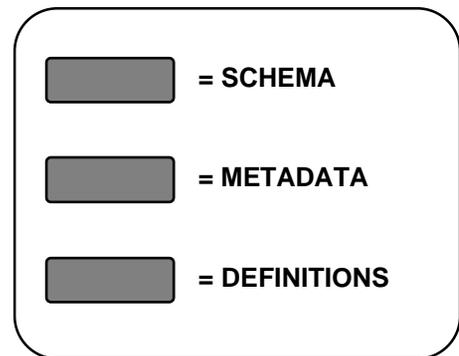
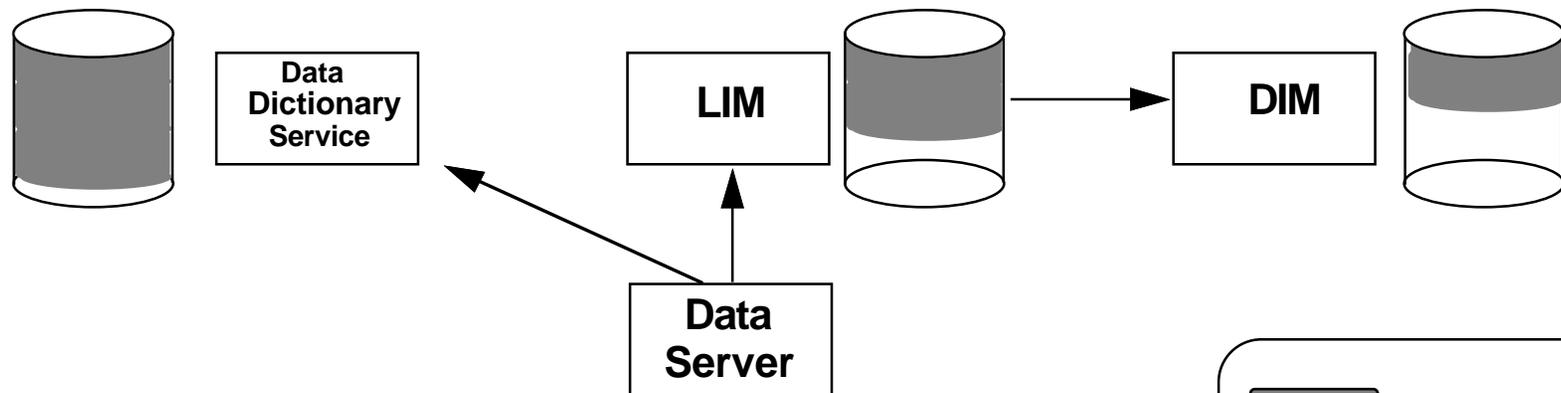
SDS View of Data Mgmt. Components



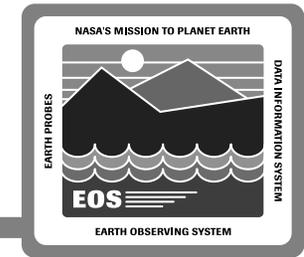
Post SDS View of Data Mgmt. Components



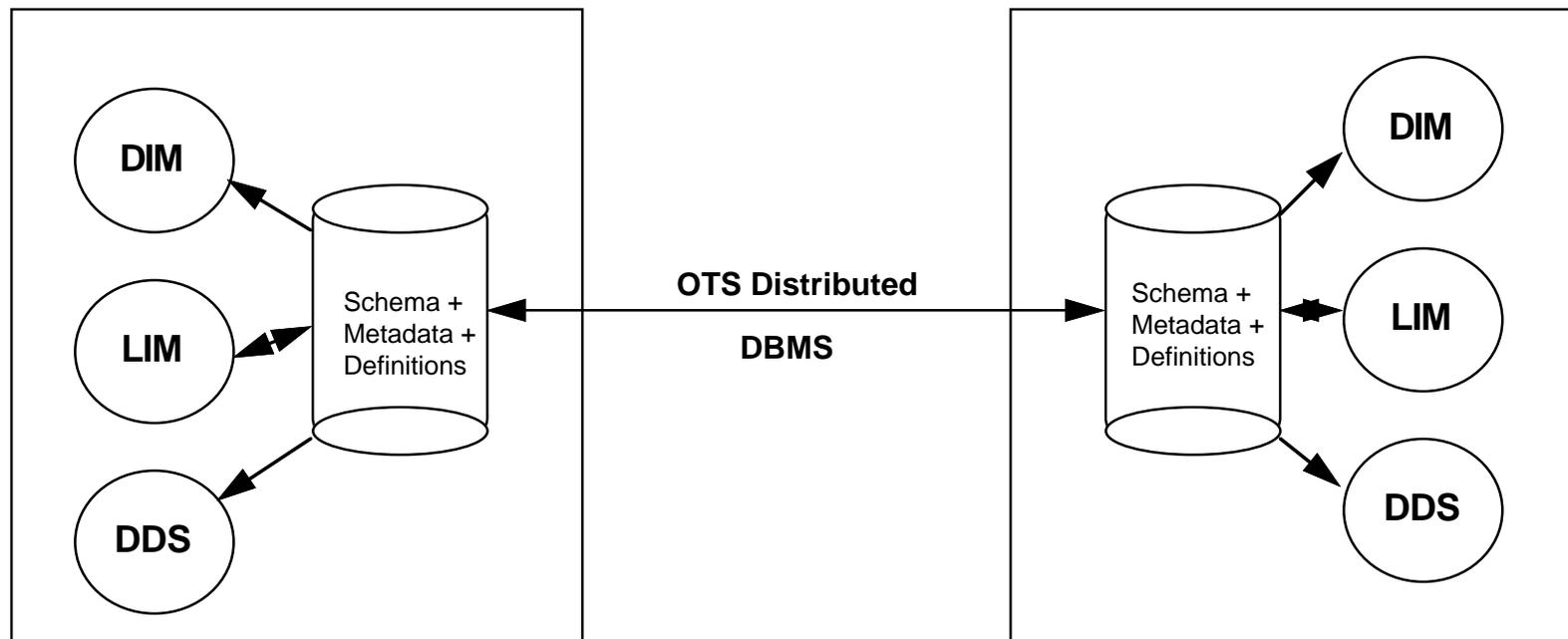
- Support One-Stop Shopping
- Intelligent Query Distribution
- Enhance Data Dictionary Service



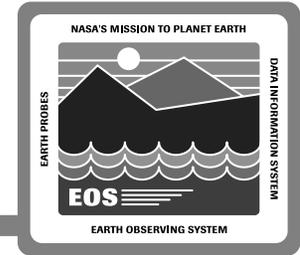
Unified Database View of Data Mgmt. Components



- Eliminates Data Redundancy
- Replaces Custom Code with OTS technologies
- Reduces Administrative (DBA) Overhead
- Reduces Risk



Organization of Advertisements



Goals

- **Allow authorized users or groups to post and organize advertisements without cluttering general advertisement space**
- **Provide restricted access to advertisements and services**

Approach

- **Provide support for Authorization Groups (e.g., GSFC, AIT, Wassamatta U., etc)**
- **Follow UNIX file system protection model**
 - **Separate Read and Write access controls**
 - **Access control based on User, User Class, and Authorization Group**
- **Follow moderated news group model**