



Spatial Data Standard for Facilities, Infrastructure and Environment (SDSFIE) Status Update: Modeling Business Mission Areas (BMA)

ESRI Federal User Conference
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A satellite map of a coastal region, likely the Gulf of Mexico, showing land, water, and a grid of latitude and longitude lines. The word "Agenda" is overlaid on the right side of the map.

Agenda

- **Introduction**
- **The Fundamentals**
- **Modeling Toward Release 3.0**
- **Questions**

Introduction





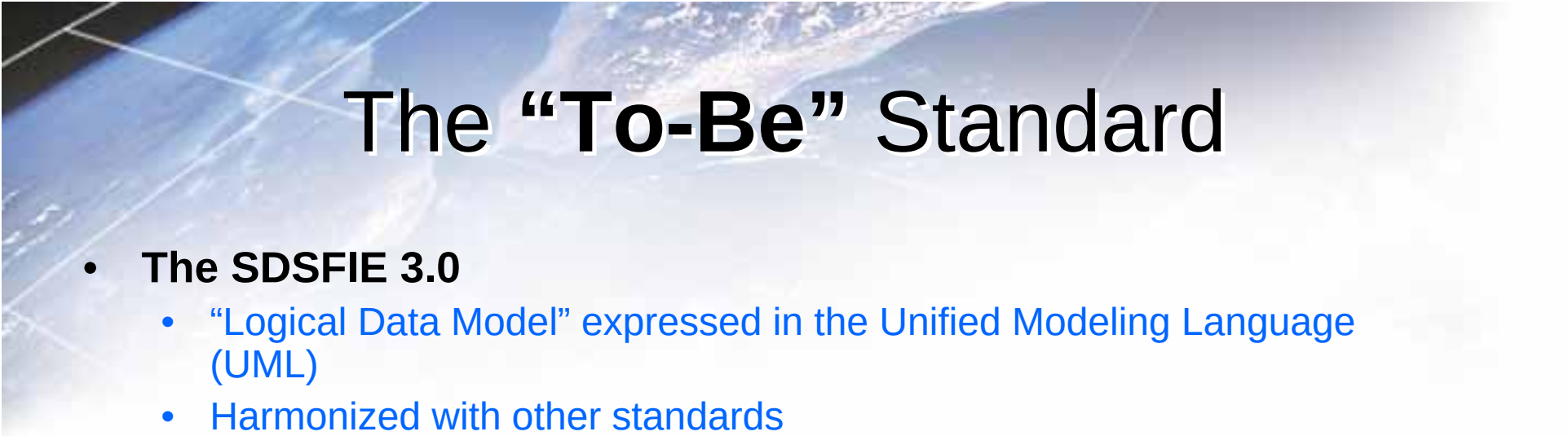
The SDSFIE Vision

- The SDSFIE Five-Year Vision Statement

The single **DoD** spatial standard that supports common implementation and maximizes interoperability for Installation, Environment, and Civil Works Missions.

7 SDSFIE Guiding Principles

1. **SDSFIE will focus on the geospatial representation of features and maintain a minimum number of attributes. It will link to our business databases for attribute data and not duplicate attributes found in business databases.**
2. **SDSFIE will provide a data model that is scalable from installation mapping up to Service level and DoD; from local to global.**
3. **If a relevant data content standard already exists, SDSFIE must incorporate it into the model rather than develop new content.**
4. **SDSFIE standard development will follow a nationally recognized development process.**
5. **SDSFIE will reside in the public domain and is vendor neutral.**
6. **The standard will be responsive and built to support the business needs of data creators and end users.**
7. **SDSFIE is governed and managed by the DISDI Group.**



The “To-Be” Standard

- **The SDSFIE 3.0**
 - “Logical Data Model” expressed in the Unified Modeling Language (UML)
 - Harmonized with other standards
- **Model-driven architecture DoD Net-Centric strategy - Dir 8320.02**
- **SDSFIE will model real world features from several domains and will concentrate on the geospatial representation**
 - **One Feature, One Definition**
- **The SDSFIE web-based tools will enable conformant implementation and local adaptation**
 - SDSFIE will still be implemented on mainstream geospatial technologies
 - With SDSFIE there is always a place for your data
 - Individual content requests and change recommendations will drive local adaptations and not the LDM

A satellite view of the Earth from space, showing a portion of the Western Hemisphere. A white grid of lines representing latitude and longitude is overlaid on the image. The text "The Fundamentals" is centered in the middle of the image.

The Fundamentals





Three Pillars to the New SDSFIE

- **The Standard (Release 3.0)
with Support Tools**
 - Migration
 - Database Creation
 - Validation
- **Communication**
- **Training**



Modeling Toward Release 3.0



The New SDSFIE Website

<http://www.sdsfie.org>

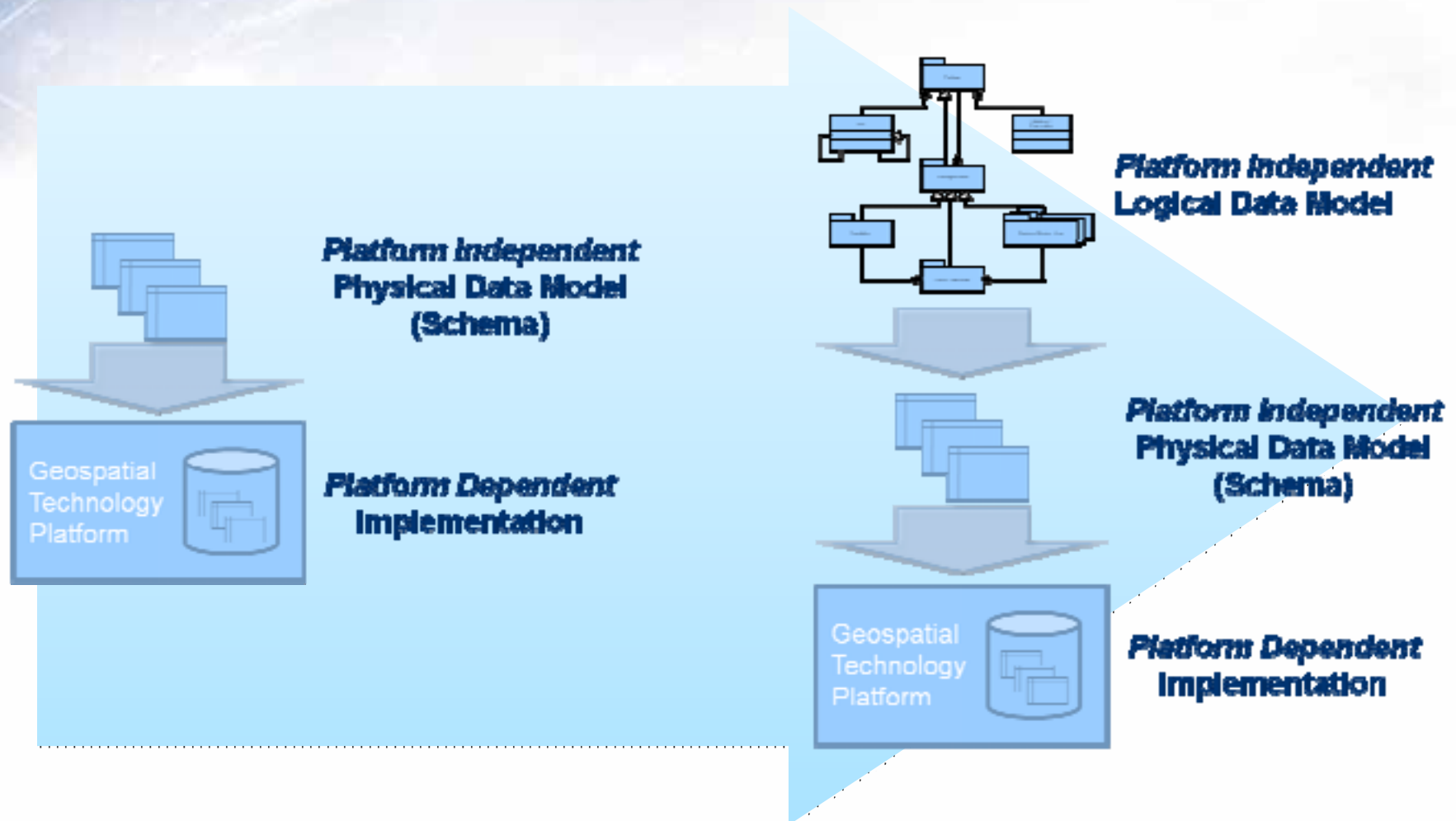


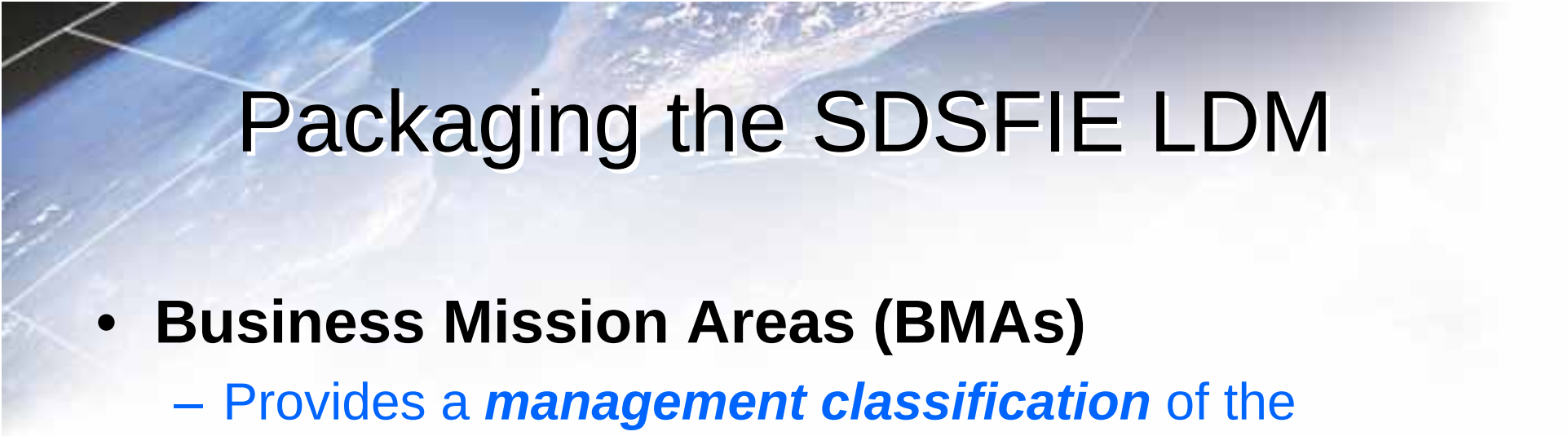
The Help Desk: 866-9SDSFIE

The Transition – Release 2.6

- **Release 2.600 (Jan 07)**
- **Follow-up Release 2.610 (Mar 07)**
- **Make up of the Release**
 - **Physical Data Model Update**
 - Real Property Inventory (RPI) Model
 - Levee Database Model
 - ArcGIS 9.2 compatibility modification
 - Same Tool Set as 2.500
 - **NO** incorporation of content requests since 2.500 release

SDSFIE In Transition





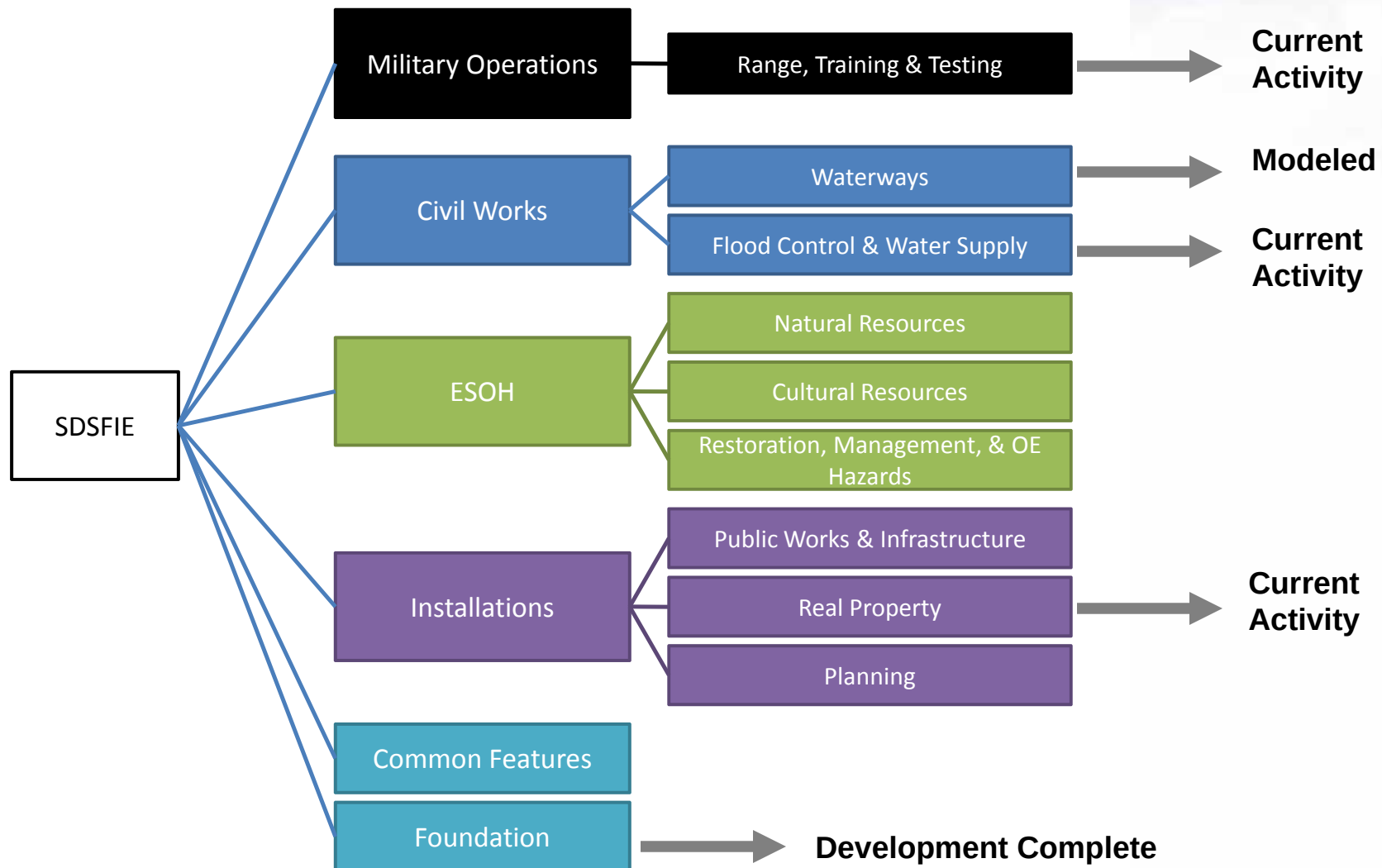
Packaging the SDSFIE LDM

- **Business Mission Areas (BMAs)**
 - Provides a *management classification* of the features in SDSFIE at the level of “business ownership groups” in DoD
- **Disciplines**
 - Sub-division of a BMA into *Functional “Areas”* in order to better utilize Subject Matter Experts (SMEs) and specific Mission requirements under a BMA

SDSFIE Logical Data Model

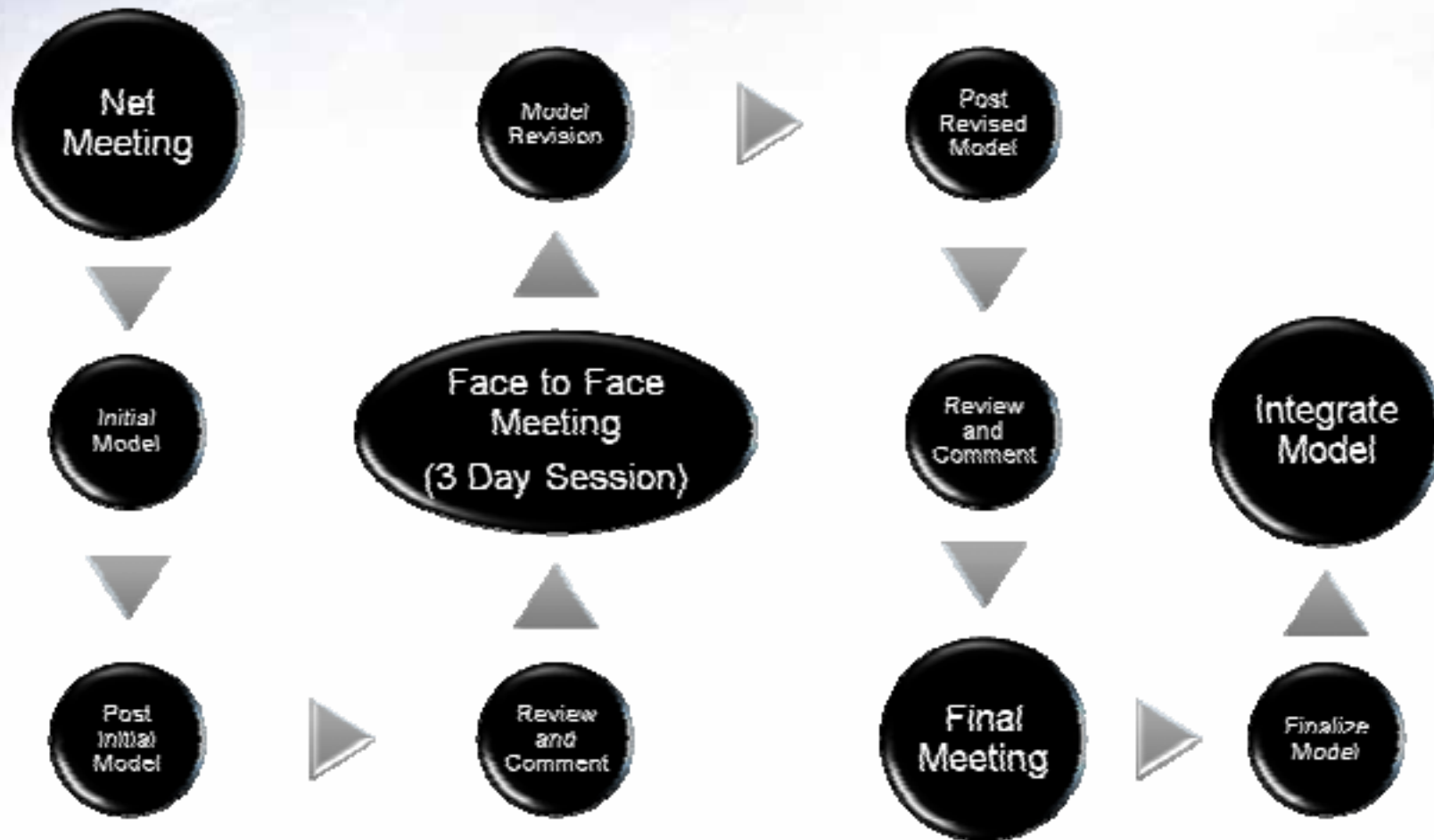
- **SDSFIE composed of 6 *Packages***
 - Groups of model elements that map to entity sets in the current SDSFIE
 - 4 *DoD BMA Packages*
 - 1 *Common/Cross-Functional BMA Package*
 - 1 *Foundation Package - contains universal model elements*
 - Represent the geometry, metadata, and general feature model of the SDSFIE

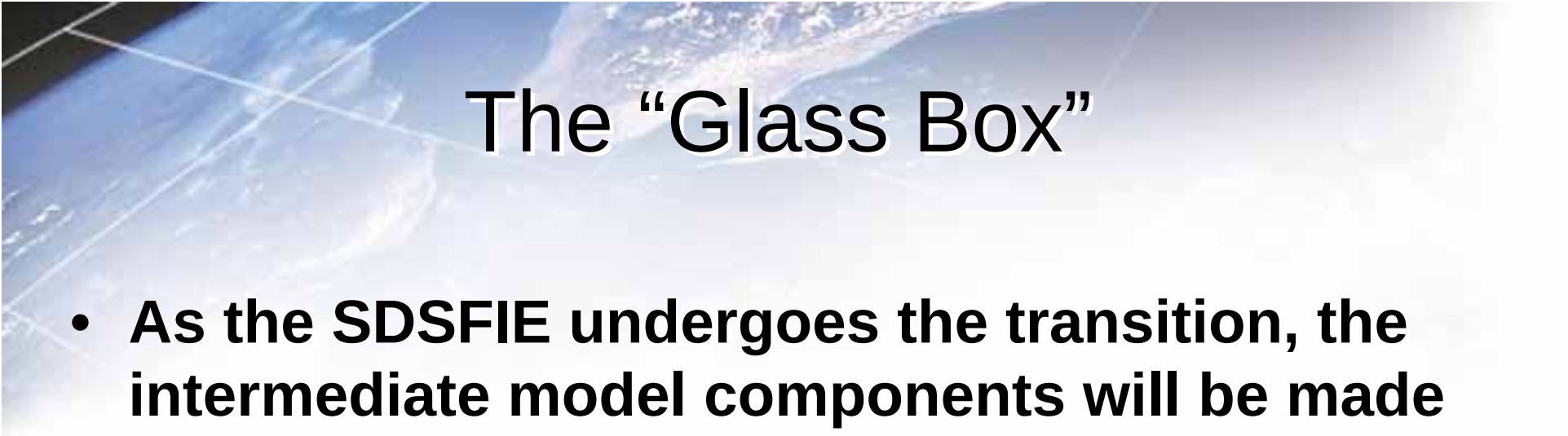
SDSFIE Logical Data Model Packages



Model Development Process

For BMA or Discipline Package Modeling Efforts with SMEs





The “Glass Box”

- **As the SDSFIE undergoes the transition, the intermediate model components will be made available via the SDSFIE website**
- **Forums will be available and specific comment periods will be announced that will allow for feedback on the “state of the SDSFIE”**
- **The transition will be visible to the entire user community**

SDSFIE Home

Support

Discussions

Web Tools

User Survey

Contact Us

Definition Review Forum

Modeling Glass Box

Training

SDSFIE Toolbox

Your Feedback

Email:

Name:

Subject:

Category:

Message:

Cancel

Send

Hydro Modeling Information and Downloads

Scope: Information regarding products, schedules, and information on the Hydro Modeling Initiative

Hydro Modeling Effort Products

Draft Model

Draft Model in Excel

Hydro Model Draft ...

Hydro UML Diagrams ...

Waterways - Proposed changes and updates

Final Model

Final Waterways Geodatabase ...

Final Model in Excel ...

Government Furnished Information

GFI Material ...

Pre-read Material

SDSFIE Classes ...

SDSFIE Classes Spreadsheet ...

Workshop Analysis Presentation ...

Slides and Documentation

Slides from Kickoff ...

SDSFIE Hydro Briefing ...

Workshop Products

Task Order 4 Initial Meeting ...

Hydro Stakeholder Meeting Notes ...

Whiteboard Modeling Notes ...

Hydro Modeling - SDE Forum

Unanswered

Not Read

My Forums

Active Topics

My Profile

Search

Members

Initial Modeling Discussions

Forum Name	Topics	Replies	Last Post
<u>GFI Discussions</u> Discussions specific to the Government Furnished Information (GFI). GFI can be found/downloaded for this site at Modeling Glass Box/Hydro Modeling.	0	0	
<u>Initial Modeling Efforts - Feedback</u> Opportunity to provide feedback on the MS-PowerPoint presentation and MS-Excel spreadsheet serving as pre-read material for the July 17th-19th Workshop.	2	0	Additional Feature Types by mcorse 07/20/2007 12:07 PM

Statistics

Total Forums:2
Total Topics:2
Total Replies:0
Total Posts:2
Most Active:
Most Views:

A satellite view of the Earth from space, showing a portion of the Western Hemisphere. A white grid of lines representing latitude and longitude is overlaid on the image. The word "Questions?" is centered in the middle of the image in a large, white, sans-serif font.

Questions?





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Backup Slides



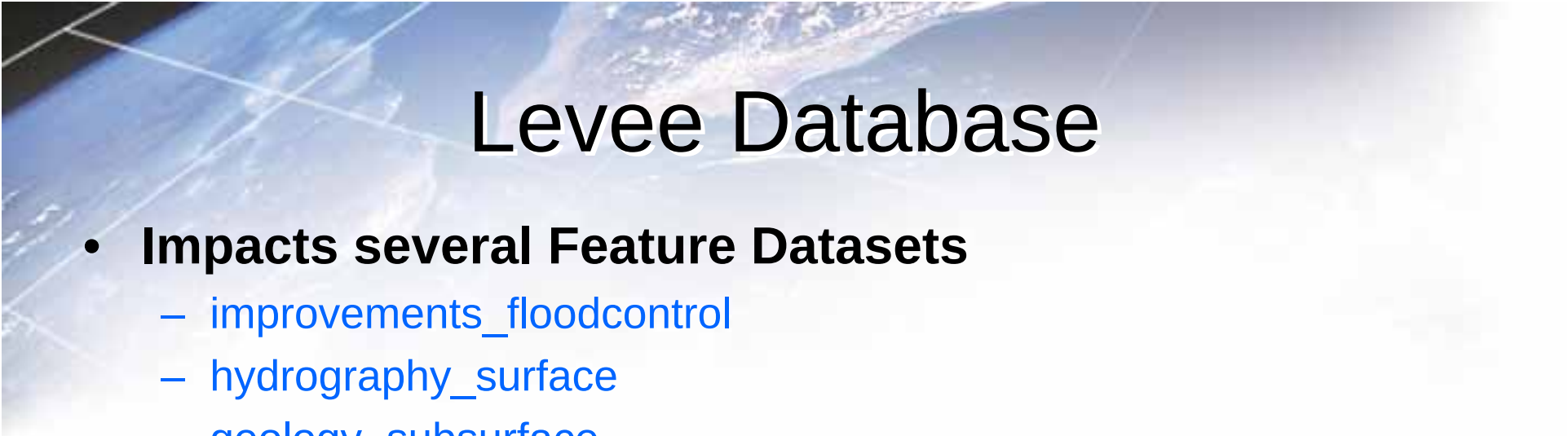
Release 2.610 High Level Overview

- **Content**
 - Release 2.500 Entity Types/Tables
 - Real Property Inventory from DISDI
 - Levee Database Model (Version 1.8+)
- **Statistics (RPI/Levee)**
 - 1135 Features (13 New Features 5/8)
 - 1234 Tables (5 New Tables 0/5)
 - 33,433 Attributes (384 New Attributes)



Real Property Inventory

- **Impacts ONLY Cadastre Feature Dataset**
- **“Canned” Filter “Real Property Invent”**
- **Names are SDSFIE Names**
- **Aliases are RPI Document Names**
- **Schema Report available on Web site**
- **“Creating an RPI Geodatabase” available on Web site**



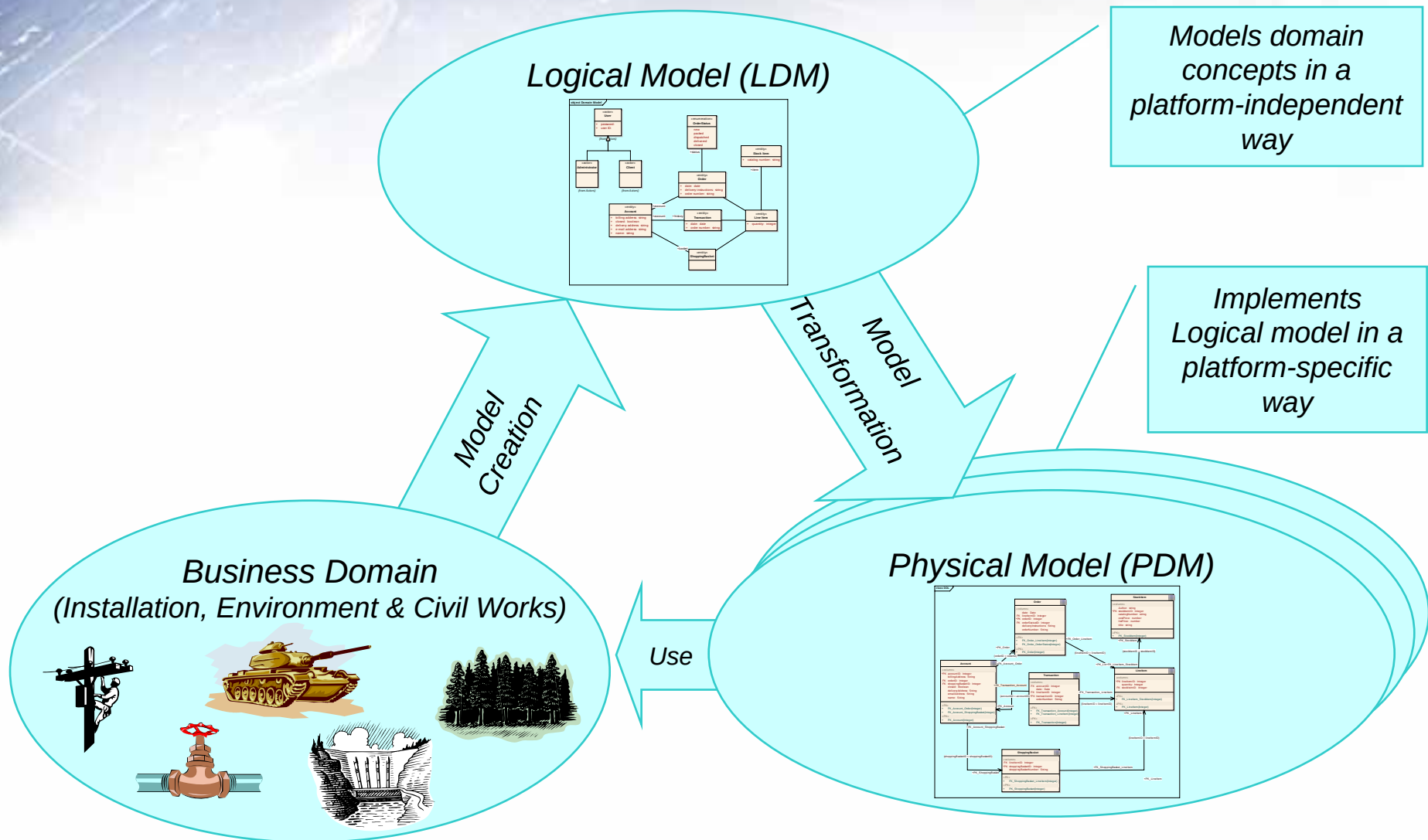
Levee Database

- **Impacts several Feature Datasets**
 - [improvements_floodcontrol](#)
 - [hydrography_surface](#)
 - [geology_subsurface](#)
- **“Canned” Filter “Levee Database”**
- **Names are SDSFIE Names**
- **Aliases are Levee Database Names**
- **Schema Report available on Website**

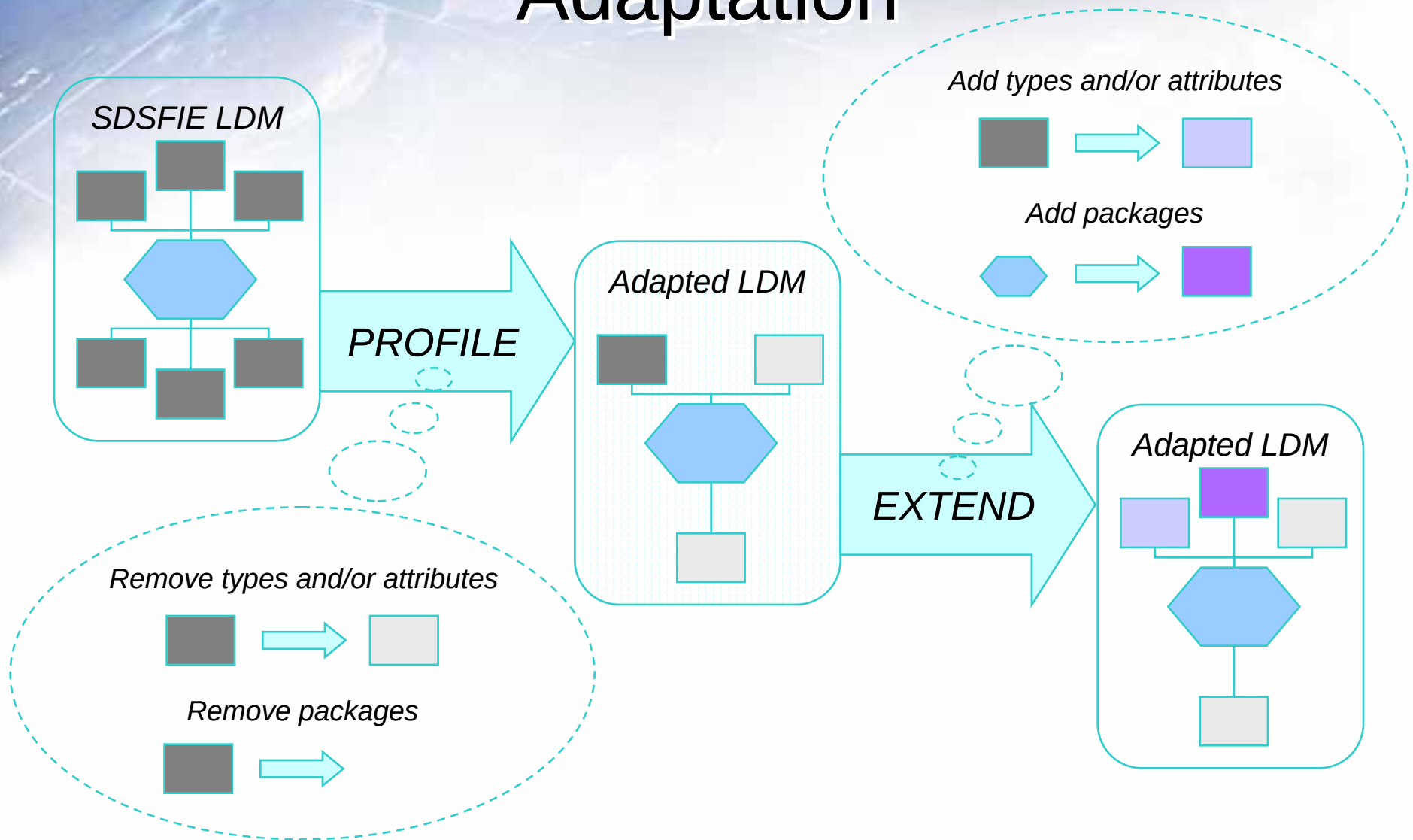
Release 2.610 Software Modifications

- **Based on Release 2.500 Final Software**
- **Modified hyperlink to new <http://www.sdsfie.org/>**
- **No significant enhancements except:**
 - **Geodatabase Builder**
 - Corrections to accommodate ArcGIS 9.2
 - Added additional Domain limitations for RPI/Levee
 - New ArcGIS Expanded Text Field capability
 - **Geodatabase Loader**
 - Corrections to accommodate ArcGIS 9.2
 - **Compliance Checker**
 - Adaptation to handle ArcGIS Expanded Text Field capability

Logical vs. Physical



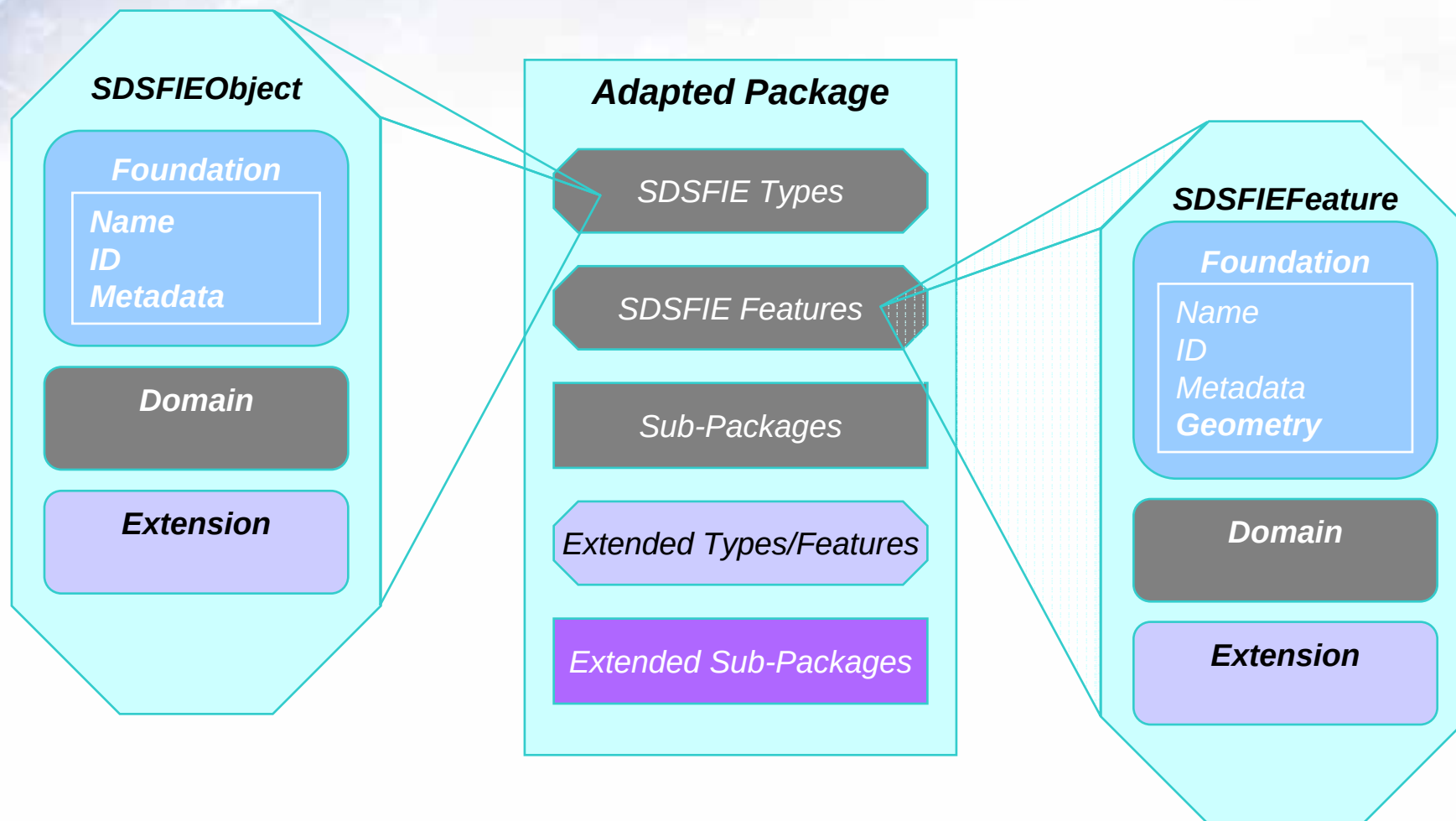
Adaptation



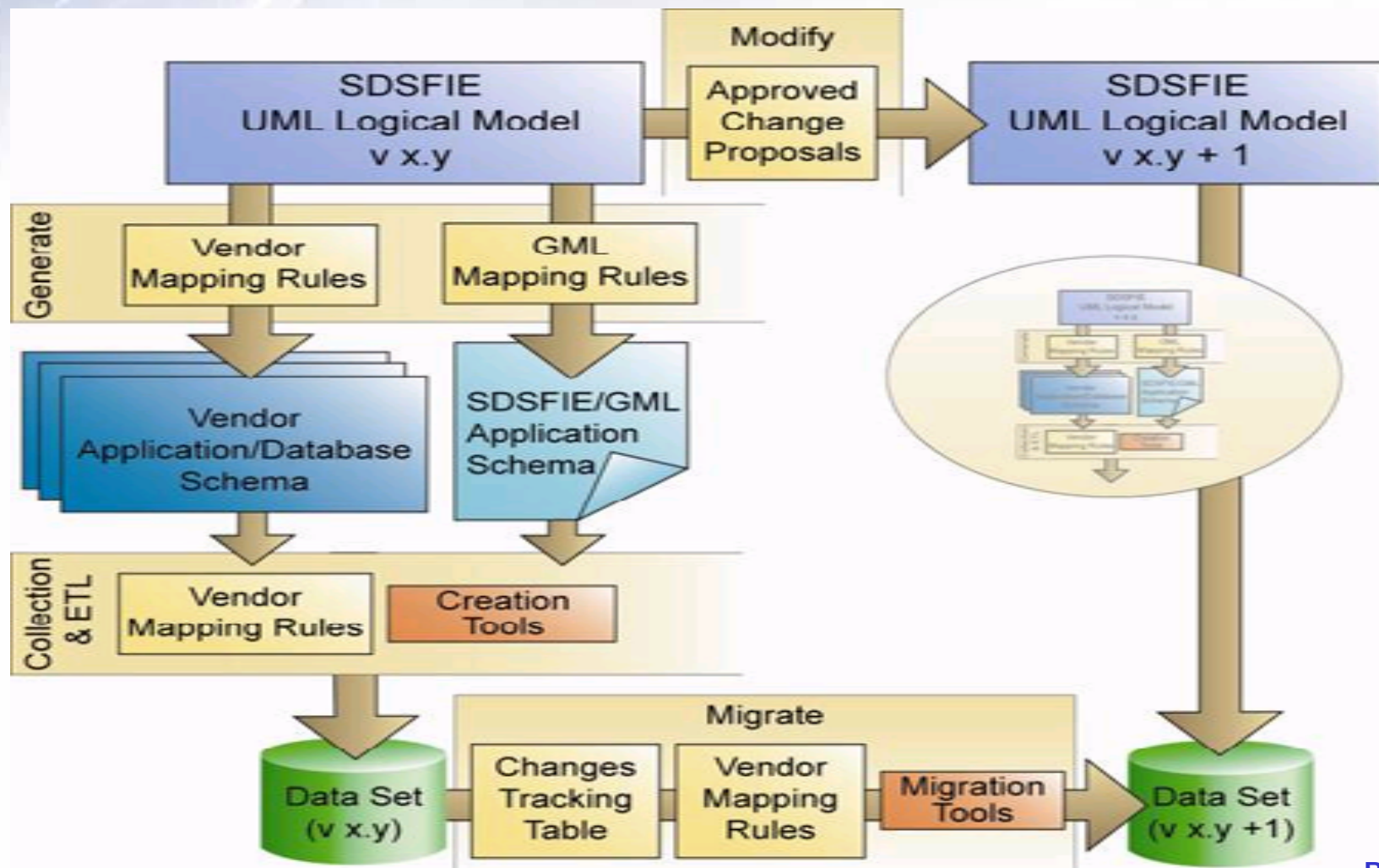
Definition: Types – the objects, data types, and features of interest

SDSFIE Anatomy

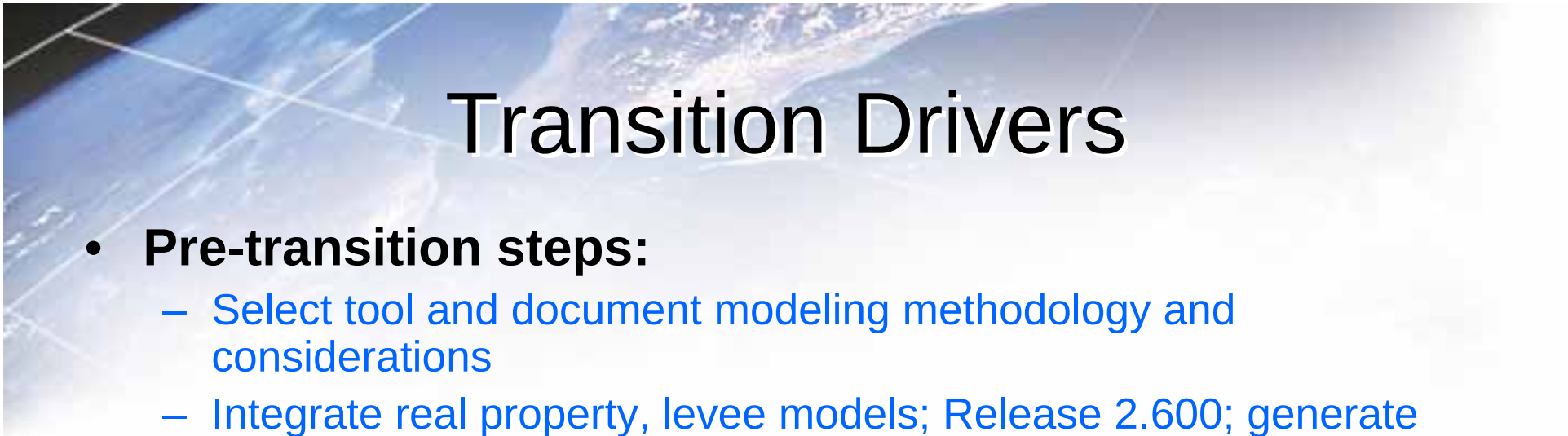
“With SDSFIE There is Always a Place for Your Data”



Process Schematic



[Back](#)

A satellite view of Earth from space, showing a coastline and surrounding waters. The image is used as a background for the presentation slide.

Transition Drivers

- **Pre-transition steps:**
 - Select tool and document modeling methodology and considerations
 - Integrate real property, levee models; Release 2.600; generate

- Select tool and document modeling methodology and considerations
 - Integrate real property, levee models; Release 2.600; generate XMI (XML Model Interchange) for 2.600; build UML
- ## Transition:
- Develop reorganization criteria
 - Develop conventions and rules
 - Develop transformations
 - Define tracking tables
 - Revise the model
 - TC211 consistency, general model clean-up, integrate new types (as defined by Government)

