



Air National Guard Geo Integration Office (GIO)

Geospatial Requirements Definition Process (GRDP)

Greg Turner (GIO Program Manager)

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**ESRI FedUC
19 February 2010**

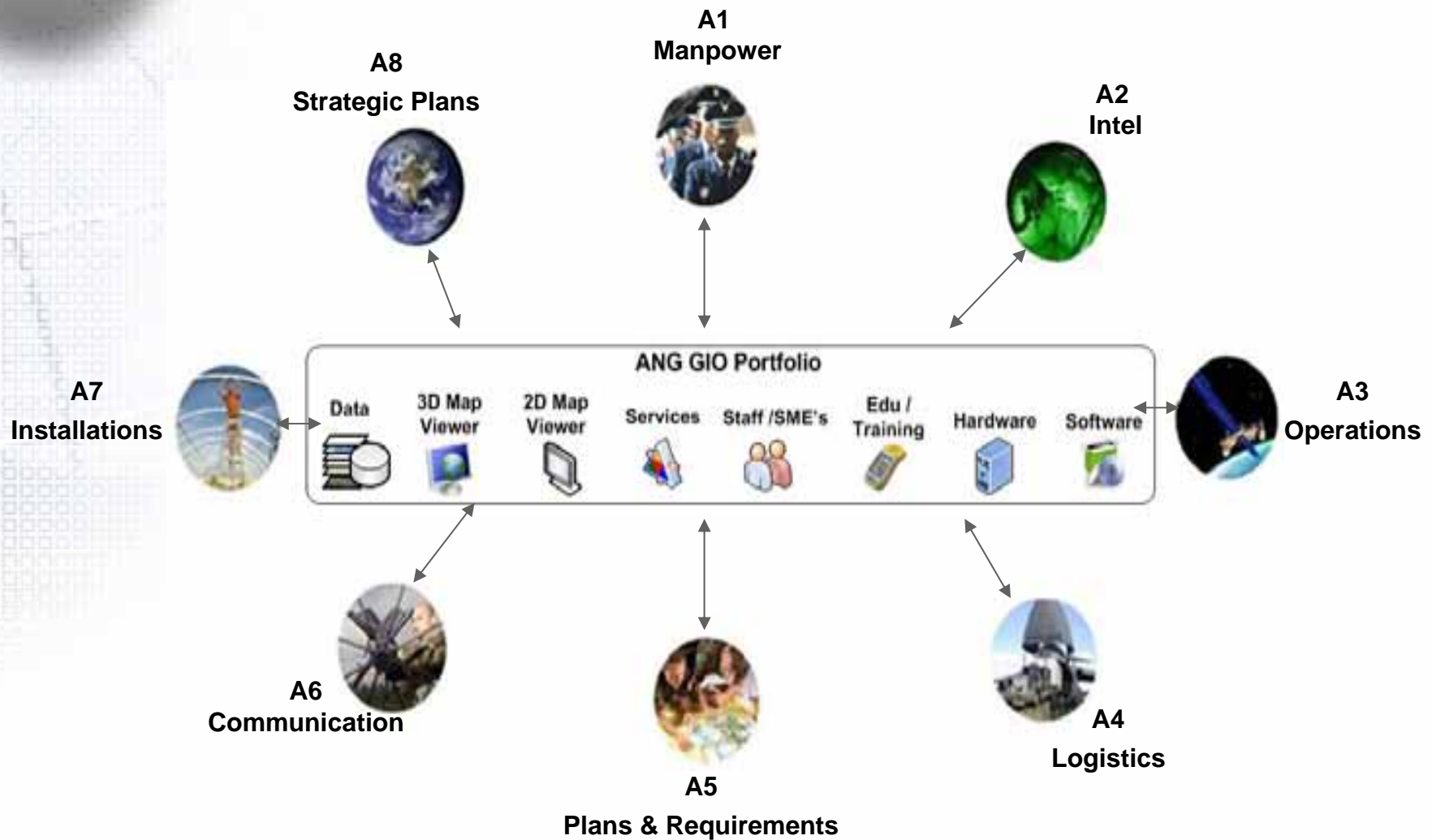


GIO Portfolio of Assets & Resources





GIO Business Mission Areas



Business Mission needs & GIO Portfolio of assets

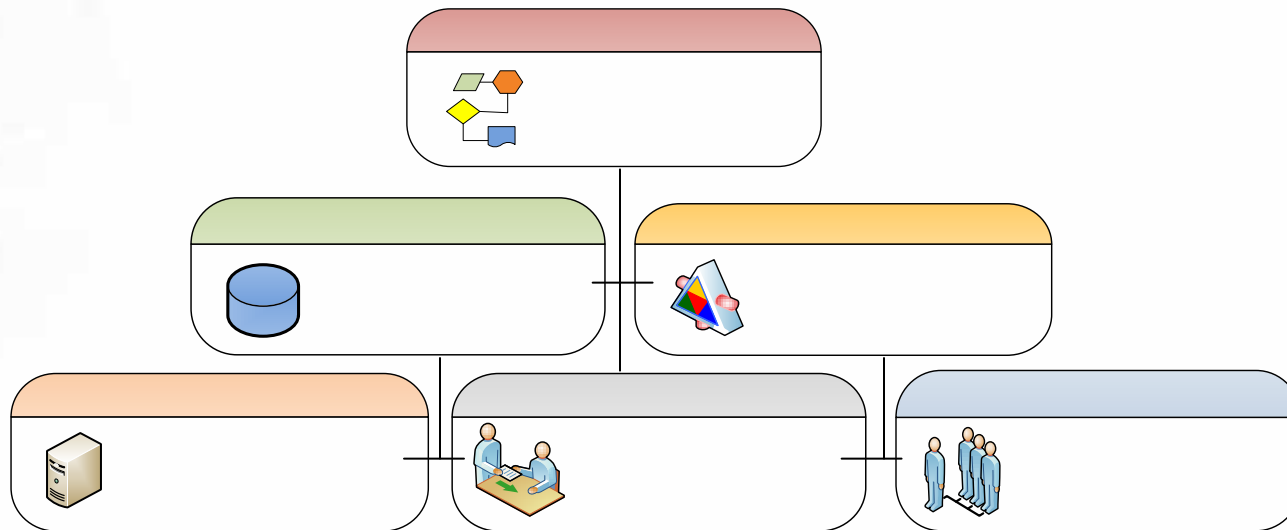


- ❖ Aligning GIO investments to business needs & strategic objectives
- ❖ Facilitating Governance...Establishing Priorities...Planned GIO initiatives
- ❖ Aligning requirements to existing resources
- ❖ Business / Mission requirements as drivers for: Data, Services, Technology
- ❖ Highlighting connected/related requirements between lines of business



Geospatial Requirements Definition Process (GRDP)

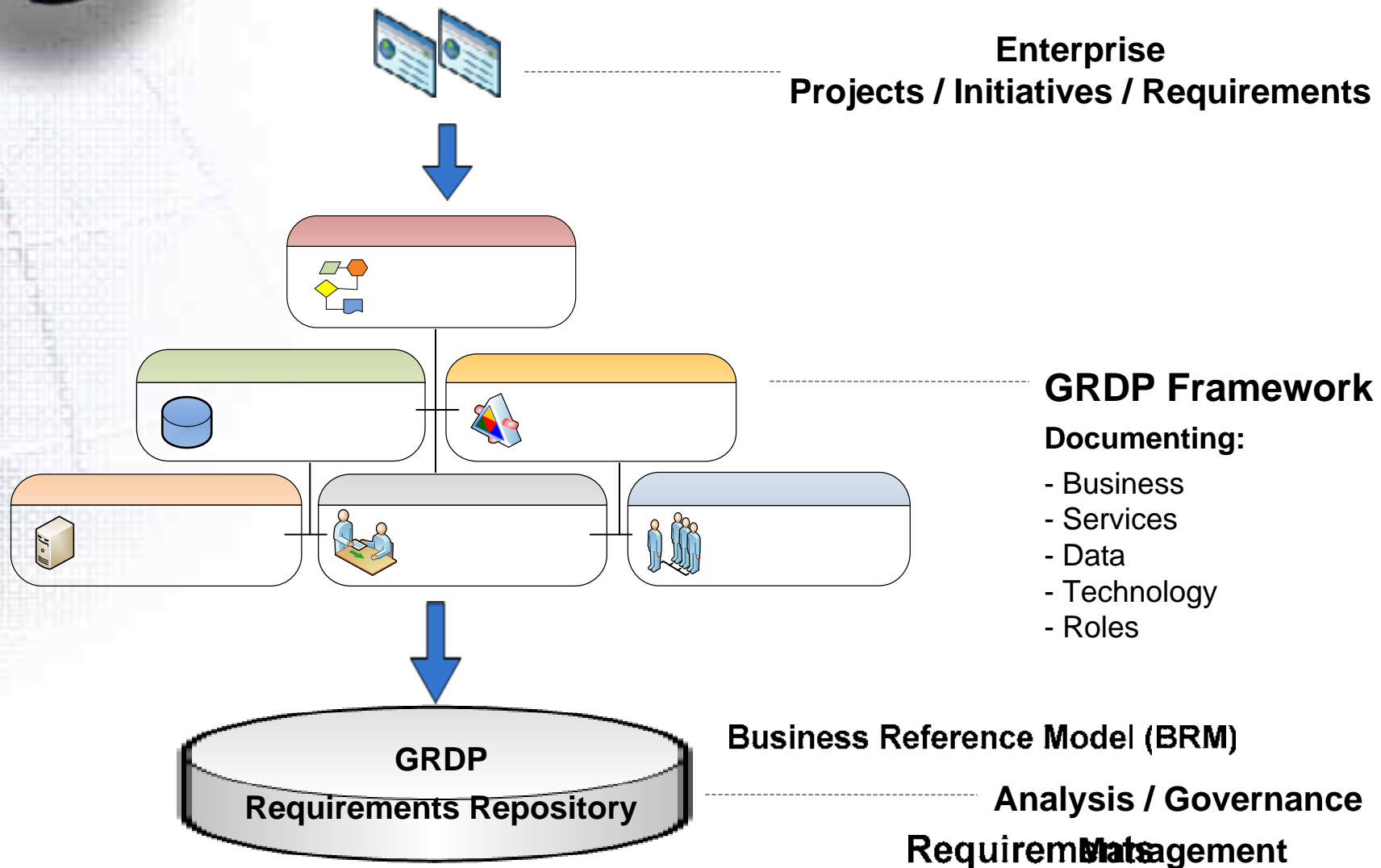
The ANG GIO Geospatial Requirements Definition Process (**GRDP**) is a methodology...for **Defining, Analyzing, Managing & Reporting** requirements...for enterprise geospatial capabilities, services and resources.



GRDP framework is modeled after the Federal Enterprise Architecture

Business Reference Model

GRDP...Project Requirements Framework





GRDP Models Defined

- The Business need for geospatial services
- Requirements tied to Lines of Business
- Business Drivers, Policy, Guidance

- Required Services to support the Mission
- Ex: Education & Training, Geo Data Management

- Documenting Required Data to support the Mission
- Data Name, Authoritative Source, Data sharing

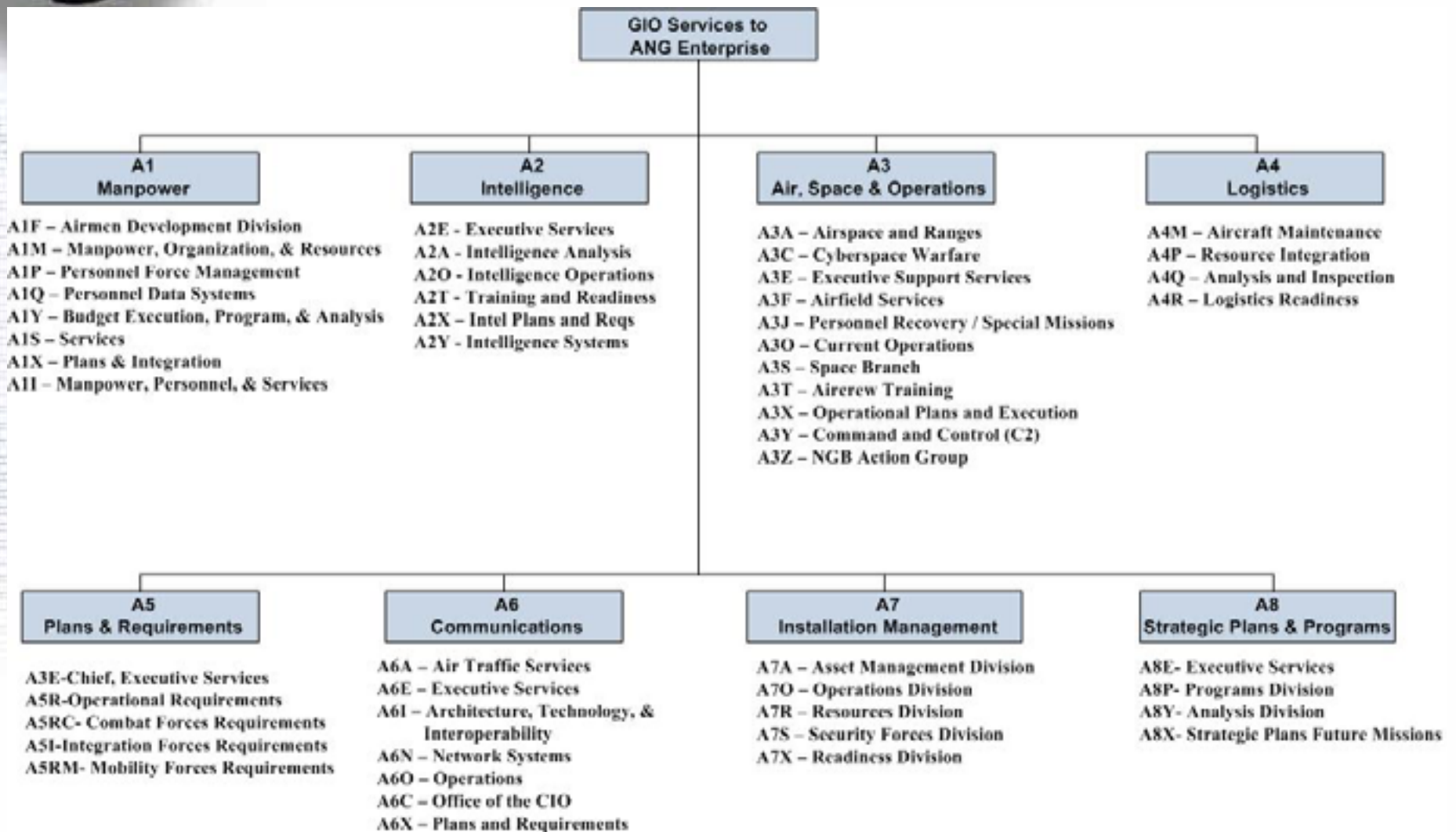
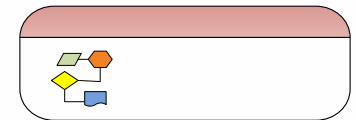
- Technical means to support the Mission
- Ex: 2D Viewer, 3D Viewer, Desktop GIS

- Standardize & Optimize Business Rules
- Identified Performance Improvements
- Performance metrics between LOB

- Identified Roles/Resp. needed to support the Mission
- Ex: Data Maintainer, Trainers, QA/QC

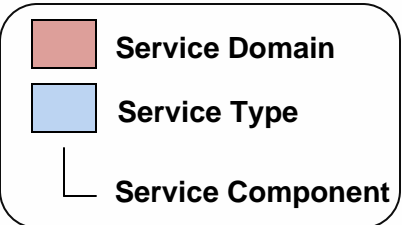
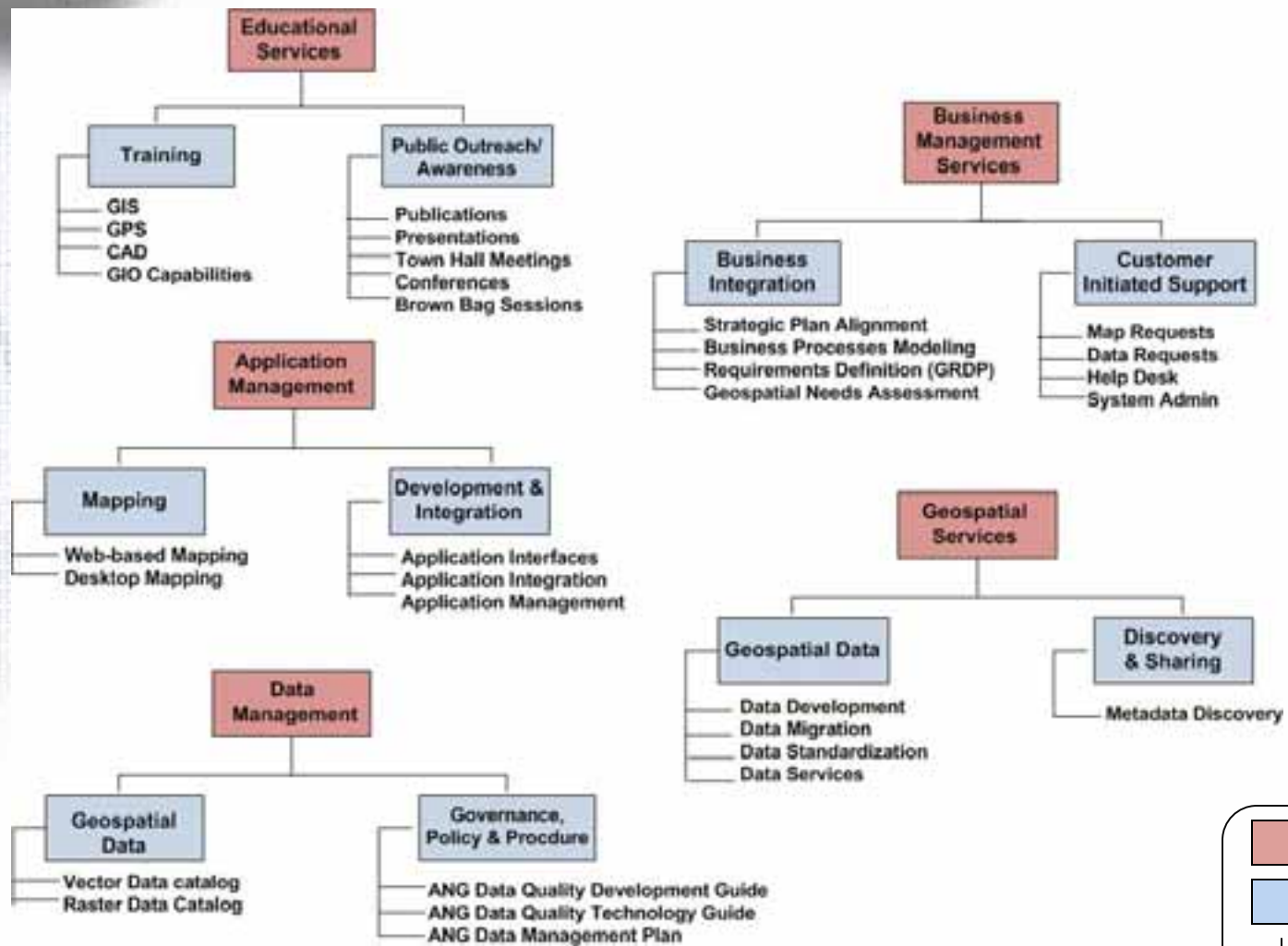


ANG GIO Business Domains (BRM)





ANG GIO Service Domains (SRM)





Data (DRM)

Data is managed & available as an asset to the enterprise, not just for the project that produced it...

Authoritative?

Standardized?

Discoverable?

Accessible?

GRDP Defined

Requirements



Authoritative Data Source



Data Name



Data Description



Data Sharing

SDSFIE 3.0

SDSFIE

Military Operations

Civil Works

ESOH

Installations

Common/Cross-Function Features

Metadata Registry



Web Services



Defined Process

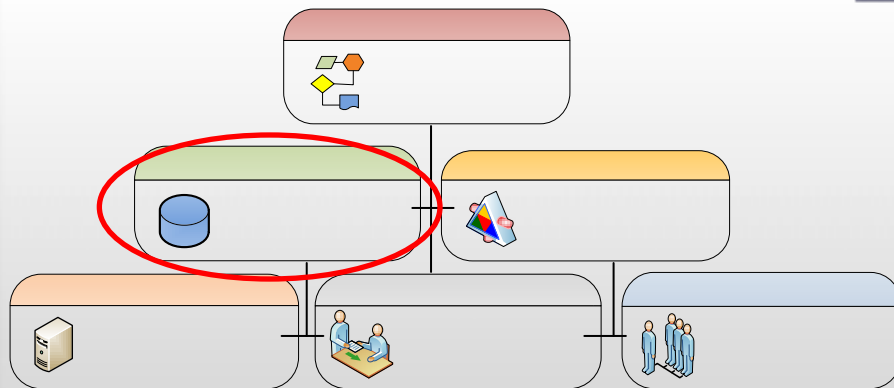


Goal of Data Reference model (DRM)

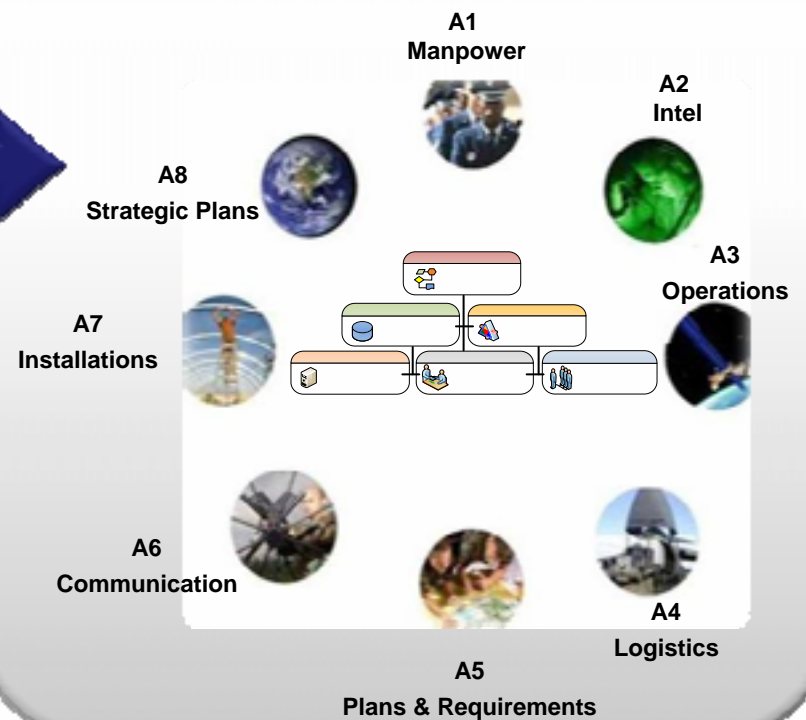
Make data visible
Make data accessible
Make data understandable

Project Level

Emergency Management



Enterprise Level

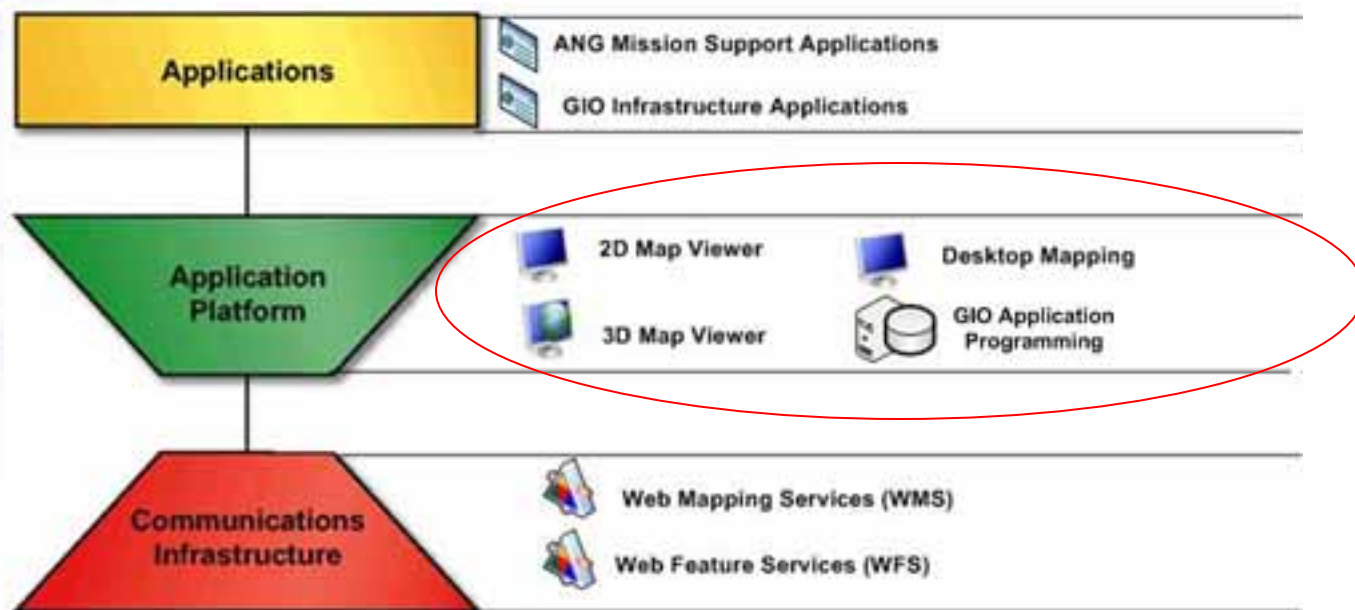




GIO Supported Technology (TRM)



Standards and technologies to support and enable the delivery of Service Components and Capabilities





GRDP Models Defined

- The Business need for geospatial services
- Requirements tied to Lines of Business
- Business Drivers, Policy, Guidance

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- Ex: Education & Training, Geo Data Management

- Documenting Required Data to support the Mission
- Data Name, Authoritative Source, Data sharing

- Technical means to support the Mission
- Ex: 2D Viewer, 3D Viewer, Desktop GIS

Referen

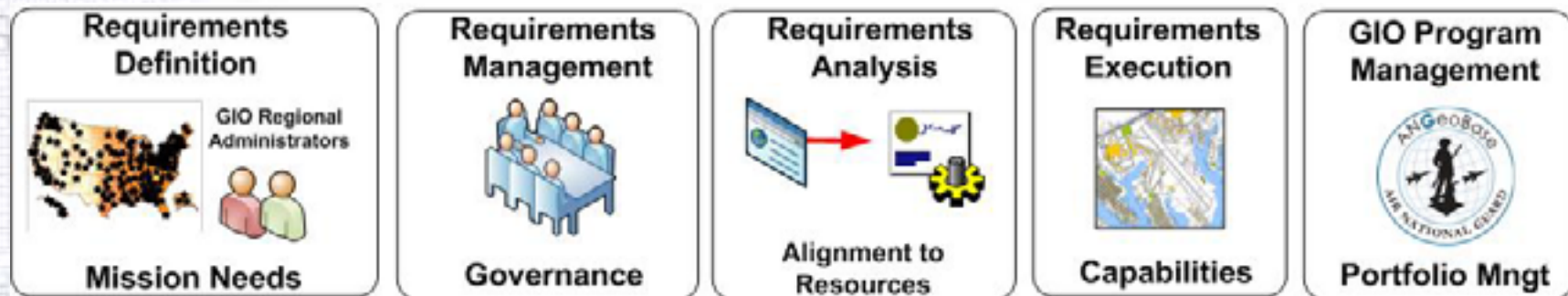
- Standardize & Optimize Business Rules
- Identified Performance Improvements
- Examining Performance metrics between LOB

Req

- Identified Roles/Resp. needed to support the Mission
- Ex: Data Maintainer, Trainers, QA/QC



GRDP Phases

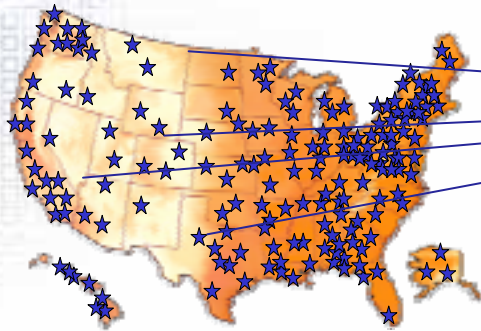




GRDP Requirements Definition

-Translating requirements into the (GRDP) Framework

Over 100 ANG installations/sites
With requirements for GI&S



5 Regional GIO
Administrators

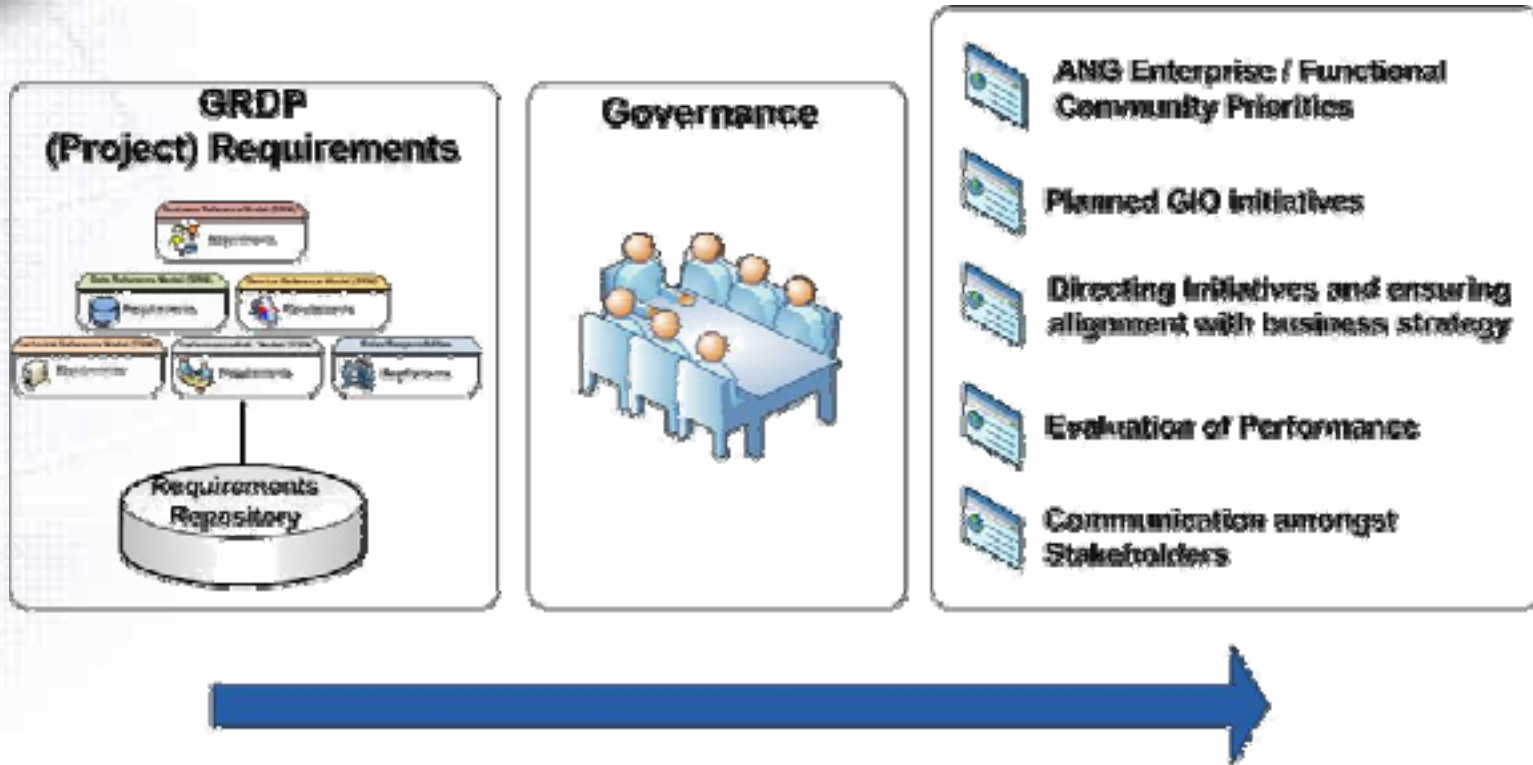


GRDP's
(Enterprise Requirements)





GRDP Requirements Management

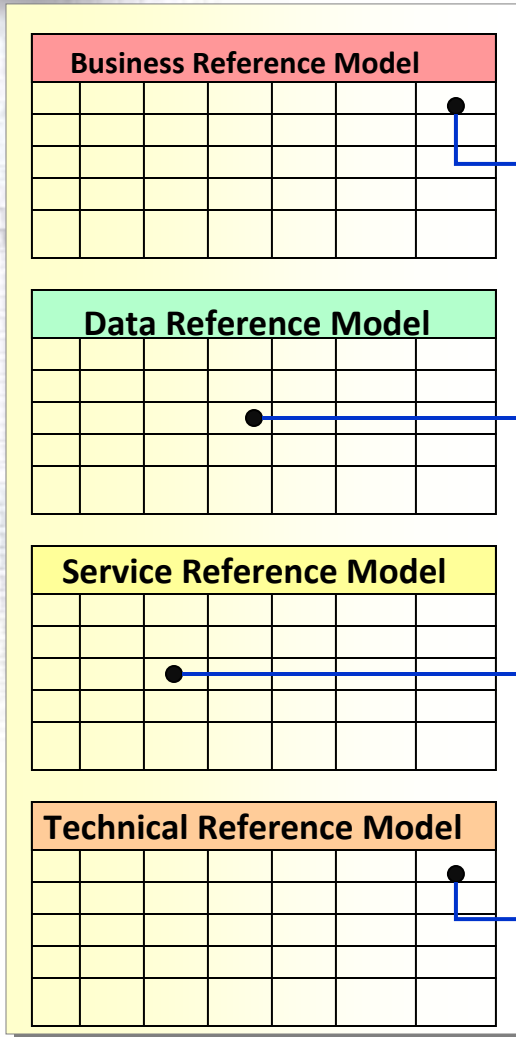


- Transparency...publish requirements for the ANG enterprise to see
- Validate....what will the ANG GIO will focus on

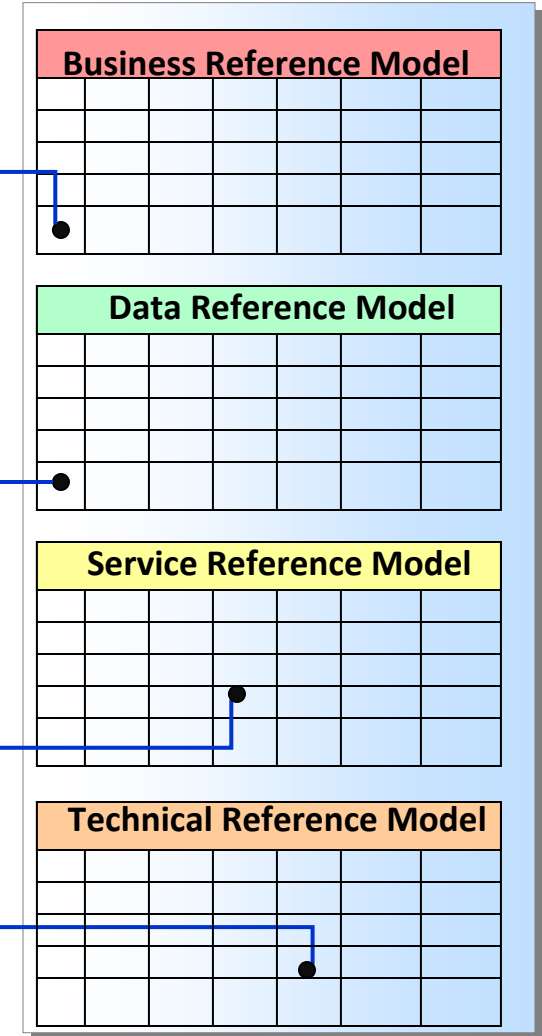


GRDP Requirements Analysis

A4 Logistics



A3 Operations



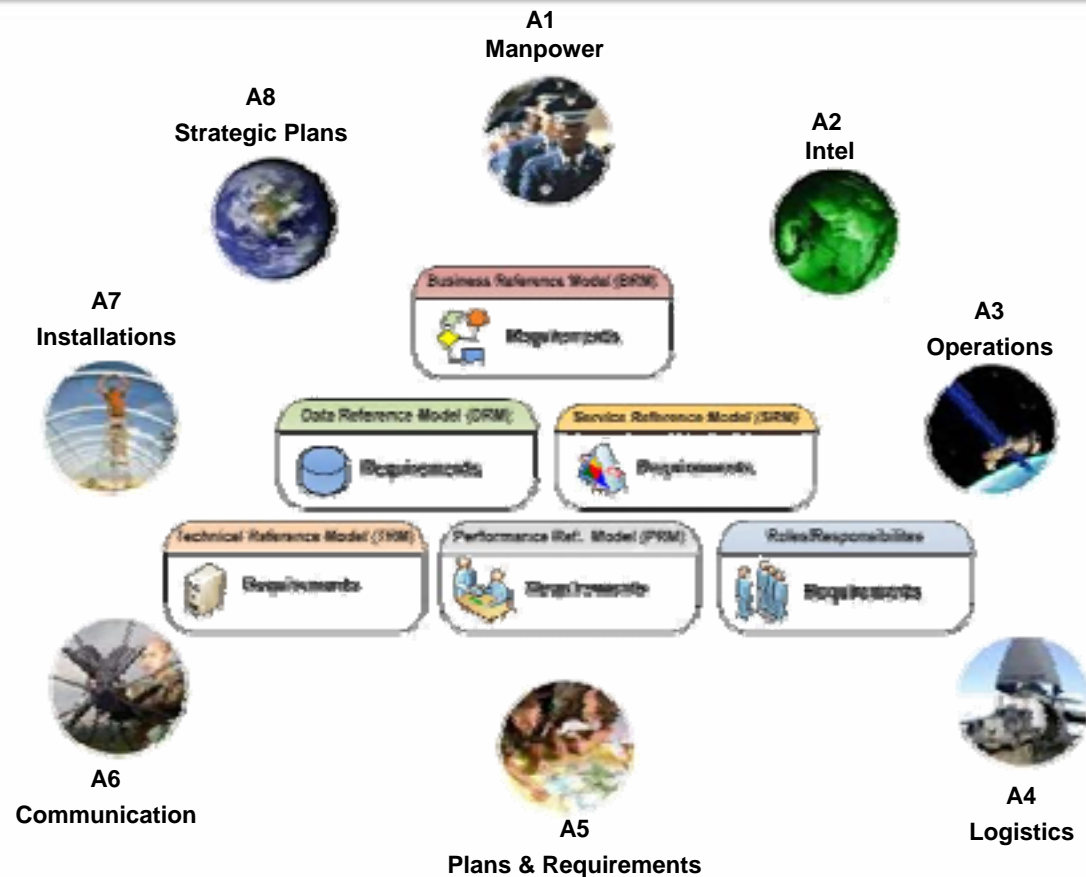
Identifying Common Business Needs

Identifying Common Data Requirements

Identifying Common Service Needs

Identifying Common Technical Requirements

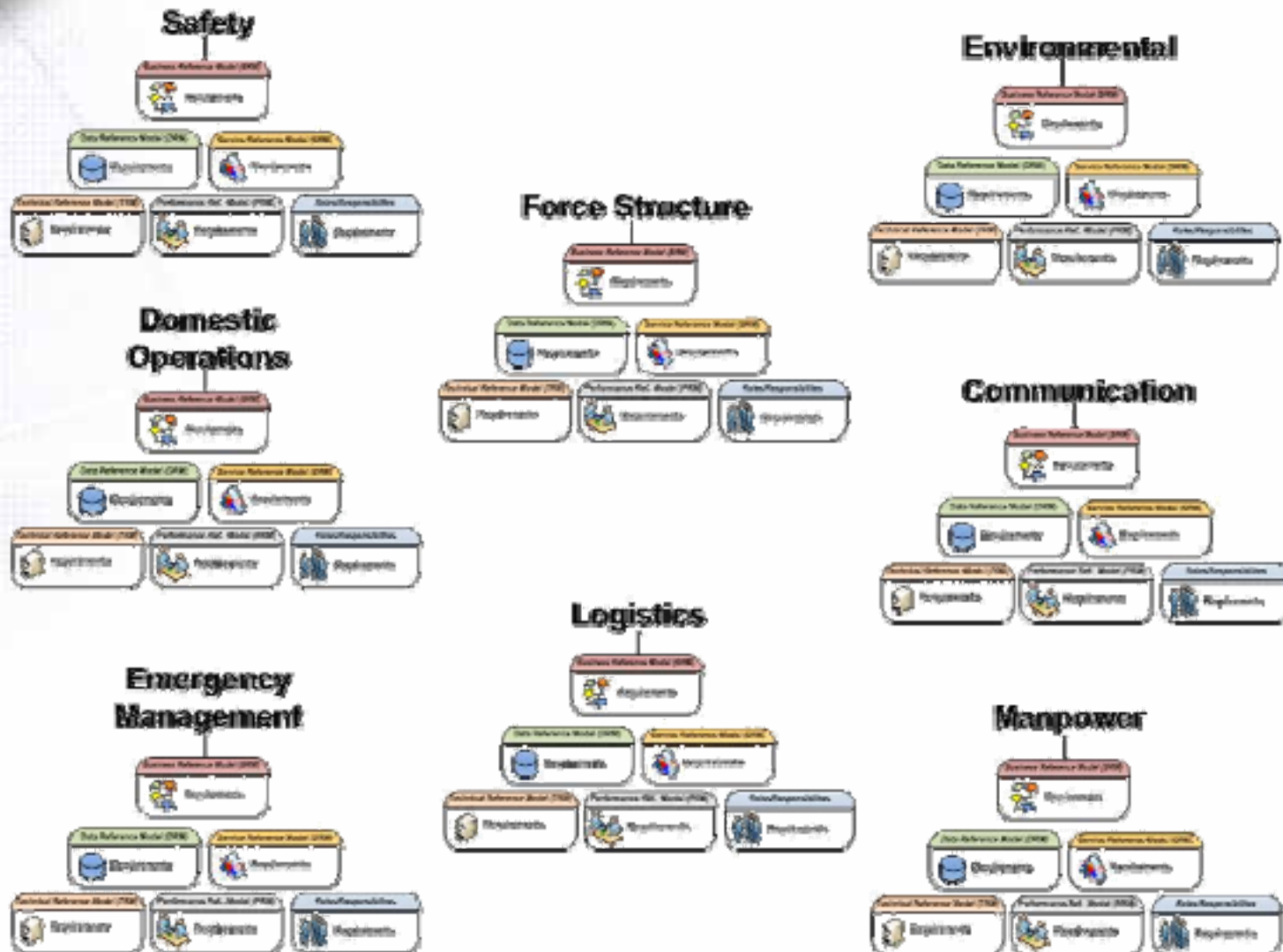
GRDP...Managing the GIO Portfolio



- Managing the capabilities that are supporting the missions
- Investing in technologies that are aligned to business needs / mission support
- Identifying the Corporate Bill to pay such as...shared data development & maintenance

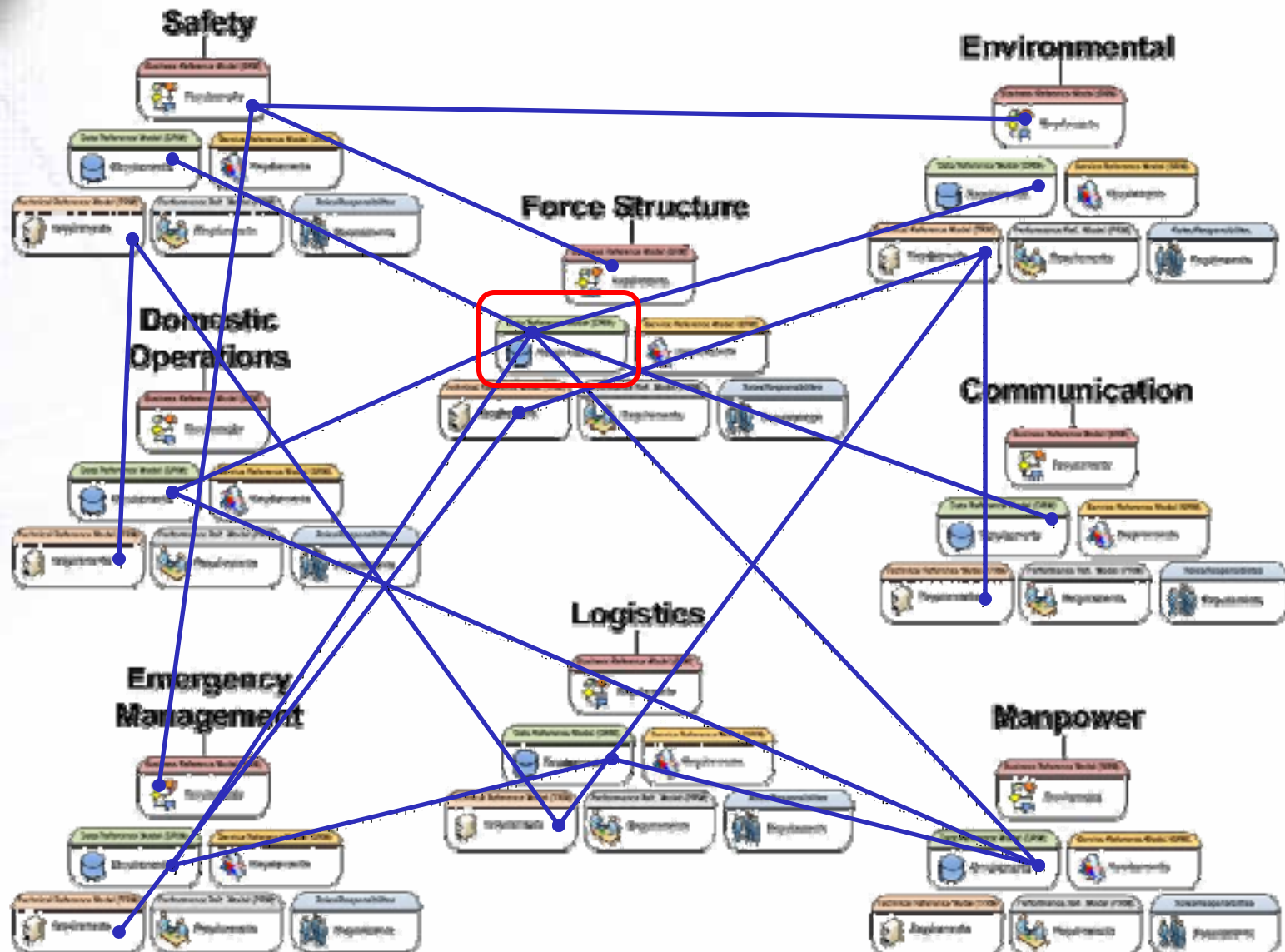


GRDP...How does the GIO define Support?



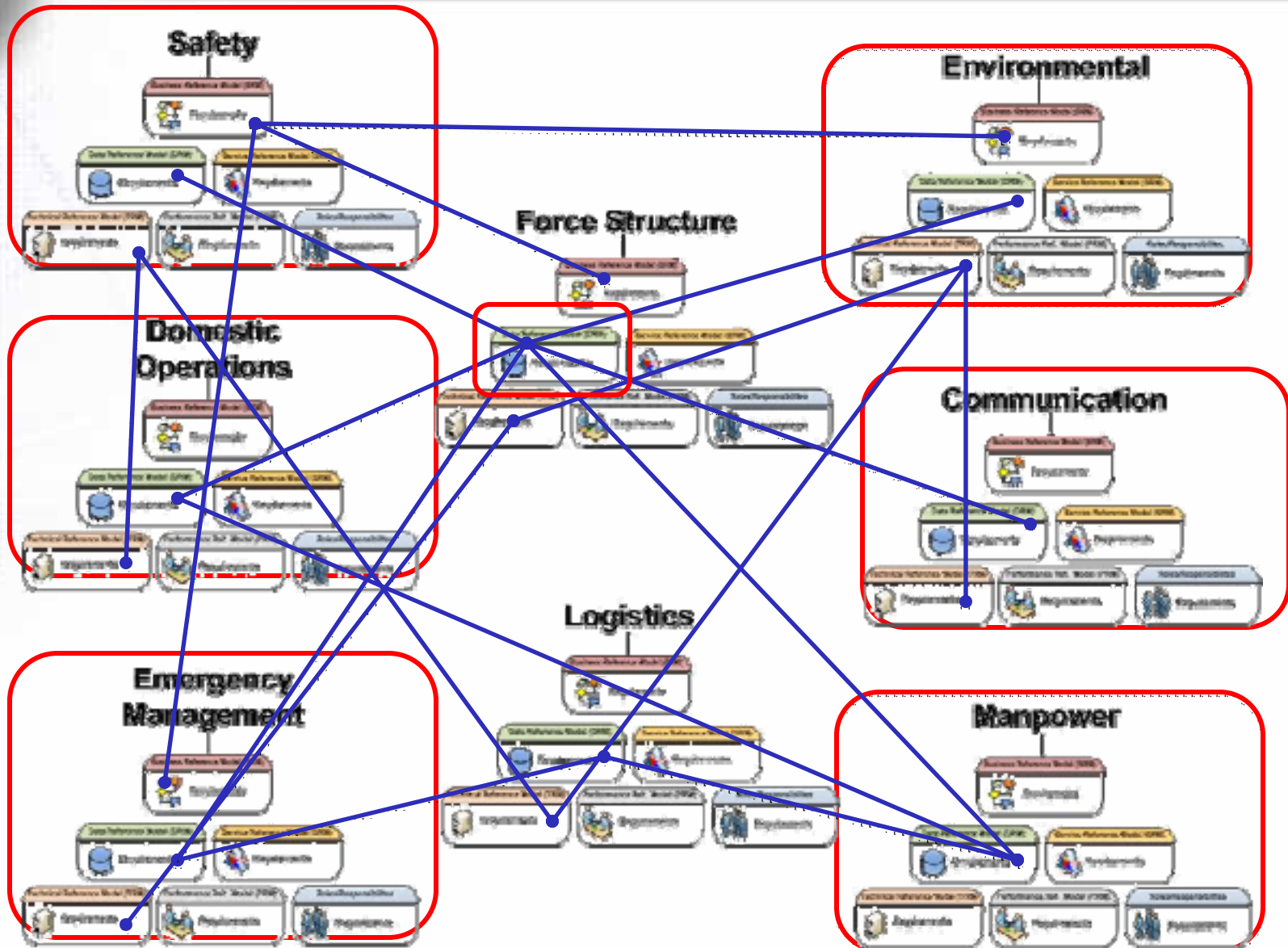


GRDP...How does the GIO define Support? Commonality between Force Structure & Emergency Management?





GRDP...How does the GIO define Support? Commonality between Force Structure & Emergency Management?



Web-based access to input, Analyze & Publish Requirements

The screenshot displays the GEOBASE Air National Guard web application. The top navigation bar includes links for Home, Program, Services, Mapping & Data, Training, GIO, and GRDP. The GRDP link is highlighted with a red circle. Below the navigation bar, a breadcrumb trail shows 'You Are Here: GRDP'. The main content area is titled 'GRDP Home' and contains a description of the Geospatial Requirements Definition Process (GRDP). Below the description, there are four interactive buttons: 'Add New Project' (with a bar chart icon), 'Search Projects' (with a magnifying glass icon), 'Project Reports' (with a bar chart and database icon), and 'Admin Tools' (with a wrench and screwdriver icon).

GEOBASE
Air National Guard

ANG Enterprise Mapping Capability


Home Program Services Mapping & Data Training GIO **GRDP** Web Site


You Are Here: GRDP


GRDP Home


GRDP Home Page

The Geospatial Requirements Definition Process (GRDP) is a methodology used by the ANG GIO for capturing, analyzing, and managing t ANG enterprise for geospatial capabilities, services and resources.

 Add New Project

 Search Projects

 Project Reports

 Admin Tools



GEOBASE
Air National Guard

ANG Enterprise Mapping Capability

Home

Program

Services

Mapping & Data

Training

GIO

GRDP

Web Site

Edit Project

Show Requirements by Spiral Level:

[View Project HomePage](#)

Business Reference Model

Business Description	Upload Content	Spiral Level	Mark for deletion
<p>Line of Business: A3 Operations <small>(Select a Line of Business)</small></p> <p>Business Domain: A3A_Airspace & Ranges <small>(Select a Business Domain)</small></p> <p>Description: A3A POCs: John D. Steinbicker, LtCol, USAF Chief, Airspace Branch ACMI / EW / DMO Program Manager <small>(Enter Business Reference Model Description)</small></p>	<p><input type="text"/> <input type="button" value="Browse..."/></p> <p><small>(Select a file to upload)</small></p> <div></div>	<p>01 <small>(Select a Spiral Level)</small></p>	<p><input type="checkbox"/> <small>(Select the box to remove the row)</small></p>
<p>Line of Business: A3 Operations <small>(Select a Line of Business)</small></p> <p>Business Domain: A3A_Airspace & Ranges <small>(Select a Business Domain)</small></p> <p>Description: The Air National Guard A3A division has</p>	<p><input type="text"/> <input type="button" value="Browse..."/></p> <p><small>(Select a file to upload)</small></p> <div></div>	<p>01 <small>(Select a Spiral Level)</small></p>	<p><input type="checkbox"/> <small>(Select the box to remove the row)</small></p>



ANG Enterprise Mapping Capability

You Are Here: [GRDP](#) > [Projects](#) > [Add Project](#)

Add Project

Service Reference Model

<u>Service Domain</u>	<u>Service Description</u>	<u>Upload Content</u>	<u>Spiral Level</u>	<u>Mark for deletion</u>
(select Service Domain) <div>Management Services</div>	<div></div> (Enter Service Reference Model Description)	<div></div> (Select a file to upload) <div></div>	01 (Select a Spiral Level)	<input type="checkbox"/> (Select the box to remove the row)



Garrison

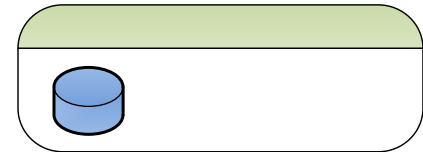


Domestic Ops



Expeditionary





ANG Enterprise Mapping Capability

November

Home

Program

Services

Mapping & Data

Training

GIO

GRDP



Web



Site

You Are Here: [GRDP](#) > [Projects](#) > [Add Project](#)

Add Project

Show Requirements by Spiral Level:

Data Reference Model

<u>Data Domain</u>	<u>Data Name</u>	<u>Data Description</u>	<u>Data Source</u>	<u>Upload Content</u>
<input type="text"/> <div>Airspace & Ranges Data ANG CIP Data ANG GIO Data Appliance ANG Sites ARNG Sites Communications Data Cultural & Natural Resource Data DoD Installations Domestic Operations Data Emergency Management Data Energy Data Environmental Data</div>	<input type="text"/> (Enter a Data Name)	<input type="text"/> (Enter a Data Description)	<input type="text"/> (Enter a Data Source)	<input type="text"/> (Select a file to upload) <input type="button" value="Browse"/>



ANG Enterprise Mapping Capability

Steven Kestler

Home

Program

Services

Mapping & Data

Training

GIO

GRDP

Web Site

You Are Here: [GRDP](#) > [Projects](#) > [Search](#) > [By Project Details](#)



Search Projects by Project Details

Filter by Spiral Level:

☒ Show Business Reference Models

☒ Show Service Reference Models

☒ Hide Data Reference Models

A8 Strategic Planning Project

Data Domain	Data Name	Data Description		Data Source	Spiral Level	Uploaded Contents
Strategic Planning Data	Future Missions Database	The Future Missions Database (FMD) is stored on ANG SQL Server. See attached Word Document for Data Structure	<input type="button" value="Up"/> <input type="button" value="Down"/>	A8	01	(Click the link below to download the file) Tables and Definitions for the FMD Database.doc
ANG Sites	ANG Sites	Point File showing the location of ANG installations	<input type="button" value="Up"/> <input type="button" value="Down"/>	GIO	01	
FEMA Regions	FEMA Regions	Polygon file showing the location of the US FEMA Regions	<input type="button" value="Up"/> <input type="button" value="Down"/>	HSIP	01	
DoD Sites	DoD Sites	Point file showing the location of DoD sites	<input type="button" value="Up"/> <input type="button" value="Down"/>	HSIP	01	

☒ Show Technical Reference Models

☒ Show Roles & Responsibilities Models

☒ Show Performance Reference Models

DRM Section of each Project defines the Mission Datasets (MDS)



ANG Enterprise Mapping Capability

Greg Turner

February 19, 2010

Home

Data Management

Mapping

Training & Support

About Us

GIO

GRDP

Web Site

search

You Are Here: [GRDP](#) > [Projects](#) > [Search](#) > [By Project Details](#)

Edit Project

Show Requirements by Spiral Level:

[View Project HomePage](#)

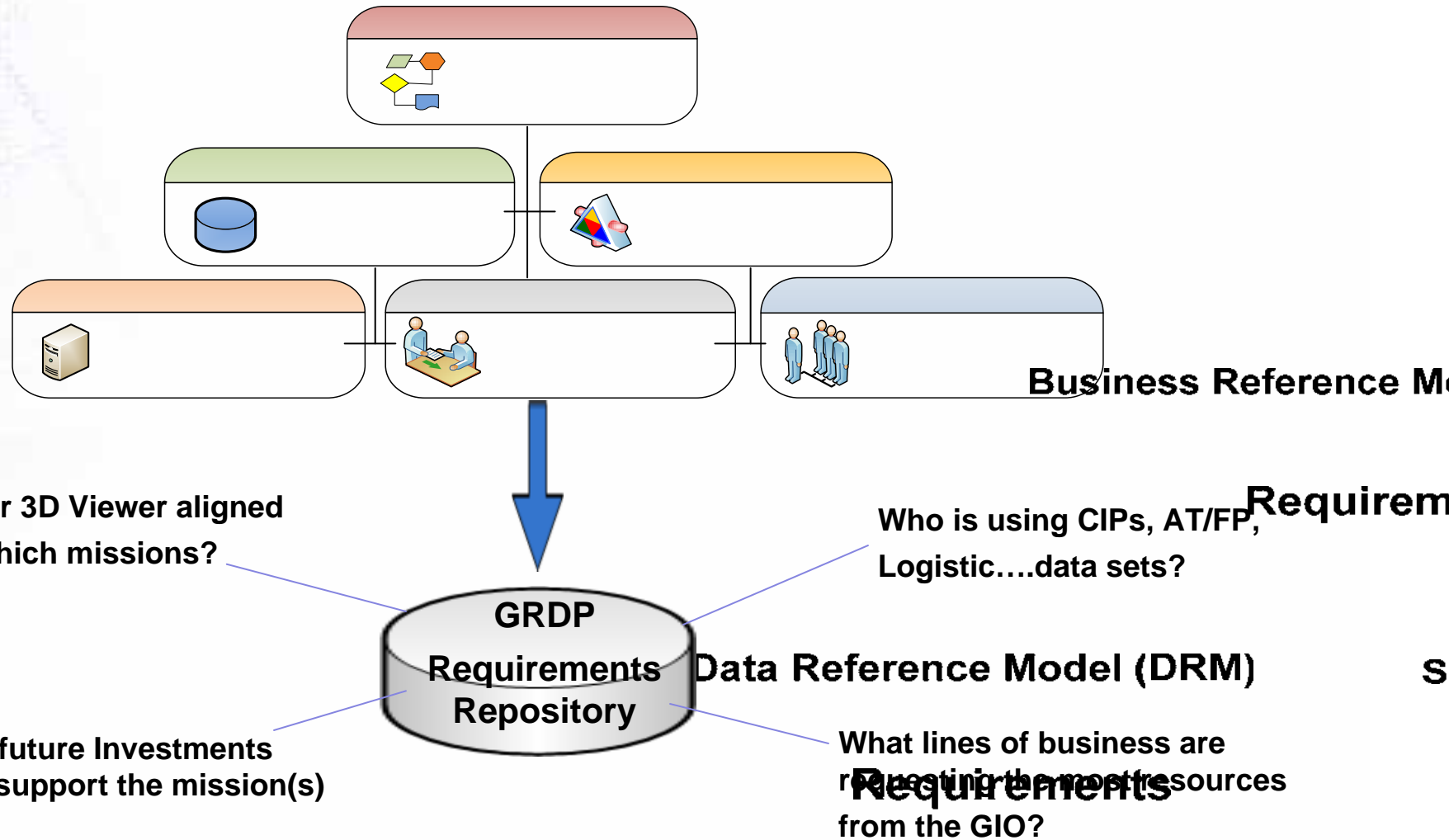
Technical Reference Model

Technical Domain	Description	Upload Content	Spiral Level	Mark for deletion
3D ArcExplorer Map Viewer	A3A requires the ArcExplorer 3D viewer with customized search/query tools to locate and zoom-to feature locations. (Enter Technical Reference Model Description)	<input type="text"/> Browse... (Select a file to upload) A3A_GRDP_SP1_StoryBoards.doc	01 (Select a Spiral Level)	<input type="checkbox"/> (Select the box to remove the row)

Add Delete Save current page



GRDP Reporting

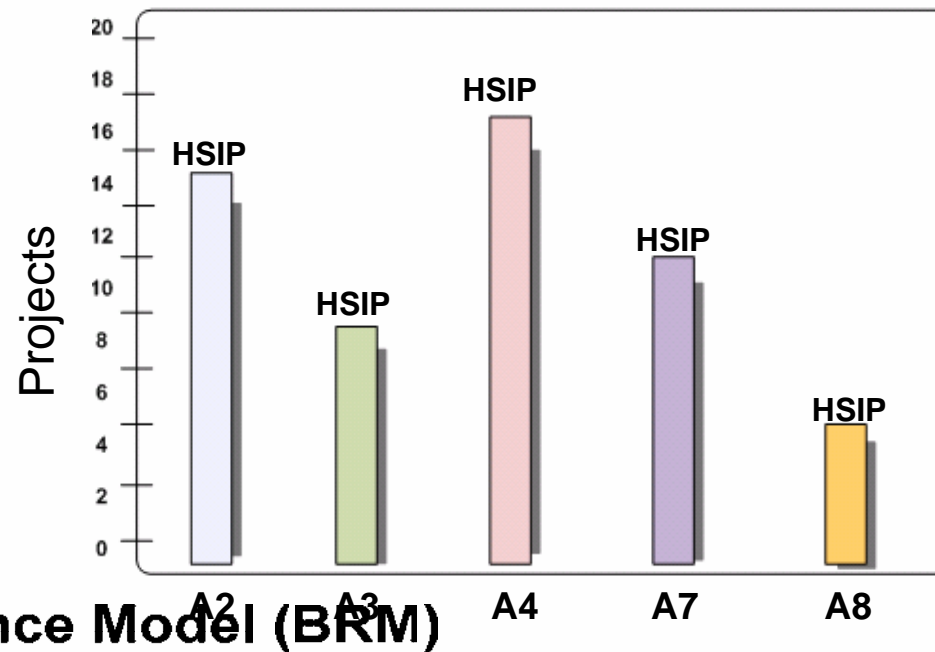
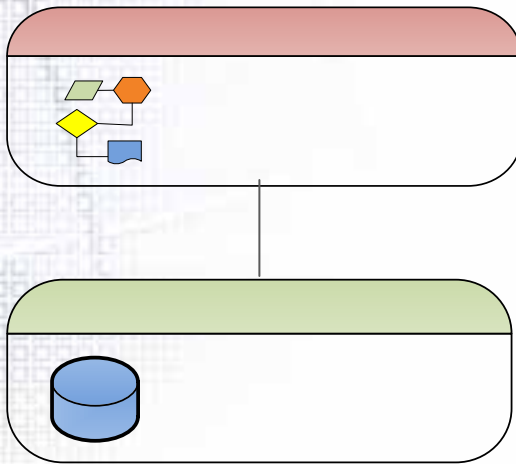




Querying the GRDP Framework

What ANG lines of business have the requirement for:

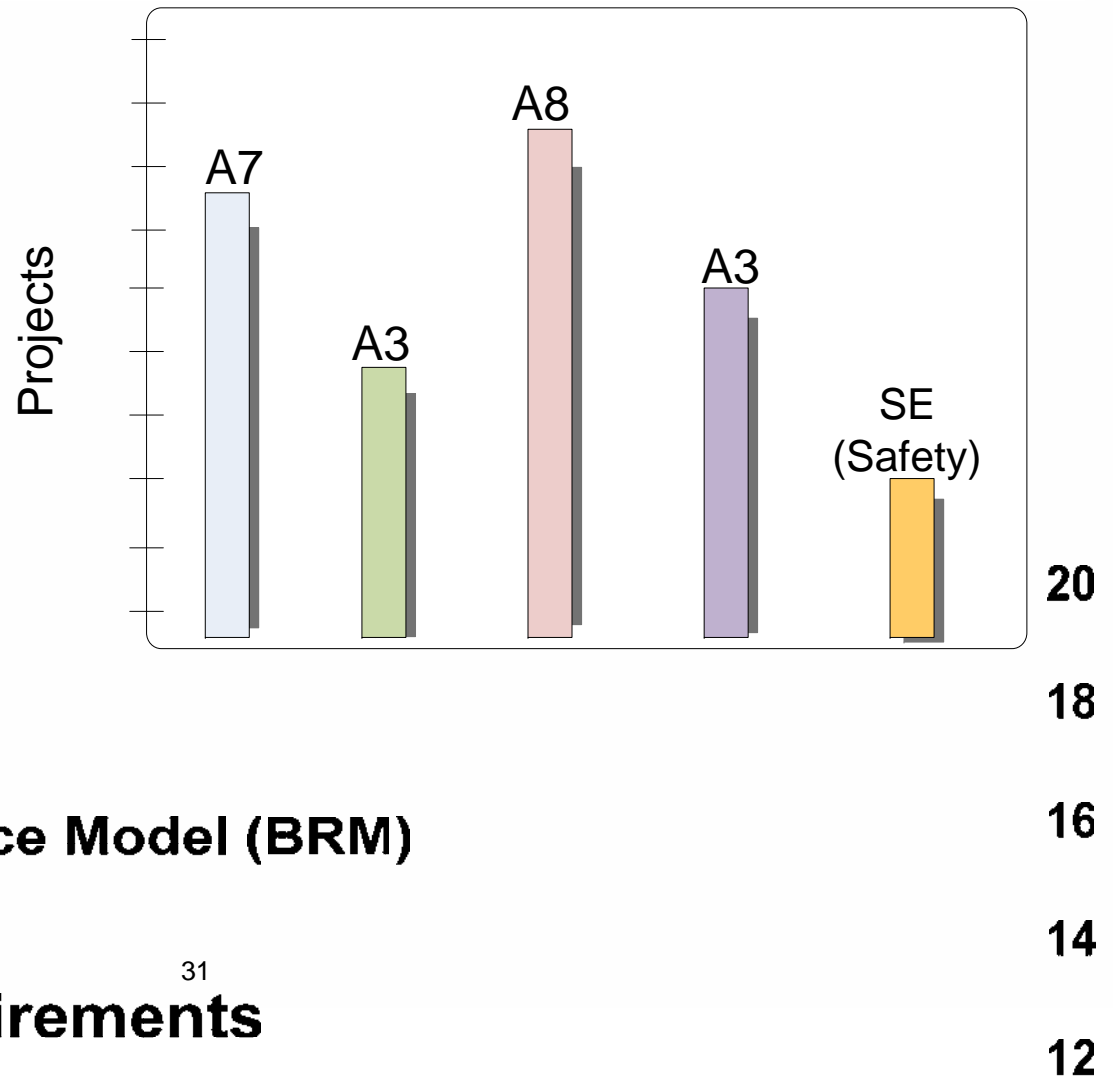
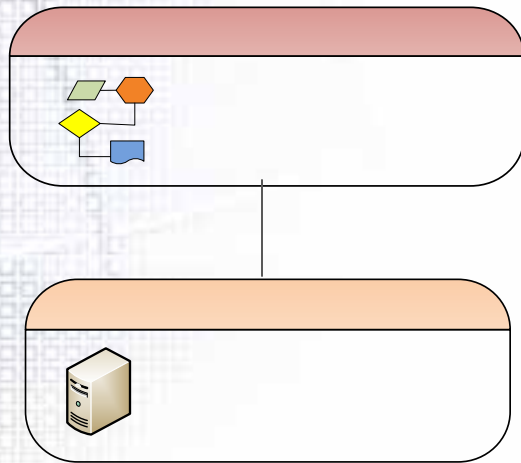
- HSIP Data
- CIP Data
- Force Structure Data





Enterprise Geospatial Technology

What GIO Supported Technology is utilized most & by whom?



Business Reference Model (BRM)

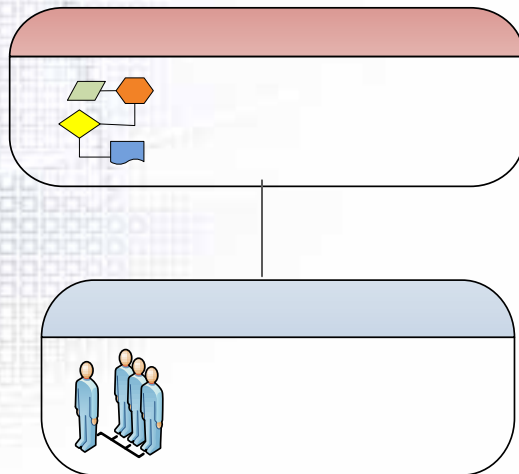
31
Requirements



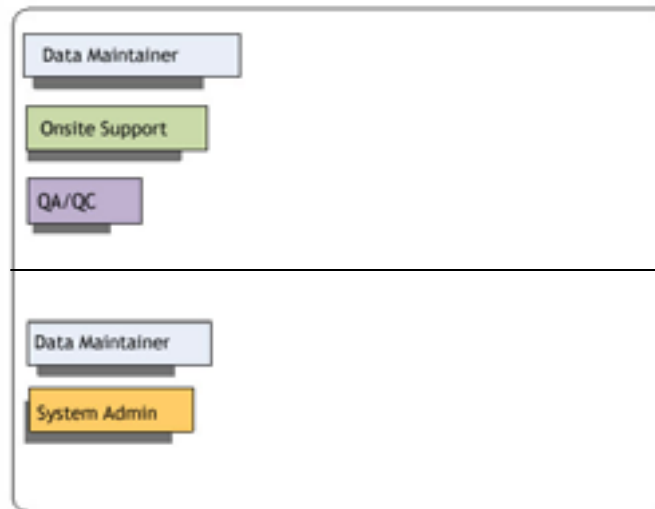
Enterprise Roles/Resp requirements

What geospatial projects or lines of business have the requirement for:

- Spatial Data Maintainers
- Spatial Data Developers
- System Administrators

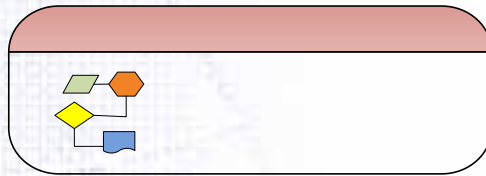


A7

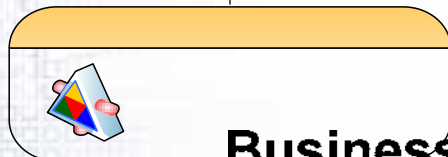




Business & Services supported by technology

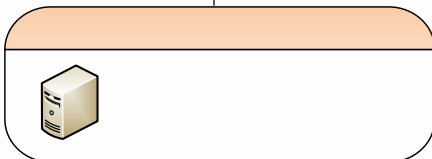


- A3A Airspace & Ranges
- A8 Force Structure
- A7 Asset Management



GIO Application Management Services

Business Reference Model (BRM)



Requirements

ArcGIS Server 9.2
(Flex Viewer)



GRDP Benefits

Capture & Define Needs



Capturing Requirements in a distributed environment

- Consistent
- Standardized
- published for all stakeholders to view

Analyze



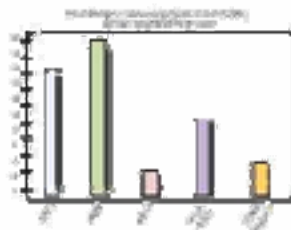
- Analyzing requirements via a methodology / framework:
- Alignment of requirements to resources
- analyzing connectivity between lines of business
- Avoid duplication of efforts (data development, app development)
- Defining requirements into well structured statements

Govern



- Establishing project priorities
- Governing investments and initiatives
- Communication amongst stakeholders
- alignment with business & strategy

Reporting & Management



- Who's using what data?
- What Technology is supporting what missions?
- What business are requesting the most GIO resources?
- What GIO services are requested the most?
- Sharing of resources (software, hardware, maintenance)



Questions ?