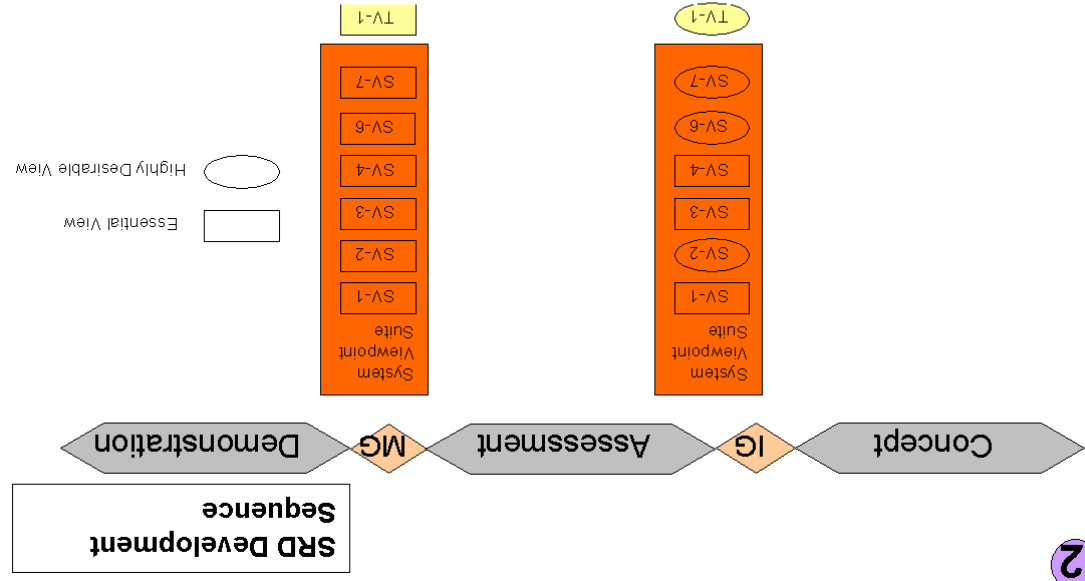


A draft SRD is developed for initial Gate, and the document is refined during the Assessment Stage, producing an agreed version at Main Gate. The diagram above shows how the MODAF Views that support the SRD mature during the acquisition lifecycle. The System Requirements are developed from and must be traceable to the User Requirements; therefore, the main input to this process is the URD document and its related Views.

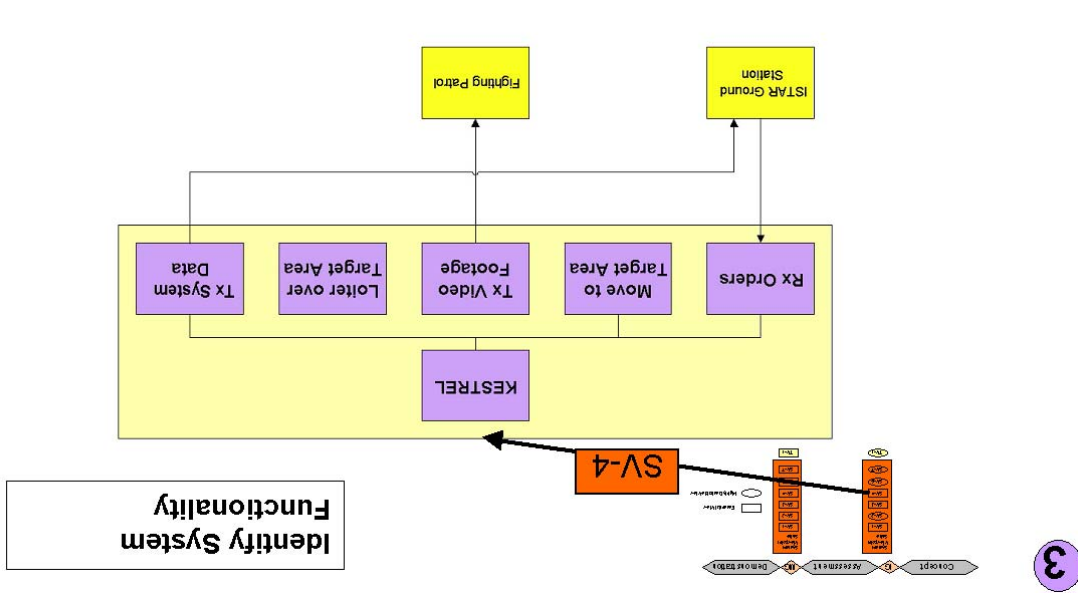


**MODAF Reference Guide**  
**SRD Development** MODAF-M10-008

Prerequisites	1. Establish Intended Use	2. Define Architecture Scope	3. Develop Data Requirements	4. Capture Architecture	5. Conduct Analyses	6. Document Results
<b>MODAF Governance</b>		Inform Central Reg.	Query of Avail. Data Sources	Provide Extant Arch. Data Publish Baseline to MODAR		Publish Final Arch. to MODAR
<b>MODAF Users</b>	User training - MODAF principles Workshop - Bound Architecture Usage	Workshop - Bound Architecture Scope Workshop - Determine Use Cases Plan of Time & Resources	Workshop - Establish Data Needs Data Gathering Plan Tool Selection	Tool-specific Training Baseline Arch. Review	Analysis Review Initial Analysis Final Analysis	Finalised Arch. Review Finalised Architecture
<b>MODAF Resources</b>	MODAF Baseline MODAF Training Material	MODAF Tiger Teams MODAF Help Desk Hybrid View Development	MODAF Tiger Teams MODAF Help Desk Certified Tool List Tool Advice	MODAF Tiger Teams MODAF Help Desk MODAF Taxonomy ERM / M3	MODAF Tiger Teams MODAF Help Desk	MODAF Tiger Teams MODAF Help Desk

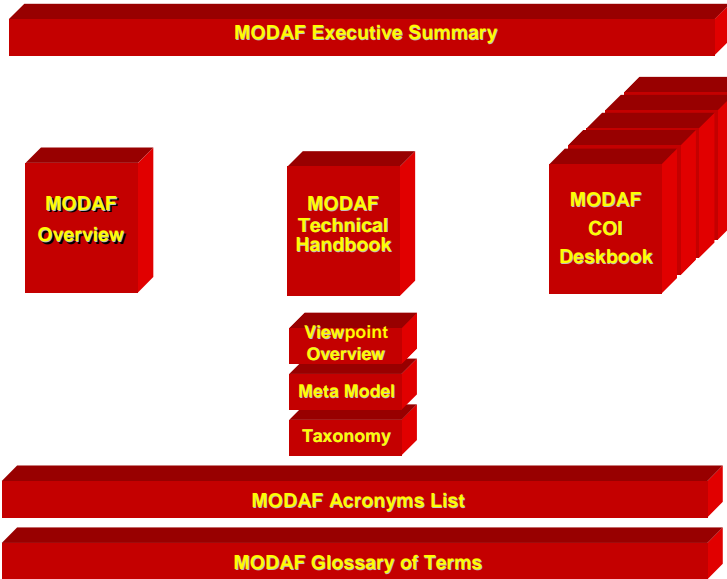
The approach to developing a MODAF-compliant architecture is shown in the diagram above. This shows how a MODAF user within any community in the MOD goes about establishing the intended use, scope and data requirements, developing the architecture, using this to conduct the required analyses and documenting the results. A more detailed description of this six-stage architecture development process is provided in the Overview of MODAF (MODAF-M09-002).

The first step is to derive those functions that need to be implemented within the system, through the essential SV-4 Systems Functionality Description. Analysis of the CV-5 in the URD will provide a key input to this process, to decide which activities are best supported by systems. The SV-4 shall show functional groupings that, depending on the size of the system, may be tendered for separately. It may also be used to identify the data flows required between functions, to enable closely coupled functions to be developed together. Creation of SV-4s requires detailed functional analysis and may usefully be supported by experimentation.



**MODAF Document Hierarchy**

This guide intends to provide the key information about the MOD Architectural Framework (MODAF) Views required for the development of a Systems Requirement Document (SRD). More detailed information can be found in the Acquisition Deskbook, by referencing [www.modaf.com](http://www.modaf.com), or by contacting the DPA Integration Authority



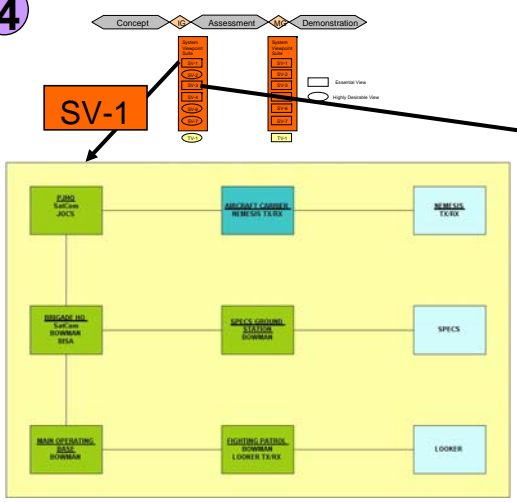
8

3

1

2

4



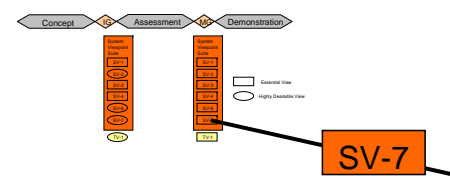
SV-1 Systems Interface Description shows the interfaces that the new system needs to support. It also shows the interdependencies with other systems (and therefore other IPTs and/or suppliers), with which the supplier of the new system will need to co-operate. Additionally, it shows the nodes to which the supplier needs to deliver systems, and supports an understanding of its fit within the Concept of Operations (ConOps)

### Identify Required Interfaces

	SAT COMM	BOWMAN	BDE HQ COMMS	PUJO COMMS	AIRCRAFT CARRIER	ISTAR GROUND STATION	REMESIS	SPECS 7	REMESIS
REMESIS		X	X						
SPECS 7				X	X	X			
REMESIS		X	X	X	X				
ISTAR GROUND STATION		X	X						
AIRCRAFT CARRIER		X		X					
PUJO COMMS		X	X						
BDE HQ COMMS		X	X						
BOWMAN									
SAT COMM									

SV-3 System to System Matrix identifies which of the potential communications paths shown graphically in SV-1 form the key system to system interfaces, presenting them in a matrix format to identify all required interfaces

6

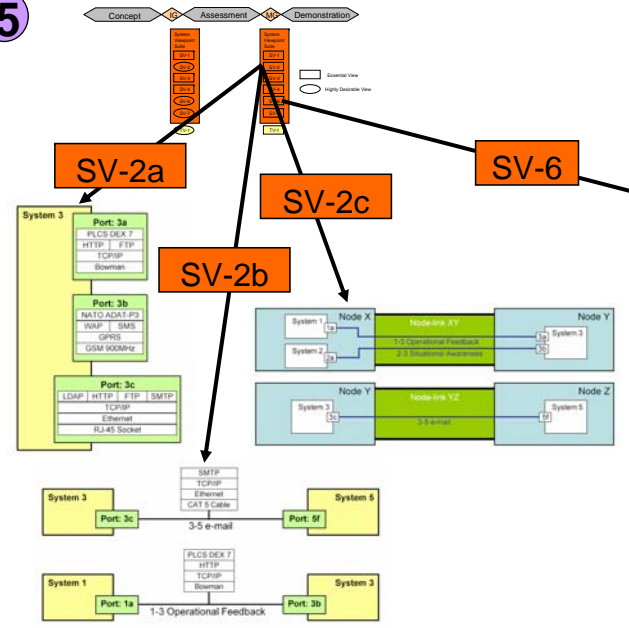


### Specify Performance Requirements

System Name	Performance Range (Threshold and Objective) Measures		
	Architecture Time Period	Time <sub>1</sub>	Time <sub>2</sub> (Target Architecture Time Period)
<b>Hardware Element 1</b>			
Maintainability			
Availability			
System Initialization Time			
Architecture data Transfer Rate			
Program Restart Time			
<b>S/W Element 1 / H/W Element 1</b>			
Architecture Data Capacity (e.g., throughput or # of input types)			
Automatic Processing Responses (by input type, # processed/unit time)			
Operator Interaction Response Times (by type)			
Availability			
Effectiveness			
Mean Time Between S/W Failures			
Organic Training			
<b>S/W Element 2 / H/W Element 1</b>			
<b>Hardware Element 2</b>			

The operational performance requirements articulated in OV-1c form part of the basis for system performance requirements development. The system performance requirements are captured in SV-7

5



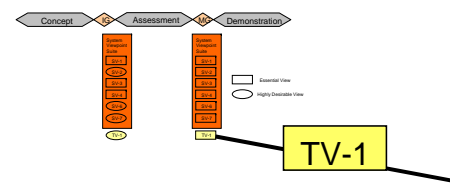
### Specify Interface Connections

IER No.	Sender	Receiver	Content	Media	Info Char	Format	Security	Freq	Timeliness	Thru put
1	020000	0200	Transfer Data	LAN	020000	020000	020000	020000	020000	020000
2	020000	020000	Transfer Data	LAN	020000	020000	020000	020000	020000	020000
3	020000	0200	Message	LAN	020000	020000	020000	020000	020000	020000
4	0200	020000	Transfer Data	LAN	020000	020000	020000	020000	020000	020000
5	0200	020000	Transfer Data	LAN	020000	020000	020000	020000	020000	020000
6	020000	0200	Transfer Data	LAN	020000	020000	020000	020000	020000	020000
7	0200	0200	Transfer Data	LAN	020000	020000	020000	020000	020000	020000
8	020000	020000	Transfer Data	LAN	020000	020000	020000	020000	020000	020000
9	0200	0200	Transfer Data	LAN	020000	020000	020000	020000	020000	020000
10	0200	0200	Transfer Data	LAN	020000	020000	020000	020000	020000	020000
11	0200	0200	Transfer Data	LAN	020000	020000	020000	020000	020000	020000
12	0200	0200	Transfer Data	LAN	020000	020000	020000	020000	020000	020000
13	020000	020000	Transfer Data	LAN	020000	020000	020000	020000	020000	020000
14	0200	0200	Transfer Data	LAN	020000	020000	020000	020000	020000	020000
15	0200	0200	Transfer Data	LAN	020000	020000	020000	020000	020000	020000
16	020000	020000	Transfer Data	LAN	020000	020000	020000	020000	020000	020000
17	0200	0200	Transfer Data	LAN	020000	020000	020000	020000	020000	020000
18	0200	0200	Transfer Data	LAN	020000	020000	020000	020000	020000	020000
19	020000	020000	Transfer Data	LAN	020000	020000	020000	020000	020000	020000
20	020000	020000	Transfer Data	LAN	020000	020000	020000	020000	020000	020000

SV-6 Systems Data Exchange Matrix shows the characteristics of the data that will be sent over the interface connections identified in SV-1 and SV-3. This enables network capacity analysis to ensure that the network will have the required bandwidth available to support these interface requirements and may be used to support the development of the system data models

SV-2 consists of several sub-Views, shown above. These are all key Views to specify and assure interoperability between systems. They specify the network protocols at each network layer; show the compatibility of these protocols between interfacing systems; and show how these interfacing systems can be logically grouped into nodes, to reduce the number of point-to-point connections required

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### Specify Technical Constraints

Service Area	Service	System Elements	Standard / Policy
Data Transfer	TCP/IP	BOWMAN	IP v6
Messaging	Email	BISA / Comms	MS Outlook Compliant JSP 324
Operating Systems	Workstations	BISA / Control Stations	
Data Interchange	Interoperability		OMG XMI 2.1

TV-1 is essential to be refined during SRD development to define the system constraints, to ensure the system conforms to the standards and protocols that will enable interoperability. TV-1 will evolve throughout CADMID cycle. The core constraints will be identified by Customer 1 in the URD, then the project specific constraints added through the SRD development work by Main Gate. It is expected that many of the core constraints within a capability's TV-1 will be derived from the core set of the JSP 600 series which define the standards required to converge with DII and in the longer term towards NEC