

# MINISTRY OF DEFENCE



## MOD Architectural Framework

### Glossary Of Terms

Version 1.0

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Prepared by:-



Approved by:- MODAF Project Review Board

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## RECORD OF CHANGES

This page will be updated and re-issued with each amendment. It provides an authorisation for the amendment and a checklist to the current amendment number.

Issue No.	Date	Revision Details
Version 1.0	31 August 2005	First MODAF Baseline release

### **Disclaimer**

*Following review it has been decided that, to better reflect its intended audience and to avoid confusion with the Acquisition Process, the Acquisition Community of Interest (COI) Deskbook is to be renamed the Integrated Project Team (IPT) COI Deskbook. This change is immediate; all references in the MODAF documentation to the Acquisition COI Deskbook should be interpreted as the Integrated Project Team COI Deskbook. This change will be reflected in the MODAF documentation at the next update.*

## GLOSSARY OF TERMS

This glossary defines terms that have been widely used in the context of MODAF and Enterprise Architecture. Where terms are not defined, the ordinary dictionary usage should be assumed. Where applicable the comments column identifies known sources for the definition and expansions on the definitions.

Term	Definition	Comment
<b>Architectural Element</b>	An instance or configuration of a discrete architectural feature.	
<b>Architectural Product</b>	A connected and coherent set of <b>Architectural Elements</b> which conform to a <b>View</b>	
<b>Architecture</b>	The structure of components, their interrelationships, and the principles and guidelines governing their design and evolution over time.	Source – IEEE 1471
<b>Attribute</b>	A property or characteristic, or a testable or measurable characteristic that describes an aspect of an <b>entity</b> or an <b>object</b> .	
<b>Capability</b>	<p>The ability to execute a specified course of action. It is defined by a user and expressed in non-equipment based operational terms.</p> <p>Sometimes it is also necessary to distinguish between a required capability (ie what is sought) and the fielded capability (ie the currently available capability that consists of equipment and the supporting lines of development)</p>	In MODAF, the term Capability refers to 'Military Capability' including all DloDs; rather than 'Equipment Capability' that refers solely to the capability of the equipment, system or system of systems.
<b>Data</b>	A representation of individual facts, concepts or instructions in a manner suitable for communication, interpretation or processing by humans or by automatic means.	Source IEEE 610.12
<b>Enterprise</b>	<p>The term enterprise can be defined in one of two ways. The first is when the entity being considered is tightly bounded and directed by a single executive function. The second is when organisational boundaries are less well defined and where there may be multiple owners in terms of direction of the resources being employed. The common factor is that both entities exist to achieve specified outcomes.</p> <p>Enterprise (1): An organisation (or cross organisational entity) supporting a defined business scope and mission that includes interdependent resources (people, organisations and technologies) that must</p>	

Term	Definition	Comment
	<p>coordinate their functions and share information in support of a common mission (or set of related missions). (US Federal CIO Council)</p>	
	<p>Enterprise (2): A systematic, purposeful set of activities whose primary purpose is focussed on achieving a set of clearly defined objectives that may transcend organisational boundaries and consequently require integrated team working under the direction of a governing body of resource providers.</p>	
<b>Enterprise Architecture</b>	<p>The formal description of the structure and function of the components of an enterprise, their interrelationships, and the principles and guidelines governing their design and evolution over time. (Note: 'Components of the enterprise' can be any element that goes to make up the enterprise and can include people, processes and physical structures as well as engineering and information systems).</p>	
<b>Enterprise Architecture Framework</b>	<p>A logical structure for classifying, organising and presenting complex information relating to <b>Enterprise Architectures</b> in a uniform manner.</p>	
<b>Entity (Business)</b>	<p><i>(Data Model Entity)</i> A representation of a business <b>object</b>, with characteristics (or <b>attributes</b>) and <b>relationships</b>, that exists in one or more business <b>architectures</b>. It is a 'blueprint' for creating <b>objects</b> for a particular business <b>architecture</b>.</p>	<p>An <b>entity</b> could, for example, be a building, a ship, an aircraft or an organisation amongst other things.</p>
<b>Information</b>	<p>The refinement of <b>data</b> through known conventions and context for purposes of imparting knowledge to individuals.</p>	
<b>Information Exchange</b>	<p>The collection of <b>information</b> elements and their performance <b>attributes</b> such as timeliness, quality and quantity values.</p>	
<b>Information Exchange Requirement</b>	<p>A requirement for <b>information</b> that is exchanged between nodes.</p>	
<b>Information Technology</b>	<p>Any equipment, or interconnected <b>system</b> or subsystem of equipment, that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission or reception of <b>data</b> or <b>information</b>. The term IT also includes computers, ancillary equipment, software,</p>	

Term	Definition	Comment
	firmware and similar procedures, services (including support services) and related resources.	
<b>Meta Model</b>	Strictly this means a model of a model. In the MODAF context this means a representation of the <b>entities</b> (and <b>data elements</b> ) pertinent to an <b>architecture</b> , including the <b>relationships</b> amongst <b>entities</b> and their <b>attributes</b> or characteristics.	
<b>MOD Architectural Repository (MODAR)</b>	The database that provides a central repository to hold all baselined MOD architectures and the MODAF framework. It contains the <b>ERM</b> and <b>Object Taxonomies</b> , and provides a service that generates MODAF <b>Views</b> from the baselined architectural <b>data</b> to users on demand.	
<b>Needline</b>	A requirement that is the logical expression of the need to transfer <b>information</b> between nodes.	
<b>Network</b>	A logical structure of <b>nodes</b> connected by virtue of their need to exchange <b>information</b> (via <b>needlines</b> )	
<b>Node</b>	A representation of an element of <b>architecture</b> that produces, consumes or processes <b>data</b> .	
<b>Object (Business)</b>	An instance of a business <b>entity</b> that forms part of a particular <b>architecture</b> . It has <b>attributes</b> that are specific to its instance, but characteristics and <b>relationships</b> that are common to other <b>entities</b> .	With reference to parts of an aircraft, it could for example be 'the left wing', 'the tail plane' or 'the Eurofighter undercarriage'.
<b>Operational Activity</b>	An activity is an action performed in conducting the business of an enterprise. It is a general term that does not imply a placement in a hierarchy (eg, it could be a process or a <b>task</b> as defined in other documents and it could be at any level of the hierarchy). It is used to portray operational actions not hardware/software system functions. Operational Activity may include either military operations or business processes.	
<b>Operational Node</b>	A <b>node</b> that performs a role or <b>mission</b> .	
<b>Platform</b>	A physical structure that hosts systems, system hardware or software items.	

Term	Definition	Comment
<b>Relationship</b>	A connection that asserts how an <b>entity</b> (or <b>object</b> ) can permissibly interact with the outside world (ie with other <b>entities</b> or <b>objects</b> )	
<b>Requirement</b>	A need, a demand or a constraint.	
<b>Role</b>	A function or position filled by a person or organisation.	
<b>Rule</b>	Statement that defines or constrains some aspect of the enterprise.	
<b>System</b>	Any organised assembly of resources and procedures united and regulated by interaction or interdependence to accomplish a set of specific functions.	
<b>System Function</b>	A function that is performed by a system. Although commonly used to refer to data transformation within IT systems it may also refer to the delivery of military capabilities such a “ground manoeuvre” or “deep strike”.	
<b>System of Systems</b>	A set or arrangement of independent <b>systems</b> that are related or connected to provide a given <b>capability</b> . The loss of any part of the <b>system</b> will degrade the performance or capabilities of the whole.	
<b>Systems Node</b>	A <b>node</b> with the identification and allocation of resources (eg, platforms, units, facilities, and locations) required to implement specific roles and <b>missions</b> .	
<b>Task</b>	A discrete unit of work, not specific to a single <b>organisation</b> , weapon system or individual, that enables <b>missions</b> or functions to be accomplished.	
<b>Taxonomy</b>	Provides the standard structured dictionary for the architecture. For example, it defines what a ‘tank’ is when used in the MoD context. The taxonomy constrains the diversity of an <b>architecture</b> to ensure consistency across the enterprise, and alignment with business strategy	
<b>Tools</b>	Software applications that support local user development and management of <b>architectures</b> .	
<b>View</b>	A specification of a way to present an aspect of the <b>architecture</b> . Views are defined with one or more purposes in mind - e.g. showing the logical topology of the enterprise, describing a process model, defining a data model, etc.	

<b>Term</b>	<b>Definition</b>	<b>Comment</b>
<b>Viewpoint (Business)</b>	A collection of <b>Views</b> . Viewpoints are usually categorised by domain - for example, in MODAF there are Acquisition, Strategic, Operational, System and Technical Viewpoints	

**Note.** The MODAF product suite makes extensive reference to UML and the terms contained within that standard. For the definition of these term the user is referred to the UML source document at [www.omg.org](http://www.omg.org).