MODAF Glossary v1.2

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 comments have been added, identifying known sources for the definition and expansions on the definitions.

This glossary is for the MODAF v1.2 release and some elements have been updated. MOD policy is for alignment of terms with the MOD Defence Terminology as maintained by Information Coherence Authority for Defence (ICAD)[1] and the MOD Abbreviations list. In future, only where there are specific definitions for MODAF use will these definitions be listed.

Term	Definition	Comment
Architectural Product	A connected and coherent set of **Architectural Elements** which conform to a **View**	
Architecture	The structure of components, their inter-relationships, and the principles and guidelines governing their design and evolution over time	Source IEEE 1471
Artefact	Any element in the physical domain that is not **software** or **organisational** (where organisational includes people)	Systems, physical assets, components, hosting systems etc are all artefacts
Attribute	A property or characteristic, or a testable or measurable characteristic, that describes an aspect of an **entity** or an **object**	
Capability	Capabilities in the MODAF sense are specifically not about equipment but are a high level specification of the **enterprise**'s ability. A capability is a classification of some ability – and can be specified regardless of whether the **enterprise** is currently able to achieve it. For example, one could define a capability "Manned Interplanetary Travel" which no-one can currently achieve, but which may be planned or aspired to. Capabilities in MODAF are not time-dependent – once defined they are persistent. It is only the Capability Requirement that changes.	
Capability Configuration	A composite structure representing the physical, human and software **resources** (and their interactions) in an enterprise. A **capability configuration** is a set of artefacts or an organisation configured to provide a capability, and should be guided by doctrine and policy, and should take account of all the Defence Lines of Development (DLODS). These replace the system node concept in DODAF.	

[1] Link to ICAD can be found on the Glossary & Abbreviation 'home' page.

Term	Definition	Comment
Data	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 Used in the MODAF System Views
Enduring Task	A type of behaviour recognised by an enterprise as being essential to achieving its goals – i.e. a strategic specification of what the enterprise does. Examples include Financial Management and Human Resource Management. These equate to Business Functions in the commercial world.	
Enterprise	The term enterprise can be defined in 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. (1) An organisation(or cross organisational entity) supporting a defined business scope and mission that includes interdependent resources (people, organisations and technologies) that must coordinate their functions and share information in support of a common mission (or set of related missions). (US Federal CIO Council) (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.	
Enterprise Architecture	The formal description of the structure and function of the components of an enterprise, their inter-relationships, and the principles and guidelines governing their design and evolution over time. (Note: 'Components of the enterprise" can be any elements that go to make up the enterprise and can include people, processes and physical structures as well as engineering and information systems.	
Enterprise Architecture Framework	A logical structure for classifying, organising and presenting complex information relating to **Enterprise Architectures** in a uniform manner.	
Entity	A representation of an **object**, with characteristics (or **attributes**) and **relationships**, that exists in one or more a**rchitectures**. It is a 'blueprint' for creating **objects** for a particular **architecture**. An **entity** could be a building, ship or organisation amongst other things.	

Term	Definition	Comment
Function	A function is performed by a resource. For IT systems, it tends to refer to data transformations. However it also covers human functions and software functions where these are manipulating data or physical elements.	
Information	The refinement of **data** through known conventions and context for purposes of imparting knowledge to individuals.	Used in the MODAF Operational Views
Information Exchange	The collection of **information** elements that are bundled together to form a **needline**.	
Information Exchange Requirement	Defines the requirement for an exchange of information in terms of who has the need, what is exchanged and the quality of service.	
MetaModel	Strictly this means a model of a model. In the MODAF context this means a representation of the **entities** (and **data elements**) pertinent to an **architecture**, including the **relationships** amongst **entities** and their **attributes** or characteristics.	
Needline	A requirement that is the logical expression of the need to transfer **information** between nodes. A needline bundles **information exchanges**.	
Node	A logical entity that performs operational activities. Note: nodes are specified independently of any physical realisation.	
Object	An instance of an **entity** that forms part of a particular **architecture**. It has **attributes** that are specific to its instance, but characteristics and **relationships** that are common to other **entities**.	With reference to parts of an aircraft, it could be ‘left wing’, ‘tail plane’ or ‘Eurofighter undercarriage’
Ontology	Ontology is the study of what exists. In architecture terms, it allows us to model the ‘things’ we see in the real world without the confusion of the different names applied to them. Ontologies are related to but different from **taxonomies**.	
Operational Activity	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 (e.g. it could be a process or a **task** as defined in other documents and it could be at any level of hierarchy). It is used to portray operational actions not hardware/software system functions. **Operational Activity** may include either military operations or business processes.	

Term	Definition	Comment
Relationship	A connection that asserts how an **entity** (or **object**) can permissibly interact with the outside world (i.e. with other **entities** or **objects**).	
Requirement	A need, demand or constraint.	
Resource	An abstract element that in the physical or solution space. The top level resources are **artefacts**, **organisational resources** or **software**.	Seen as Resource Type in the MODAF meta model
Role	A function or position filled by a person or post.	
System	MODAF 1.2 specific.	
System of Systems	A set or arrangement of interdependent **systems** that are related or connected to provide an enhanced measure of **capability**. The loss of one component **system** will degrade the performance of the whole but not affect the performance of the individual **systems**.	
Taxonomy	Provides the standard structured dictionary for the architecture. A **taxonomy** has the ability to constrain the diversity of an **architecture** to ensure consistency across the **enterprise**.	
View	A specification of a way to present an aspect of the **architecture**. Views are defined with one or more purposes in mind e.g. show the local enterprise topology, describe a process model, define a data model, etc.	
Viewpoint	A collection of **Views**. Viewpoints are usually categorised by domain i.e. in MODAF we have Acquisition, Strategic, etc.	