

TINA-C Deliverable

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TINA-C Glossary of Terms

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1. Introduction

This document provides the glossary of terms for the TINA-C Core Team deliverables. The document is dynamic as new terms get introduced and old ones get amended while the work progresses.

This document contains the result of task: T214.

It feeds on the results of the Stream Glossaries:

- Glossary for Terms for the Services Stream (T24)
- Glossary for Terms for Management (T106)
- Glossary for Terms for the Resource Stream (T306)
- Glossary for Terms for the DPE Stream (T77)

The glossary is contained in a table (see section 3). This table provides the **term**, **definition** of the term and a **contexts** the TINA area.

The present version (v2.0) adds on version v1.1 by including the terminology that is used in a number of new and updated documents:

- Service Architecture 96 (BL)
- Network Resource Architecture
- Naming Framework
- Information Services and Resources in TINA
- Mobility in TINA

Additionally, in this version a list of acronyms is included in section 5

2. Procedure for introduction of new terms

The glossary of terms is maintained by the Core team secretariat. Any new term should be discussed within the appropriate field and Stream-Champion(s) within the Core team before introduction (nb Auxiliary projects are subject to this procedure as well).

Modifications to old terms must be discussed by the Stream-Champions and CTL(s) before introduction.

With the introduction of a new term a reference to a document name or file should be included.

3. How to Read

New terms that are still under some discussion but need to be included for reasons of descriptive power or consistence are indicated by *italicizing* the term.

4. Glossary of terms

Table 1: Terms

term	explanation	context
Absolute name	A target entity is denoted by an absolute name if all source entities use the same name(s) for it relative to a single agreed naming context. Unlike unique names, absolute names allow synonyms.	Naming Framework
Abstract infra- structure	Forms the execution environment for computational objects. The TINA-C engineering modelling concepts provide the framework for describing an abstract infrastructure. The abstract infrastructure is a model of the Distributed Processing Environment (DPE).	DPE Architecture
Abstraction	The process of suppressing irrelevant detail to establish a simplified model, or the result of that process. Abstraction consists of clustering and generalization	Information Modeling
Access	Policies and mechanism that facilitate the utilization of systems and services.	Service Architecture
Access Service	An information service that provides the capability to use other services.	Service Archi- tecture
Access Session	The objects and relations required to allow a consumer to access services in the Retailer domain. An access session does not exist until an access session binding between Consumer and Retailer domains is established.	Service Architecture
Access Session Binding	Relates a consumer to a retailer in a secure manner.	Service Archi- tecture
Access transparency	A transparency which enables interworking between heterogeneous computer architectures by masking differences in data representation and invocation mechanisms (including the distinction between local and remote invocations) of computational operations at computational interfaces.	DPE Architecture
Accountability	The ability to report the history of the system, and in particular, which actions were performed by which entities.	Requirements

term	explanation	context
Accounting Management	One of the six TINA functional areas. A classification of management functions that enable charges to be established for the use of resources. It includes functions to inform users of costs incurred or resources consumed, enable accounting limits to be set, and tariff schedules to be associated with the use of resources, and enable costs to be combined where multiple resources are invoked.	Service Architecture
ACID properties	Refers to the atomicity, consistency, isolation, and durability properties of transactions. (See the glossary entry for each property.)	DPE Architecture
Action	Something that happens. Every action of interest for modelling purposes is associated with at least one object.	General
Action	An operation on a managed object, the semantics of which are defined as part of the managed object class definition.	Network Resource Architecture
Activation (Services)	Changing the status of a Service and its Components from a dormant state into an active one, so that it may subsequently be instantiated and used.	Service Architecture
Address	An invocation name that denotes the location of an entity.	Naming Framework
Administrative Domain	An administrative domain is a portion of a TINA which is submitted to a single stakeholder ownership. E.g. the part of a TINA system that belongs to a PNO or private person is an administrative domain. An Administrative Domain can perform several businesses.	Reference Points
Agent	Functions accessible through a management interface that enable access to, operations on, and notifications from a collection of managed objects associated with the interface.	Network Resource Architecture
Alarm	A notification, of the form defined by the alarm reporting function, of a specific event. An alarm may or may not represent an error.	Connection Management Architecture
Alarm Report	A specific type of the event report used to convey alarm information.	Connection Management Architecture

Table 1: Terms

term	explanation	context
Alarm Surveil- lance	A fault management activity which permits monitoring the resources and makes information about the fault status available outside the resource itself.	Connection Management Architecture
Alias	Two or more distinct names are aliases if and only if they denote the same entity when they are resolved in the same context.	Naming Framework
Allomorphic Behavior	Allomorphic behavior is exhibited by a managed object belonging to one managed object class when it responds to a management operation as if it were an instance of another managed object class.	Information Modelling
Announcement	A computational operation that does not return any result; when a client invokes an announcement, the client is not informed of the outcome of the invocation.	Computational Modeling Con- cepts
Application	A software product with a well-defined functionality.	General
Application	A software product with a well-defined functionality. In the context of Service Architecture, this term means a software product or which provides the service logic of a telecommunication service.	Service Architecture
Application Area	A broad category of functions within a single network management functional area.	Service Archi- tecture
Application Programming Interface	A collection of high level programming interfaces provided by one or more adaptors.	Service Architecture
Architecture	A framework for design and construction of systems. It consists of a set of concepts and principles (rules).	General
Arity	The number of arguments taken; unary is one argument, binary is two arguments and n-ary is n arguments.	Information Modeling Con- cepts (OMT)
Association	see Relationship Type.	Information Modeling Con- cepts (OMT)
Association	An application level connection between a user and a provider of a contract or between CPE applications.	Service Architecture

term	explanation	context
Association Handle	A descriptor returned by the DPE that is used by building blocks and CPE applications to uniquely identify an association.	Service Architecture
Atomicity	One of the ACID properties of transactions (see ACID properties.) The atomicity property specifies that either a transaction succeeds or if it fails it is as if it never began.	DPE Architecture
Attribute	Information of a particular type concerning an Object.	Computational Modeling Con- cepts
Attribute	In the context of Service Composition, attributes appear in an entry (describing that entity) in the Directory Information Base and Management Information Base.	Service Architecture
Attribute Type	An attribute type is that component of an attribute which indicates the type of information given by that attribute.	Computational Modeling Con- cepts
Attribute Value	An attribute value is an Instance of the class of information indicated by an Attribute Type.	Computational Modeling Con- cepts
Attributive name	A name which one entity attributes to another entity for referrals. It might not be possible to interact with or perform an action on an entity using its attributive name, i.e the attributive name may not be understood by the infrastructure.	Naming Framework
Authentication	A process by which an entity (person, software, etc.) is verified to be the Entity they claim to be.	General
Authorization	A process by which it is verified that an Entity (person, software, etc.) is allowed to partake in an activity.	General
Availability	Maximization of the likelihood that a service is available for use when a service user attempts to use the service.	DPE Architecture
Base Managed Object	Managed object types that exist before connection setup activities begin and remain after connections are cleared down. Examples of the base managed objects are: subnetwork, topological Link, link Termination Point, connection, nWCTP, nWTTP, and nWTpPool.	Connection Management Architecture

Table 1: Terms

term	explanation	context
Basic engineer- ing modelling concepts	Concepts described in Section 3 and Section 8: Node, nucleus, capsule, cluster, eCO, and channel.	DPE Architecture
Behavior (2)	(Of a managed object:) The way in which managed objects, name bindings, attributes, notifications and actions interact with the actual resources they model and with each other.	Network Resource Architecture
Behavior (Managed Object)	The way in which managed objects, name bindings, attributes, notifications and actions interact with the actual resources they model and with each other.	Connection Management Architecture
Behavior (Object)	A collection of actions with a set of constraints on the circumstances in which they may occur.	ODP Model- ling Concepts
Bind	(verb) The action to associate a name with an entity.	Naming Framework
Binder function	A channel function which interacts with other binder functions to maintain the integrity of a binding. It contributes to distribution transparencies.	DPE Architecture
Binding	A communication session involving one or more computational objects.	Computational Modeling Con- cepts
Binding Object	A computational object that represents a binding; provides operations for controlling the binding; encapsulates the mechanisms required for controlling the binding.	Computational Modeling Con- cepts
Blocking Invocation	An invocation of a computational operation in which the invoker object waits until the response to the invocation is received.	Computational Modeling Con- cepts
Broker	The business role that provides information about how to find certain services and certain stakeholders in the TINA system.	Reference Points, Busi- ness Model
Business Role	A business role is a role performed by an stake- holder. A stakeholder can perform several busi- nesses roles.	Reference Points
Call	A association between two or more parties.	Service Architecture

term	explanation	context
Capsule	A capsule is an engineering unit of allocation of a DPE node's computing resources. The objects deployed to this unit share the same allocation policy for allocating resources from a node's kernel which is different from the allocation policies in other capsules on the same node.	DPE Architecture
Cardinality	Load granularity of an Object Type is the number of instances of an object type allocated in some equipment.	Deployment (Mapping to Paschal)
Channel	The engineering realization of a computational binding. Composed of stub, binder and protocol objects.	Network Resource Architecture
Channel	The engineering realization of a computational binding. Composed of stub, binder and protocol objects.	General
Channel control function	Is the engineering correspondence of the binding object.	DPE Architecture
Channel control interface	Is the engineering correspondence of the binding control interface.	DPE Architecture
Channel tem- plate	See engineering template. Describes a channel in terms of interfaces to be bound and QoS requirements.	DPE Architecture
Characteristic Information	A signal of characteristic rate, coding, and format which is transferred within and between subnetworks in a Layer Network.	Connection Management Architecture
Checkpoint (of a cluster or eCO)	A non-active state (of a cluster or eCO) derived from deactivating or checkpointing, which can be used for reactivating (the cluster or eCO).	DPE Architecture
Checkpointing	The process of deriving a checkpoint from an active object.	DPE Architecture
Class	(of <x>s): A collection of <x> s satisfying a type. <x> may be any of: object, relationship, interface, action.</x></x></x>	Information Modeling Con- cepts
Classification	is the process of collecting phenomena or concepts into a concept.	Information Modeling Con- cepts
Client	Defined relative to an operational interface; an object that invokes computational operations defined in an operational interface is a Client of the Server interface.	General

Table 1: Terms

term	explanation	context
Cluster	A distribution unit which is at the same time unit of activation, placement, and migration.	DPE Architecture
Cluster template	See engineering template. Describes a cluster in terms of the management policy which can be applied on the cluster, the eCO templates which are instantiated into the cluster, and their initial configuration.	DPE Architecture
Clustering	Clustering is the process of collecting phenomena into groups with common properties called concepts. It is the inverse of exemplification.	Information Modeling Con- cepts
Common DPE services	Services that are deemed generic enough to be described in a way independent from the NCCE supporting the TINA DPE	DPE Architecture
Communication Session	A specific type of Session which models relations or associations that provide an abstract view of communication capabilities associated with a service session and manages multiple connections for a service session.	Service Architecture
Communication Session Man- ager	A computational object in the connection management functional area. It provides clients with the service of interconnection of computational stream interfaces.	Network Resource Architecture
Composition (1)	(Composition of <x>) An action or the result of realizing a certain <x> from a set of basic or simpler <x>s. <x> may be any of: object, behavior, service.</x></x></x></x>	Information Modeling Con- cepts
Compound Service	A service which is composed of one or more service components and one or more other services.	Service Architecture
Computational binding	See binding object.	DPE Architec- ture
Computational Interface	An abstraction that provides access to a subset of capabilities provided by a computational object. See operational Interface and Stream Interface.	Computational Modeling Con- cepts
Computational Interface Type	See Interface Type.	Computational Modeling Con- cepts
Computational Modeling Con- cepts	A collection of concepts that provide the framework for the computational specification of distributed applications. (See Modelling Concepts)	General

term	explanation	context
Computational modelling concepts	A collection of concepts that provide the framework for the computational specification of distributed applications.	DPE Architecture
Computational Object	Object in the computational viewpoint. An abstraction that encapsulates data and processing. It provides a set of capabilities that can be used by other objects.	Computational Modeling Con- cepts
Computational Operation	The interaction mechanism by which a capability provided by a server of a computational interface can be accessed by a client of the interface; specified using an input/output structure and the behavior of the operation including constraints applicable to it.	Computational Modeling Con- cepts
Computational Specification	The specification of a distributed application in terms of program components (objects and object groups) that interact with each other. It includes both structural aspects and semantic aspects of interactions.	Computational Modeling Con- cepts
Computing Architecture	A set of concepts and principles for designing and building distributed software and the software support environment. The TINA Computing Architecture consists of the Information Modelling Concepts, the Computational Modelling Concepts, The Engineering Modelling Concepts, and the Distributed Processing Environment Architecture.	General
Computing node	A computing node is a network node providing DPE support. It is a model for a collection of computing resources. The objects deployed into a computing node use these computing resources independently of objects on other computing nodes.	DPE Architecture
Computing resources	Processing, memory, and communication resources.	DPE Architecture
Concept	A generalized idea of a collection of phenomena, based on knowledge of common properties of instances in the collection.	Information Modeling Con- cepts
Concurrency manager	An engineering support object that enforces the isolation property and consistency.	DPE Architecture

Table 1: Terms

term	explanation	context
Concurrency transparency	Coordinates concurrent interactions that arise when several application components interact concurrently with one application component, and ensures that the interactions' consistency is preserved.	DPE Architecture
Confidentiality	The property that information is not made available or disclosed to unauthorized entities (person, software, etc.).	General
Configuration Management	One of the five OSI management functional areas. The TINA-C architecture separates this functional area into Resource Configuration and Connection Management.	Connection Management Architecture
Configuration service	Holds and provides information about object configuration.	DPE Architecture
Connection	A connection in the NRIM is taken to be a Link Connection, i.e. a connection between subnetworks or a connection between a subnetwork and a layer network.	NRIM
Connection Coordinator	A computational object in the connection management functional area. It provides clients with the service of interconnection of addressable termination points, multipoint-to-multipoint bidirectional. It hides from clients the concepts of layering and partitioning of transmission networks. The interface specification is based on the connectiongraph concept.	Network Resource Architecture
Connection Management	One of the six TINA-C network management functional areas. Functions in this category are responsible for establishing, modifying and releasing connections in response to client requests.	Network Resource Architecture
Connection Management Configurator	A computational object in the connection management functional area. The Connection Managment Configurator provides an interface to Resource Configuration functions that must configure Connection Management functions (such as a Communication Session Manager, a Connection Coordinator, a Connection Performer) that are co-located in one building block.	Network Resource Architecture

term	explanation	context
Connection Performer	A computational object in the connection management functional area. It provides clients with the service of interconnecting termination points of a subnetwork. Every subnetwork is managed by one Connection Performer.	Network Resource Architecture
Connection- graph	A connectivity schema that describes how end points (ports at vertex layer) are connected. It is an aggregate of one or more lines.	Connection Management Architecture
Connection- graph	An object type used in the computational interface specification of a Communication Session Manager and a Connection Coordinator. It is used as a container object for other object classes (port, vertex, line) to model transport abstractions.	Network Resource Architecture
Connectivity Layer Network	A transport network that is made up of one or more Layer Networks. The Characteristic Information accepted can de different from that delivered using adaptation.	Connectivity Service Reference Point RFR/S
Connectivity Provider	A business role that provides transport and routing capabilities to both users and service providers so that user can access the service and use it.	General
Connectivity Service	A Service that provides capabilities for setup, modification and release of Connectivity Sessions. This service enables management of Flow Connections that are part of a Connectivity Session either individually or aggregate.	Connectivity Service Reference Point RFR/S
Connectivity Service Refer- ence Point (ConS-RP)	A TINA Reference Point that represents the interactions between the Connectivity Provider and Connectivity User business roles.	Reference Points
Connectivity Session	A specific type of session which models relations between network access points and provides a context in which Flow Connections are managed.	Connectivity Service refer- ence Point RFR/S
Connectivity User	A business role that uses the transport and routing capabilities provided by the Connectivity Provider	Connectivity Service Reference Point RFR/S

Table 1: Terms

term	explanation	context
Consistency	One of the ACID properties of transactions (see ACID properties.) The consistency property specifies that a transaction transforms the system from one consistent state to another.	DPE Architecture
Construction Stage	A stage in the service life-cycle which includes all the off-line activities required in designing and developing the software and any special hardware associated with a service.	Service Architecture
Consumer	Defined relative to a stream flow between objects; an object that is a sink for a stream flow is a consumer of the flow. (see Stream flow.)	Computational Modeling Con- cepts, Connec- tion Management Architecture
Consumer	A business role that utilizes a telecommunications service, provided by a Retailer and is subscribed by a subscriber (see User, Provider, End-User and Subscriber).	Reference Points, Busi- ness Model
Containment (1)	This is a relationship between phenomena. One phenomenon is contained in another phenomenon if it is an intrinsic part of the containing phenomenon. The phenomena are often objects.	Informational Modeling Con- cepts
Containment (2)	A generic relationship type which is a subtype of the generic relationship type Composition (see Composition 2))and which has the additional constraint that the role cardinality of the Composite role is.	Informational Modeling Con- cepts
Context	Information stored in the Connectivity Provider's domain and containing the values negotiated with the Connectivity User. These values are initially negotiated off-line but can be modified online. These values are related to the connectivity session parameters (usage context), and FCAP policies.	Connectivity Service Refer- ence Point RFR/S
Contract	A computational interface that is provided by an object in an object group and that can be used by objects in other object groups.	Computational Modeling Con- cepts, Service Architecture
Contract	The reflection of the agreements on the business relationships between Business Roles.	Business Model, Refer- ence Points

term	explanation	context
Core	A component of a service in the USCM concept which defines the key functionality provided by a service and which is portable in different environments.	General
Creation	The process of instantiation (performed by an Object (Factory) which results in the existence of a new Object Instance.	Engineering Modeling Con- cepts
Creation (of an object)	The process of instantiation (performed by an object (factory)) which results in the existence of a new object instance.	DPE Architecture
CRUD Rules	Create, Read, Update and Delete rules for an object given in an information specification.	Informational Modeling Con- cepts
Customer	See Subscriber.	General, Service Architecture
Customization	The process of changing/updating a user's profile. The profile contains information like subscribed services/service features, related SAGs, invitation policies, defaults (e.g., QoS), etc.xustomization can be done by either the End-User and/or the Subscriber	Retailer Reference Point RFRS (Ret-RP)
Daemon-server model	An execution model. In this model, the execution resources are allocated at the time when the object (eCO) is created. No resource allocation is required for a subsequent invocations. The resources remain allocated until the object (eCO) is explicitly destroyed.	DPE Architecture
Deactivation (of an object)	Set the object instance from an active to a non- active state. The result of a deactivation is a checkpoint which can later on be used for reacti- vating the object instance.	DPE Architecture
Deadlock man- ager	An engineering support object that is responsible for detecting, solving or avoiding transaction deadlocks.	DPE Architecture
Denote	(verb) To stand as the name for.	Naming Framework
Dependent Object/entity	An object or entity is dependent on another object or entity if and only if its creation or deletion (its existence) depends on the existence of the second object or entity (the parent).	Informational Modeling Con- cepts

Table 1: Terms

term	explanation	context
Deployer/With- drawer	A stakeholder role that places and configures developed software and hardware modules, received from a developer, into a telecommunication system, and confirms that the system runs correctly, and removes the modules when they are no longer needed.	General
Deployment concepts	The deployment concepts allow for the grouping of computational objects or resources and define common characteristics for the resulting group of objects.	DPE Architecture
Deployment Stage	A stage in the service life-cycle which includes all the activities required to install the developed software and hardware modules into a network, and to activate the service provided by such modules.	Service Architecture
Design portabil- ity	Ability to design a TINA application with the assurance that fundamental assumptions about the infrastructure will be supported by any TINA DPE platform.	DPE Architecture
Designer	A stakeholder role who designs a telecommunications service/a network system according to service/network requirements. A designer produces specifications, and passes them to developers.	Service Architecture
Destruction	Freeing all resources tied to a Object. The Object does no longer exist.	Engineering Modeling Con- cepts
Destruction (of an object)	Freeing all resources. The object does no longer exist.	DPE Architecture
Developer	A stakeholder role who implements a system and passes the implementation to the Deployer.	General, Service Architecture
Distributed Processing Envi- ronment	The abstract infrastructure that provides the execution environment for computationally specified applications, providing distribution transparencies for distributed applications.	Computational Modeling Con- cepts, Engi- neering Modeling Con- cepts
Distributed Processing Envi- ronment Archi- tecture	Architecture, in terms of concepts, models, and mechanisms, of the computing infrastructure required to support TINA-C architecture.	Engineering Modeling Con- cepts

term	explanation	context
Distributed Processing Envi- ronment Kernel	The Distributed Processing Environment Kernel provides the foundation for the interaction and management of computational objects. Part of the Distributed Processing Environment Platform.	Engineering Modeling Con- cepts
Distributed Processing Envi- ronment Node	A computing node providing a Distributed Processing Environment Platform.	Engineering Modeling Con- cepts
Distributed Processing Envi- ronment Plat- form	An implementation of the Distributed Processing Environment according to the Distributed Processing Environment architecture.	Engineering Modeling Con- cepts
Distributed Processing Envi- ronment Serv- ices	Services that are deemed generic enough to be considered as a part of the TINA Distributed Processing Environment. Some of the DPE Services play a role in the implementation of distribution transparencies (e.g. the trader is essential in the provision of location transparency).	Engineering Modeling Con- cepts
Distributed Processing Envi- ronment Specifi- cations	Formal parts of the architecture describing the interfaces and models provided by the Distributed Processing Environment in terms of information, computational, and engineering modelling concepts.	Engineering Modeling Con- cepts
Distribution Transparency	The concept of hiding from applications details and complexities introduced by distribution. The nature of transparency is classified into: access transparency, location transparency, relocation transparency, failure transparency, replication transparency, persistence transparency, and transaction transparency.	Engineering Modeling Con- cepts
Distribution unit	Distribution units are collections of object instances (in particular, collections of eCOs) for which certain joint distribution characteristics are defined. Thus, distribution units are used to group objects according to distribution requirements. See also unit of placement, de/reactivation, and migration.	DPE Architecture
DPE	See Distributed Processing Environment.	DPE Architecture
DPE architecture	Architecture, in terms of concepts, models, and mechanisms, of the computing infrastructure required to support TINA-C architecture.	DPE Architecture

Table 1: Terms

term	explanation	context
DPE kernel	The DPE kernel provides the foundation for the interaction and management of computational objects. Part of the DPE platform.	DPE Architecture
DPE node	A computing node providing a DPE platform.	DPE Architecture
DPE platform	An implementation of the DPE according to the DPE architecture.	DPE Architecture
DPE specifica- tions	Formal parts of the architecture describing the interfaces and models provided by the DPE in terms of information, computational, and engineering modelling concepts.	DPE Architecture
Durability	One of the ACID properties of transactions (see ACID properties.) The durability property specifies that the effects of a successfully completed transaction are not lost due to subsequent failures.	DPE Architecture
Dynamic Con- nectivity Object	Managed object types that are created in the course of connection setup activities and destroyed when the related connections are cleared down. Examples of the base managed objects are; subnetworkConnection, tandemConnection, edge, and trail.	Connection Management Architecture
Dynamic Data	The data is dynamic if it is initialized and changed only by the reactions expected from the object within the context of a single end user service. Dynamic data can not be recovered in case of node restart.	Engineering Modeling Con- cepts
Dynamic Load Sharing	The objects of the same type are partitioned to a number of nodes and the nodes can provide the service, characteristic of the object type to any service user. The objects do not carry any persistent data but may have a set of state variables that may be changed by the services provided by the object. The actual load is allocated based on dynamic data, such as the load characteristics, the state of the nodes, and the location of the objects.	Engineering Modeling Con- cepts
Dynamic nam- ing context	A naming context in which the bindings are of limited validity in a spatio-temporal sense.	Naming Framework
Dynamic Typing	The ability for an object to change its membership of object types dynamically during its existence.	Informational Modeling Con- cepts

term	explanation	context
eCO	The engineering representation of a computational object, which encapsulates state/ data and processing.	DPE Architecture
eCO template	The engineering representation of a computational object template, which can be instantiated into arbitrary number of eCOs.	DPE Architecture
Edge	A Managed Object that represents association between a subnetworkConnection and a NWCTP or a NWTTP.	Network Resource Architecture
Element Man- agement Layer	A sublayer of resource management functions defined in TMN standards that consists of functions that manage individual network elements or subsets of network elements (which may be viewed by network management layer functions as subnetworks).	Network Resource Architecture
End User	A stakeholder role who utilizes a telecommunications service, provided by a service provider and subscribed by a subscriber.	Network Resource Architecture
End-user	A specialization of the User role (see User), who interacts with a service to obtain the effect of the service.	Service Architecture
Engineered Capacity	The engineered capacity is the mean offered load at which the node just meets all grade of service requirements used by the Network Operator to engineer the node.	Engineering Modeling Con- cepts
Engineering Computational Object	The engineering representation of a computational object, which encapsulates state/data and processing.	Engineering Modeling Con- cepts
Engineering Computational Object Template	The engineering representation of a computational object template, which can be instantiated into arbitrary number of Engineering Computational Objects.	Engineering Modeling Con- cepts
Engineering Interface reference	An identifier in the context of an engineering interface reference management domain, for an engineering object interface that is available for distributed binding.	DPE Architecture
Engineering modelling concepts	A framework for describing an abstract infra- structure enabling the execution of distributed applications in a distribution transparent way.	General
Engineering object	Nucleus, eCO,, stub, binder, protocol, DPE server objects.	DPE Architecture

Table 1: Terms

term	explanation	context
Engineering specification	The specification of an infrastructure enabling the execution of application components, e.g., the DPE, in terms of the infrastructure components and their interaction.	DPE Architecture
Engineering template	The specification of common features of a collection of engineering objects in sufficient detail that an engineering object can be instantiated from it. Examples are channel, cluster, eCO template.	DPE Architecture
Engineering viewpoint	The view of a system provided by an engineering specification. This document (engineering modelling concepts) provides a framework for an engineering specification.	DPE Architecture
Entity	Any thing that may be of interest.	Naming Framework
Environment	(USCM) The collection of all identifiable entities that interact with the service; this set includes users, service managers, and resources.	Service Architecture
Error	A deviation of a system from normal behavior/ operation.	Computational Modeling Con- cepts
Event	An Event is the basic element of a behavior description language.	Computational Modeling Con- cepts, Engi- neering Modeling Con- cepts
Execution model	An execution model describes the strategies for the allocation of execution resources for creation and invocation of an object (eCO). Examples are Daemon-server and On-demand-server model.	DPE Architecture
Execution resource	A subset of computing resources which are needed for executing an object invocation.	DPE Architecture
Exemplification	The process of delivering an instance of a concept. The inverse process of clustering.	Informational Modeling Con- cepts
Explicit Binding	A binding that is established as a result of an explicit request from a computational object; a binding object is instantiated as a result of this request; application level control on the binding is accomplished by invoking operations on the binding object.	Computational Modeling Con- cepts

term	explanation	context
Exporter	(Trading Service) A computational object that advertises its services via a trading service.	DPE Architec- ture
Factory	An object and a supporting/distinguished object which creates objects. Being a supporting/distinguished object a factory can be accessed remotely. Examples for a factory are: Channel factory, cluster factory, object factory.	DPE Architecture
Failure transparency	A transparency which masks occurrences of failures and recovery of components.	DPE Architecture
Fault	A condition within one or more network resources which results in improper behavior of some part of the network.	Connection Management Architecture
Fault Correction	A fault management activity which is concerned with the restoration of resources currently in a fault condition.	Connection Management Architecture
Fault Localiza- tion	A fault management activity which identifies the specific resources that are responsible for improper behavior within the network.	Connection Management Architecture
Fault Manage- ment	One of the six TINA management functional areas. Functions in this category are related to the detection, isolation, and correction of faults within the network.	Connection Management Architecture
Fault-tolerance	Ability of a system to perform in a reasonable manner in the presence of faults.	DPE Architecture
Federation	An organizational structure involving two or more autonomous stakeholders, in which the members have an agreement on how they will interwork with each other including the extent to which the resource of one member can be shared by other members.	General
Federation	An organizational structure involving two or more autonomous administrations in which the member administrations have an agreement on how they will interwork with each other including the extent to which the resources of one member can be shared by other members.	Network Resource Architecture
Federation	Naming systems are said to be federated when links are established between two or more existing naming systems in which name bindings have already taken place and the control of naming systems remain independent.	Naming Framework

Table 1: Terms

term	explanation	context
Federation transparency	A transparency which enables interworking between different administrative domains.	DPE Architecture
Flat name space	A naming network which consists of a single node and no edges. A flat name space has a single naming context and only absolute names are used within it.	Naming Framework
Flow Connection	A Network Resource that transports information across a Connectivity Layer between two or more Flow Endpoints. The characteristics information associated with the different Flow Endpoints of a Flow Connection may be different.	Connectivity Service Reference Point RFR/S
Flow Connection Branch	The Flow Connection Branch is part of a Flow Connection linked to only on a leaf endpoint.	Connectivity Service Refer- ence Point RFR/S
Flow Endpoint	The Network Access Points that are in the periphery of the Connectivity Layer Network.	Connectivity Service Reference Point RFR/S
Flow Endpoint Pool	A collection of physically co-located flow Endpoints.	Connectivity Service Reference Point RFR/S
Functional Area	A task-specific grouping of required network management functions. The OSI defines five management functional areas. The TINA-C architecture defines six TINA functional areas by dividing the OSI Configuration Management functional area into Resource Configuration and Connection Management. The six TINA functional areas are: Accounting Management, Connection Management, Fault Management, Performance Management, Resource Configuration Management, and Security Management.	Connection Management Architecture

term	explanation	context
Functional Area (1)	A task-specific grouping of required network management functions. The OSI defines five management functional areas. The TINA-C architecture defines six TINA functional areas by dividing the OSI Configuration Management functional area into Resource Configuration and Connection Management. The six TINA functional areas are: Accounting Management, Connection Management, Fault Management, Performance Management, Resource Configuration Management, and Security Management.	Network Resource Architecture
Generalization	Generalization is the process of defining a concept from another concept by removing detail. It is the inverse process of specialization.	Informational Modeling Con- cepts
Generic Relationship Type	A generic relationship type defines a number of relationship types by omitting to specify the object types associated with each role. The generic relationship type can be instantiated into a relationship type by specifying the types that are associated with the roles.	Informational Modeling Con- cepts
Group	See Object Group.	Computational Modeling Con- cepts
Group Manager	A designated computational object in an object group that is responsible for mediating management operations on the component entities in the group.	Computational modelling Concepts
Hierarchical name space	A name space in which the naming network forms a tree.	Naming Framework
Homonym	A name which denotes more than one entity, in a particular naming context.	Naming Framework
Identifier	An unambiguous name in a given naming context taken from a restricted name set to uniquely identify an entity.	Naming Framework
Implicit binding	Computational binding concept. The binding is established by the infrastructure without application control.	DPE Architecture
Importer	(Trading Service) A computational object that searches for service offers via a trading service.	DPE Architecture

Table 1: Terms

term	explanation	context
Information	The knowledge necessary to make appropriate use of a System.	Informational Modeling Con- cepts
Information Model	An implementation independent specification of some corporate resource including their attributes, operations permissible on them and constraints.	Information Modeling Con- cepts
Information Modelling Concepts	A collection of concepts that provide the framework for the information specification of distributed applications.	General
Information Object	An object that occurs in an information specification.	Informational Modeling Con- cepts
Information Object	A model of a phenomenon.	Information modeling Con- cepts
Information Service	A stakeholder service that interprets and/or manipulates information.	Service Architecture
Information Specification	A description of a structure that models the information in a system in terms of information bearing entities, relationships between the entities, and constraints that govern their behavior, including creation and deletion.	Informational Modeling Con- cepts
Information Viewpoint	One of the ways of looking at a distributed application, as defined in RM-ODP. In this view of the distributed application and its management, the only things visible are the relevant information elements and their relationships.	General
Infrastructure	See abstract infrastructure.	DPE Architecture
Inheritance	A specification technique that defines an object type from another object type by adding or overwriting properties (attributes, behavior).	Computational Modeling Con- cepts, Informa- tional Modeling Con- cepts
Initial Object	The object within an object group that is created when the object group is created. Normally the initial object will be the group manager.	Computational Modeling Con- cepts
Installation service	Provides installation and removal of object implementations in DPE nodes.	DPE Architecture

term	explanation	context
Installer	Service provided by each DPE platform to support deployment of eCO templates.	DPE Architecture
Installer Object	A Computational Object that is part of the Distributed Processing Environment and that provides capabilities for installation and removal of building blocks.	Computational modeling Concepts
Installer Service	A Service provided by each Distributed Processing Environment platform to support deployment of Engineering Computational Object templates.	Engineering Modeling Con- cepts
Instance	(of an <x> template), an <x> instantiated from the template. <x> may be any of: object, interface, building block, cluster.</x></x></x>	Informational Modeling Con- cepts
Instantiation	(of an <x> template) A process which using a given template and other necessary information, results in a new <x>. <x> may be any of: object, interface, object group, cluster. See also Creation.</x></x></x>	Information/ Computational/ Engineering Modeling Con- cepts
Instantiation (of an object template)	The process of creating an object instance from an object template.	DPE Architecture
Integrity	The property that data has not been altered or destroyed in an unauthorized manner.	General
Inter-Domain Reference Point	An inter-domain reference point is the specification of a set of interfaces which are defined as conformance requirements for a relationship between administrative domains. In this relationship, each administrative domain performs a specific business (role). The specification of this type of reference point can also be used as conformance requirements for relationships between components, independently of administrative boundaries.	Reference Points
Interface	See Computational Interface.	Computational Modeling Con- cepts
Interface reference	A descriptor that unambiguously identifies a computational interface and contains the information needed to enable binding to this instance; the descriptor may include information on the communication endpoint at which the computational interface is offered.	DPE Architecture

Table 1: Terms

term	explanation	context
Interface Tem- plate	A template for a computational interface.	Computational Modeling Con- cepts
Interface Type	A predicate on interfaces; defined using an interface template; interfaces that are defined by the same template satisfy the type predicate.	Computational Modeling Con- cepts
Interface Type Compatibility	An interface type A is compatible with another type B if interfaces of type A can be transparently substituted for interfaces of type B.	Computational Modeling Con- cepts
Interface type repository	A repository for interface types.	DPE Architec- ture
Interface type structure	(Trading Service) Classification of service offers in a trading service according to their interface types reflecting the sub/supertype relationship.	DPE Architecture
Interoperability	The capability of deployed software programs to interact consistently with one another, over time, even if one of the programs is modified asynchronously with respect to the other programs which interact with it. Hence, interoperability involves more than an ability to communicate messages among applications.	Service Architecture
Interoperability	Static and runtime compatibility between TINA applications running on different DPE platforms.	DPE Architecture
Interrogation	A computational operation that returns zero or more results; when a client invokes an interrogation, the client is always informed of the outcome of the invocation.	Computational Modeling Con- cepts
Intra-Domain Reference Point	An intra-domain reference point is the specification of a set of interfaces which are defined as conformance requirements for a relationship between components within an administrative domain.	Reference Points
Invariant	A property of a system or part of it, valid at all times. An invariant of an object is a logical property that holds from after the object has been created and initialized and until the object is deleted, except during the execution of operations on the object. Invariants are usually given for object types, defining the same invariant for all instances of the object type.	Informational Modeling Con- cepts

term	explanation	context
Invocation name	A name that must be used to interact with an entity, i.e. it is a name that the infrastructure understands.	Naming Framework
Is-a Relationship	the is-a relationship between concepts defines specialization.	Informational Modeling Con- cepts
Isolation	One of the ACID properties of transactions (see ACID properties.) The isolation property specifies that the effects of a transaction are invisible to other activities until the transaction completes.	DPE Architecture
Kernel	Encapsulates the computing resources of a DPE platform and provides mechanism to support the execution of, and the communication between eCOs.	DPE Architecture
Kernel Trans- port Network	A specific transport network aiming at connecting DPE nodes.	DPE Architecture
KTN Load	The Distributed Processing Environment Transport Network load is measured for each kTN connection. The kTN load is the ratio of transmission time for the kTN messages to the length of the measurement interval. kTN load is measured in Erlangs.	DPE Architecture
Late binding	A scheme where an object that uses an interface provided by another object obtains a reference for the interface only at execution time.	DPE Architecture
Layer Network	A set of transport functions which support the transfer of information of a characteristic type. Generally, a layer network is closely tied to a specific type of network transmission and/or switching technology, e.g., SDH/SONET VC-4, ATM virtual channel (ATM VC) or ATM virtual path (ATM VP).	Network Resource Architecture
Layer Network Coordinator	A computational object responsible for providing trails in a layer network. It is associated with one domain in the layer network and federates with other Layer Network Coordinators to provide a trail across domain boundaries.	Network Resource Architecture
Life-cycle Inter- face	Interface offered by each eCO which provides operations for its own management.	DPE Architecture

Table 1: Terms

term	explanation	context
Line	An object type in the connection graph that is used to represent an information flow between a pair of ports in a connection graph.	Network Resource Architecture
Link	OMT terminology, see relationship.	Informational Modeling Con- cepts
Link Connection	An connectivity which runs between a pair of Subnetwork.	Network Resource Architecture
Link Termination Point	A termination point of a Link.	Network Resource Architecture
Load Granularity	Load granularity of an Object Type is the size of the instances of the object type to which the object type can be partitioned for load sharing purposes. The size of a instance is measured in terms of the load it generates. An instance is understood to represent the smallest unit of load which the object type may generate and which may be allocated in the engineering process.	Engineering modeling Con- cepts
Load Partitioning	Load partitioning is a type of load sharing such that the actual load is allocated to nodes as a function of values of some semi-permanent (e.g. configuration) parameters provided by the client. The total object space of objects of the same type is partitioned into disjoint groups of objects of the same or different size and each of these groups is mapped into a different physical node.	Engineering Modeling Con- cepts
Load Sharing	Load sharing is a type of mapping of computational and information to physical nodes such that objects of the same type appear in multiple nodes.	Engineering Modeling Con- cepts
Load Sharing Trader	Load sharing Trader(Manager) is a service that allocates load, i.e. manages the dispatching of operation invocations to nodes that should share the load based on one of the load sharing principles.	Engineering Modeling Con- cepts
Local interaction	Interaction between two objects residing in the same DPE node.	DPE Architecture
Localization	The ability to define a local scope for a phenomenon or concept, i.e. a scope constrained to some other concept or phenomenon.	Informational Modeling Con- cepts

term	explanation	context
Location	A node in a DPE domain.	Naming Framework
Location independent name	A name that does not reflect any change in the path between the current context and the named entity, in the face of migration of the entity that is denoted or any context in the path.	Naming Framework
Location trans- parency	A distribution transparency that enables locating interface objects regardless of their current position or state.	DPE Architecture
Location trans- parent name	A name that does not reflect any information about the location of the entity that is denoted by that name or the path that is followed to get the entity.	Naming Framework
Log manager	An engineering support object that enforces durability.	DPE Architec- ture
Logical Connection Graph	An information object that represents a stream binding.	Service Architecture
Managed Object	An abstract representation of a resource that can be supervised and controlled by other objects.	Network Resource Architecture
Managed Object Class	A category of managed objects, each of which has identical characteristics in terms of attribute, action, and notification syntaxes and managed object behavior. Objects are instances of a class, the objects may differ in the values of their attributes, however they have a common set of functions (methods). By these rules, an object is said to be derived from a class.	General
Management	The monitoring, control, and coordination of entities in a telecommunications environment, such as services, software, and network resources.	General
Management Architecture	A set of concepts and principles for the design, specification, and implementation of software systems that are used to manage services, resources, software, and underlying technology.	General
Management Context	Represents an agreement between a User and Provider on the management (reporting and negotiation) of parameters impacting the execution services.(see also Personal Profile).	Retailer / Con- nectivity Serv- ice Reference Point RFR/S

Table 1: Terms

term	explanation	context
Management Interface	An operational interface provided by an object that provides capabilities for managing some primary capabilities provided by the object.	Computational Modeling Con- cepts, Service Architecture
Management Service	An information service designed to support a service manager role and/or a network manager role.	Service Architecture
Manager	Defined relative to a management interface; an object that uses a management interface provided by another object to supervise and control the latter.	Computational Modeling Con- cepts
Manager	A manager is a stakeholder role who manages operation of a system to maintain normal condition of the system and efficient use of the system for a particular system environment, and also performs minor reconfiguration of the system	Service Architecture
Manager - Man- aged Object Relationship	The relationship between two objects when they interact via a management interface.	General, Service Architecture
Mated Pair	Mated pair is a pair of nodes which hold copies of the same objects. The load is shared between the nodes based on the load characteristics and the state of the nodes to provide the same operations to any client objects. When one of the nodes fails, the other one can continue to provide the operations to all users.	Engineering Modeling Con- cepts
Methodology	A set of methods for system construction which defines a series of steps (not necessarily sequential) that can be used when constructing a system.	General
Migration	Moving (a Cluster) to a different location (another Capsule).	Engineering Modeling Con- cepts
Migration (of a cluster)	Moving (a cluster) to a different location (another capsule).	DPE Architecture
Migration trans- parency	An extension of location transparency which masks relocation of an object from the object being relocated; enables the object to be relocated preserving its state across the migration without disrupting objects interacting with it.	DPE Architecture

term	explanation	context
Model	An abstraction of a number of concepts or phenomena in a system.	General
Modelling Concepts	A collection of concepts that provide the framework for the specification of distributed applications. (See also information modelling concepts, computational modelling concepts, engineering modelling concepts.)	General
Name	(noun) A linguistic entity, that singles out an entity from amongst a group of entities in a given naming context.	Naming Framework
Name	(verb) To select a name from a name set.	Naming Framework
Name binding	(noun) The association of a name with a particular entity.	Naming Framework
Name resolution	The action of isolating a particular entity from amongst a group of entities, given a name and an entity (and by implication a naming context and naming conventions).	Naming Framework
Name resolution authority	A controlling entity of a naming domain performing name resolution within that naming domain.	Naming Framework
Name server	An entity which maps attributive names to invocation names.	Naming Framework
Name set	The name set is the set of all names that follow a particular naming convention within a naming system.	Naming Framework
Name space	That part of a naming network within which a single naming convention is used.	Naming Framework
Naming authority	The controlling entity of a naming domain performing all name bindings within that naming domain.	Naming Framework
Naming bridge	A mechanism that permits two name spaces to be connected in a federation, and performs the name translations as required.	Naming Framework
Naming context	A set of bindings. Within a given naming context, all names must be chosen from a single name set and all entities must be chosen from a single naming domain. A naming context may be treated as an entity for the purpose of naming.	Naming Framework

Table 1: Terms

term	explanation	context
Naming convention	A predicate that defines name sets. A naming convention specifies the syntax of names and the algorithm to be used to parse names.	Naming Framework
Naming domain	A set of distinguishable entities that can be named. An instance of the domain concept in ODP.	Naming Framework
Naming model	A set of constraints on the components of a naming system.	Naming Framework
Naming network	The constraints on the extent to which entities that have names in one naming context can be pointed at or referred to from other naming contexts.	Naming Framework
Naming sub- domain	A subset of a naming domain.	Naming Framework
Naming system	The combination of a naming domain, one or more name sets, one or more naming contexts, and a naming network.	Naming Framework
Native Computing and Communication Environment	Part of the computing infrastructure that is not described by the DPE Architecture.	DPE Architecture
Need Stage	A stage in the service life-cycle where the requirements to provide or modify a service are identified. Requirements may come from a customer or end-user, or from the service provider as a result of market analysis.	Service Architecture
Nested Transaction	A transaction that is initiated as part of another transaction; it is aborted if the initiating transaction aborts and its effects are committed only when the initiating transaction commits.	Computational Modeling Con- cepts
Network	A part of a telecommunication system that provides capabilities for transport of information.	General
Network Access Point	The access points of a Layer Network	Network resource Archi- tecture
Network Architecture	A set of concepts and principles for the design, specification, implementation, and management of transport networks.	General

term	explanation	context
Network Element Layer	The category of functions defined in TMN standards that are linked to the technology or architecture of the network resources that provide the basic telecommunications services. These functions may be accessed by the element management layer functions using standard or open information specifications that may hide vendor-specific functions within network resources.	Network Resource Architecture
Network Man- agement Layer	A sublayer of network resource management functions defined in TMN standards that have the responsibility for the management of all the network elements, as presented by the element management layer. It is not concerned with how a particular network element provides service internally. Complete visibility of the whole network is typical, and a vendor independent view will need to be maintained. The functions in this layer interact with the service management layer on end-to-end connections, performance, faults, etc. across the network.	Network Resource Architecture
Network node	A model of a physical node or a collection of physical nodes in a network and all resources required for networking. The unit of network connectivity and network management.	DPE Architecture
Nick name	Name that may not unambiguously define an entity in a given naming context.	Naming Framework
Node	See computing node.	DPE Architecture
Node template	See engineering template. Describes a node in terms of its resources.	DPE Architecture
Non-blocking Invocation	An invocation of a computational operation in which the invoker object does not wait until the response is received, but receives the response at some later time.	Computational Modeling Con- cepts
Notification	A management operation initiated by a managed object for the purpose of communicating the occurrence of some significant event within the managed object.	Network Resource Architecture
Notification Interface	An operational interface that contains only announcements, and each announcement corresponds to a notification specified in the information specification of the application.	Computational Modeling Con- cepts

Table 1: Terms

term	explanation	context
Notification Server	A computational object that is part of the Distributed Processing Environment; it filters notifications emitted by objects and forwards them to designated recipient objects.	Computational Modeling Con- cepts
Notification service	Service enabling objects to emit or receive notifi- cations without having to interact explicitly with the emitters or recipients of the notifications.	DPE Architecture
Object	A model of an entity. (See also Computational Object, Managed Object, Engineering Object).	General
Object Group	An aggregation of computational objects. Object groups can be nested, and the components of the object group can be distributed. The object group is an application structuring mechanism the provides support for modularity, and flexible software management. A designated object, called a group manager, is responsible for managing the group. The object group encapsulates its internal components. Eternal interfaces to the groups are known as contracts.	Computational Modeling Con- cepts, Service Architecture
Object Group Template	A template used for defining object groups, using object templates, and component group templates.	Computational Modeling Con- cepts
Object life-cycle	definition of the concepts, models, mechanisms, and interfaces for supporting the operations of management of a TINA object	DPE Architecture
Object Model	The definition of an object. Includes the characteristics that an object may exhibit, the method by which the object is accessed, and the rules governing the existence of an object.	Computational Modeling Con- cepts
Object Template	A Template for Instantiating an Object.	Computational Modeling Con- cepts, Informa- tional Modeling Con- cepts
Object Type	A predicate on objects; defined using an object template; objects defined using the same template satisfy the Type predicate (see Type)	Computational Modeling Con- cepts, Informa- tional Modeling Con- cepts

term	explanation	context
Offered Load	Offered Load is the total number of external operation invocations presented to a node during a given interval of time.	Engineering Modeling Con- cepts
On-demand- server model	An execution model. In this model, no execution resources are pre-allocated. Resources are allocated on demand basis at the time of an invocation and released at the end of the subsequent method execution.	DPE Architecture
Open System	Telecommunications systems which employ standardized communications procedures and methods for interactions with other systems.	DPE Architecture
Operation	See Computational Operation	Computational Modelling Con- cepts
Operation	Definition of an activity within an object. For example, CMIS services include operations services and notification services. CMIS operation services are: M-CREATE, M-DELETE, M-SET, M-GET, M-CANCEL-GET, and M-ACTION	Information Modelling Con- cepts
Operation Signature	The syntactic structure of an operation including its name, argument types and result types.	Computational Modeling Con- cepts
Operational Interface	A Computational Interface in which interactions that occur via the interface are structured in terms of operation invocations and responses.	Service Architecture, Computational Modeling Concepts
Operational Interface Type	A template for an operational interface; specifies the input/output structure of operations, behavior of operations, and the name and type of each service attribute associated with the interface.	Computational Modeling Con- cepts
Overall Architecture	A set of Concepts and Principles that embody the general features of TINA.	General
Package	A collection of attributes, notifications, operations and/or behavior which is treated as a single module in the specification of a managed object class. Packages may be specified as being mandatory or conditional when referenced in a managed object class definition.	Engineering Modeling Con- cepts
Performance	Different forms of timing constraints that can be expressed for a system.	DPE Architecture

Table 1: Terms

term	explanation	context
Performance monitoring serv- ice	Access and control over the performance of specific network resource activity provided by the infrastructure in order to monitor the performance of the system.	DPE Architecture
Persistence Transparency	A transparency which hides from an application component the deactivation and reactivation of other components or itself.	Computa- tional/ Engi- neering Modelling Con- cepts
Persistent Data	The data is persistent if it can be recovered in case of a restart of the equipment using that data. In practice persistent data is stored in a non-volatile memory.	Engineering Modeling Con- cepts
Personal Mobility	The ability of a user to access services from any terminal and any location, (including invitations to join sessions). This ability may be restricted due to contract agreements between the Consumer and Retailer, and due to user system capabilities.	Service Architecture
Phenomenon	Anything that has a definite, individual existence in reality or in the mind. An entity.	Service Architecture, Informational Modeling Concepts
Physical node	A physical system that contains the hardware and software environment in which objects are installed and executed.	DPE Architecture
Platform	In general, software providing infrastructure for execution of applications. Used here as synonym of Distributed Processing Environment.	General
Platform profile	The definition of the set of models and services supported, quality of service and properties that a DPE platform is able to support.	DPE Architecture
Polymorphism	The ability to substitute an object of one type for an object of a super type in any context.	Informational Modeling Con- cepts
Port	An object type in the connectiongraph that models a source or a sink of information flows.	Network Resource Architecture

term	explanation	context
Predictability	The tendency of a system to perform a set of operations in a well-defined manner such that the timing requirements of each operation are satisfied.	DPE Architecture
Processing Load	Processing load of a computer (a node) is the ratio of CPU time used for service processing to the measurement time interval. Processing load is measured in percents (%).	Engineering Modeling Con- cepts
Producer	Defined relative to an information flow between objects; the object that is a source for an information flow is the producer of the flow.	Computational Modeling Con- cepts
Protocol adapter object	A channel function which interacts with other protocol adapter functions to convey information between two different objects in different clusters.	DPE Architecture
Provider	The role in the User/Provider relationship that provides a service used by a User (see User).	General
Provider Access Session	Contains information related to the admission of a user to one or more services. It represents the user to the Provider at all times and enables the Provider to access the user.	Service Architecture
Provider Agent	a service independent CO, defined as the consumer domain's end-point of an Access Session with a retailer.	Service Architecture
Provider Communication Session	represents the system wide communication capabilities of the provider domain and allows connection control from the provider point of view.	Service Architecture
Provider Domain User Service Session	supports information and semantics relating to the user session that reside in the provider domain	Service Architecture
Provider Service Session	represents system wide view of the service in the provider domain, governs the usage of a service for a number of users, and governs service usage and management from the provider point of view.	Service Architecture
Proxy offer	A service offer in a trading domain that forwards the request to another object.	DPE Architecture
Q.93B	The Q.931 signalling protocol defined for narrow-band ISDN, but modified for use in B-ISDN (broadband ISDN).	Network Resource Architecture

Table 1: Terms

term	explanation	context
QoS Attribute	QoS attribute specifies a QoS domain. Each QoS attribute has a name and a type, and each QoS attribute denotes a QoS guarantee that is either provided by the server of an interface and required by clients of the interface	DPE Architecture
QoS Domain	A QoS domain is a package or grouping made up of one or more QoS attributes.	DPE Architec- ture
Re-activation	The action following a deactivation which transforms an object from a non-active to an active state. The checkpoint can be used for reactivating the object.	Engineering Modeling Con- cepts
Reaction	Finite processing initiated by an external operation invocation.	Engineering Modeling Con- cepts
Reactivation (of an object)	The action following a deactivation which transforms an object from a non-active to an active state. The checkpoint can be used for reactivating the object.	DPE Architecture
Reference point	A reference point defines a collections of interfaces with associated model which are considered potentially prescriptive for a DPE platform.	DPE Architecture
Relationship	A tuple of objects related by some properties that do not pertain to any particular object in the tuple, but to all objects of the tuple	Informational Modeling Con- cepts
Relationship Binding	The association of the roles of a generic relationship with object or relationship types.	Informational Modeling Con- cepts
Relationship Binding Tem- plate	The specification of a relationship binding.	Informational Modeling Con- cepts
Relationship Type	A predicate on relationships describing common characteristics of relationships.	Informational Modeling Con- cepts
Relative name	A target entity is denoted by a relative name if source entities that are in different naming contexts may use different names to denote the same target entity.	Naming Framework

term	explanation	context
Release Independence	A constraint on upgrades to an object group that involve changes to contract types whose instances are currently being offered by the building block; when such a contract type is changed, the new contract type must be compatible with the old contract type.	Computational Modeling Con- cepts
Relocation service	A supporting object which keeps track of the locations of relocated object and thus contributes towards distribution transparency.	DPE Architecture
Relocation Transparency	A transparency that hides relocation of a component from other components bound to it. This transparency enables applications to continue to operate even if some components change location or are replaced.	Computa- tional/ Engi- neering Modelling Con- cepts
Remote interac-	Interaction between two objects residing in two different DPE platforms.	DPE Architecture
Replication	Replication is a mapping of a set of objects to a pair or a larger number of equipments such that the state changes of the objects on those equipments are synchronized. The synchronization is such that if one of the equipment fails, another can take over the execution of operations to external clients within a time limit. The time interval allowed for taking over the load from a failed equipment may vary depending on the provided operations. Replication of nodes means that the state changes of applications in those nodes are synchronized. Replication of computers in a node means that the state changes of the applications in the computers are synchronized.	Engineering Modeling Con- cepts
Replication transparency	A transparency which hides the replication of objects.	DPE Architecture
Repository service	Provides persistent storage for template specifications, implementations, and installation information.	DPE Architecture
Repudiation	The false denial that any part of a transaction took place.	General
Resource	A generalization of any entity that exists in a TINA implementation that requires generic management, i.e., the maintenance of operational, usage, and administrative states.	General

Table 1: Terms

term	explanation	context
Resource trans- parency	A transparency which masks the de- and reactivation of objects.	DPE Architecture
Resource unit	A resource unit is a model for a collection of computing resources and computing resource allocation policies with some specific properties. E.g. describing how many tasks and threads an application needs. See also computing node and capsule.	DPE Architecture
Retailer	A business role that provides a telecommunications service, used by a End-User and is subscribed by a Subscriber (see User, Providder, End-User and Subscriber). Retailers ensure ease of access and quality guaranty to consumers.	Reference Points
Roaming	The ability to access telecommunication services at places other than one specific home access. This implies also that the profile of the user is the same at all these places. Roaming requires location updating.	Service Architecture
Role	A position in a relationship. Relationships belonging to the same relationship type have the same set of roles. The relationship type may describe properties associated with each role. Each role is associated with one type	Informational Modeling Con- cepts
Role Cardinality	For a given binary relationship type, a set of non- negative integers associated with a role which constrains the number of relationships of the given relationship type that have the same object in the other role.	Informational Modeling Con- cepts
Root Transaction	A transaction that is neither commit dependent nor abort dependent on the activity that initiated the transaction.	Computational Modeling Con- cepts
Router	A computational object in the connection management functional area. It provides a list of possible paths between two end points of a network.	Network Resource Architecture
Scalability	Measure of applicability of the architecture to dif- ferent processor configurations, to networks of different size, and to different traffic and service patterns.	DPE Architecture
Schema	A number of properties collected together.	Informational Modeling Con- cepts

term	explanation	context
Scope of a name	The set of naming contexts from which a given name, when resolved, denotes a particular entity.	Naming Framework
Security	Means to minimize the vulnerability of assets and resources.	DPE Architecture
Security service	Service providing functional support to security requirements of TINA applications (identification, authentication, authorization, etc.)	DPE Architecture
Server	Defined relative to an operational interface; the object that provides an operational interface is the server of the interface. (see Client)	General
Service	(Enterprise viewpoint) A meaningful set of capabilities provided by an existing or intended set of systems to all who utilize it.: subscribers, end users, network providers, and service providers. each one sees a different perspective of the service.	General
Service	(Computational viewpoint) A set of capabilities provided by a computational object that can be used by other objects.	Computational Modeling Con- cepts
Service Architecture	A set of concepts and principles for the design, specification, implementation, and management of information, telecommunication and management services.	General
Service Attribute	An attribute associated with an interface and that specifies a nonfunctional aspect of the interface.	Computational Modeling Con- cepts
Service Component	An entity which is represented as an object or a group of objects and is classified based on functional characteristics relative to the service.	Service Architecture
Service Composition	Method providing a set of concepts, principles and guidelines for the construction of new services by reusing one or more existing service components and one or more existing services.	Service Architecture
Service Configuration	A subcategory of service management which is related to deployment (= installation and activation), modification, replacement and withdrawal (= deactivation and removal) of a service.	Service Architecture

Table 1: Terms

term	explanation	context
Service Deployment	The activity of placing a pre-defined service component, including its management capability, into the TINA environment. The activity encompasses the planning and installation of its constituent parts, their testing and concludes with the activation of the service component such that it is in harmony with the other services available to a service provider.	Service Architecture
Service Deployment	The activity of a placing a pre-defined service group into a TINA environment. The installation configuration of the service group should ensure that the match of node (and its resource availability) to object group (and its resource requirement) will (best) satisfy the service's expected quality of service.	Computational Modelling Con- cepts, Engi- neering Modelling Con- cepts
Service Feature	A service specific aspect of a service that is used in conjunction with other services or service features	Retailer RFR/S
Service Interaction	A beneficial or problematic effect when multiple services are executed.	Service Architecture
Service Interaction Management	A subcategory of service management to handle multiple services which are performed simultaneously and interrelated with one another at the time of operation. This management function may deal with detection, prevention, resolution of service interaction, and coordination, or composition of multiple services.	Service Architecture
Service Life- cycle Model	A concept of a telecommunication service which identifies the stages that a service will go through, and is a combination of traditional software engineering methodologies and the activities required to operate, use and maintain a service.	Service Architecture
Service Manage- ment	Service-related capability which is related to keep a service operable. This capability consists of fault management, configuration management, account management, performance management, security management, subscription management, and so on.	Service Architecture
Service Manage- ment Layer	The category of functions defined in the TMN standards that provide end-user service specific functions including service logic and service management.	General

term	explanation	context
Service offer	A set of information to represent an offered service of exporter in trading. It is composed of an interface type, an interface reference, and service attribute values of the interface of the server (exporter).	DPE Architecture
Service Profile	Represents a service description for a particular user. It outlines characteristics of a service to be executed by means of a number of contexts (see Context).	Service Architecture
Service Session	A specific type of Session which models relations or associations between resources and parties in a service. It includes a service dependent part and a service independent part. It supports multientities negotiation and control, Special Resource identification and control, and maintenance of the status of the Session. It covers connectivity aspects from a high level point of view only.	Service Architecture
Service Usage	A concept on how a user uses a service. This concept focuses on the user interface of a service. This concept may include adaptation function to support multiple types of user interface format/procedure.	Service Architecture
Service With- drawal	The activity of removing a service component, including its management capability, from an environment without negatively impacting other live and dormant services. The activity encompasses the planning, de-activation, de-installation and/or de-commissioning of its constituent parts, and the testing for adverse consequences. At the conclusion of the activity the service component is no longer available to the service provider.	Enterprise Modeling Con- ceopts
Service With- drawal	The activity of removing a service group from a TINA environment without negatively impacting other live and dormant service groups. At the conclusion of the activity the service group may not be instantiated.	Service Architecture

Table 1: Terms

term	explanation	context
Service/Network Designer	A stakeholder role that designs a telecommunications service/network according to service/network requirements. A designer produces specifications, and passes them to developers. In designing a service/network system, the designer should follow a set concepts and principles defined by the TINA-C architecture.	General
Service/Network Manager	A stakeholder role that manages the operation of services/networks to maintain their normal condition. A service manager negotiates with subscribers regarding their subscription and maintains and updates subscription data. Also a service manager, in collaboration with a network manager, calculates charges and sends bills to subscribers.	General
Session	A relation between entities. In the TINA architecture, a session means a relation or an association between parties and resources.	Service Architecture
Session Control	The part of the Service Session which is service independent.	Service Architecture
Session Graph	An object type used in the computational interface specification of the User Session Manager and Service Session Manager for the Session Control. It is used as a container object for other object classes (SessionMember, SessionRelationship) to model parties (users / terminals), resources, control and transport abstractions.	Service Architecture
Session Mobility	The capability to suspend a session and resume it on a different location and or terminal.	Service Architecture
Simple name	A structured name that consists of exactly one part. A simple name cannot refer to the context in which that name is currently resolved.	Naming Framework
Simple name space	A name space in which only simple names are used. In a simple name space there are no naming contexts that define bindings onto themselves.	Naming Framework
Software Architecture	A set of concepts and principles for the structuring and provisioning of software.	General

term	explanation	context
Software Deployment	The activity of installing binary and data files, reconfiguration databases and system administration data configuration files, modifying operational support systems, establishing connections, starting processes and applications etc. such that either the whole, or part, of a version of a service is introduced into the DPE environment. Software deployment, if used loosely, may also include the installation and commissioning of hardware.	General
Software With- drawal	The activity of shutting down applications and processes, disassociating connections, decommissioning hardware, removing binary and data files, re-configuration databases and system administration files, modifying operational support systems management etc. such that either the whole, or part, of a version of a service is removed from the DPE environment. Software withdrawal, if used loosely, may also include the de-installation and de-commissioning of hardware.	General
Source entity	An entity that uses an invocation name to interact with the target entity.	Naming Framework
Specialization	Specialization is the process of defining a concept from another concept by adding detail. It is the inverse process of generalization.	Informational Modeling Con- cepts
Specification repository	services that provide persistent storage for specifications of objects, interfaces, operations, data types, etc.	DPE Architecture
Stakeholder	A stakeholder is a party of any kind, company or a person, which/who owns a portion (one or more administrative domains) of a TINA system.	Reference Points
Stakeholder Service	A service that is capable of being used by humans. (in contrast to a system service).	Service Architecture
Static name	In a particular naming context, a static name denotes the same entity for the duration of the whole life-time of the entity.	Naming Framework
Stream Flow	A unidirectional bit stream with a certain frame structure and quality of service parameters.	Computational Modeling Con- cepts

Table 1: Terms

term	explanation	context
Stream Interface	An abstraction that represents a communication endpoint that may be a source for some stream flows and a sink for some stream flows.	Network Resource Architecture
Stream Inter- face Reference	A reference to a Stream Interface to be able to resolve the binding as instances of Stream Interfaces.	Computational Modeling Con- cepts
Stream Inter- face Type	A template for a stream interface; specifies the frame structure, coding, and synchronization and timing constraints of stream flows that can occur at the interface; also specifies the service attributes associated with the interface.	Computational Modeling Con- cepts
Structured name	A name that is composed of at least one part.	Naming Framework
Stub	A software component that performs the Stub Function. Stubs are present for the client side and for the server side of an interface.	Engineering Modeling Con- cepts
Stub function	A channel function which adds further interactions and/or information to the interactions between eCOs. It contributes to distribution transparencies.	DPE Architecture
Subclass-1	One class is a subclass of another class precisely when it is a subset of the other class. (see Superclass-1)	Computational Modeling Con- cepts, Informa- tional Modeling Con- cepts
Subclass-2	A object class which inherits the template of another class. (see Superclass-2)	Computational Modeling Con- cepts
Subnetwork	A subset of the network resources such that the resources, having common operations properties (e.g., manufacturer, common function, or common geographical location) cooperate to support some aspect or portion of one or more telecommunications services. It may contain resources of different suppliers, and may consist of several nodes that are operated as a cohesive entity. In the context of Connection Management the subnetwork is used as a topological component to effect routing and management. It can be partitioned into interconnected subnetworks and connections.	Network Resource Architecture

term	explanation	context
Subnetwork Connection	A transport entity formed by a connection across a subnetwork between termination points.	Network Resource Architecture
Subordinate	A Managed Object instance which is placed below its Superior Managed Object in the Containment relationship tree.	Information Modelling Con- cepts
Subscriber	A subtype of the User role (see User), who interacts with a service to obtain the effect of the service.	Service Architecture
Subscription	An agreement between a subscriber and a service provider which allows the subscriber to own a right of usage (or provide/sell to a third party of a service which the service provider offers. This may also includes a rule of billing and a specification of subscriber specific features/restriction to the service.	Service Architecture
Subscription Assignment Group (SAG)	A group of one or more End-users, one or more User Systems and one or more NAPs.	Retailer Reference Point RFR/S
Substance	A component of a service which adapts the core to the external environment consisting other services and resources that this service affects and to which it reacts (see USCM)	General
Subtransaction	See Nested Transaction.	Computational Modeling Con- cepts
Subtype	Type T2 is a subtype of type T1 if and only if (being of type) T2 implies (being of type) T1.	Informational Modeling Concepts, Computational Modeling Concepts
Superclass-1	One class is a superclass of another class precisely when the other class is a subset of it. (see Subclass-1).	Computational Modeling Con- cepts
Superclass-2	A object class whose template is inherited by another class. (see Subclass-2).	Computational Modeling Con- cepts
Superior	A Managed Object instance which is placed above its Subordinate Managed Object.	Information Modelling Con- cepts

Table 1: Terms

term	explanation	context
Supporting object	An engineering distinguished object, outside a channel, which cooperates with the objects inside the channel for the provision of distribution transparency.	DPE Architecture
Synonym	An alternative name. Two or more distinct names are synonyms provided that when they are resolved, they single out the same entity. Note that the resolution of the synonyms does not have to start in the same naming context as for aliases.	Naming Framework
System Service	A service that is part of the support environment, but provides no interfaces to humans.	Service Architecture
Target entity	An entity that is being named with an invocation name by a source entity in the course of interaction.	Naming Framework
Telecommunica- tion Application	An application within a telecommunication system, embodying telecommunications and computing functionality.	General
Telecommunica- tion System	A collection of hardware and software resources that are able to provide services to individuals or organizations, either directly or indirectly through other systems.	General
Template	The specification of the common features of a collection of <x>s in sufficient detail that an <x> can be instantiated from it.</x></x>	DPE Architecture
Terminal	A physical equipment which a user operates to interact with a network or other users. This terminal may have signalling capability (or capability to handle messages related to an object-oriented interface) to perform service procedures. This terminal may have capability of control bearers to connect/disconnect bearer connections.	Service Architecture
Terminal Address	A number used to identify a unique terminal or fixed network access point on a network.	Service Architecture
Terminal Agent	An object which represents a terminal attached to a network, or is accessible from a network (such as a mobile phone).	Service Architecture
Terminal Con- nection Refer- ence Point (TCon-RP)	A TINA Reference Point that represents the interactions between the Consumer and Connectivity Provider Business Roles.	Reference Points

term	explanation	context
Terminal Layer Adapter	The computational object that acts as a counterpart to Layer network coordinator in the process of setting up the Trail Termination Point for a trail requested by Connection Coordinator	Terminal Con- nection Refer- ence Point RFR/S
Terminal Mobility	The ability of a terminal to change physical location. This includes terminals which can continue to support services while moving, and those that cannot.	Retailer Reference Point RFR/S
Third Party Service Provider	A business role that provides the actual service to be offered by a Retailer to a Consumer.	Reference Points
Throughput	Throughput is the number of external operation invocations processed successfully by a node in a unit of time.	Engineering Modeling Con- cepts
Timeliness	Timeliness is concerned with different forms of timing constraints that may be found in telecommunications applications, such as bounded response time, periodicity of events, and temporal relationships between events.	DPE Architecture
TINA System	A TINA system consists of all the administrative domains that can interoperate by means of using interactions specified in one or more of the TINA interdomain reference points.	Reference Points
TINA-Conform- ant	A term applied to networks, services, reference points, equipment, software, etc. that are implemented in accordance with the TINA-C Architecture specifications.	General
Topological Link	Collection of Link Connections which are served by a trail of a server layer network.	Network Resource Architecture
TP (Termination Point) Pool	A collection of termination points that is used for some management purpose such as routing.	Connection Management Architecture
TP Pool	A collection of termination points that is used for some management purpose such as routing.	Network Resource Architecture
Trading	The process of exporting and importing service offers.	DPE Architecture
Trading context	A subset of the trading domain. A trading context is associated with trading policies.	DPE Architecture

Table 1: Terms

term	explanation	context
Trading context structure	A structure grouping the service offers in the trading domain into trading contexts.	DPE Architecture
Trading domain	The set of service offers administered by a trading service.	DPE Architec- ture
Trading policies	Access policy (which object is granted access to a trading context for exporting or importing service offers); search policy (how the trading service searches for service offers in a trading context); selection policy (how the trading service determines one service offer among a set of matching offers).	DPE Architecture
Trading Service	Service supporting trading.	DPE Architecture
Trail	A transport entity which spans across a Layer Network.	Network Resource Architecture
Trail Termination Point	A termination point of a Trail.	Network Resource Architecture
Transaction	An activity with ACID properties that spans one or more objects.	DPE Architecture
Transaction Abort	An unsuccessful completion of a transaction; when a transaction aborts, all its effects are undone.	Computational Modeling Con- cepts
Transaction Commitment	A successful completion of a transaction; when a transaction commits, all its effects are made durable.	Computational Modeling Con- cepts
Transaction Initiation Operation	An interrogation operation; when invoked, it causes initiation of a transaction.	Computational Modeling Con- cepts
Transaction Join Operation	An interrogation operation; when invoked, the invocation processing is performed as a part of the transaction in which the invocation occurred.	Computational Modeling Con- cepts
Transaction management service	An engineering support object that enforces atomicity.	DPE Architecture
Transaction service	The transaction service provides transactional communication between objects with ACID properties.	DPE Architecture

term	explanation	context
Transaction transparency	A transparency which masks the coordination of transactional operations.	DPE Architecture
Transcoder	An equipment that translates coding scheme of the input stream in the coding scheme of the output stream.	Network Resource Architecture
Transparency	See distribution transparency.	DPE Architecture
Transport Net- work	A network modelling the telecommunication transport capabilities and susceptible to being used by telecommunications network management and services.	DPE Architecture
Transport Net- work Load	The Transport Network(TN) load is measured for a topological link and a connection. The load is the ratio of the time the resource is in use to all the available time. The TN load is measured in Erlangs.	Connection Management Architecture
Туре	A predicate characterizing <x>. <x> can be any of; object (information object, computational object, engineering object), interface, relationship.</x></x>	Informational Modeling Con- cepts, Compu- tational Modeling Con- cepts
Unique name	A given name is unique if and only if (a) the name is absolute and (b) no other name in any naming context of the given naming system resolves to the entity to which the unique name resolves.	Naming Framework
Unit of activation	A distribution unit. All objects contained in this unit have to be de/reactivated at the same time. Engineering concepts provide consistency.	DPE Architecture
Unit of instantia- tion	A distribution unit. All objects contained in this unit have to be instantiated at the same time.	DPE Architecture
Unit of migration	A distribution unit. All objects contained in this unit have to be migrated at the same time. Engineering concepts provide consistency.	DPE Architecture
Unit of place- ment	A distribution unit. All objects contained in this unit are placed at the same location and are therefore local to each other. This allows to use only optimized mechanisms for the internal interaction.	DPE Architecture

Table 1: Terms

term	explanation	context
Universal Service Component Model	A model of a service which defines a service in terms of categories of components. This model represents a service as being composed of four parts: usage access, management access, core, and substance access.	General
Unresolvable name	A name for which there does not exist a binding in a particular context.	Naming Framework
Usage Context	Part of the context information that represents the pool of usable resources for the execution of services for the user(i.e the user environment). It contains user system registration information.	Retailer Reference Point RFR/S, Connectivity Service Reference Point RFR/S
Usage Context	Part of the context information containing the default values for the connectivity session parameters.	Connectivity Service Reference Point RFR/S
User	A role that utilizes a service provided by a Provider (see Provider).	General
User Access Session	Represents general information for access a service, and enables the user to access the Provider domain. It also represents the Provider domain to the user.	Retailer Reference Point RFR/S
User Agent	A service independent CO, that represents a consumer in the Provider domain. It is the Provider domain's end-point of an Access Session with a consumer.	Service Architecture
User Domain user Service Session	Supports information and semantics relating to the user session that reside in the user domain.	Retailer Reference Point RFR/S
User Group	An object which is an addressable collection of user agents, and as such calls can be made to and from groups, or more correctly, to/from a user agent within the group. There is a many-to-many relationship between user agents and user groups.	Service Architecture
User Profile	Represents information on how services should be related with respect to user services. It is an aggregation of contexts (see Management Context).	Service Architecture

term	explanation	context
User Service Session	Represents user specific information and governs usage of the service from standpoint of a specific user.	Retailer Reference Point RFR/S
User System	The entity used by a consumer to access services. This can range from a single terminal owned and operated by the Consumer, to a network of terminals, communication and computing resources owned and operated by a multinational company.	Retailer Reference Point RFR/S
Vertex	An object type in the connectiongraph that groups ports and is used to represent information processing entities.	Network Resource Architecture
Viewpoint	A form of abstraction achieved using a selected set of architecture concepts and structuring rules, in order to focus on particular concerns within a system. TINA-C provides architecture concepts for information, computational and engineering viewpoints.	General
Virtual Synchro- nisity	In a virtually synchronous environment, routines can be programmed to behave as if distributed actions were performed instantaneously and in lock-step.	DPE Architecture
Withdrawal Stage	A stage in the service life-cycle which includes all the activities required to eradicate the service from the network.	Service Architecture

5. Acronym List

Table 5-1. Acronyms

acronym	full name	context
3Pty	Third Party service provider inter-domain reference point	Service Architecture
anonUA	anonymous User Agent	Service Architecture
ARP	Address Resolution Protocol	Information Services & Resources
AS	Access Session	Service Architecture
ASEP	Access Session End Point	Service Architecture
ASN.1	Abstract Syntax Number 1	Naming Framework
ASR	Access Session Relationship	Service Architecture
ATM	Asynchronous Transfer Mode	Network Resource Architecture
ATP	Agent Transfer Protocol	Information Services & Resources
AVA	Attribute Value Assertion	Naming Framework
B-ISDN	Broadband Integrated Services Digital Network	General
BISUP	Broadband ISDN User Part	Network Resource Architecture
Bkr	Broker inter-domain reference point	Service Architecture
BNF	Backus Naur Form	Naming Framework
BSM	Broker Service Manager	Information Services & Resources
CAP	Client Application	Information Services & Resources
CC	Connection Coordinator	Network Resource Architecture
CG	Connection Graph	Service Architecture
CGBO	ConnectionGraph Binding Object	Network Resource Architecture
CGI	Common Gateway Interface	Information Services & Resources

Table 5-1. Acronyms

acronym	full name	context
CIP	Common Indexing Protocol	Information Services & Resources
Cli	Client Reference Point	Information Services & Resources
СМ	Connection Management	General
СМА	Connection Management Architecture	Network Resource Architecture
CMC	Connection Management Configurator	Network Resource Architecture
CMIP	Common Management Information Protocol	Network Resource Architecture
CMISE	Common Management Information Service Element	Network Resource Architecture
CMT	Connection Management Team	Network Resource Architecture
CNM	Customer Network Management	Service Architecture
CnSR	Connectivity Session Relationship	Service Architecture
СО	Computational Object	General
ConS	Connectivity Service inter-domain reference point	Service Architecture
Cont	Containment	Service Architecture
CORBA	Common Object Request Broker Architecture	Service Architecture
СР	Connection Performer	Network Resource Architecture
CPE	Customer Premises Equipment	General
CPN	Customer Premises Network	Service Architecture
cs	Communication Session	Service Architecture
CSLN	Client-Server Layer Network inter-domain reference point	Service Architecture
CSM	Communication Session Manager	General
CSR	Control Session Relationship	Service Architecture
Ctl	Client-to-Integrated Directory Resolver Reference Point	Information Services & Resources

Table 5-1. Acronyms

acronym	full name	context
CtN	Client-to-Naming Authority Reference Point	Information Services & Resources
CTP	Connection Termination Point	Network Resource Architecture
CtR	Client-to-Resolver Reference Point	Information Services & Resources
CtU	Client-to-URN Authority Reference Point	Information Services & Resources
CUG	Closed User Group	Service Architecture
DAVIC	Digital Audio-Visual Council	Service Architecture
DCR	Directory Catalog Registry	Information Services & Resources
DIT	Directory Information Tree	Service Architecture
DN	Distinguished Name	Naming Framework
DPE	Distributed Processing Environment	General
eCO	Engineering Computational Object	General
EML	Element Management Layer	Network Resource Architecture
ETSI	European Telecommunication Standards Institute	Network Resource Architecture
FCAPS	Fault, Configuration, Accounting, Performance, Security	Service Architecture
FEP	Flow End Point	Service Architecture
FSM	Finite State Machine	Service Architecture
FTP	File Transfer Protocol	Service Architecture
GIOP	General Inter-ORB Protocol	Naming Framework
GSC	Global Session Control	Service Architecture
GSEP	Generic Session End Point	Service Architecture
GSS	Global Service Segment	Service Architecture
HTTP	HyperText Transfer Protocol	Information Services & Resources
I/f	Interface	Service Architecture
IA	Initial Agent	Service Architecture

Table 5-1. Acronyms

acronym	full name	context
IDL	Interface Definition Language	Service Architecture
IDR	Integrated Directory Resolver (Reference Point)	Information Services & Resources
IDS	Integrated Directory Service	Information Services & Resources
IEEE	Institute of Electrical and Electronics Engineers	Information Services & Resources
IETF	Internet Engineering Task Force	Service Architecture
IF	InterFace	Information Services & Resources
IGMP	Internet Group Management Protocol	Information Services & Resources
IIOP	Internet Inter-ORB Protocol	General
IN	Intelligent Network	Service Architecture
INA	Information Networking Architecture	Network Resource Architecture
Ю	Information Object	General
IOR	Interoperable Object Reference	Naming Framework
IP	Internet Protocol	General
IR	Information Repository	Information Services & Resources
IR	Interface Reference	Service Architecture
IRM	Information Resource Manager	Service Architecture
ISDN	Integrated Services Digital Network	Service Architecture
ITB	Information Transport Binder	Information Services & Resources
ItN	Integrated Directory Resolver-to-Native Directory Resolver Reference Point	Information Services & Resources
ITU-TSS	International Telecommunication Union - Telecommunication Standardization Sector	Network Resource Architecture
JAAPI	Java Aglet Application Programming Interface	Information Services & Resources
kTN	kernel Transport Network	General

Table 5-1. Acronyms

acronym	full name	context
LCG	Logical Connection Graph	Service Architecture
LDAP	Lightweight Directory Access Protocol	Information Services & Resources
LNC	Layer Network Coordinator	Network Resource Architecture
LNFed	Layer Network Federation inter-domain reference point	Service Architecture
LNW	Layer NetWork	Network Resource Architecture
LTP	Link Termination Point	Network Resource Architecture
MgmtCtxt	Management Context	Service Architecture
МО	Managed Object	Network Resource Architecture
MSC	Management Service Component	Network Resource Architecture
N-ISDN	Narrowband Integrated Services Digital Network	Network Resource Architecture
N2C	URN-to-Resource Characteristics Resolution Service	Information Services & Resources
N2L(s)	URN-to-URL(s) Resolution Service	Information Services & Resources
N2R(s)	URN-to-Resource(s) Resolution Service	Information Services & Resources
NA	Naming Authority (Reference Point)	Information Services & Resources
NADOC	Naming Authority DOCumentation	Information Services & Resources
namedU A	Named User Agent	Service Architecture
NAP	Network Access Point	Service Architecture
NAPTR	Naming Authority PoinTeR	Information Services & Resources
NAR	Naming Authority Registry	Information Services & Resources

Table 5-1. Acronyms

acronym	full name	context
NCCE	Native Computing and Communication Envi- ronment	General
NDR	Native Directory Resolver/Native Directory Registry	Information Services & Resources
NE	Network Element	Network Resource Architecture
NEL	Network Element Layer	Service Architecture
NID	Namespace IDentifier	Information Services & Resources
NID- SPEC	Namespace IDentifier SPECification	Information Services & Resources
NML	Network Management Layer	Network Resource Architecture
NNI	Network Interface	Network Resource Architecture
NRIM	Network Resource Information Model	Network Resource Architecture
NS	Naming Server	Service Architecture
NSS	Namespace Specific String	Information Services & Resources
NtP	Native Directory Resolver-to-Publisher Reference Point	Information Services & Resources
NWCTP	Network Connection Termination Point	Network Resource Architecture
NWTp- Pool	Network Termination Point Pool	Network Resource Architecture
NWTTP	Network Trail Termination Point	Network Resource Architecture
OA	Object Adapter	Information Services & Resources
ODL	Object Definition Language	General
ODP	Open Distributed Processing	General
OMG	Object Management Group	General
OMT	Object Modelling Technique	Service Architecture
00	Object Oriented	Service Architecture

Table 5-1. Acronyms

acronym	full name	context
ООМ	Object Oriented Modelling	Service Architecture
ORB	Object Request Broker	General
OSI	Open Systems Interconnection	Service Architecture
OSR	Ownership Session Relationship	Service Architecture
PA	Provider Agent	Service Architecture
PAP	Publisher Application	Information Services & Resources
PD_BSS	Provider Domain Broker Service Session	Information Services & Resources
POTS	Plain Old Telephony Service	General
PSM	Party Session Member	Service Architecture
PSMG	Party Session Member Group	Service Architecture
PtR	Publisher-to-URN Resolver Reference Point	Information Services & Resources
PtU	Publisher-to-URN Authority Reference Point	Information Services & Resources
Pub	Publisher Reference Point	Information Services & Resources
QoS	Quality of Service	General
QRM	Query Resolver Manager	Information Services & Resources
RASR	Read Access Session Relationship	Service Architecture
RC	Resource Configuration	Network Resource Architecture
RCM	Resource Configuration Manager	Information Services & Resources
RDN	Relative Distinguished Name	Naming Framework
Rel	Relationship Object	Service Architecture
Repo	Repository	Service Architecture
Res	URN Resolver Reference Point	Information Services & Resources
Ret	Retailer inter-domain reference point	Service Architecture
RFR/S	Request For Refinements/Solutions	Service Architecture

Table 5-1. Acronyms

acronym	full name	context
RMI	Remote Method Invocation	Information Services & Resources
RP	Reference Point	Service Architecture
RPC	Remote Procedure Call	Information Services & Resources
RSM	Resource Session Member	Service Architecture
RSMG	Resource Session Member Group	Service Architecture
RSR	Report Session Relationship	Service Architecture
RSVP	Resource reSerVation Protocol	Information Services & Resources
RTP	Real-time Transport Protocol	Information Services & Resources
RtR	Retailer to Retailer inter-domain reference point	Service Architecture
SA	Subscription Agent	Service Architecture
SAG	Subscription Assignment Group	Service Architecture
SBSR	Stream Binding Session Relationship	Service Architecture
SC	Service Component	Service Architecture
SCCP	Simple Conference Control Protocol	Information Services & Resources
SCIP	Simple Conference Invitation Protocol	Information Services & Resources
SDH	Synchronous Digital Hierarchy	Network Resource Architecture
SDP	Session Description Protocol	Information Services & Resources
SF	Service Factory	Service Architecture
SG	Session Graph	Information Services & Resources
SG	Session Graph	Service Architecture
SGI	Session Graph Interface	Service Architecture
SI	Stream Interface	Service Architecture
SILC	Service Instance Life Cycle	Service Architecture

Table 5-1. Acronyms

acronym	full name	context
SIP	Session Invitation Protocol	Information Services & Resources
SLC	Service Life Cycle	Service Architecture
SM	Session Member	Service Architecture
SMG	Session Member Group	Service Architecture
SML	Service Management Layer	Service Architecture
SNC	Subnetwork Connection	Network Resource Architecture
SNW	Subnetwork	Network Resource Architecture
SOE	Service Offer Evaluator	Service Architecture
SP	Service Provider	Service Architecture
SR	Special Resource	Network Resource Architecture
SRG	Session Relationship Group	Service Architecture
SRgs	Subscription Registrar	Service Architecture
SS	Service Session	Service Architecture
SSC	Service Support Component	Service Architecture
SSEP	Specific Session End Point	Service Architecture
SSG	Service Session Graph	Service Architecture
SSGIM	Service Session Graph Information Model	Service Architecture
SSM	Service Session Manager	Service Architecture
SSO	Service Support Object	Information Services & Resources
ST2+	Internet Stream protocol version 2+	Information Services & Resources
STH	Service Template Handler	Service Architecture
SubM	Subscription Manager	Service Architecture
T-UAP	Terminal - User APplication	Information Services & Resources
TCon	Terminal Connection inter-domain reference point	Service Architecture

Table 5-1. Acronyms

acronym	full name	context
TCP	Transmission Control Protocol	Information Services & Resources
TCSM	Terminal Communication Session Manager	Service Architecture
TINA	Telecommunications Information Networking Architecture	Network Resource Architecture
TINA [-C]	Telecommunications Information Networking Architecture [Consortium]	General
TLA	Terminal Layer Adapter	Information Services & Resources
TMN	Telecommunications Management Network	General
TN	Transport Network	Information Services & Resources
TPPool	Termination Point Pool	Network Resource Architecture
TPSP	Third Party Service Provider	Service Architecture
Tr	Trader	Service Architecture
TSA	Terminal Service Adaptor	Service Architecture
TTL	Time To Live	Information Services & Resources
TTP	Trail Termination Point	Network Resource Architecture
UA	User Agent	Service Architecture
UA-GM	User Agent Group Manager	Service Architecture
UAP	User Application	Service Architecture
UAR	URN Authority Registry	Information Services & Resources
UCtx	User Context	Service Architecture
UD_BSS	User Domain Broker Service Session	Information Services & Resources
UDP	User Datagram Protocol	Information Services & Resources
UDSEP	User Domain Session End Point	Service Architecture
UNI	User Network Interface	Network Resource Architecture

Table 5-1. Acronyms

acronym	full name	context
UPrf	User Profile	Service Architecture
UPT	Universal Personal Telecommunication	Service Architecture
URC	Universal Resource Characteristics	Information Services & Resources
URI	Universal Resource Identifier	Information Services & Resources
URL	Universal Resource Location	Service Architecture
URN	Universal Resource Name	Service Architecture
URPTR	URN Resolver PoinTeR	Information Services & Resources
USC	User Session Control	Service Architecture
USCI	User/Service session Control Interface	Service Architecture
USCM	Universal Service Component Model	Service Architecture
USM	User Service Session Manager	Service Architecture
USS	User Service Segment	Service Architecture
VC	Virtual Circuit	Network Resource Architecture
VOD	Video On Demand	Service Architecture
VP	Virtual Path	Network Resource Architecture
WAIS	Wide Area Information Service	Information Services & Resources
WASR	Write Access Session Relationship	Service Architecture
www	World Wide Web	General
XTP	eXpress Transport Protocol	Information Services & Resources