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SERIES Q: SWITCHING AND SIGNALLING

Intelligent Network

Glossary of terms used in the definition of intelligent networks

ITU-T Recommendation Q.1290

(Previously CCITT Recommendation)

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ITU-T RECOMMENDATION Q.1290

GLOSSARY OF TERMS USED IN THE DEFINITION OF INTELLIGENT NETWORKS

Summary

This Recommendation provides a glossary of terms and definitions which have been studied for application in the documentation of intelligent networks. These terms will also be incorporated in Recommendation Q.9, "Vocabulary of Switching and Signalling Terms".

TMN management systems terminology needs to be harmonized with IN terms and is not included in this version of this Recommendation.

The text in this Recommendation is considered to be stable. Companion Recommendations include the Q.1200 series of Recommendations.

Source

ITU-T Recommendation Q.1290 was revised by ITU-T Study Group 11 (1997-2000) and was approved under the WTSC Resolution No. 1 procedure on the 15th of May 1998.

FOREWORD

ITU (International Telecommunication Union) is the United Nations Specialized Agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of the ITU. The ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Conference (WTSC), which meets every four years, establishes the topics for study by the ITU-T Study Groups which, in their turn, produce Recommendations on these topics.

The approval of Recommendations by the Members of the ITU-T is covered by the procedure laid down in WTSC Resolution No. 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

NOTE

In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

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As of the date of approval of this Recommendation, the ITU had not received notice of intellectual property, protected by patents, which may be required to implement this Recommendation. However, implementors are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database.

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Recommendation Q.1290

GLOSSARY OF TERMS USED IN THE DEFINITION OF INTELLIGENT NETWORKS

(revised in 1998)

1 General

1.1 Introduction

This Recommendation provides a glossary of terms and definitions which have been studied for application in the documentation of intelligent networks. These terms will also be incorporated in Recommendation Q.9, "Vocabulary of Switching and Signalling Terms".

To the extent practicable, terms that have been defined previously are used unchanged and reference to the source of the definition is shown next to the term in parenthesis. The definitions that have been changed to make them appropriate for this application are considered to be new definitions; however, reference to the source definition is also shown in parenthesis.

1.2 Conventions

The following notations and styles are used in the text of this Recommendation as appropriate:

1) The names of IN SIBs are written with each component word capitalized and spaces between the words (e.g. LOG CALL INFORMATION).

2) The names of IN information flows are written with each component word capitalized and spaces between the words and the appropriate type descriptor is included (e.g. Call Information Report req.ind.).

3) The names of information elements in IN information flows are written with each component word capitalized and spaces between the words (e.g. Request Information).

4) The abbreviation for the word identity in an IN information element is written ID.

5) The names of IN detection points are written with each component word capitalized and underscores between the words (e.g. O_Disconnect).

6) Other names defined are not capitalized (e.g. detection points).

7) The names of information flows defined in Recommendation Q.71 are written in upper case and the appropriate type descriptor is included (e.g. SETUP req.ind).

8) The names of the personal mobility procedures defined in draft Recommendation F.851 are written as in InCall, OutCall and AllCall registration and deregistration.

2 Terms and definitions (listed alphabetically)

For the purpose of this Recommendation, the following definitions apply:

2.1 **access**: A means of interaction between a user and a network.

2.2 **access channel (Q.9 – 0008, I.112 – 414)**: A designated part of the information transfer capability having specified characteristics, provided at the user-network interface.

2.3 **access code**: A code(s) for "customized numbering plan": attendant access, escapes to public network, etc.

2.4 **access function**: A set of processes in a network that provide for interaction between the user and a network.

2.5 **Adjunct (AD)**: An entity in the intelligent network that is functionally equivalent to a service control point but is directly connected to a service switching point.

2.6 **Administration**: In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunications Administration and a recognized operating agency.

2.7 **agent**: Entity acting on behalf of another.

2.8 **alerting pattern**: a specific pattern used to alert a subscriber (e.g. distinctive ringing, tones etc.). Recommendation Q.931 refers.

2.9 **Analogue Display Service Interface (ADSI) server**: A network element capable of sending textual messages for display on suitably equipped analog terminals.

2.10 **application**: Refer to Fascicle I.3 of the *Blue Book*.

2.11 **Application Context (AC)**: Refer to Recommendation X.207.

2.12 **Application Context Negotiation (ACN)**: The process of negotiation at the beginning of a transaction that determines which set of user protocol ASEs will be potentially exchanged during a transaction.

2.13 **Application Entity (AE) (Q.9 – 2156 modified)**: The set of system-independent application activities that are made available as application services to the application agent, e.g. a set of application service elements which together perform all or part of the communication aspects of an application process.

2.14 **Application Entity Invocation (AEI)**: The actual "run-time" program that performs all, or a subset, of the communication functions that comprise the AE-type.

2.15 **Application Protocol Data Unit (APDU)**: A PDU carrying application layer control information and data.

2.16 **Application Service Element (ASE)**: Refer to Recommendation X.207.

2.17 **attribute**: Refer to 8.1/X.501

2.18 **Automatic Speech Recognition (ASR)**: The function of converting the spoken word into a machine understandable form.

2.19 **basic call**: A call between two users that consists of communication only, and does not include additional features.

2.20 **Basic Call Process (BCP)**: The sequence of activities used in establishing, maintaining and releasing a basic call.

2.21 **Basic Call State Model (BCSM)**: A high-level finite state machine model of call processing for basic call control (i.e. a two-party non-IN call). The model might only cover a portion of a call attempt, e.g. an originating BCSM or terminating BCSM, or the whole attempted call connection, originating user to terminating user.

2.22 **Basic Rate Interface (BRI)**: Refer to Recommendation Q.9.

2.23 **bearer control**: The set of functions used to direct the low layer (common) means of transmission.

2.24 **bind**: A mechanism used during Association Control for authentication. Refer to Recommendation X.500.

2.25 **business group**: A logical grouping of service subscribers, who share a set of service properties.

2.26 Business Group Identity (BGID): The Basic Business Group or Multiswitch Business Group Identity of the calling/called party, e.g. group-based services.

2.27 call (Q.9 – 0009-2): The use, or possible use, of one or more connections set up between two or more users and/or service(s).

2.28 call control: The set of functions used to process a call (e.g. provide service features and establish, supervise, maintain and release connections).

2.29 Call Control Agent Functional Entity (CCAF): A functional entity that provides network access functions for users, interacting with call control functional entities in providing services.

2.30 Call Control Function (CCF): The application process that provides call/connection processing and control.

2.31 call control functional entity: Functional entities which cooperate with each other to provide network call processing functions.

2.32 call related: Service interaction(s) performed by the network on behalf of an end user, which require switching capabilities and a call reference to exist within the SSP.

2.33 call unrelated: Service interaction(s) performed by the network on behalf of an end user, which do not require switching capabilities in the SSP. Also the interaction(s) do not require that a call reference exist within the SSP. Also referred to as non-call related.

2.34 called party/user: The entity which receives a call.

2.35 calling party/user: The entity which initiates a call.

2.36 called party business group ID: Identifies the business group associated with the called party.

2.37 called party subaddress: Address information additional to the called party that identifies a specific CPE beyond the S/T reference point.

2.38 call gapping encountered: Indicates the type of gapping the request for instructions have been subjected to, if any.

2.39 calling facility group: Identifier for incoming trunks or private facilities.

2.40 calling facility group member: Identifier for individual member of a facility group.

2.41 calling party business group ID: Identifies the business group associated with the calling party.

2.42 calling party subaddress: the subaddress information identifying the calling party.

2.43 call model: A representation of functions involved in processing a call.

2.44 call party handling: A description of a network's ability to manipulate individual parties to a call independently.

2.45 call/service processing: The execution of logic by a switching or control function to advance a call attempt or a service request.

2.46 Call Segment (CS): A grouping of all the legs connected to a particular connection point.

2.47 Call Segment Model (CSM): A representation of the processing of a call in terms of call segments.

2.48 Capability Set (CS): A coherent and consistent set of network capabilities which have been standardized in a particular release.

2.49 Carrier Access Code (CAC): A code used to select a carrier.

2.50 carrier (commercial telecommunications): The organization whose function is to provide the particular service, e.g. an agent of a private network/facility, intra-serving area, or a specific inter-exchange carrier or international carrier.

2.51 carrier identification code: Identifies the carrier.

2.52 carrier selection: The act or ability to select or choose between telecommunications service providers.

2.53 charge number: The number that identifies the entity to be charged for the call.

2.54 class of service: This is either a Customer Class of Service, a Trunk Class of Service, or a Private-Facility Class of Service. It may refer to either originating or terminating accesses.

2.55 collected address information: An interpretation of the dialled digits specifying the nature of address and the called party number.

2.56 collected digits: A variable number of digits collected.

2.57 Common Management Information System (CMIS): See Recommendation X.700.

2.58 confidentiality (ITU-T X.800): The property that information is not made available or disclosed to unauthorized individuals, entities or processes.

2.59 connection: Refer to Recommendation Q.9.

2.60 connection control: The set of functions used for setting up, maintaining and releasing a communication path between two or more users or a user and a network entity, e.g. a dual tone multi-frequency receiver.

2.61 connection view state: The set of Call Party Handling functionality supported by an SSF can be defined as a catalogue of Connection View States.

2.62 connection point: A connection point is a representation of the interconnection of legs, as viewed from the CSA, that allows information to flow between legs.

2.63 consumer: Refer to Recommendation X.880.

2.64 control: To exercise a directing influence.

2.65 controlling leg: For IN CS-2, the controlling leg is the leg that represents the local access interface at local exchange or the remote access interface at transit exchange (e.g. the incoming line or trunk in an originating call segment, or the outgoing line or trunk in a terminating call segment).

2.66 control window: An interval during which an entity involved in call/service processing is subject to the control of the service control function.

2.67 core feature: A service feature that is fundamental to a service, i.e. in the absence of the feature, the service is not a viable service offering.

2.68 Customized Dialling Plan (CDP): Also known as "customer numbering plan" or "private numbering plan"; see "Access Code".

2.69 data: User and/or network information.

2.70 database: An entity that stores user and/or network information.

2.71 data management: Establishing, updating and administering databases in the network.

2.72 data object: An individually addressable unit of information.

2.73 data integrity (ITU-T X.800): The property that data has not been altered or destroyed in an unauthorized manner.

2.74 data origin authentication (ITU-T X.800): The corroboration that the source is as claimed.

2.75 data template: A specified logical structure for a collection of data objects, including allowable ranges for their values and other data consistency specifications.

2.76 destination routing address: A list of called party numbers (primary and alternative).

2.77 Detection Point (DP): A point in basic call processing at which a processing event may be reported to the service control function and transfer of processing control can occur.

2.78 destination user: The entity to which calls are directed.

2.79 dialled digits: Untranslated address information collected/received from the originating user/line/trunk.

2.80 dialogue: A conversation or an exchange of information.

2.81 Digital Subscriber Signalling System No. 1 (DSS 1): The standardized message-based user-network signalling system for narrow-band ISDN.

2.82 directory: Refer to clause 12/X.500.

2.83 Directory Access Protocol (DAP): Refer to clause 12/X.500.

2.84 Directory Entry (DE): Refer to 7.1/X.501.

2.85 Directory Information Tree (DIT): Refer to 7.1/X.501.

2.86 Directory System Protocol (DSP): Refer to clause 12/X.500.

2.87 directory user agent: Refer to 6.1/X.500.

2.88 Distinguished Name (DN): Refer to 9.1/X.501.

2.89 Distributed Functional Plane (DFP): The plane in the unified functional model containing functional entities and their relationships.

2.90 Distributed Service Logic (DSL): Logic in the distributed functional plane that is used to realize service-independent building blocks.

2.91 domain: Refer to IN domain.

2.92 Dual Tone Multi-Frequency (DTMF): An analogue inband access signalling system.

2.93 dynamic arming/disarming: Enabling/disabling of a detection point by a service control function in the course of service control execution for a particular call/service attempt.

2.94 dynamic data: Information subject to change as a result of an event.

2.95 element: An identifiable physical unit.

2.96 elementary function: A primary or basic function that cannot be further decomposed.

2.97 entity (Q.9 – 7110): A part, device, subsystem, functional unit, equipment or system that can be individually considered. In ISDN the term is used to refer to a particular system or subsystem such as a user terminal or a digital exchange. It is also used to refer to a set of functions of a particular system at a location, e.g. the layer 2 functions of a signalling system at a user terminal.

2.98 **event**: A specific input to and/or output from a given state in a finite state machine model that causes a transition from one state to another.

2.99 **Event Detection Point (EDP)**: A detection point that is armed for a particular instance of a call.

2.100 **executive process**: A process that controls the execution of other processes.

2.101 **Extended User Interface (EUI) Server**: This is an example of SRF that provides the functionality to interact with callers using speech recognition, DTMF, Text-To-Speech Synthesis, context-sensitive announcements, and ADSI CPE with context-sensitive display.

2.102 **facility code**: Code(s) used to select/activate a facility related service, e.g. a two-digit code preceded by "#" to select a preferred routing.

2.103 **facility group**: Indicates the particular group of facilities to route the call.

2.104 **facility group member**: Indicates the specific member of a trunk group or a multi-line hunt group.

2.105 **Facility Restriction Level (FRL)**: The permission level associated with an incoming facility, e.g. trunk line.

2.106 **feature**: A reusable capability provided to a user by one or more services in a network.

2.107 **feature code**: Code(s) used to select/activate a service feature (e.g. forwarding, using two or three digit codes preceded by * or 11 or #, and which may precede subsequent digit selection).

2.108 **feature interaction**: A situation that occurs when an action of one feature affects an action or capability of another. This situation is sometime referred to as Service Interaction. This situation may be desirable or undesirable. A desirable Feature Interaction is referred to as Feature cooperation. An undesirable Feature Interaction is referred to as Feature Interference.

2.109 **feature interactions manager**: The entity in the SSF that provides mechanisms to support multiple concurrent instances of IN service logic instances and non-IN service logic instances on a single call.

2.110 **Finite State Machine (FSM)**: A system having a finite number of states and specified transitions between states.

2.111 **finite state machine model**: An operational model of an entity that is described by the finite set of states the entity can be in and the finite set of transitions possible from one state to another.

2.112 **function (I.112 – 403)**: A set of processes defined for the purpose of achieving a specified objective.

2.113 **functional entity (Q.9 – 7112)**: An entity that comprises a specific set of functions at a given location.

2.114 **functional entity (In telecommunications service provision applications) (Q.9 – 7113)**: A grouping of service providing functions in a single location and a subset of the total set of functions required to provide the service.

2.115 **Functional Entity Action (FEA)**: An action performed by a functional entity as a result of a specific stimulus while the functional entity is in a specific state.

2.116 **functional routine**: Logic that controls the performance of a set of actions to accomplish "routine" tasks, e.g. retrieve information, pass information, etc.

2.117 **generic name**: This identifier, if present, carries name characters and presentation status for the calling and redirecting users.

2.118 global control: Control of functions that are distributed among several entities.

2.119 Global Functional Plane (GFP): The plane in the unified functional model that defines Service-Independent Building Blocks (SIBs) used in providing service features.

2.120 Global Service Logic (GSL): Logic in the global functional plane that is used to realize features.

2.121 Global Virtual Network Services (GVNS): These are the participating services of the global switched GVNS service.

2.122 home network: The network to which the user is normally connected, or the service provider with which the user is associated.

2.123 High-Level SIB (HLSIB): A reusable part of a service feature as normal SIBs, but composed out of SIBs and other HLSIBs which can be executed sequentially. An HLSIB stands for abstraction by hiding service logic and parts of the "service support data" that is considered to be local to the HLSIB.

2.124 inband (inband signalling Q.9 – 2010): A signalling method in which signals are sent over the same transmission channel or circuit as the user's communication and in the same frequency band as that provided for the users – an example is DTMF.

2.125 information flow (Q.9 – 7120): An interaction between a communicating pair of functional entities.

2.126 Intelligent Network (IN): A telecommunications network architecture that provides flexibility for facilitating the introduction of new capabilities and services, including those under customer control.

2.127 Intelligent Network Application Protocol (INAP): A protocol for intelligent network applications.

2.128 IN Conceptual Model (INCM): A planar model used for defining the intelligent network architecture.

2.129 IN DataBase (INDB): A physical entity used for information storage in the intelligent network.

2.130 IN DataBase Management System (INDBMS): A system used for establishing and/or administering information storage in the INDB.

2.131 IN domain: A part of an IN encapsulating predefined roles (e.g. network operator or service provider).

2.132 IN supported service: A service provided using the capabilities of the intelligent network.

2.133 IN Switching Manager (IN-SM): The entity in the SSF that interacts with the SCF in the course of providing IN service features to users.

2.134 IN Switching State Model (**IN-SSM)**: Provides a finite state machine description of SSF/CCF IN call/connection processing in terms of IN call/connection states.

2.135 integrated services digital network (ISDN): see 2.3/I.112, 2.3, Definition 308.

2.136 Intelligent Peripheral (IP): A physical entity that implements a specialized resource function.

2.137 ISDN User Part (ISDN-UP): The Signalling System No. 7 protocol which provides the signalling functions required to support basic bearer services and supplementary services for voice and non-voice applications in an integrated services digital network.

2.138 interworking function: Functionality separating interworking functions from other independent functional or physical architectures.

2.139 interface (Q.9 – 4001): A shared boundary, for example, the boundary between two subsystems or two devices.

2.140 IP available: Indication whether or not an IP is attached, and available at the SSP.

2.141 IPSSP capabilities: Indication of which IP resources are supported, and attached at the SSP from which the call was suspended.

2.142 layer (Q.9 – 2160): A conceptual region that embodies one or more functions between an upper and a lower logical boundary within a hierarchy of functions.

2.143 leg: A representation within a call processing state model representing a telecommunication path towards some addressable entity (e.g. a path toward a user, intelligent peripheral unit etc.).

2.144 Local Exchange (LE) (local central office) (Q.9 – 1002): An exchange in which subscriber lines terminate.

2.145 management function (M.60 modified): A set of processes used for the management of an entity (e.g. database management capabilities covering maintenance of operations, administration, maintenance, and provisioning).

2.146 management building block: A reusable set of functional entity actions and information flows used to provide service management functions in the network.

2.147 monitor window: An interval during which an entity performs the monitoring function.

2.148 Multiple Association Control Function (MACF): Represents the rules and regulations governing the coordination of set of peer-to-peer communications within an Application Entity Invocation (AEI).

2.149 network: See Volume I, Fascicle I.3 of the *Blue Book*.

2.150 Network Access Point (NAP): The point of connection of a physical entity that provides network access for users.

2.151 Network Functional Architecture (NFA): The functional block which consists of the network elements.

2.152 Network Manager (NM): The Network Manager is the entity providing the basic switching and transmission capabilities as well as the service execution capabilities (offered by the SCP, SDP and IP) to the Service Manager. The NM is also responsible for the development and maintenance of the transmission, switching and service execution capabilities. The NM encompasses both the TMN network management functionality and the network element management functionality.

2.153 network operator: The network operator is responsible for the development, provision and maintenance of real-time networking services and for operating the corresponding networks.

2.154 network provider: The organization that maintains and operates the network components required for IN functionality. A network provider may also take more than one role, e.g. also acting as Service Provider.

2.155 operator services information: Information sent between operator services entities identifying charging and service type options.

2.156 optional feature: A service feature added to core features to optionally enhance a service offering.

2.157 open systems interconnection (OSI): Refer to Recommendation X.200 – Basic reference model.

2.158 original called party ID: Refer to Recommendation Q.762.

2.159 Originating Line Information (OLI): Information indicating a toll class of service for the call.

2.160 persistent data: Information that endures beyond a single instance of use, e.g. longer than one call attempt.

2.161 Personal Mobility (PM): The flexibility of the user's access to telecommunications service provision enabling the user to associate with and/or configure any terminal to meet individual requirements.

2.162 private network: A network which provides services to a specific set of users only (see Recommendation I.570).

2.163 physical plane: The plane in the unified functional model containing elements and their interfaces that implement functional entities.

2.164 Plain Old Telephone Service (POTS): A call that requires nothing more than basic call handling.

2.165 plane: A part of the unified functional model.

2.166 Point In Call (PIC): A state in a basic call state model.

2.167 Point of Control (POC): The point in service logic where two different service processes may interact. Possible points of control are: "Point of Initiation (POI)", "Point of Synchronization (POS)", and "Point of Return (POR)" which is considered to be a specialized point of synchronization. Inter process data is conveyed via point of controls.

2.168 Point of Initiation (POI): A functional interface between a service process (including the basic call process) and service logic of another service process to initiate (further) service processing.

2.169 Point of Return (POR): A functional interface between service logic of a service process and basic call processing over which call processing control is returned to basic call processing, whereby the execution of the service logic of the service process is terminated. A point of return is considered to be a specialized point of synchronization.

2.170 Point of Synchronization (POS): A functional interface between service logic of two service processes over which asynchronous communication is initiated, i.e. the execution of the service logic that has a point of synchronization connected to it has to wait until the synchronization signal has arrived. Synchronous communication may be achieved by performing a handshake with the two points of synchronization.

2.171 Primary Rate Interface (PRI): Refer to Recommendation Q.9.

2.172 Private Telecommunication Network Exchange (PTNX): A physical realization of automatic telecommunications switching functionality for private telecommunications network(s) providing call functions for various types of customer premises equipment.

2.173 Protocol Data Unit (PDU): Refer to Recommendation X.200 – OSI Basic Reference Model.

2.174 protocol layer (based on Q.9 – 2160 – definition of "layer"): A group of one or more functions within an upper and lower logical boundary within a protocol reference model. [Layer (N) has boundaries to layer (N + 1) and to layer (N – 1).]

2.175 Public Switched Telephony Network (PSTN): A telecommunications network established to perform telephone services for the public subscribers.

2.176 redirection information: Refer to Recommendation Q.763.

2.177 relationship (Q.65): The complete set of information flows, where they exist, between two functional entities.

2.178 Recognized Operating Agency (ROA): Refer to "Administration".

2.179 Relative Distinguished Name (RDN): Refer to 9.1/X.501.

2.180 route index: A pointer to a specific trunk routing group.

2.181 service (Q.9 – 7011, modified): That which is offered by an Administration or ROA to its customers in order to satisfy a telecommunication requirement.

2.182 service address information: A sequence of digits that identifies a specific service.

2.183 service control: Direction of the functions or processes used to provide a specific telecommunications service.

2.184 service control customization: Functionality to personalize a stand-alone commercial telecommunications service offering, by the server on behalf of a client.

2.185 Service Control Function (SCF): The application of service logic to control functional entities in providing intelligent network services.

2.186 Service Control Function Identifier (SCFID): The means of identification of an SCF.

2.187 Service Control Point (SCP): A physical entity in the intelligent network that implements a service control function.

2.188 Service Creation Environment (SCE): The set of functions to support service creation processing by altering service logic and service data on behalf of the controlling node.

2.189 Service Creation Environment Function (SCEF): The set of functions that support the service creation process, the output of which includes both service logic programs and service data.

2.190 Service Creation Environment Point (SCEP): A physical entity that implements the service creation environment function.

2.191 service creation platform: A set of service-independent objects or functions that allow the creation of services in an intelligent network.

2.192 service creation process: The conception, design and implementation of a capability to provide a service.

2.193 service data: Customer and/or network information required for the proper functioning of a service.

2.194 Service Data Function (SDF): The set of functions that provides for the management of service data in accordance with a service data template.

2.195 Service Data Point (SDP): A physical entity that implements a service data function.

2.196 service data template: A data template related to a specific service logic program.

2.197 Service Feature (SF): A reusable part of one or more service capabilities forming all or part of a service.

2.198 service independent:

1) not dependent on the availability of other services; or

2) having freedom to create any service desired.

2.199 Service independent Building block (SIB): A reusable set of functional entity actions and information flows used to support a service feature or a part of a service feature in an intelligent network.

2.200 service instance data: Service instance data template defines data related to a service subscriber's profile that exist before the service is invoked and can be modified and updated as a result of the service processing activity. This type of data can be read within the service execution and be stored to be used in further service invocations.

2.201 service interaction: See "feature interaction".

2.202 Service Logic (SL): A sequence of processes/functions used to support a specific service.

2.203 Service Logic Control Program (SLCP): A program that may be run to realize an instance of a service feature.

2.204 Service Logic Management Program (SLMP): A program that may run to realize the management of user and/or network information.

2.205 Service Logic processing Program (SLP): A software program containing service logic.

2.206 Service Logic processing Program (use) Instance (SLPI): The invocation and application of a particular service logic program in providing a service or a service feature for a specific call/service attempt.

2.207 Service Manager (SM): The entity that provides the services to its customers on a contractual basis, and which is responsible for the services offered. The SM uses the service execution, transmission and switching capabilities offered by the Network Manager to offer the services to its customers.

2.208 service management: Management of user and/or network information required for the proper operation of a service.

2.209 Service Management Access Function (SMAF): A functional interface between network operators and/or subscribers and network service management functional entities.

2.210 Service Management Agent Function (SMAF): The entity equivalent to the work station function between network operators and/or subscribers and network service management functional entities.

2.211 Service Management Function (SMF): The set of processes that support the management of user and/or network information, including service data and service logic programs that are required for the proper operation of a service.

2.212 Service Management Point (SMP): A physical entity that implements a service management function.

2.213 Service Management System (SMS): A set of service management functions.

2.214 Service Node (SN): A physical entity that contains the service control function, service data function, specialized resource function and service switching/call control functions.

2.215 service plane: The plane in the unified functional model that describes services.

2.216 **service process**: A chain of "service-independent building blocks" or "high-level service-independent building blocks" executed sequentially, but may be in parallel with other service processes. Service processes are initiated via a "point of initiation" and synchronized via "point(s) of synchronization". A service process is always contained within one "domain". A process in one domain is able to spawn new processes and to communicate with processes in other domains or its own domain. The "points of control" and "call instance data" crossing the border of two domains is part of their logical interface. The "basic call processing" can be regarded as a specialized service process.

2.217 **service processing**: The execution of service control and basic call processing functions to provide a service.

2.218 **Service Subscriber (SS)**: An entity that contracts to receive services offered by Service Providers.

2.219 **Service Switching and Control Point (SSCP)**: The physical entity that contains the service control function, service data function and the service switching/call control functions.

2.220 **Service Support Data (SSD)**: An identifier that defines data parameters of specific service feature descriptions in the global functional plane.

2.221 **Service Switching Function (SSF)**: The set of processes that provide the communication path for interaction between a call control function and a service control function.

2.222 **Service Switching function Management Entity (SSME)**: Functionality of an entity controlling the system management of the node.

2.223 **Service Switching Point (SSP)**: The physical entity that implements the service switching function.

2.224 **Service Trigger Information (STI)**: Information whose reception initiates an action in support of a service.

2.225 **Service User (SU)**: An entity external to the network that uses its services.

2.226 **serving area ID**: The identity of the local area where a service is available from the server.

2.227 **Single Association Control Function (SACF)**: Represents the rules and regulation governing the use of the ASEs that are being used for communication over a single Application Association to a peer.

2.228 **Single Association Object (SAO)**: The representation of the functions that are needed to communicate over a single Application Association to a peer.

2.229 **single-ended service feature**: A feature, e.g. call/service attempt manipulation, that applies to only one of the parties that may be involved on a call/service attempt.

2.230 **Specialized Resource Function (SRF)**: The set of functions that provide for the control and access to resources used in providing services.

2.231 **state (in FSM)**: A description of an entity defined by the values of its object attributes at a given point in time.

2.232 **state (in SDL) (Q.9 – 6942)**: A condition in which the action of a process is suspended awaiting an input.

2.233 **static arming/disarming**: Enabling/disabling of a detection point, as directed by a service management function, to cause a specified action by call/service processing whenever a specific point in call is encountered.

2.234 **static data**: Information that remains unchanged for the duration of several calls or instance of use of a service. (Usually controlled by a source external to the network.)

2.235 **supplemented call**: A basic call with added service features or capabilities.

2.236 **supplier**: See Recommendation X.880.

2.237 **Telecommunication Management Network (TMN)**: The entity which provides the means used to transport and process information related to management functions for the telecommunications network.

2.238 **terminal type**: Indicates the type of terminal to the SCF (e.g. DTMF phone, ISDN terminal).

2.239 **transaction (Fascicle I.3)**: An association between two TC providers.

2.240 **Transaction Capabilities (TC)**: A peer-to-peer protocol used to support remote operations in telecommunication networks.

2.241 **Transaction Capabilities Application Part (TCAP)**: The Application layer services and protocols of TC consisting of the component sublayer and the Transaction sublayer, dialogue control.

2.242 **transit network selection**: This identifier if present, identifies the Carrier Identification Code and the Circuit Code.

2.243 **transition**: In a finite state machine model, a change in the state of an entity resulting from a change in the values of its object attributes.

2.244 **travelling class mark**: Provides information for routing or screening and allows for carrying class of service information along with calling number through a network.

2.245 **trigger**: A stimulus for initiating an action.

2.246 **Trigger Detection Point (TDP)**: A detection point in basic call processing that is statically armed.

2.247 **Universal Personal Telecommunications (UPT)**: A telecommunications service which uninterrupted enables access to telecommunications services while allowing personal mobility.

2.248 **unbind**: A mechanism used during Association Control for authentication. Refer to Recommendation X.500.

2.249 **user**: An entity external to the network that uses its service(s).

2.250 **User-to-Service Information (USI)**: This information element is used to convey information from the user to the network.

2.251 **vendor- or implementation-independent**: The characteristic that products from different vendors are able to work together in the same environment, and/or, physical units serving as the same functional entity(ies) produced by different vendors can be used interchangeably.

2.252 **Virtual Private Network (VPN)**: A network consisting of physical components of both public and private networks that together behave as a private network.

Annex A

Acronyms

AC	Application Context
ACN	Application Context Negotiation
ACSE	Application Control Service Element
AD	Adjunct
ADSI	Analogue Display Service Interface (Server)
AE	Application Entity
AEI	Application Entity Invocation
AOC	Advice of Charge
APC	Apply Charging
APCI	Application Protocol Control Information
APDU	Application Protocol Data Unit
API	Application Programming Interface
APR	Apply Charging Report
ASE	Application Service Element
ASR	Automatic Speech Recognition
BCP	Basic Call Process
BCSM	Basic Call State Model
BCUP	Basic Call Unrelated Process
BCUSM	Basic Call Unrelated State Model
BGID	Business Group Identity
BRI	Basic Rate Interface
CAC	Carrier Access Code
CCAF	Call Control Agent Function
CCF	Call Control Function
CDP	Customized Dialling Plan
CHA	Component Handler
CID	Call Instance Data
CM	Call Manager
CMIS	Common Management Information System
CS	Call Segment
CS	Capability Set
CSM	Call Segment Model
CUSF	Call-Unrelated Service Function
DAP	Directory Access Protocol
DE	Directory Entry
DET	Determination

DFP	Distributed Functional Plane
DHA	Dialogue Handler
DIT	Directory Information Tree
DLE	Destination Local Exchange
DN	Directory Number
DN	Distinguished Name
DP	Detection Point
DSA	Directory System Agent
DSL	Distributed Service Logic
DSP	Directory System Protocol
DSS 1	Digital Subscriber Signalling System No. 1
DTMF	Dual Tone Multi-Frequency
DUA	Directory User Agent
EDP	Event Detection Point
EDP-N	Event Detection Point-Notification
EDP-R	Event Detection Point-Request
EUI	Extended User Interface Server
FCI	Furnish Charging Information
FEA	Functional Entity Action
FEAM	Functional Entity Access Manager
FIM	Feature Interactions Manager
FRL	Facility Restriction Level
FSM	Finite State Machine
GEN	Generation
GFP	Global Functional Plane
GSL	Global Service Logic
GVNS	Global Virtual Network Services
HLSIB	High-Level Service Independent Block
IAF	Intelligent Access Function
IEC	International Electrotechnical Commission
IMT-2000	International Mobile Telecommunications-2000
IN	Intelligent Network
INAP	Intelligent Network Application Protocol
INCM	IN Conceptual Model
INDB	IN DataBase
INDBMS	IN DataBase Management System
IN-SM	IN Switching Manager
IN-SSM	IN Switching State Model
IP	Intelligent Peripheral
ISDN	Integrated Services Digital Network
ISDN-UP	ISDN User Part
ISO	International Organization for Standardization
ISUP	Integrated Services Digital Network-User Part
ISUP	ISDN-UP
ITU-T	International Telecommunication Union – Telecommunication Standardization Sector
LE	Local Exchange

MACF	Multiple Association Control Function
NAP	Network Access Point
NEF	Network Element Function
NFA	Network Functional Architecture
NM	Network Manager
NSAP	Network Service Access Point
OFC	Off-line Charging (billing/accounting information)
OLE	Originating Local Exchange
OLI	Originating Line Information
ONC	On-line Charging (user access information)
OSF	Operation System Function
OSI	Open Systems Interconnection
OUT	Output
PDU	Protocol Data Unit
PIC	Point in Call
PM	Personal Mobility
POC	Point of Control
POI	Point of Initiation
POR	Point of Return
POS	Point of Synchronization
POTS	Plain Old Telephone Service
PRI	Primary Rate Interface
PSTN	Public Switched Telephony Network
PTNX	Private Telecommunication Network Exchange
RCP	Resource Control Part
RDN	Relative Distinguished Name
REG	Registration
RFP	Resource Function Part
RLF	Radio Link Function
RPOA	Recognized Operating Agency
ROS	Remote Operations
ROSE	Remote Operations Service Element
SACF	Single Association Control Function
SAO	Single Association Object
SCCP	Signalling Connection Control Part
SCE	Service Creation Environment
SCEF	Service Creation Environment Function
SCEP	Service Creation Environment Point

SCF	Service Control Function
SCF FSM	Service Control Function Finite State Machine
SCFID	Service Control Function Identifier
SCI	Send Charging Information
SCME	Service Control function Management Entity
SCME FSM	Service Control function Management Entity Finite State Machine
SCP	Service Control Point
SCSM	Service Control Function Call State Model
SDF	Service Data Function
SDF FSM	Service Data function Finite State Machine
SDL	Specification and Description Language
SDME	Service Data function Management Entity
SDP	Service Data Point
SDSM	Service Data function Call State Model
SF	Service Feature
SIB	Service Independent Building Block
SL	Service Logic
SLCP	Service Logic Control Program
SLMP	Service Logic Management Program
SLP	Service Logic Processing Program
SLPI	Service Logic Processing Program Instance
SM	Service Manager
SMAF	Service Management Access Function
SMAF	Service Management Agent Function
SMF	Service Management Function
SMP	Service Management Point
SMS	Service Management System
SN	Service Node
SRF	Specialized Resource Function
SRF FSM	Specialized Resource Function Finite State Machine
SRME	Specialized Resource Function Management Entity
SRSM	Specialized Resource Function Call State Model
SS	Service Subscriber
SS7	Signalling System No. 7
SSCP	Service Switching and Control Point
SSD	Service Support Data

SSF	Service Switching Function
SSF FSM	Service Switching Function Finite State Machine
SSME	Service Switching Function Management Entity
SSME FSM	Service Switching Function Management Entity Finite State Machine
SSN	Sub-System Number
SSP	Service Switching Point
STI	Service Trigger Information
SU	Service User
TC	Transaction Capabilities
TCAP	Transaction Capabilities Application Part
TDP	Trigger Detection Point
TDP-N	Trigger Detection Point-Notification
TDP-R	Trigger Detection Point-Request
TMN	Telecommunications Management Network
TTS	Text To Speech
UPT	Universal Personal Telecommunication
VPN	Virtual Private Network
WCR	Wireless Call Related
WCU	Wireless Call Unrelated

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