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SERIES Y: GLOBAL INFORMATION INFRASTRUCTURE AND INTERNET PROTOCOL ASPECTS

Global information infrastructure – General

Global Information Infrastructure terminology: Terms and definitions

ITU-T Recommendation Y.101

(Formerly CCITT Recommendation)

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ITU-T Recommendation Y.101

Global Information Infrastructure terminology: Terms and definitions

Summary

This ITU-T Recommendation contains the Global Information Infrastructure terminology.

Source

ITU-T Recommendation Y.101 was prepared by ITU-T Study Group 13 (1997-2000) and approved under the WTSC Resolution 1 procedure on 10 March 2000.

FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. 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 turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSC Resolution 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, 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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Introduction

This ITU-T Recommendation provides the terms and definitions used in the Global Information Infrastructure.

ITU-T Recommendation Y.101

Global Information Infrastructure terminology: Terms and definitions

1 access network

F: réseau d'accès

S: red de acceso

An implementation comprising those entities (such as cable plant, transmission facilities, etc.) which provide the required transport bearer capabilities for the provision of telecommunications services between a *Service Node Interface* (SNI) and each of the associated *User-Network Interfaces* (UNIs).

2 Access Network Interface (ANI)

F: interface du réseau d'accès

S: interfaz de red de acceso

An interface between a local switch and an *access network* within a local network.

3 access node

F: nœud d'accès

S: nodo de acceso

The element of the access network containing centralized functions responsible for processing information flows in preparation for transport through the selected distribution network.

4 adaptation unit

F: adaptateur

S: unidad de adaptación

The unit which converts from the native *On-Premise Interface* (OPI) to another interface more suitable for the given appliance.

5 affordability

F: prix abordable (accessibilité pécuniaire)

S: asequibilidad

The cost effectiveness of the resources utilized by an enterprise/organization or consumer over a specified period of time.

6 agent

F: agent

S: agente

An agent is an element that performs some task on behalf of some party (i.e. a user, machine, application, or another agent) rather than having the party itself perform the task.

7 appliance

F: appareil

S: aparato

Generic term used to describe the terminal device employed by the service application. Telephones, TV sets, computers, etc. are examples of appliances.

8 application

F: application

S: aplicación

A structured set of capabilities, which provide value-added functionality supported by one or more services.

9 application process

F: processus d'application

S: proceso de aplicación

A sequence of operations that performs the information processing for a particular application.

10 Application Service Element (ASE)

F: élément de service d'application

S: elemento de servicio de aplicación

A set of application functions that provide a capability for the interworking of application-entity invocations for a specific purpose; application-service elements are components of application-service objects.

11 Application Service Object (ASO)

F: objet de service d'application

S: objeto de servicio de aplicación

A configuration of various groups of application service elements.

12 Asymmetric Digital Subscriber Line (ADSL)

F: ligne d'abonné numérique asymétrique

S: línea de abonado digital asimétrica

A modem technology that converts twisted-pair telephone lines into access paths for multimedia and high-speed data communications. The bit rates transmitted in both directions are different.

13 ATM Transfer Capability (ATC)

F: capacité de transfert ATM

S: capacidad de transferencia ATM

A set of ATM traffic control procedures, tailored to support a service with given traffic characteristics.

14 availability

F: disponibilité

S: disponibilidad

The measure of the degree of access to a particular resource or set of resources.

15 bitway

F: connexion physique; route physique

S: conexión física

All the associated physical *media* between a sender and a receiver of data.

16 broadcast

F: diffusion

S: difusión

A unidirectional distribution of data from one point to many points.

17 Cable Distribution Network (CDN)

F: réseau de distribution par câble

S: red de distribución por cable

A tree-structured network to transport a signal to appliances.

18 cell conformance

F: conformité d'une cellule

S: conformidad de una célula

An algorithm that identifies cells that conform to negotiated traffic parameters and traffic control procedures at a standardized interface.

19 Cell Delay Variation (CDV)

F: variation du temps de propagation des cellules

S: variación del retardo de célula

The variation of cell transfer delay between two given points of an ATM layer connection.

20 cell entry event

F: instant d'arrivée d'une cellule

S: evento de llegada de célula

An event which occurs when an ATM cell crosses a measurement point entering the Switching or Signalling Node (SSN) or customer equipment (CEQ) from the attached transmission system.

21 cell exit event

F: instant de sortie d'une cellule

S: evento de salida de célula

An event which occurs when an ATM cell crosses a measurement point exiting the Switching or Signalling Node (SSN) or customer equipment (CEQ) into the attached transmission system.

22 continuity check

F: test de continuité

S: prueba de continuidad

Mechanism to test that transfer is possible on a certain link or connection. This term is normally qualified to indicate the object being supervised (e.g. VP continuity check).

23 compression

F: compression

S: compresión

A representation scheme to reduce the size of data maintaining acceptable quality.

NOTE – Compression schemes are usually designed for a particular type of data or content and may give lower quality for other types.

24 core network

F: réseau central

S: red medular; principal

A portion of the delivery system composed of networks, systems equipment and infrastructures, connecting the service providers to the access network.

25 cultural elements

F: éléments culturels

S: elementos culturales

The special characteristics of languages and the commonly accepted rules for their use (especially in written form) which are particular to a society or geographic area. Examples are: national characters and associated elements (such as hyphens, dashes, and punctuation marks), correct transformation of characters, dates and measures, sorting and searching rules, coding of national entities (such as country and currency codes), presentation of telephone numbers, and keyboard layouts.

26 Customer Premises Equipment (CPE)

F: equipement des locaux client

S: equipo en las instalaciones del cliente

End-use system including private network elements connecting the customer applications to the access line.

27 decryption

F: déchiffrement

S: descriptación

The decoding of encrypted information.

28 domain

F domaine

S: dominio

A domain is a set of functions that are performed by one or more players and can include functions from more than one role.

29 Drop Distribution Interface (DDI)

F: interface entre distribution et raccordement

S: interfaz distribución entrega

The interface between a local distribution network and the final drop network to the customer premises.

30 element

F: élément

S: elemento

Generic term used to describe any GII component e.g. network, switch, application server, appliance, etc.

31 emulation

F: émulation

S: emulación

Simulation in real time.

32 encryption

F: chiffrement

S: criptación

An encoding scheme that produces meaningless information to all observers except those with the decoding key.

33 Global Information Infrastructure (GII)

F: infrastructure mondiale de l'information

S: infraestructura mundial de la información

A collection of networks, end user equipment, information, and human resources which can be used to access valuable information, communicate with each other, work, learn, receive entertainment from it, at any time and from any place, with affordable cost on a global scale.

34 head end

F: tête de réseau

S: cabecera de red

An element in a cable distribution system which receives information from a service provider and transmits it to end users.

35 interoperability

F: interopérabilité

S: interoperabilidad

The ability of two or more systems or applications to exchange information and to mutually use the information that has been exchanged.

36 interface

F: interface

S: interfaz

A shared boundary between two functional units.

NOTE – An interface is defined by various characteristics pertaining to the functions, physical interconnections, signal exchanges and other characteristics as appropriate.

37 Internet

F: Internet

S: Internet

A collection of interconnected networks using the Internet Protocol which allows them to function as a single, large virtual network.

38 Inter-Network Interface (INI)

F: interface interréseaux

S: interfaz entre redes

The interface between two networks.

39 Intrinsic Burst Tolerance (IBT)

F: tolérance intrinsèque de rafales

S: tolerancia intrínseca de ráfaga

A traffic parameter which characterises the maximum burst duration at a specified peak cell rate, for use together with a Sustainable Cell Rate (SCR) in addition to a Peak Cell Rate (PCR).

40 manageability

F: aptitude à être géré

S: gestionabilidad

The characteristic of a set of resources, which a allows an enterprise, organization, or consumer to control how these resources are deployed and/or utilized.

41 management system

F: système de gestion

S: sistema de gestión

A functional system which supports the management of user and/or network information and resources for the proper operation of a service.

42 media

F: médias

S: medios

Plural of medium.

43 medium

F: média

S: medio

Specific physical support for transmission or storage of information.

Type of presentation of information (i.e., video, audio, text, etc.).

44 middleware

F: entité médiatrice

S: soporte intermedio

The mediating entity between two information elements. Such an element can be, for example, an application, infrastructure component, or another mediating entity.

45 network

F: réseau

S: red

A set of nodes and links that provide connections between two or more defined points to facilitate telecommunication between them.

46 nomadicity

F: itinérance

S: nomadicidad

Continuity of access between two information infrastructure components as they move in space.

47 Network-to-Network Interface type A (NNI-A)

F: interface réseau-réseau de type A

S: interfaz red/red tipo A

The interface between a long-distance backbone network and a local network.

48 Network-to-Network Interface type B (NNI-B)

F: interface réseau-réseau de type B

S: interfaz red/red tipo B

The interface between a long-distance backbone network and a peer long-distance backbone network.

49 Peak Cell Rate (PCR)

F: débit cellulaire crête

S: velocidad de células de cresta

An upper limit on the rate at which cells can be submitted on an ATM connection.

50 player

F: acteur

S: actor

A player is an organization, or individual, which undertakes one or more roles.

51 portability

F: portabilité

S: portabilidad

The ability of an entity or element to be used in different systems or environments. Three examples of portability are as follows:

1) Ability of software or data to be used in different systems;
2) Ability of a system to be connected to several different systems and operate in different environments; and
3) Ability of a user's telephone number or address to be allocated to different systems when the user moves from one location to another.

52 quality of service

F: qualité de service

S: calidad de servicio

The collective effect of service performances which determine the degree of satisfaction of a user of the service.

53 reference point

F: point de référence

S: punto de referencia

A conceptual point at the conjunction of two non-overlapping functional groups (see ITU-T Recommendations G.960, I.112, I.430 and Q.9).

NOTE – Each reference point is assigned a prefix letter (for example: T reference point).

54 reliability

F: fiabilité

S: fiabilidad

The probability that a product or system will perform as required for a specified period of time.

55 role

F: rôle

S: cometido; rol

The role is a business activity that is intended to add value to certain goods/services.

56 segment

F: segment

S: segmento

A segment is a well-defined set of functions, part of one role, owned and operated by one player, part of one (and only one) service provisioning platform, and part of one domain.

57 service

F: service

S: servicio

A structure set of capabilities intended to support applications.

58 service node

F: nœud de service

S: nodo de servicio

A network element that contains one or several of the service control functions, service data functions, specialized resource functions and service switching/control function to provide a service in the context of GII.

59 service primitive

F: primitive de service

S: primitiva de servicio

The smallest defined interaction between the user and provider of a communication service.

60 service primitive; primitive

F: primitive de service; primitive

S: primitiva de servicio; primitiva

An abstract, implementation-independent interaction between a service user and the service provider.

61 Sustainable Cell Rate (SCR)

F: débit cellulaire soutenu

S: velocidad de células sostenible

An upper limit on the long-term average cell transfer rate of an ATM connection.

62 User-Network Interface (UNI)

F: interface utilisateur

S: interfaz usuario/red

The interface between the terminal equipment and a network termination at which interface the access protocols apply.

63 Very high speed Digital Subscriber Line (VDSL)

F: ligne d'abonné à très haut débit

S: línea digital de abonado de velocidad muy alta

A modem technology that enables converts twisted-pair telephone lines to be used as access paths for multimedia and high-speed data communications. VDSL uses higher bit rates than ADSL. These bit rates may or may not be different in both directions.

64 video

F: vidéo

S: vídeo

Electronic image with the capability to reproduce movement.

65 video server

F: serveur vidéo

S: servidor de vídeo

A physical entity that stores video contents for retrieval by users.

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