



UNIÓN INTERNACIONAL DE TELECOMUNICACIONES

UIT-T

Q.824.0

SECTOR DE NORMALIZACIÓN
DE LAS TELECOMUNICACIONES
DE LA UIT

(10/95)

**ESPECIFICACIONES DEL SISTEMA
DE SEÑALIZACIÓN N.º 7**

**DESCRIPCIÓN DE LAS ETAPAS 2 Y 3
DE LA INTERFAZ Q3 –
ADMINISTRACIÓN DE CLIENTES –
INFORMACIÓN COMÚN**

Recomendación UIT-T Q.824.0

(Anteriormente «Recomendación del CCITT»)

PREFACIO

El UIT-T (Sector de Normalización de las Telecomunicaciones) es un órgano permanente de la Unión Internacional de Telecomunicaciones (UIT). Este órgano estudia los aspectos técnicos, de explotación y tarifarios y publica Recomendaciones sobre los mismos, con miras a la normalización de las telecomunicaciones en el plano mundial.

La Conferencia Mundial de Normalización de las Telecomunicaciones (CMNT), que se celebra cada cuatro años, establece los temas que han de estudiar las Comisiones de Estudio del UIT-T, que a su vez producen Recomendaciones sobre dichos temas.

La aprobación de Recomendaciones por los Miembros del UIT-T es el objeto del procedimiento establecido en la Resolución N.º 1 de la CMNT (Helsinki, 1 al 12 de marzo de 1993).

La Recomendación UIT-T Q.824.0 ha sido preparada por la Comisión de Estudio 11 (1993-1996) del UIT-T y fue aprobada por el procedimiento de la Resolución N.º 1 de la CMNT el 17 de octubre de 1995.

NOTA

En esta Recomendación, la expresión «Administración» se utiliza para designar, en forma abreviada, tanto una administración de telecomunicaciones como una empresa de explotación reconocida de telecomunicaciones.

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RESUMEN

La finalidad de esta Recomendación es proporcionar la descripción común de las etapas 2 y 3 de la interfaz Q3 entre una central local y la red de gestión de las telecomunicaciones (RGT) para soportar las funciones de gestión de configuración con el fin de prestar asistencia a la administración de clientes. La administración de clientes es una actividad de gestión que realiza el operador de la red para intercambiar con el cliente todos los datos y funciones y de gestión relacionados con el mismo necesarios para ofrecer un servicio de telecomunicaciones, y para intercambiar con la red todos los datos y funciones de gestión relacionados con el cliente necesarios para que la red produzca ese servicio de telecomunicaciones. Esta Recomendación trata de la administración de la configuración del cliente en la central local mediante la RGT y forma parte de una serie de Recomendaciones. En esta Recomendación se definen objetos gestionados comunes no específicos de una tecnología.

DESCRIPCIÓN DE LAS ETAPAS 2 Y 3 DE LA INTERFAZ Q3 – ADMINISTRACIÓN DE CLIENTES – INFORMACIÓN COMÚN

(Ginebra, 1995)

1 Introducción

1.1 Finalidad y alcance

La administración de clientes es una actividad de gestión que realiza el operador de la red con el fin de intercambiar con el cliente todos los datos y funciones de gestión relacionados con el mismo, requeridos para ofrecer un servicio de telecomunicaciones y para intercambiar con la red todos los datos y funciones de gestión relacionados con el cliente, necesarios para que la red produzca ese servicio de telecomunicaciones.

La finalidad de esta Recomendación consiste en proporcionar la descripción común de las etapas 2 y 3 de la interfaz Q3 entre una central local y la red de gestión de las telecomunicaciones (RGT) para sustentar funciones de gestión de configuración.

La interfaz Q3 es una interfaz TMN entre elementos de red o adaptadores a interfaz Q que interconectan con sistemas de operaciones (OS, *operation systems*) sin mediación y entre los OS y los dispositivos de mediación, tal como se describe en la Recomendación M.3100.

1.2 Referencia

Esta Recomendación se basa en la descripción de servicios de gestión de la etapa 1 dada en las Recomendaciones de la serie M.3000, incluida la Recomendación M.3400. Esta Recomendación también proporciona las descripciones de las etapas 2 y 3 para el tratamiento de servicios de administración del cliente, bien por una interfaz Q3 o por la interfaz usuario-red de la RDSI, tal como se describe en la Recomendación Q.942.

1.3 Aplicación

La información de gestión incluida en esta Recomendación puede ser intercambiada por aplicaciones del elemento de servicio de información de gestión común (CMISE, *common management information service element*). La clase de aplicaciones de operación, administración, mantenimiento y suministro (OAM&P) para transacciones se explica en esta Recomendación con la definición de clases de objetos, sus atributos y sus relaciones. Las series de protocolos se indican en las Recomendaciones Q.811 y Q.812. No se identifican requisitos especiales.

1.4 Consideraciones generales

1.4.1 Diagramas de modelos de información

Los siguientes diagramas de modelos de información se han diseñado para aclarar las relaciones entre las diferentes clases de objetos de administración del cliente. Se distinguen tres tipos de diagramas:

- 1) Modelos de relaciones de entidades, que muestran las relaciones entre los diferentes objetos gestionados.
- 2) Jerarquía de herencia, que muestra cómo los objetos gestionados proceden los unos de los otros (es decir, los diferentes trayectos de las características heredadas de los diferentes objetos gestionados).
- 3) Jerarquía de denominación, que muestra la procedencia de nombres de objetos gestionados (es decir, los diferentes trayectos de denominación para casos de objetos gestionados).

Estos tres diagramas se ofrecen sólo para mayor claridad. La especificación formal en función de plantillas de directrices para la definición de objetos gestionados (GDMO, *guidelines for the definition of managed objects*) y definiciones de tipo ASN.1 constituye la información pertinente para la aplicación de esta Recomendación.

1.4.1.1 Modelos de relaciones de entidades

El siguiente modelo de relaciones de entidades describe la relación entre los objetos gestionados comunes.

Los diagramas de relaciones de entidades ilustran la manera pretendida de aplicación del modelo. Sin embargo, no muestran todas las relaciones que el modelo puede soportar. Estos diagramas muestran las relaciones en las que pueden participar los objetos gestionados. Ejemplares de una clase o subclase pueden no ser aptos para participar en la relación indicada. En caso de contención, esto significa que existe una vinculación de nombre alternativa; en relaciones implementadas mediante punteros, el valor del puntero será nulo si un ejemplar no puede participar o no participa en la relación. Véanse las Figuras 1a, 1b y 1c.

1.4.1.2 Jerarquía de herencia

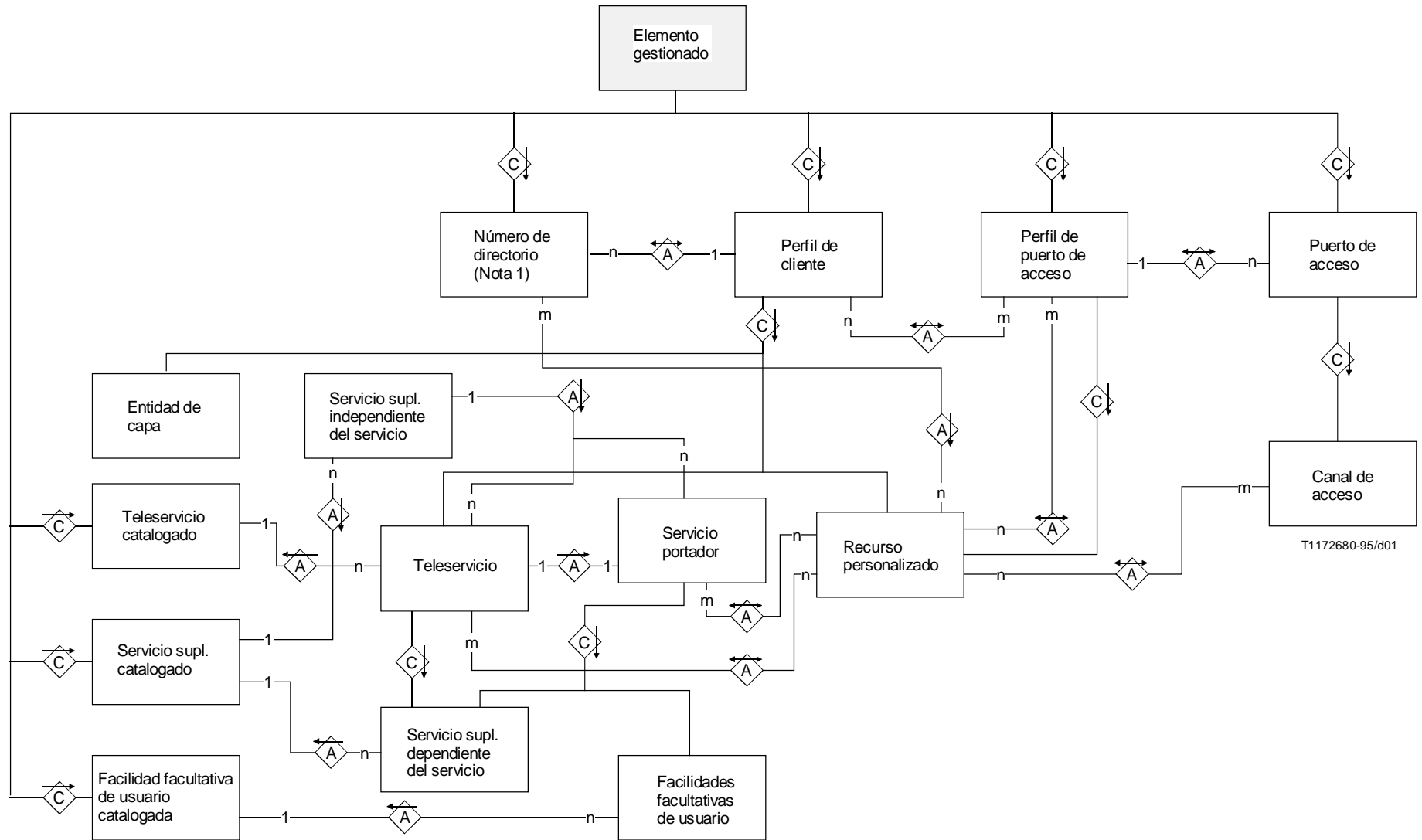
Véase la Figura 2.

1.5 Denominación de objetos gestionados y sintaxis de atributos

En esta Recomendación, todos los atributos se denominan de acuerdo con las siguientes directrices:

- El nombre de un atributo se compone del nombre de una clase de objeto seguido por la cadena «Ptr» únicamente si el valor del atributo está destinado a identificar una clase específica de objeto.
- Si un valor de atributo está destinado a identificar clases de objetos diferentes, se da un nombre descriptivo a ese atributo y se proporciona una descripción en el comportamiento del atributo.
- El nombre de un atributo se compone del nombre de una clase de objeto seguido de la cadena «id», únicamente si el valor del atributo está destinado a identificar el nombre de la clase del objeto que desempeña ese atributo.

Véase la Figura 3.



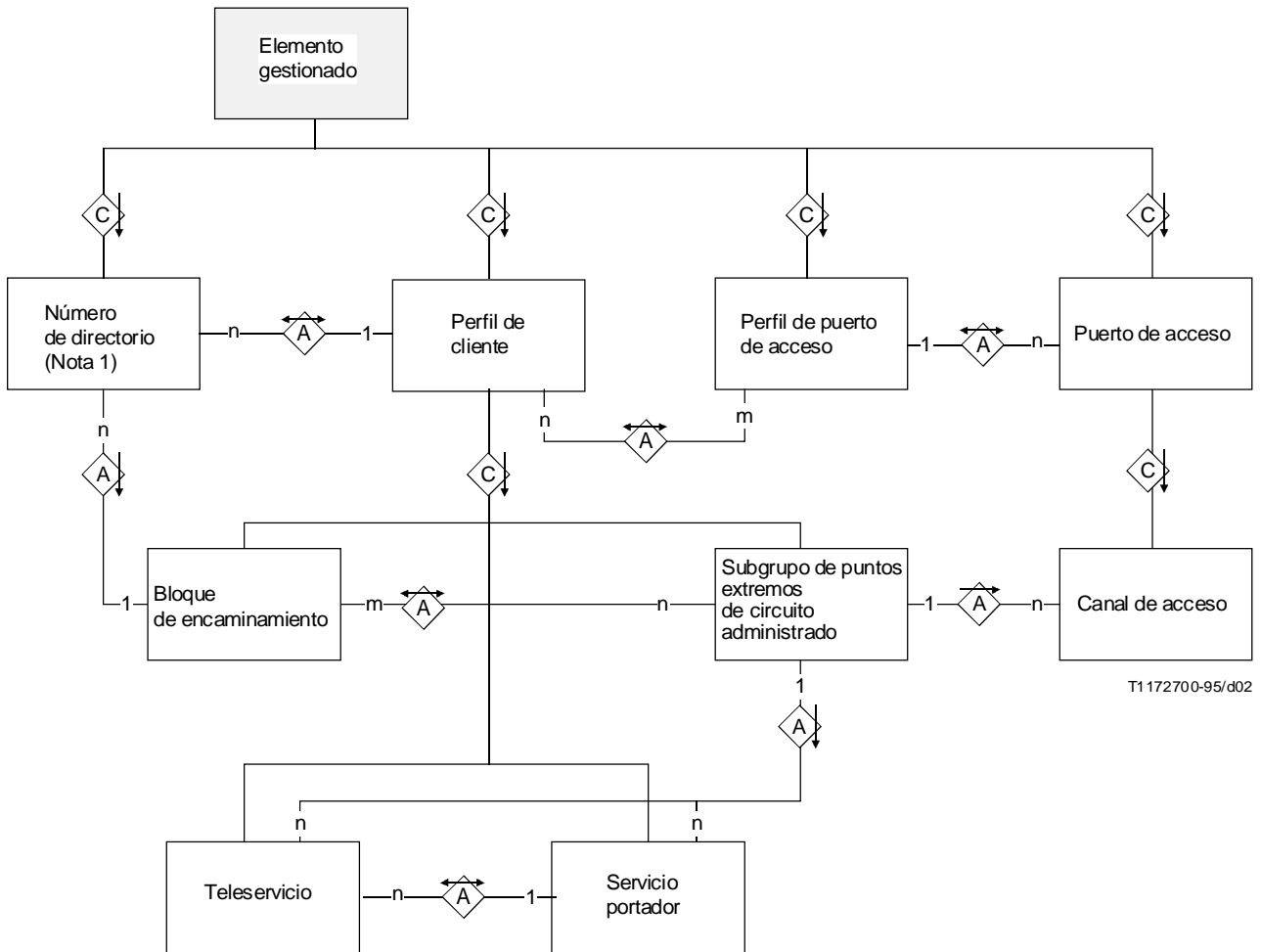
T1172680-95/d01

NOTAS

- 1 Número de directorio tiene 2 subdirecciones: número de directorio E.164 y número de directorio X.121. Estas subdirecciones se utilizan como se indica para el número de directorio.
- 2 Salvo por lo que se refiere al elemento gestionado, en esta Figura sólo se muestran las clases de objetos gestionados definidas en la presente Recomendación. Se definen relaciones adicionales para las mismas subclases de estos objetos. Véanse las demás Recomendaciones de la serie Q.824.

FIGURA 1a/Q.824.0

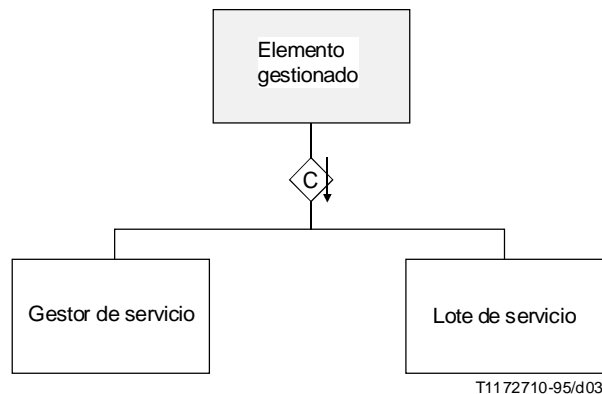
Modelo de relaciones de entidades – Parte A



NOTAS

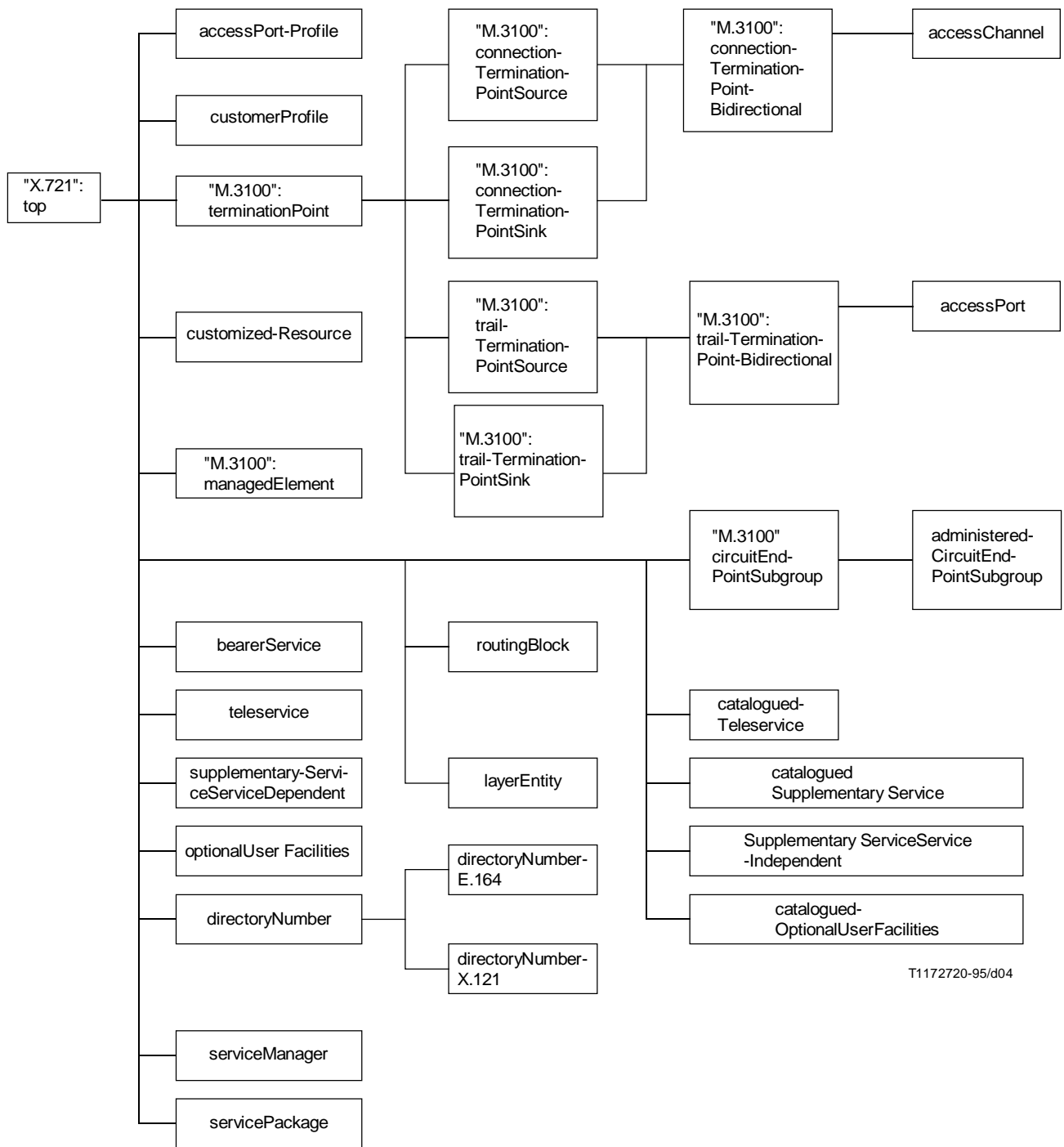
- 1 Número de directorio tiene 2 subdirecciones: número de directorio E.164 y número de directorio X.121. Estas subdirecciones se utilizan como se indica para el número de directorio.
- 2 Salvo por lo que se refiere al elemento gestionado, en esta Figura sólo se muestran las clases de objetos gestionados definidas en la presente Recomendación. Se definen relaciones adicionales para las mismas subclases de estos objetos. Véanse las demás Recomendaciones de la serie Q.824.

FIGURA 1b/Q.824.0
Modelo de relaciones de entidades – Parte B



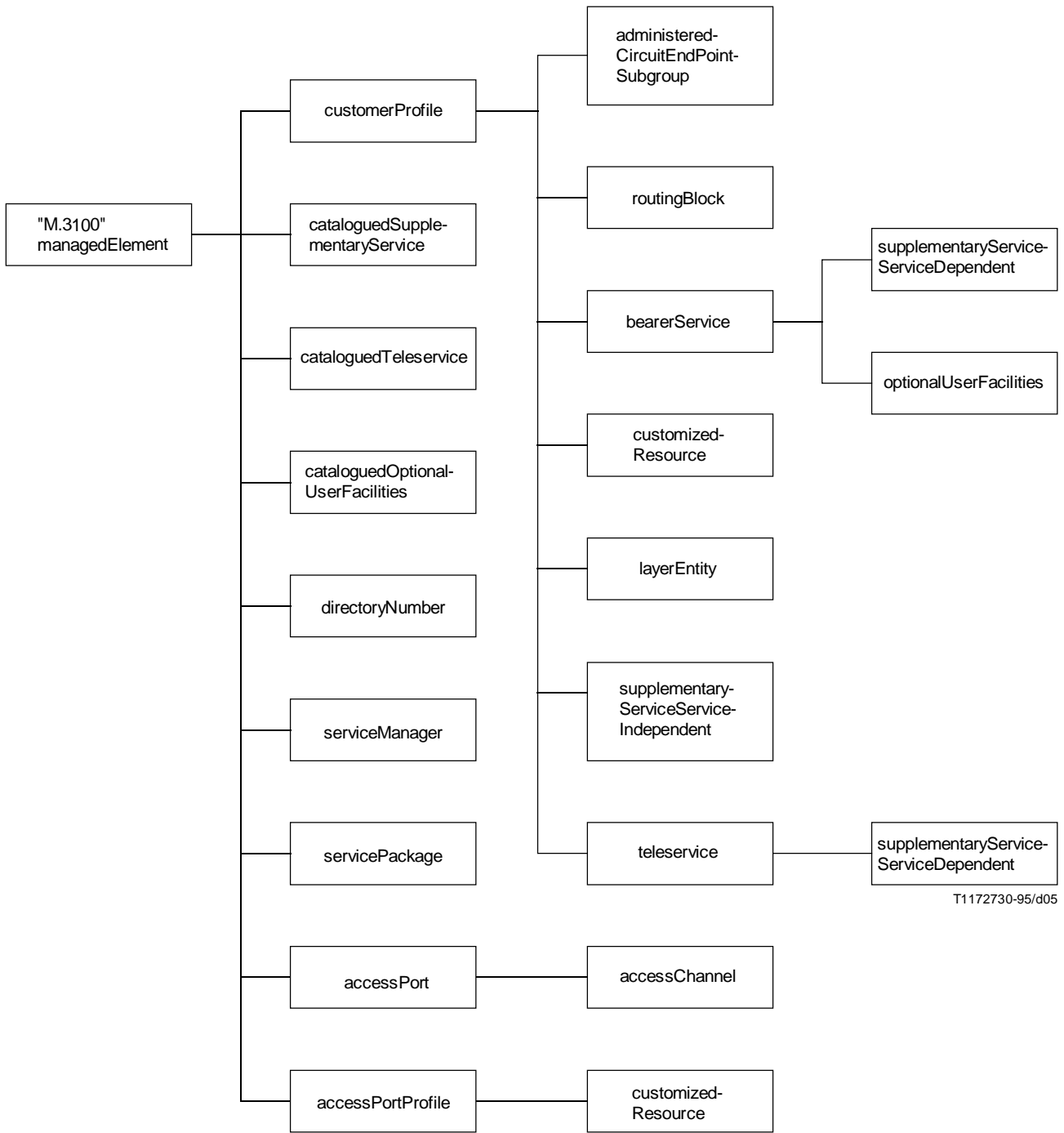
NOTA – Salvo por lo que se refiere al elemento gestionado, en esta Figura sólo se muestran clases de objetos gestionados definidas en la presente Recomendación. Se definen relaciones adicionales para las subclases de estos objetos. Véanse las demás Recomendaciones de la serie Q.824.

FIGURA 1c/Q.824.0
Modelo de relaciones de entidades – Parte C



T1172720-95/d04

FIGURA 2/Q.824.0
Jerarquía de herencia



T1172730-95/d05

NOTA – La jerarquía de denominación indicada incluye vinculaciones de nombre reutilizables definidas en otras Recomendaciones.

FIGURA 3/Q.824.0
Jerarquía de denominación

2 Referencias

Las siguientes Recomendaciones UIT-T y otras referencias contienen disposiciones que, por referencia en el presente texto, constituyen disposiciones de esta Recomendación. En el momento de su publicación eran válidas las ediciones indicadas. Todas las Recomendaciones y otras referencias están sujetas a revisión; por lo tanto, se aconseja a todos los usuarios de esta Recomendación que estudien la posibilidad de aplicar la edición más reciente de las Recomendaciones y otras referencias que a continuación se enumeran. Periódicamente se publica una lista de las Recomendaciones UIT-T en vigor.

- Recomendación E.164 del CCITT (1991), *Plan de numeración para la era de la red digital de servicios integrados*.
- Recomendación UIT-T I.210 (1993), *Principios de los servicios de telecomunicación soportados por una red digital de servicios integrados y medios para describirlos*.
- Recomendación I.240 del CCITT (1988), *Definición de teleservicios*.
- Recomendación M.3010 del CCITT (1992), *Principios para una red de gestión de las telecomunicaciones*.
- Recomendación M.3020 del CCITT (1992), *Metodología de especificación de la interfaz de la red de gestión de las telecomunicaciones*.
- Recomendación UIT-T M.3100 (1995), *Modelo genérico de información de red*.
- Recomendación M.3400 del CCITT (1992), *Funciones de gestión de la red de gestión de las telecomunicaciones*.
- Recomendación UIT-T Q.811 (1993), *Perfiles de protocolo de capa inferior para la interfaz Q3*.
- Recomendación UIT-T Q.812 (1993), *Perfiles de protocolo de capa superior para la interfaz Q3*.
- Recomendación UIT-T Q.931 (1993), *Sistema de señalización digital de abonado N.º 1 – Especificación de la capa 3 de la interfaz usuario-red de la red digital de servicios integrados para el control de llamada básica*.
- Recomendación UIT-T X.2 (1993), *Servicios de transmisión de datos y facilidades facultativas de usuario internacionales en redes públicas de datos y en redes digitales de servicios integrados*.
- Recomendación X.121 del CCITT (1992), *Plan de numeración internacional para redes públicas de datos*.
- Recomendación X.700 del CCITT (1992), *Marco de gestión para la interconexión de sistemas abiertos para aplicaciones del CCITT*.
- Recomendación X.701 del CCITT (1992), *Tecnología de la información – Interconexión de sistemas abiertos – Visión general de la gestión de sistemas*.
- Recomendación X.710 del CCITT (1991), *Definición del servicio común de información de gestión para aplicaciones del CCITT*.
- Recomendación X.711 del CCITT (1991), *Especificación del protocolo común de información de gestión para aplicaciones del CCITT*.
- Recomendación X.720 del CCITT (1992), *Tecnología de la información – Interconexión de sistemas abiertos – Estructura de la información de gestión: Modelo de información de gestión*.
- Recomendación X.721 del CCITT (1992), *Tecnología de la información – Interconexión de sistemas abiertos – Estructura de la información de gestión: Definición de la información de gestión*.
- Recomendación X.722 del CCITT (1992), *Tecnología de la información – Interconexión de sistemas abiertos – Estructura de la información de gestión: Directrices para la definición de objetos gestionados*.
- Recomendación UIT-T X.723 (1993), *Tecnología de la información – Interconexión de sistemas abiertos – Estructura de la información de gestión: Información de gestión genérica*.

3 Clases de objetos de administración de clientes básicas

3.1 Canal de acceso

La clase de objeto canal de acceso es una clase de objetos gestionados que termina un canal de un puerto de acceso dentro de la central. Identifica el conjunto de atributos que se aplican en común a todos los tipos de canales de acceso. Ejemplares de esta clase de objetos se encuentran dentro de los puertos de acceso correspondientes. El número de canales de acceso que pertenecen a un puerto de acceso depende de la arquitectura del puerto de acceso de la RDSI. Este objeto puede relacionarse con un conjunto de recursos personalizados cuando los servicios se hayan de prestar en base a cada canal de acceso.

Arquitectura del puerto de acceso. Este objeto puede relacionarse con un conjunto de recursos personalizados cuando los servicios se hayan de prestar en base a cada canal de acceso.

accessChannel MANAGED OBJECT CLASS

DERIVED FROM "CCITT Rec. M.3100":

connectionTerminationPointBidirectional;

CHARACTERIZED BY

"CCITT Rec. M.3100":administrativeOperationalStatesPackage,

"CCITT Rec. M.3100":ctp InstancePackage,

accessChannelPkg PACKAGE

BEHAVIOUR

accessChannelBhv BEHAVIOUR

DEFINED AS "The Access Channel managed object is a service class object that points to the supporting physical resources for a particular channel. The attribute customizedResourcePtrList is synchronized with customizedChannelPtrList in the customizedResource managed object class. That is, when a reference to an instance of the customizedResource object class is added to or deleted from the attribute customizedResourcePtrList, customizedResource attribute is updated accordingly.";;

ATTRIBUTES

"CCITT Rec. X.721":alarmStatus
customizedResourcePtrList

GET,
GET-REPLACE
ADD-REMOVE;;;

DEFAULT VALUE CACommonModule.emptySet

GET-REPLACE
ADD-REMOVE;;;

CONDITIONAL PACKAGES

officeEquipmentPck PRESENT IF "supported by Administration.";

REGISTERED AS {cACommonObjectClass 1};

3.2 Puerto de acceso

El accessPort (puerto de acceso) representa el concepto de recurso y se utiliza para identificar las capacidades de recursos que soporta los servicios de un abonado. La abstracción de recursos se define como los puntos de terminación de camino, que terminan caminos entre el elemento de red de conmutación y el equipo de las instalaciones del cliente. Estos puntos de terminación de camino envían la información de señalización y servicio al cliente.

accessPort MANAGED OBJECT CLASS

DERIVED FROM "CCITT Rec. M.3100": trailTerminationPointBidirectional;

CHARACTERIZED BY

"CCITT Rec. M.3100": ttpInstancePackage,

accessPortPkg PACKAGE

BEHAVIOUR

accessPortBhv BEHAVIOUR

DEFINED AS "The Access Port is a resource managed object, the Access Port Objects of this class terminate customer service access within the exchange. When the supportedByAccessPortPtrList attribute in the corresponding AccessPort Profile object is changed, the accessPortProfilePtr in the Access Port must be updated.";;

ATTRIBUTES

| | |
|---|--------------|
| accessPortProfilePtr | GET, |
| "CCITT Rec. X.721": administrativeState | GET-REPLACE, |
| "CCITT Rec. X.721": operationalState | GET, |
| officeEquipment | GET-REPLACE; |

NOTIFICATIONS

"CCITT Rec. X.721": stateChange,
"CCITT Rec. X.721": attributeValueChange;;

REGISTERED AS {cACommonObjectClass 2};

3.3 Perfil de puerto de acceso

El objeto de perfil de puerto de acceso (y los de las subclases) representa los aspectos de un acceso de central que no pueden ser configurados hasta que no se haya efectuado el abono, en cuyo momento se da a conocer el modo en el cual el abonado debe utilizar el puerto de acceso.

accessPortProfile MANAGED OBJECT CLASS

DERIVED FROM "CCITT Rec. X.721(1992)": top;

CHARACTERIZED BY

accessPortProfilePkg PACKAGE

BEHAVIOUR

accessPortProfileBhv BEHAVIOUR

DEFINED AS "The Access Port Profile managed object is a service class object that points to the supporting resources for a particular access. It is related to the other service objects and is the means by which these service objects become associated with the access resources. In addition, Access Port objects point to the Access Port Profile object so that a relationship can be found between the resources and the services they support. If the supportedByAccessPortPtrList attribute is changed, the attribute accessPortProfilePtr in the related AccessPort object shall be changed as well.";

ATTRIBUTES

| | |
|------------------------------------|----------------------|
| accessPortProfileId | GET SET-BY-CREATE |
| customerProfilePtrList | GET-REPLACE |
| customerProfilePtrList | ADD-REMOVE, |
| | GET-REPLACE |
| customerProfilePtrList | ADD-REMOVE, |
| customizedResourcePtrList | GET-REPLACE |
| DEFAULT VALUE CACommonModule.empty | ADD-REMOVE, |
| supportedByAccessPortPtrList | GET-REPLACE |
| | ADD-REMOVE, |
| sensitiveCircuit | REPLACE-WITH-DEFAULT |
| DEFAULT VALUE CACommonModule.false | GET-REPLACE; |

NOTIFICATIONS

"CCITT Rec. X.721 | ISO/IEC 10165-2": attributeValueChange,
"CCITT Rec. X.721 | ISO/IEC 10165-2": objectCreation,
"CCITT Rec. X.721 | ISO/IEC 10165-2": objectDeletion;
;;

REGISTERED AS {cACommonObjectClass 3};

3.4 Subgrupo de puntos extremos de circuitos administrado

administeredCircuitEndPointSubgroup MANAGED OBJECT CLASS

DERIVED FROM "CCITT Rec. M.3100": circuitEndPointSubgroup;

CHARACTERIZED BY

administeredCircuitEndPointSubgroupPkg PACKAGE

BEHAVIOUR

administeredCircuitEndPointSubgroupBhv BEHAVIOUR

DEFINED AS "The circuit endpoint subgroup (CEPSG) managed object class is used to order channels that may belong to different Access Ports. This set may then be associated with services (servicePtrList) and with routing blocks (routingBlockPtrList). If no association is made to services using the servicePtrList this list is empty and the underlying channel capabilities determine the service capabilities of the CEPSG. If no association is made to routing blocks then the routingBlockPtrList is empty. The channels that are ordered by CEPSG must have the following common characteristics:

uniform signalling
common endpoints
same directionality

The circuitEndPointSubgroupOrderedPtrList points to an ordered list of channels and may be empty.";;

ATTRIBUTES

| | |
|---------------------------------------|----------------------------|
| servicePtrList | GET-REPLACE ADD-REMOVE, |
| routingBlockPtrList | GET, |
| circuitEndPointSubgroupOrderedPtrList | GET-REPLACE, |

ACTIONS

insertCSGChannels,
removeCSGChannels;;;

REGISTERED AS {cACommonObjectClass 4};

3.5 Servicio portador

bearerService MANAGED OBJECT CLASS

DERIVED FROM "CCITT Rec. X.721": top;

CHARACTERIZED BY

bearerServicePkg PACKAGE

BEHAVIOUR

bearerServiceBhv BEHAVIOUR

DEFINED AS "The Bearer Service object class represents the common aspects of the ISDN bearer services. While the Bearer Service object class is not instantiated, it is a superclass from which specialized subclasses are derived and instantiated.

The communication service provided by a bearer service is defined by the specific settings of the Information Transfer Attributes and the Access Attributes defined in Table B.1/I.210. Bearer Service is subclassed on the basis of these attributes for each of the individual bearer services defined in the I-Series Recommendations. For each of the individual bearer service subclasses, the I.210 Information Transfer Attributes and Access Attributes have unique pre-defined value settings and are non-customizable.

The Information Transfer Attributes include:

- Information Transfer Mode
- Information Transfer Rate
- Information Transfer Capability
- Structure
- Establishment of Communication
- Symmetry
- Communication Configuration

The Access Attributes include:

- Access Channel and Rate
- Signalling Access Protocol Layer 1
- Signalling Access Protocol Layer 2
- Signalling Access Protocol Layer 3
- Information Access Protocol Layer 1
- Information Access Protocol Layer 2
- Information Access Protocol Layer 3

The attribute customizedResourcePtrList is synchronized with bearerServicePtrList in the customizedResource managed object class. That is, when bearerServicePtrList in the associated instance of the customizedResource object class or a subclass is updated, the customizedResourcePtrList is updated accordingly.

The numberOfBChannels attribute limits the B-Channel resources that the bearerService can use at any point in time. The value of the attribute in this object must be equal to or less than the value of the numberOfBChannels attribute in the Customer Profile object instance containing the Bearer Service object instance. The default value of -1 for this attribute indicates that all of the B-channel Access Channel Object instances associated with the Customer Profile are available.";;

ATTRIBUTES

| | |
|---|---------------------------------------|
| bearerServiceId | GET SET-BY-CREATE, GET-REPLACE, |
| "CCITT Rec. X.721": administrativeState customizedResourcePtrList DEFAULT VALUE CACommonModule.emptySet | GET-REPLACE ADD-REMOVE; |

NOTIFICATIONS

"CCITT Rec. X.721":stateChange,
"CCITT Rec. X.721":attributeValueChange;;;

CONDITIONAL PACKAGES

numberOfChannelsPkg
PRESENT IF "the bearer services provided supports use of B-channels", bearerSignalingPkg
PRESENT IF "the bearer services supports *ON DEMAND* establishment and supported by Administration";

REGISTERED AS {cACommonObjectClass 5};

3.6 Perfil de cliente

customerProfile **MANAGED OBJECT CLASS**

DERIVED FROM "CCITT Rec. X.721": top;

CHARACTERIZED BY

customerProfilePkg **PACKAGE**

BEHAVIOUR

customerProfileBhv **BEHAVIOUR**

DEFINED AS "The Customer Profile represents a single point of reference used to bind together a range of services and resources for customer administration purposes. It is a class of managed objects representing the characteristics of the Directory Number(s) (DN) assigned to an individual subscriber, independent of the access type and bearer service. Each instance of the customer profile object class includes a Directory Number Pointer List attribute that represents the Directory Number(s) assigned to the customer profile object and an Access Port Profile List attribute that represents Access Port Profile(s) also assigned to the customer profile object.";;

ATTRIBUTES

| | |
|---|--|
| customerProfileId accessPortProfilePtrList | GET SET-BY-CREATE, GET-REPLACE ADD-REMOVE, GET-REPLACE ADD-REMOVE;;; |
| directoryNumberPtrList | GET-REPLACE ADD-REMOVE;;; |

REGISTERED AS {cACommonObjectClass 6};

3.7 Número de directorio

directoryNumber **MANAGED OBJECT CLASS**

DERIVED FROM "CCITT Rec. X.721": top;

CHARACTERIZED BY

directoryNumberPkg **PACKAGE**

BEHAVIOUR

directoryNumberBhv **BEHAVIOUR**

DEFINED AS "The Directory Number managed object class represents a managed resource. It is a constituent part of the user interface and it is directly related to one or more dialling plans which are part of a managed element.

The attributes `customerProfilePtr` and `customizedResourcePtrList` are synchronized with `directoryNumberPtrList` in the `customerProfile` managed object class and with the `directoryNumberPtrList` in the `customizedResource` managed object class, respectively. For example, when `directoryNumberPtrList` in the associated instance of the `customerProfile` object class or a subclass is updated, the `customerProfilePtr` is updated accordingly.";;

ATTRIBUTES

| | |
|---|--------------------|
| <code>directoryNumberId</code> | GET SET-BY-CREATE, |
| <code>"CCITT Rec. X.721":administrativeState</code> | GET-REPLACE, |
| <code>customizedResourcePtrList</code> | GET, |
| <code>customerProfilePtr</code> | GET; |

NOTIFICATIONS

`"CCITT Rec. X.721":objectCreation,`
`"CCITT Rec. X.721":objectDeletion,`
`"CCITT Rec. X.721":stateChange,`
`"CCITT Rec. X.721":attributeValueChange;;;`

CONDITIONAL PACKAGES

`routingBlockPtrPkg`

PRESENT IF `"hierarchical routing to physical channel subgroups on egress is supported"`;

REGISTERED AS `{cACommonObjectClass 7}`;

3.8 Número de directorio E.164

`directoryNumberE164` MANAGED OBJECT CLASS

DERIVED FROM `directoryNumber`;

CHARACTERIZED BY

`directoryNumberE164Pkg` PACKAGE

BEHAVIOUR

`directoryNumberE164Bhv` BEHAVIOUR

DEFINED AS "The E.164 Directory Number object class represents directory numbers belonging to the numbering plan of the ISDN era as defined in E.164. The E.164 Directory Number is a single-valued, read-only attribute, set only at creation time. The intercept treatment attributes provide the handling treatment (announcement, tone, or otherwise) that should be applied to a disconnected E.164 Directory Number or a Directory Number to which service is temporarily suspended.";;

ATTRIBUTES

| | |
|---|----------------------|
| <code>e164DirectoryNumber</code> | GET SET-BY-CREATE, |
| <code>interceptTreatmentTerm</code> | REPLACE-WITH-DEFAULT |
| DEFAULT VALUE <code>CACommonModule.interceptTreatmentTerm</code> GET-REPLACE;;; | |

CONDITIONAL PACKAGES

`interceptTreatmentOriginPkg`

PRESENT IF `"an instance supports it."`;

REGISTERED AS `{cACommonObjectClass 8}`;

3.9 Número de directorio X.121

`directoryNumberX121` MANAGED OBJECT CLASS

DERIVED FROM `directoryNumber`;

CHARACTERIZED BY

`directoryNumberX121Pkg` PACKAGE

BEHAVIOUR

`directoryNumberX121Bhv` BEHAVIOUR

DEFINED AS "This object class characterizes the X.121 packet switched Directory Number resource.";;

ATTRIBUTES

| | |
|----------------------------------|----------------------|
| <code>X121DirectoryNumber</code> | GET SET-BY-CREATE;;; |
|----------------------------------|----------------------|

REGISTERED AS `{cACommonObjectClass 9}`;

3.10 Entidad de capa

layerEntity MANAGED OBJECT CLASS

DERIVED FROM "CCITT Rec. X.721": top;

CHARACTERIZED BY

layerEntityPkg PACKAGE

BEHAVIOUR

layerEntityBhv BEHAVIOUR

DEFINED AS "This class describes the customizable characteristics common to all layer protocols which are used for signalling purpose or for user information purpose. This object class is not instantiated.";;

ATTRIBUTES

| | |
|---|--------------------|
| layerEntityId | GET SET-BY-CREATE, |
| "CCITT Rec. X.721": usageState | GET, |
| "CCITT Rec. X.721": administrativeState | GET-REPLACE, |
| "CCITT Rec. X.721": operationalState | GET; |

NOTIFICATIONS

"CCITT Rec. X.721": objectCreation,
"CCITT Rec. X.721": stateChange,
"CCITT Rec. X.721": objectDeletion,
"CCITT Rec. X.721": attributeValueChange;;;

REGISTERED AS {cACommonObjectClass 10};

3.11 Bloque de encaminamiento

routingBlockMANAGED OBJECT CLASS

DERIVED FROM "CCITT Rec. X.721":top;

CHARACTERIZED BY

routingBlockPkg PACKAGE

BEHAVIOUR

routingBlockBhv BEHAVIOUR

DEFINED AS "The routing block managed object class associates an ordered list of channel subgroups with a list of directory numbers. This list of circuitSubgroups is ordered so that the preference of circuitSubgroups to use for a particular directory number can be expressed. The routingBlockCircuitSubgroupPtrList is a complex attribute that also contains information on how to present the number on departure.";;

ATTRIBUTES

| | |
|--------------------------------|-----------------------------|
| routingBlockId | GET SET-BY-CREATE, |
| directoryNumberPtrList | GET-REPLACE |
| circuitEndPointSubgroupPtrList | ADD-REMOVE, GET-REPLACE; |

ACTIONS

insertCircuitSubgroups,
removeCircuitSubgroups,
modifyCircuitSubgroup;;;

REGISTERED AS {cACommonObjectClass 11};

4 Clases de objetos gestionados auxiliares

4.1 Facilidades facultativas de usuario catalogadas

La clase de objetos gestionados facilidades facultativas de usuario catalogadas es una superclase para otras subclases de servicio que tienen atributos no personalizables por el abonado. Las subclases serán definidas una vez que se hayan identificado candidatos para los atributos no personalizables.

cataloguedOptionalUserFacilities **MANAGED OBJECT CLASS**

DERIVED FROM **"CCITT Rec. X.721(1992)": top;**

CHARACTERIZED BY

cataloguedOptionalUserFacilitiesPkg **PACKAGE**

BEHAVIOUR

cataloguedOptionalUserFacilitiesBhv **BEHAVIOUR**

DEFINED AS "The catalogued Optional User Facilities managed object class is a superclass for all Optional User Facilities classes.";;

ATTRIBUTES

cataloguedOptionalUserFacilitiesId

GET SET-BY-CREATE

NOTIFICATIONS

"CCITT Rec. X.721": objectCreation,
"CCITT Rec. X.721": objectDeletion,
"CCITT Rec. X.721": attributeValueChange;;;

REGISTERED AS {cACommonObjectClass 12};

4.2 Servicio suplementario catalogado

La clase de objeto gestionado servicio suplementario catalogado es una superclase para otras subclases de servicio que tengan atributos no personalizables por el abonado. Las subclases serán definidas una vez que se hayan identificado candidatos para los atributos no personalizables.

cataloguedSupplementaryService **MANAGED OBJECT CLASS**

DERIVED FROM **"CCITT Rec. X.721(1992)": top;**

CHARACTERIZED BY

cataloguedSupplementaryServicePkg **PACKAGE**

BEHAVIOUR

cataloguedSupplementaryServiceBhv **BEHAVIOUR**

DEFINED AS "The catalogued services managed object class is a superclass for all supplementary services classes.";;

ATTRIBUTES

cataloguedSupplementaryServiceId

GET SET-BY-CREATE

NOTIFICATIONS

"CCITT Rec. X.721": objectCreation,
"CCITT Rec. X.721": objectDeletion,
"CCITT Rec. X.721": attributeValueChange;;;

REGISTERED AS {cACommonObjectClass 13};

4.3 Teleservicio catalogado

cataloguedTeleservice **MANAGED OBJECT CLASS**

DERIVED FROM **"CCITT Rec. X.721": top;**

CHARACTERIZED BY

LayerInfoPkg,

cataloguedTeleservicePkg **PACKAGE**

BEHAVIOUR

cataloguedTeleserviceBhv **BEHAVIOUR**

DEFINED AS "The catalogued teleservice managed object class defines a communication service that makes available layer 4-layer 7 capabilities and have attributes that are not customizable by the subscriber. This object class is a superclass from which specific catalogued teleservice objects may be derived as subclasses.";;

ATTRIBUTES

cataloguedTeleserviceId GET SET-BY-CREATE

NOTIFICATIONS

"CCITT Rec. X.721": objectCreation,
"CCITT Rec. X.721": objectDeletion,
"CCITT Rec. X.721": attributeValueChange;;;

REGISTERED AS {cACommonObjectClass 14};

4.4 Recursos personalizados

La clase de objetos recursos personalizados es una clase de objetos gestionados que representa la prestación de servicios a un abonado. Permite la asociación de un conjunto de servicios a uno o varios puertos y canales de acceso, tal como se ilustra en el Apéndice I.

customizedResource MANAGED OBJECT CLASS

DERIVED FROM "CCITT Rec. X.721": top;

CHARACTERIZED BY

customizedResourcePkg PACKAGE

BEHAVIOUR

customizedResourceBhv BEHAVIOUR

DEFINED AS "The Customized Resource object class is a class of the managed objects that represents the service provisioning for a subscriber. It allows association of a set of services to one or more Access Port and Channels. The pointer list attributes: bearerServicePtrList, directoryNumberPtrList, teleServicePtrList, accessPortProfilePtrList, and accessChannelPtrList should be maintained synchronized with their corresponding pointing attribute in the objects they point out to. For example, the attribute accessChannelPtrList is synchronized with customizedResourcePtrList in the accessChannel managed object class. That is, when a reference to an instance of the accessChannel object class is added to (or deleted from) the attribute accessChannelPtrList, customizedResourcePtrList attribute in accessChannel is updated accordingly."

The accessChannelPtrList attribute should not be used to point at accessChannels that are associated with the customizedResource via the accessPortProfilePtrList, since such a relationship would be redundant.

ATTRIBUTES

| | |
|--------------------------|----------------------------|
| customizedResourceId | GET SET-BY-CREATE |
| bearerServicePtrList | GET-REPLACE |
| directoryNumberPtrList | ADD-REMOVE, GET-REPLACE |
| numberOfBChannels | ADD-REMOVE, GET-REPLACE |
| teleServicePtrList | ADD-REMOVE, GET-REPLACE |
| accessPortProfilePtrList | ADD-REMOVE, GET-REPLACE |
| accessChannelPtrList | ADD-REMOVE, GET-REPLACE |
| | ADD-REMOVE;;; |

REGISTERED AS {cACommonObjectClass 15};

4.5 Facilidades facultativas de usuario

Las facilidades facultativas de usuario, tal como se definen en la Recomendación X.2, son servicios que sólo se pueden utilizar junto con servicios portadores en modo paquetes. La clase de objetos facilidades opcionales de usuario se define para permitir la creación de subclases específicas de servicios opcionales.

optionalUserFacilities MANAGED OBJECT CLASS

DERIVED FROM "CCITT Rec. X.721": top;

CHARACTERIZED BY

optionalUserFacilitiesPkg PACKAGE

BEHAVIOUR

optionalUserFacilitiesBhv BEHAVIOUR

DEFINED AS "The Optional user facilities service object class is defined to allow the creation of specific Optional user facilities that can only be used in conjunction with Packet Mode bearer services.";

ATTRIBUTES

optionalUserFacilitiesId GET SET-BY-CREATE

NOTIFICATIONS

"CCITT Rec. X.721": attributeValueChange,
"CCITT Rec. X.721": objectCreation,
"CCITT Rec. X.721": objectDeletion;;;

CONDITIONAL PACKAGES

cataloguedOptionalUserFacilitiesPtrPkg

PRESENT IF "catalogued optional user facilities is supported by Administration.";

REGISTERED AS {cACommonObjectClass 16};

4.6 Servicios suplementarios dependientes del servicio

Esta superclase se utiliza para modelar servicios suplementarios definidos como configurables servicio por servicio en la definición de servicios suplementarios subyacentes del UIT-T. Tales servicios se modelan contenidos en el objeto de servicio apropiado (teleservicio o servicio portador). Estos servicios suplementarios NO TIENEN un puntero hacia servicios portadores/teleservicios. Están vinculados por el nombre al objeto gestionado de servicio portador/teleservicio al que pertenecen, lo que establece la vinculación entre el servicio y el servicio suplementario.

supplementaryServiceServiceDependent MANAGED OBJECT CLASS

DERIVED FROM "CCITT Rec. X.721": top;

CHARACTERIZED BY

supplementaryServiceServiceDependentPkg PACKAGE

BEHAVIOUR

supplementaryServiceServiceDependentBhv BEHAVIOUR

DEFINED AS "This object class is defined to allow the creation of specific supplementary service subclasses for those supplementary services that are defined by ITU-T to be configurable on a per bearer or teleservice basis. Supplementary services, as defined in I.210, are services that can only be used in conjunction with another bearer service or another teleservice.";

ATTRIBUTES

supplementaryServiceId GET
SET-BY-CREATE,
GET-REPLACE;
"CCITT Rec. X.721": administrativeState

NOTIFICATIONS

"CCITT Rec. X.721": stateChange,
"CCITT Rec. X.721": attributeValueChange,
"CCITT Rec. X.721": objectCreation,
"CCITT Rec. X.721": objectDeletion;;;

CONDITIONAL PACKAGES

cataloguedSupplementaryServicePtrPkg

PRESENT IF "catalogued supplementary service is supported by Administration.";

REGISTERED AS {cACommonObjectClass 17};

4.7 Servicios suplementarios independientes del servicio

Esta superclase se utiliza para modelar servicios suplementarios definidos como independientes del servicio (es decir, aplicables a múltiples servicios de una manera uniforme) en la definición de servicios suplementarios subyacentes del UIT-T. Tales servicios se modelan contenidos en el objeto de servicio apropiado. Estos servicios suplementarios TIENEN un puntero hacia servicios portadores/teleservicios que permiten la asociación del servicio portador/teleservicio con servicios particulares, cuando una administración necesita esta capacidad para implementar ofertas de tarifa/servicio. Están vinculados por el nombre al objeto gestionado perfil de cliente y en relación con un servicio se establece mediante los valores del puntero del servicio.

supplementaryServiceServiceIndependent **MANAGED OBJECT CLASS**

DERIVED FROM "CCITT Rec. X.721": top;

CHARACTERIZED BY

supplementaryServiceServiceIndependentPkg **PACKAGE**

BEHAVIOUR

supplementaryServiceServiceIndependentBhv **BEHAVIOUR**

DEFINED AS "This object class is defined to allow the creation of specific supplementary service subclasses for those supplementary services that are defined by ITU-T to be independent of any particular bearer/teleservice. Supplementary services, as defined in I.210, are services that can only be used in conjunction with another bearer service or another teleservice.";;

ATTRIBUTES

| | |
|--|-----------------------|
| supplementaryServiceId | GET |
| "CCITT Rec. X.721": administrativeState | SET-BY-CREATE, |
| ServicePtrList | GET-REPLACE, |
| | GET-REPLACE |
| | ADD-REMOVE; |

NOTIFICATIONS

"CCITT Rec. X.721": stateChange,
"CCITT Rec. X.721": attributeValueChange,
"CCITT Rec. X.721": objectCreation,
"CCITT Rec. X.721": objectDeletion;;;

CONDITIONAL PACKAGES

cataloguedSupplementaryServicePtrPkg
PRESENT IF "catalogued supplementary service is supported by Administration.";

REGISTERED AS {cACommonObjectClass 18};

4.8 Teleservicio

teleservice **MANAGED OBJECT CLASS**

DERIVED FROM "CCITT Rec. X.721": top;

CHARACTERIZED BY

teleservicePkg **PACKAGE**

BEHAVIOUR

teleserviceBhv **BEHAVIOUR**

DEFINED AS "The teleservices managed object class defines a communication service that makes available layer 1-layer 7 capabilities. The characteristics of teleservice are defined in accordance with I.240. Teleservices may be subclassed on the basis of the user information type attribute (Speech, Video, Fax, etc.) defined in I.240. The various Teleservices are defined in the *Blue Book Recommendations*.";;

ATTRIBUTES

| | |
|--|---------------------------|
| teleserviceId | GET SET-BY-CREATE, |
| bearerServicePtr | GET-REPLACE, |
| "CCITT Rec. X.721": administrativeState | GET-REPLACE, |
| customizedResourcePtrList | |
| DEFAULT VALUE CACommonModule.emptySet | GET-REPLACE |
| | ADD-REMOVE; |

NOTIFICATIONS

"CCITT Rec. X.721": stateChange;;;

CONDITIONAL PACKAGES

cataloguedTeleservicePtrPkg PRESENT IF "catalogued teleservice is supported by Administration.",
layerInfoPkg PRESENT IF "teleservice's layers are configurable per subscriber";

REGISTERED AS {cACommonObjectClass 19};

5 Clases de objetos gestionados de soporte de operaciones

5.1 Gestor de servicio

El gestor de servicio es un objeto de soporte necesario para completar el provisionamiento de la central sin un conocimiento detallado del modelo de provisionamiento. El gestor de servicio es un objeto de superclase que puede ser subclasificado para soportar acciones específicas para funciones o tecnologías concretas. El gestor de servicio se utiliza junto con ejemplares de objetos paquete de servicios para realizar estas acciones. El paquete de servicios contiene ejemplares de objetos gestionados con valores iniciales que se utilizan en la creación de una parte o la totalidad de un servicio de cliente. Si las clases de objetos gestionados de recursos se incluyen en un paquete de servicios, entonces sus atributos (por ejemplo, atributo e164DirectoryNumber del objeto e164DN o atributo officeEquipment del objeto accessPort) deben tener valores ficticios. Los valores reales se toman de los parámetros ACTION. No se conserva el conocimiento del gestor de servicios o los lotes de servicio utilizados para crear el servicio de cliente. Los proveedores de servicio pueden definir diferentes lotes de servicios para cumplir con requisitos comerciales específicos.

Los lotes de servicios que pueden definirse para un determinado gestor de servicio sólo deben utilizar los parámetros que se definen en la acción de ese gestor de servicio. Si es necesario introducir parámetros adicionales, debe crearse una nueva subclase de gestor de servicio.

Estos lotes de servicios se definen utilizando las mismas clases de objetos que en el modelo que proporciona definiciones de servicios.

serviceManager MANAGED OBJECT CLASS

DERIVED FROM "CCITT Rec. X.721": top;

CHARACTERIZED BY

serviceManagerPkg PACKAGE

BEHAVIOUR

serviceManagerBhv BEHAVIOUR

DEFINED AS "This is the superclass for all service managers. The subclasses will have service management actions defined. Upon the reception of an action request, the serviceManager will perform the action according to the action specification. In case of an action failure, the services will remain unchanged and an error message will be returned to the managing system instead of the action reply.";;;

ATTRIBUTES

| | |
|-------------------------|-----------------------------|
| serviceManagerId | GET SET-BY-CREATE;;; |
|-------------------------|-----------------------------|

REGISTERED AS {cACommonObjectClass 20};

5.2 Lote de servicios

Esta clase de objeto se utiliza para agrupar ejemplares de clases de objetos diferentes que se usan para proporcionar valores iniciales para atributos de los objetos de servicio creados por la clase de objeto de gestor de servicio.

servicePackage **MANAGED OBJECT CLASS**
DERIVED FROM "CCITT Rec. X.721": top;
CHARACTERIZED BY
servicePackagePkg **PACKAGE**
BEHAVIOUR
servicePackageBhv **BEHAVIOUR**

DEFINED AS "This object class is a passive object. However, this object affects the behaviour of the object instances that are contained in (named by) instances of this class. The instances contained are also passive and do not represent live services. They are rather only instantiated to provide initial values for the creation of real, connected services.";

ATTRIBUTES

servicePackageId **GET SET-BY-CREATE;;;**

REGISTERED AS {cACommonObjectClass 21};

6 Plantillas de lotes

6.1 Lote de señalización de portador

bearerSignalingPkg **PACKAGE**

ATTRIBUTES

layer2SignalingEntityPtr **GET-REPLACE,**
layer3SignalingEntityPtr **GET-REPLACE;**

REGISTERED AS {cACommonPackage 1};

6.2 Lote de facilidades facultativas de usuario catalogadas

cataloguedOptionalUserFacilitiesPtrPkg **PACKAGE**

ATTRIBUTES

cataloguedOptionalUserFacilitiesPtr **GET-REPLACE;**

REGISTERED AS {cACommonPackage 2};

6.3 Lote de puntero de servicio suplementario catalogado

cataloguedSupplementaryServicePtrPkg **PACKAGE**

ATTRIBUTES

cataloguedSupplementaryServicePtr **GET-REPLACE;**

REGISTERED AS {cACommonPackage 3};

6.4 Lote de teleservicio catalogado

cataloguedTeleservicePtrPkg **PACKAGE**

ATTRIBUTES

cataloguedTeleservicePtr **GET-REPLACE;**

REGISTERED AS {cACommonPackage 4};

6.5 Lote de origen de tratamiento de interceptación

interceptTreatmentOriginPkg **PACKAGE**

ATTRIBUTES

interceptTreatmentOrigin **REPLACE-WITH-DEFAULT**
DEFAULT VALUE CACommonModule.interceptTreatmentOrigin **GET-REPLACE;**

REGISTERED AS {cACommonPackage 5};

6.6 Lote de información de capa

layerInfoPkg PACKAGE

ATTRIBUTES

| | |
|-----------------------------|---------------------|
| layer4InfoEntityType | GET-REPLACE, |
| layer4InfoEntityPtr | GET-REPLACE, |
| layer5InfoEntityType | GET-REPLACE, |
| layer5InfoEntityPtr | GET-REPLACE, |
| layer6InfoEntityType | GET-REPLACE, |
| layer6InfoEntityPtr | GET-REPLACE, |
| layer7InfoEntityType | GET-REPLACE, |
| layer7InfoEntityPtr | GET-REPLACE; |

REGISTERED AS {cACommonPackage 6};

6.7 Lote de número de canales B

numberOfChannelsPkg PACKAGE

ATTRIBUTES

| | |
|--------------------------|------------------------------|
| numberOfBChannels | REPLACE-WITH-DEFAULT; |
|--------------------------|------------------------------|

REGISTERED AS {cACommonPackage 7};

6.8 Lote de equipo de oficina

officeEquipmentPkg PACKAGE

ATTRIBUTES

| | |
|----------------------------|------------------------------------|
| officeEquipmentList | GET-REPLACE ADD-REMOVE; |
|----------------------------|------------------------------------|

REGISTERED AS {cACommonPackage 8};

6.9 Lote de puntero de bloque de encaminamiento

routingBlockPtrPkg PACKAGE

ATTRIBUTES

| | |
|------------------------|---------------------|
| routingBlockPtr | GET-REPLACE; |
|------------------------|---------------------|

REGISTERED AS {cACommonPackage 9};

7 Plantillas de atributos

Esta cláusula contiene las definiciones ASN.1 de todos los atributos de las clases de objetos descritas. Estas definiciones identifican la función de los atributos y sus características válidas, como sus valores, interdependencias, imperativos de lectura/escritura válidos, etc. Los atributos se identifican mediante sus descriptores ASN.1.

7.1 Lista de punteros de canal de acceso

accessChannelPtrList ATTRIBUTE

WITH ATTRIBUTE SYNTAX

CACommonModule.AccessChannelPtrList;
MATCHES FOR SET-INTERSECTION, SET-COMPARISON;
BEHAVIOUR
accessChannelPtrListBhv BEHAVIOUR

DEFINED AS "This is a set-valued attribute whose value(s) points to one or more instances of the Access Channel object class.";;

REGISTERED AS {cACommonAttribute 1};

7.2 Identificador de perfil de puerto de acceso

accessPortProfileId ATTRIBUTE

WITH ATTRIBUTE SYNTAX

CACommonModule.NameType;

MATCHES FOR EQUALITY, ORDERING, SUBSTRINGS;

BEHAVIOUR

accessPortProfileIdBhv BEHAVIOUR

DEFINED AS "The naming attribute of the managed object access port profile.";

REGISTERED AS {cACommonAttribute 2};

7.3 Puntero de perfil de puerto de acceso

accessPortProfilePtr ATTRIBUTE

WITH ATTRIBUTE SYNTAX

CACommonModule.ObjectInstance;

MATCHES FOR EQUALITY, SET-COMPARISON, SET-INTERSECTION;

BEHAVIOUR

accessPortProfilePtrBhv BEHAVIOUR

DEFINED AS "This attribute is used as a pointer to an instance of the Access Port Profile managed object class.";

REGISTERED AS {cACommonAttribute 3};

7.4 Lista de punteros de perfil de puerto de acceso

accessPortProfilePtrList ATTRIBUTE

WITH ATTRIBUTE SYNTAX

CACommonModule.SetOfInstances;

MATCHES FOR EQUALITY, SET-COMPARISON, SET-INTERSECTION;

BEHAVIOUR

accessPortProfilePtrListBhv BEHAVIOUR

DEFINED AS "This is a set-valued attribute whose value(s) points to one or more instances of the Access Port Profile object class or its subclasses.";

REGISTERED AS {cACommonAttribute 4};

7.5 Identificador de servicio portador

bearerServiceId ATTRIBUTE

WITH ATTRIBUTE SYNTAX

CACommonModule.NameType;

MATCHES FOR EQUALITY;

BEHAVIOUR

bearerServiceIdBhv BEHAVIOUR

DEFINED AS "The Bearer Service Id attribute is used to compose the RDN when naming an instance of the bearer service subclasses. The bearer service is a term that describes the nature of the call in an Integrated Services Digital Network (ISDN). A bearer capability is a subset of the characteristics associated with the ISDN term bearer service. A bearer service is, in part, defined in terms of the transmission characteristics of the channel provided between ISDN users on successful connection of a call.";

REGISTERED AS {cACommonAttribute 5};

7.6 Puntero de servicio portador

bearerServicePtr ATTRIBUTE

WITH ATTRIBUTE SYNTAX

CACommonModule.ObjectInstance;

MATCHES FOR EQUALITY, SET-COMPARISON, SET-INTERSECTION;

BEHAVIOUR

bearerServicePtrBhv BEHAVIOUR

DEFINED AS "This attribute is used from any managed object to reference a bearer service managed object.";

REGISTERED AS {cACommonAttribute 6};

7.7 Lista de punteros de servicio portador

bearerServicePtrList ATTRIBUTE
WITH ATTRIBUTE SYNTAX
CACommonModule.SetOfInstances;
MATCHES FOR EQUALITY, SET-COMPARISON, SET-INTERSECTION;
BEHAVIOUR
bearerServicePtrListBhv BEHAVIOUR

DEFINED AS "This attribute references multiple bearer services.";;
REGISTERED AS {cACommonAttribute 7};

7.8 Identificador de facilidades opcionales de usuario catalogadas

cataloguedOptionalUserFacilitiesId ATTRIBUTE
WITH ATTRIBUTE SYNTAX
CACommonModule.NameType;
MATCHES FOR EQUALITY, ORDERING, SUBSTRINGS;
BEHAVIOUR
cataloguedOptionalUserFacilitiesIdBhv BEHAVIOUR

DEFINED AS "The Catalogued OptionalUserFacilitiesId attribute is used to compose the RDN when naming an instance of the Catalogued Optional User Facilities subclasses.";;
REGISTERED AS {cACommonAttribute 8};

7.9 Puntero de facilidades opcionales de usuario catalogadas

cataloguedOptionalUserFacilitiesPtr ATTRIBUTE
WITH ATTRIBUTE SYNTAX
CACommonModule.ObjectInstance;
MATCHES FOR EQUALITY, SET-COMPARISON, SET-INTERSECTION;
BEHAVIOUR
cataloguedOptionalUserFacilitiesPtrBhv BEHAVIOUR

DEFINED AS "This attribute is used from any managed object to reference a Catalogued User Facilities managed object.";;
REGISTERED AS {cACommonAttribute 9};

7.10 Identificador de servicio suplementario catalogado

cataloguedSupplementaryServiceId ATTRIBUTE
WITH ATTRIBUTE SYNTAX
CACommonModule.NameType;
MATCHES FOR EQUALITY, ORDERING, SUBSTRINGS;
BEHAVIOUR
cataloguedSupplementaryServiceIdBhv BEHAVIOUR

DEFINED AS "The Catalogued Supplementary Service Id attribute is used to compose the RDN when naming an instance of the Catalogued Supplementary Service subclasses.";;
REGISTERED AS {cACommonAttribute 10};

7.11 Puntero de servicio suplementario catalogado

cataloguedSupplementaryServicePtr ATTRIBUTE
WITH ATTRIBUTE SYNTAX
CACommonModule.ObjectInstance;
MATCHES FOR EQUALITY;
BEHAVIOUR
cataloguedSupplementaryServicePtrBhv BEHAVIOUR

DEFINED AS "This attribute is used from any managed object to reference a Catalogued Supplementary Service managed object.";;
REGISTERED AS {cACommonAttribute 11};

7.12 Identificador de teleservicio catalogado

cataloguedTeleserviceId ATTRIBUTE
WITH ATTRIBUTE SYNTAX

CACommonModule.NameType;
MATCHES FOR EQUALITY, ORDERING, SUBSTRINGS;
BEHAVIOUR
cataloguedTeleserviceIdBhv BEHAVIOUR

DEFINED AS "The Catalogued Teleservice Id attribute is used to compose the RDN when naming an instance of the Catalogued Teleservice subclasses.";;

REGISTERED AS {cACommonAttribute 12};

7.13 Puntero de servicio catalogado

cataloguedTeleservicePtr ATTRIBUTE
WITH ATTRIBUTE SYNTAX

CACommonModule.ObjectInstance;
MATCHES FOR EQUALITY, SET-COMPARISON, SET-INTERSECTION;
BEHAVIOUR
cataloguedTeleservicePtrBhv BEHAVIOUR

DEFINED AS "This attribute is used from any managed object to reference a Catalogued Teleservice managed object.";;

REGISTERED AS {cACommonAttribute 13};

7.14 Lista ordenada de punteros de subgrupo de puntos extremos de circuitos

circuitEndPointSubgroupOrderedPtrList ATTRIBUTE
WITH ATTRIBUTE SYNTAX

CACommonModule.CircuitSubgroupChannelPtrList;
MATCHES FOR EQUALITY, SET-COMPARISON, SET-INTERSECTION;
BEHAVIOUR
circuitEndPointSubgroupOrderedPtrListBhv BEHAVIOUR

DEFINED AS "This attribute is an ordered list of B-Channels. Each member of the list points to a CTP managed object class or its subclasses.";;

REGISTERED AS {cACommonAttribute 14};

7.15 Lista de punteros de subgrupo de puntos extremos de circuitos

circuitEndPointSubgroupPtrList ATTRIBUTE
WITH ATTRIBUTE SYNTAX

CACommonModule.CircuitSubgroupPtrList;
MATCHES FOR EQUALITY, SET-COMPARISON, SET-INTERSECTION;
BEHAVIOUR
circuitEndPointSubgroupPtrListBhv BEHAVIOUR

DEFINED AS "This complex attribute is an ordered list; each member of the list has three elements in a sequence. The first element is the name of the circuitEndPointSubgroup. The second element indicates how many digits to delete from the incoming number when the call is presented on this CSG. The third element indicates the string to prefix when the call is presented on this CSG. The members to this list may be inserted using the insertCircuitSubgroupChannel action, removed using the removeCircuitSubgroupChannel or the second and third elements may be modified using the modifyCircuitSubgroupChannel action. When a CSG is inserted or removed from this list the corresponding backward pointer (routingBlockPtrList) in the CSG (circuitSubGroup) managed object is automatically updated";;

REGISTERED AS {cACommonAttribute 15};

7.16 Identificador de perfil de cliente

customerProfileId ATTRIBUTE
WITH ATTRIBUTE SYNTAX

CACommonModule.NameType;
MATCHES FOR EQUALITY, ORDERING, SUBSTRINGS;
BEHAVIOUR
customerProfileIdBhv BEHAVIOUR

DEFINED AS "The Customer Profile represents a single point of reference used to bind together a range of services and resources for customer administration purposes. The Customer Profile may therefore represent a single subscriber or a group of subscribers (e.g. Centrex group), thus allowing the maximum flexibility in the administration of all subscribers. The customerProfileId attribute is used to name instances of this class. This is a naming attribute. If the string choice for the syntax is used, matching on the substrings is permitted. If the number choice for the syntax is used, then matching on ordering is permitted.";;

REGISTERED AS {cACommonAttribute 16};

7.17 Puntero de perfil de cliente

customerProfilePtr ATTRIBUTE

WITH ATTRIBUTE SYNTAX

CACommonModule.PointerOrNull;

MATCHES FOR EQUALITY;

BEHAVIOUR

customerProfilePtrBhv BEHAVIOUR

DEFINED AS "This attribute is used as a pointer to an instance of the customer Profile managed object class. The attribute value is null if no directory number is assigned to the customer profile.";;

REGISTERED AS {cACommonAttribute 17};

7.18 Lista de punteros de perfil de cliente

customerProfilePtrList ATTRIBUTE

WITH ATTRIBUTE SYNTAX

CACommonModule.SetOfInstances;

MATCHES FOR EQUALITY, SET-COMPARISON, SET-INTERSECTION;

BEHAVIOUR

customerProfilePtrListBhv BEHAVIOUR

DEFINED AS "This is a set-valued attribute whose value(s) points to instances of the customer Profile object class or its subclasses.";;

REGISTERED AS {cACommonAttribute 18};

7.19 Identificador de recurso personalizado

customizedResourceId ATTRIBUTE

WITH ATTRIBUTE SYNTAX

CACommonModule.NameType;

MATCHES FOR EQUALITY, ORDERING, SUBSTRINGS;

BEHAVIOUR

customizedResourceIdBhv BEHAVIOUR

DEFINED AS "This is a naming attribute. If the string choice for the syntax is used, matching on the substrings is permitted. If the number choice for the syntax is used, then matching on ordering is permitted.";;

REGISTERED AS {cACommonAttribute 19};

7.20 Lista de punteros de recursos personalizados

customizedResourcePtrList ATTRIBUTE

WITH ATTRIBUTE SYNTAX

CACommonModule.SetOfInstances;

MATCHES FOR EQUALITY, SET-COMPARISON, SET-INTERSECTION;

BEHAVIOUR

customizedResourcePtrListBhv BEHAVIOUR

DEFINED AS "This is a set-valued attribute whose value(s) points to instances of the Customized Resources object class.";;

REGISTERED AS {cACommonAttribute 20};

7.21 Identificador de número de directorio

directoryNumberId ATTRIBUTE
WITH ATTRIBUTE SYNTAX
CACommonModule.NameType;
MATCHES FOR EQUALITY, ORDERING, SUBSTRINGS;
BEHAVIOUR
directoryNumberIdBhv BEHAVIOUR

DEFINED AS "This is a naming attribute. If the string choice for the syntax is used, matching on the substrings is permitted. If the number choice for the syntax is used, then matching on ordering is permitted.";;

REGISTERED AS {cACommonAttribute 21};

7.22 Lista de punteros de números de directorio

directoryNumberPtrList ATTRIBUTE
WITH ATTRIBUTE SYNTAX
CACommonModule.SetOfInstances;
MATCHES FOR EQUALITY, SET-COMPARISON, SET-INTERSECTION;
BEHAVIOUR
directoryNumberPtrListBhv BEHAVIOUR

DEFINED AS "This is a set-valued attribute whose value(s) points to instances of the Directory Number object class or its subclasses.";;

REGISTERED AS {cACommonAttribute 22};

7.23 Número de directorio E.164

e164DirectoryNumber ATTRIBUTE
WITH ATTRIBUTE SYNTAX
CACommonModule.E164DN;
MATCHES FOR EQUALITY;
BEHAVIOUR
e164DirectoryNumberBhv BEHAVIOUR

DEFINED AS "This attribute represents directory numbers belonging to the Numbering Plan for the ISDN Era defined in E.164.";;

REGISTERED AS {cACommonAttribute 23};

7.24 Origen de tratamiento de interceptación

interceptTreatmentOrigin ATTRIBUTE
WITH ATTRIBUTE SYNTAX
CACommonModule.InterceptTreatmentOrigin;
MATCHES FOR EQUALITY;
BEHAVIOUR
interceptTreatmentOriginBhv BEHAVIOUR

DEFINED AS "This attribute's value identifies the intercept treatment to be applied to line originations for each non-normal condition indicated by the administrativeState attribute. A non-normal condition is one which denies user access to the subscribed services (i.e. service disconnected or suspended).

This attribute is a choice between a numericString (supplier specified) or an integer (generalized types).

The generalized types are as follows:

Site Translations – This intercept treatment indicates that the switchwide defined intercept treatments are to be used. The remainder of the values allow specific intercept treatment for individual subscribers.

No Dial Tone – This intercept treatment indicates that originating call attempts should not receive dial tone.

Local Announcement – This intercept treatment indicates that originating call attempts should be routed to announcement (indicating no service) instead of receiving dial tone.

Basic Business Group (BBG) Special Announcement – This intercept treatment indicates that originating call attempts from a BBG line should be routed to a BBG customized announcement (indicating no service) instead of dial tone.

Soft Dial Tone Emergency Service/Business Office – This intercept treatment indicates that originating calls should be allowed to emergency numbers and service provider business office numbers only. Originating calls to all other destinations are blocked and routed to a soft dial tone announcement.";;

REGISTERED AS {cACCommonAttribute 24};

7.25 Terminación de tratamiento de interceptación

interceptTreatmentTerm ATTRIBUTE

WITH ATTRIBUTE SYNTAX

CACommonModule.InterceptTreatmentTerm;

MATCHES FOR EQUALITY;

BEHAVIOUR

interceptTreatmentTermBhv BEHAVIOUR

DEFINED AS "This attribute's value identifies the intercept treatment to be applied to line terminations for each non-normal condition indicated by the administrativeState attribute. A non-normal condition is one which denies user access to the subscribed services (i.e. service disconnected or suspended).

This attribute is a choice between a numericString (supplier specified) or an integer (generalized type). The generalized types are as follows:

Site Translations – This intercept treatment indicates that the switchwide defined intercept treatments are to be used. The remainder of the values allow specific intercept treatment for individual subscribers.

Trouble/SuspendedServiceAnnouncement – This intercept treatment indicates that the terminating call should be routed to an announcement indicating that the called party's service has been suspended.

Operator Intercept – This intercept treatment indicates that the terminating call should be routed to an operator for handling.

DN Change/Disconnect Announcement – This intercept treatment indicates that the terminating call should be routed to a change/disconnected DN announcement.

Announce And Operator – This intercept treatment indicates that the terminating call should be routed to an announcement first and then to an operator for handling. The intercept is specified on a switchwide basis and is not customizable for individual subscribers.

External Automatic Intercept System – This intercept treatment indicates that the terminating call should be routed to an external Automatic Intercept System (AIS). The AIS then determines what treatment to provide based on the steering digits and DN supplied by the switch. An example of AIS capabilities is DN aging. When a customer's DN is changed, the AIS will give a change DN announcement for a specified time period after the change. Following this time period, calls to the old DN are then routed to the intercept for an unassigned DN.

Business Group Announcement for Disconnected or Term Restricted Lines – This intercept treatment indicates that the terminating call should be routed to a non-working Business Group DN announcement.";;

REGISTERED AS {cACCommonAttribute 25};

7.26 Puntero de entidad de señalización de capa 2

layer2SignalingEntityPtr ATTRIBUTE
WITH ATTRIBUTE SYNTAX **CACommonModule.ObjectInstance**;
MATCHES FOR EQUALITY, SET-COMPARISON, SET-INTERSECTION;
BEHAVIOUR
layer2SignalingEntityPtrBhv BEHAVIOUR

DEFINED AS "This attribute is used as a pointer to an instance of the **Layer2SignalingEntity** managed object class.";;

REGISTERED AS {cACommonAttribute 26};

7.27 Puntero de entidad de señalización de capa 3

layer3SignalingEntityPtr ATTRIBUTE
WITH ATTRIBUTE SYNTAX
CACommonModule.ObjectInstance;
MATCHES FOR EQUALITY, SET-COMPARISON, SET-INTERSECTION;
BEHAVIOUR
layer3SignalingEntityPtrBhv BEHAVIOUR

DEFINED AS "This attribute is used as a pointer to an instance of the **Layer3SignalingEntity** managed object class.";;

REGISTERED AS {cACommonAttribute 27};

7.28 Puntero de entidad de capa 4

layer4InfoEntityPtr ATTRIBUTE
WITH ATTRIBUTE SYNTAX
CACommonModule.ObjectInstance;
MATCHES FOR EQUALITY, SET-COMPARISON, SET-INTERSECTION;
BEHAVIOUR
layer4InfoEntityPtrBhv BEHAVIOUR

DEFINED AS "This attribute is used as a pointer to an instance of the **Layer4InfoEntity** managed object class.";;

REGISTERED AS {cACommonAttribute 28};

7.29 Tipo de entidad de capa 4

layer4InfoEntityType ATTRIBUTE
WITH ATTRIBUTE SYNTAX
CACommonModule.ObjectInstance;
MATCHES FOR EQUALITY, SET-COMPARISON, SET-INTERSECTION;
BEHAVIOUR
layer4InfoEntityTypeBhv BEHAVIOUR

DEFINED AS "This attribute is used as a pointer to an instance of the **Layer4InfoEntity** managed object class.";;

REGISTERED AS {cACommonAttribute 29};

7.30 Puntero de entidad de capa 5

layer5InfoEntityPtr ATTRIBUTE
WITH ATTRIBUTE SYNTAX
CACommonModule.ObjectInstance;
MATCHES FOR EQUALITY, SET-COMPARISON, SET-INTERSECTION;
BEHAVIOUR
layer5InfoEntityPtrBhv BEHAVIOUR

DEFINED AS "This attribute is used as a pointer to an instance of the **Layer5InfoEntity** managed object class.";;

REGISTERED AS {cACommonAttribute 30};

7.31 Tipo de entidad de capa 5

layer5InfoEntityType ATTRIBUTE
WITH ATTRIBUTE SYNTAX
CACommonModule.Layer5InfoEntityType ;
MATCHES FOR EQUALITY;

REGISTERED AS {cACommonAttribute 31};

7.32 Puntero de entidad de capa 6

layer6InfoEntityPtr ATTRIBUTE
WITH ATTRIBUTE SYNTAX
CACommonModule.ObjectInstance;
MATCHES FOR EQUALITY, SET-COMPARISON, SET-INTERSECTION;
BEHAVIOUR
layer6InfoEntityPtrBhv BEHAVIOUR

DEFINED AS "This attribute is used as a pointer to an instance of the Layer6InfoEntity managed object class.";

REGISTERED AS {cACommonAttribute 32};

7.33 Tipo de entidad de capa 6

layer6InfoEntityType ATTRIBUTE
WITH ATTRIBUTE SYNTAX
CACommonModule.Layer6InfoEntityType ;
MATCHES FOR EQUALITY;

REGISTERED AS {cACommonAttribute 33};

7.34 Puntero de entidad de capa 7

layer7InfoEntityPtr ATTRIBUTE
WITH ATTRIBUTE SYNTAX
CACommonModule.ObjectInstance;
MATCHES FOR EQUALITY, SET-COMPARISON, SET-INTERSECTION;
BEHAVIOUR
layer7InfoEntityPtrBhv BEHAVIOUR

DEFINED AS "This attribute is used as a pointer to an instance of the Layer7InfoEntity managed object class.";

REGISTERED AS {cACommonAttribute 34};

7.35 Tipo de entidad de capa 7

layer7InfoEntityType ATTRIBUTE
WITH ATTRIBUTE SYNTAX
CACommonModule.Layer7InfoEntityType ;
MATCHES FOR EQUALITY;

REGISTERED AS {cACommonAttribute 35};

7.36 Identificador de entidad de capa

layerEntityId ATTRIBUTE
WITH ATTRIBUTE SYNTAX
CACommonModule.NameType;
MATCHES FOR EQUALITY, ORDERING, SUBSTRINGS;
BEHAVIOUR
layerEntityIdBhv BEHAVIOUR

DEFINED AS "This is a naming attribute. If the string choice for the syntax is used, matching on the substrings is permitted. If the number choice for the syntax is used, then matching on ordering is permitted.";

REGISTERED AS {cACommonAttribute 36};

7.37 Número de canales B

numberOfBChannels ATTRIBUTE
WITH ATTRIBUTE SYNTAX

CACommonModule.NumberOfBChannels ;
MATCHES FOR EQUALITY;
BEHAVIOUR
numberOfBChannelsBhv BEHAVIOUR

DEFINED AS "This attribute represents the number of ISDN B-channels.";

REGISTERED AS {cACommonAttribute 37};

7.38 Equipo de oficina

officeEquipment ATTRIBUTE
WITH ATTRIBUTE SYNTAX

CACommonModule.StringName;
MATCHES FOR EQUALITY;
BEHAVIOUR
officeEquipmentBhv BEHAVIOUR

DEFINED AS "The value of this attribute is a printable string of alphanumeric characters that uniquely identifies the office equipment used to terminate the subscriber's line.";

REGISTERED AS {cACommonAttribute 38};

7.39 Lista de equipos de oficina

officeEquipmentList ATTRIBUTE
WITH ATTRIBUTE SYNTAX

CACommonModule.SetOfStringNames;
MATCHES FOR EQUALITY, SET-COMPARISON, SET-INTERSECTION;
BEHAVIOUR
officeEquipmentListBhv BEHAVIOUR

DEFINED AS "The value of this attribute is a set of graphic strings that identifies a set of office equipments.";

REGISTERED AS {cACommonAttribute 39};

7.40 Identificador de facilidades facultativas de usuario

optionalUserFacilitiesId ATTRIBUTE
WITH ATTRIBUTE SYNTAX

CACommonModule.NameType;
MATCHES FOR EQUALITY, ORDERING, SUBSTRINGS;
BEHAVIOUR
optionalUserFacilitiesIdBhv BEHAVIOUR

DEFINED AS "This is a naming attribute. If the string choice for the syntax is used, matching on the substrings is permitted. If the number choice for the syntax is used, then matching on ordering is permitted.";

REGISTERED AS {cACommonAttribute 40};

7.41 Identificador de bloque de encaminamiento

routingBlockId ATTRIBUTE
WITH ATTRIBUTE SYNTAX

CACommonModule.NameType;
MATCHES FOR EQUALITY, ORDERING, SUBSTRINGS;
BEHAVIOUR
routingBlockIdBhv BEHAVIOUR

DEFINED AS "This is a naming attribute. If the string choice for the syntax is used, matching on the substrings is permitted. If the number choice for the syntax is used, then matching on ordering is permitted.";

REGISTERED AS {cACommonAttribute 41};

7.42 Puntero de bloque de encaminamiento

routingBlockPtr ATTRIBUTE

WITH ATTRIBUTE SYNTAX

CACommonModule.ObjectInstance;

MATCHES FOR EQUALITY;

BEHAVIOUR

routingBlockPtrBhv BEHAVIOUR

DEFINED AS "This attribute points to an instance of routing block managed object.";

REGISTERED AS {cACommonAttribute 42};

7.43 Lista de punteros de bloques de encaminamiento

routingBlockPtrList ATTRIBUTE

WITH ATTRIBUTE SYNTAX

CACommonModule.SetOfInstances;

MATCHES FOR EQUALITY, SET-COMPARISON, SET-INTERSECTION;

BEHAVIOUR

routingBlockPtrListBhv BEHAVIOUR

DEFINED AS "This attribute points to instances of routing block object class.";

REGISTERED AS {cACommonAttribute 43};

7.44 Circuito sensible

sensitiveCircuit ATTRIBUTE

WITH ATTRIBUTE SYNTAX

CACommonModule.Boolean;

MATCHES FOR EQUALITY;

BEHAVIOUR

sensitiveCircuitBhv BEHAVIOUR

DEFINED AS "An attribute value of TRUE indicates that the access (circuit) is sensitive for such critical sources as a police station, first aid, hospital, etc. A sensitive circuit implies that a special clearance is required from the customer before the circuit can be put out of service. The default value FALSE, meaning the circuit is not sensitive to those sources.";

REGISTERED AS {cACommonAttribute 44};

7.45 Identificador de gestor de servicio

serviceManagerId ATTRIBUTE

WITH ATTRIBUTE SYNTAX

CACommonModule.NameType;

MATCHES FOR EQUALITY, ORDERING, SUBSTRINGS;

BEHAVIOUR

servicePackageIdBhv BEHAVIOUR

DEFINED AS "This is a naming attribute. If the string choice for the syntax is used, matching on the substrings is permitted. If the number choice for the syntax is used, then matching on ordering is permitted.";

REGISTERED AS {cACommonAttribute 45};

7.46 Identificador de lote de servicio

servicePackageId ATTRIBUTE

WITH ATTRIBUTE SYNTAX

CACommonModule.NameType;

MATCHES FOR EQUALITY, ORDERING, SUBSTRINGS;

BEHAVIOUR

serviceManagerIdBhv BEHAVIOUR

DEFINED AS "This is a naming attribute. If the string choice for the syntax is used, matching on the substrings is permitted. If the number choice for the syntax is used, then matching on ordering is permitted.";;

REGISTERED AS {cACommonAttribute 46};

7.47 Lista de punteros de servicios

servicePtrList ATTRIBUTE

WITH ATTRIBUTE SYNTAX

CACommonModule.SetOfInstances;

MATCHES FOR EQUALITY, SET-COMPARISON, SET-INTERSECTION;

BEHAVIOUR

servicePtrListBhv BEHAVIOUR

DEFINED AS "This attribute points to instances of the Bearer Service class and its subclasses, or to the Teleservice class and its subclasses, or to instances of Service Restriction class (defined in Q.824.2) or its subclasses or to other service classes such as those characterizing hunt group algorithms.";;

REGISTERED AS {cACommonAttribute 47};

7.48 Identificador de servicio suplementario

supplementaryServiceId ATTRIBUTE

WITH ATTRIBUTE SYNTAX

CACommonModule.NameType;

MATCHES FOR EQUALITY, ORDERING, SUBSTRINGS;

BEHAVIOUR

supplementaryServiceIdBhv BEHAVIOUR

DEFINED AS "This is a naming attribute. If the string choice for the syntax is used, matching on the substrings is permitted. If the number choice for the syntax is used, then matching on ordering is permitted.";;

REGISTERED AS {cACommonAttribute 48};

7.49 Lista de punteros admitida por puerto de acceso

supportedByAccessPortPtrList ATTRIBUTE

WITH ATTRIBUTE SYNTAX

CACommonModule.SupportedByAccessPortPtrList;

MATCHES FOR EQUALITY;

BEHAVIOUR

supportedByAccessPortPtrListBhv BEHAVIOUR

DEFINED AS "This attribute is a complex attribute that points the managed object instance of accessPort class and includes a second parameter AccessPortInterfaceIdPtr which is applicable only if the accessPortProfile instance points to non-associated signalling controlling interfaces. The AccessPortInterfaceIdPtr presents an interface identifier to the channel identification information element contained in some appropriate messages such as SETUP message which is defined in Q.931. The accessPortInterfaceIdPtr is only used with non-associated signalling.";;

REGISTERED AS {cACommonAttribute 49};

7.50 Identificador de teleservicio

teleserviceId ATTRIBUTE

WITH ATTRIBUTE SYNTAX

CACommonModule.NameType;

MATCHES FOR EQUALITY, ORDERING, SUBSTRINGS;

BEHAVIOUR

teleserviceIdBhv BEHAVIOUR

DEFINED AS "This is a naming attribute. If the string choice for the syntax is used, matching on the substrings is permitted. If the number choice for the syntax is used, then matching on ordering is permitted.";;

REGISTERED AS {cACommonAttribute 50};

7.51 Lista de punteros de teleservicios

teleServicePtrList ATTRIBUTE

WITH ATTRIBUTE SYNTAX

CACommonModule.SetOfInstances;

MATCHES FOR EQUALITY, SET-COMPARISON, SET-INTERSECTION;

BEHAVIOUR

teleServicePtrListBhv BEHAVIOUR

DEFINED AS "This is a set-valued attribute whose value(s) points to instances of the Access Port Profile object class or its subclasses.";;

REGISTERED AS {cACommonAttribute 51};

7.52 Número de directorio X.121

x121DirectoryNumber ATTRIBUTE

WITH ATTRIBUTE SYNTAX

CACommonModule.X121DN;

MATCHES FOR EQUALITY;

BEHAVIOUR

x121DirectoryNumberBhv BEHAVIOUR

DEFINED AS "This attribute represents directory numbers belonging to the Numbering Plan for Packet Data Networks defined in X.121.";;

REGISTERED AS {cACommonAttribute 52};

8 Vinculaciones de nombre

8.1 Vinculación de nombre canal de acceso – puerto de acceso

accessChannel-accessPort NAME BINDING

SUBORDINATE OBJECT CLASS accessChannel AND SUBCLASSES;

NAMED BY

SUPERIOR OBJECT CLASS accessPort AND SUBCLASSES;

WITH ATTRIBUTE "CCITT Rec. M.3100(1992)":cTPId;

CREATE;

DELETE;

REGISTERED AS {cACommonNameBinding 1};

8.2 Vinculación de nombre perfil de puerto de acceso – elemento gestionado

accessPortProfile-managedElement NAME BINDING

SUBORDINATE OBJECT CLASS accessPortProfile AND SUBCLASSES;

NAMED BY

SUPERIOR OBJECT CLASS "CCITT Rec. M.3100(1992)":managedElement AND SUBCLASSES;

WITH ATTRIBUTE accessPortProfileId;

CREATE;

DELETE;

REGISTERED AS {cACommonNameBinding 2};

8.3 Vinculación de nombre subgrupo de puntos extremos de circuitos administrado – perfil de cliente

administeredCircuitEndPointSubgroup-customerProfile NAME BINDING

SUBORDINATE OBJECT CLASS administeredCircuitEndPointSubgroup AND SUBCLASSES;

NAMED BY

SUPERIOR OBJECT CLASS customerProfile AND SUBCLASSES;

WITH ATTRIBUTE "CCITT Rec. M.3100":circuitEndPointSubgroupId;

CREATE

WITH-AUTOMATIC-INSTANCE-NAMING,

WITH-REFERENCE-OBJECT;

DELETE

DELETES-CONTAINED-OBJECTS;

REGISTERED AS {cACommonNameBinding 3};

8.4 Vinculación de nombre servicio portador – perfil de cliente

```
bearerService-customerProfile  NAME BINDING
SUBORDINATE OBJECT CLASS bearerService AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS customerProfile AND SUBCLASSES;
WITH ATTRIBUTE bearerServiceId;
BEHAVIOUR
bearerService-customerProfileBhv BEHAVIOUR
DEFINED AS
"This name binding is used to bind service independent supplementary services to the containing customer profile.
This name binding is applicable only to service independent supplementary services.";;
CREATE;
DELETE;
REGISTERED AS {cACommonNameBinding 4};
```

8.5 Vinculación de nombre facilidades facultativas de usuario catalogadas – elemento gestionado

```
cataloguedOptionalUserFacilities-managedElement  NAME BINDING
SUBORDINATE OBJECT CLASS cataloguedOptionalUserFacilities AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "CCITT Rec. M.3100(1992)":managedElement AND SUBCLASSES;
WITH ATTRIBUTE cataloguedOptionalUserFacilitiesId;
CREATE;
DELETE;
REGISTERED AS {cACommonNameBinding 5};
```

8.6 Vinculación de nombre servicio suplementario catalogado – elemento gestionado

```
cataloguedSupplementaryService-managedElement  NAME BINDING
SUBORDINATE OBJECT CLASS cataloguedSupplementaryService AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "CCITT Rec. M.3100(1992)":managedElement AND SUBCLASSES;
WITH ATTRIBUTE cataloguedSupplementaryServiceId;
CREATE;
DELETE;
REGISTERED AS {cACommonNameBinding 6};
```

8.7 Vinculación de nombre teleservicio catalogado – elemento gestionado

```
cataloguedTeleservice-managedElement  NAME BINDING
SUBORDINATE OBJECT CLASS cataloguedTeleservice AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "CCITT Rec. M.3100(1992)":managedElement AND SUBCLASSES;
WITH ATTRIBUTE cataloguedTeleserviceId;
CREATE;
DELETE;
REGISTERED AS {cACommonNameBinding 7};
```

8.8 Vinculación de nombre perfil de cliente – elemento gestionado

```
customerProfile-managedElement  NAME BINDING
SUBORDINATE OBJECT CLASS customerProfile AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "CCITT Rec. M.3100(1992)":managedElement AND SUBCLASSES;
WITH ATTRIBUTE customerProfileId;
CREATE;
DELETE;
REGISTERED AS {cACommonNameBinding 8};
```


8.9 Vinculación de nombre recurso personalizado – perfil de cliente

```
customizedResource-customerProfile    NAME BINDING
SUBORDINATE OBJECT CLASS customizedResource AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS customerProfile AND SUBCLASSES;
WITH ATTRIBUTE customizedResourceId;
CREATE;
DELETE;
REGISTERED AS {cACommonNameBinding 10};
```

8.10 Vinculación de nombre número de directorio – elemento gestionado

```
directoryNumber-managedElement    NAME BINDING
SUBORDINATE OBJECT CLASS directoryNumber AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "CCITT Rec. M.3100(1992)":managedElement AND SUBCLASSES;
WITH ATTRIBUTE directoryNumberId;
CREATE;
DELETE;
REGISTERED AS {cACommonNameBinding 11};
```

8.11 Vinculación de nombre entidad de capa – perfil de cliente

```
layerEntity-customerProfile    NAME BINDING
SUBORDINATE OBJECT CLASS layerEntity AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS customerProfile AND SUBCLASSES;
WITH ATTRIBUTE layerEntityId;
CREATE;
DELETE;
REGISTERED AS {cACommonNameBinding 12};
```

8.12 Vinculación de nombre facilidades facultativas de usuario – servicio portador

```
optionalUserFacilities-bearerService    NAME BINDING
SUBORDINATE OBJECT CLASS optionalUserFacilities AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS bearerService AND SUBCLASSES;
WITH ATTRIBUTE optionalUserFacilitiesId;
CREATE;
DELETE;
REGISTERED AS {cACommonNameBinding 13};
```

8.13 Vinculación de nombre bloque de encaminamiento – perfil de cliente

```
routingBlock-customerProfile    NAME BINDING
SUBORDINATE OBJECT CLASS routingBlock AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS customerProfile AND SUBCLASSES;
WITH ATTRIBUTE routingBlockId;
CREATE
WITH-AUTOMATIC-INSTANCE-NAMING,
WITH-REFERENCE-OBJECT;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {cACommonNameBinding 14};
```

8.14 Vinculación de nombre gestor de servicio – elemento gestionado

```
serviceManager-managedElement NAME BINDING
SUBORDINATE OBJECT CLASS serviceManager AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "CCITT Rec. M.3100(1992)":managedElement AND SUBCLASSES;
WITH ATTRIBUTE serviceManagerId;
CREATE
WITH-AUTOMATIC-INSTANCE-NAMING,
WITH-REFERENCE-OBJECT;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {cACommonNameBinding 15};
```

8.15 Vinculación de nombre lote de servicio – elemento gestionado

```
servicePackage-managedElement NAME BINDING
SUBORDINATE OBJECT CLASS servicePackage AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "CCITT Rec. M.3100(1992)":managedElement AND SUBCLASSES;
WITH ATTRIBUTE servicePackageId;
CREATE
WITH-AUTOMATIC-INSTANCE-NAMING,
WITH-REFERENCE-OBJECT;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {cACommonNameBinding 16};
```

8.16 Vinculación de nombre servicio suplementario dependiente del servicio – servicio portador

```
supplementaryServiceServiceDependent-bearerService NAME BINDING
SUBORDINATE OBJECT CLASS supplementaryServiceServiceDependent AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS bearerService AND SUBCLASSES;
WITH ATTRIBUTE supplementaryServiceId;
BEHAVIOUR
sSSD-BS-NBBhv BEHAVIOUR
DEFINED AS
"This name binding is used to bind service dependent supplementary services to the containing bearer service and
establishes an association between the bearer service and the supplementary service.";;
CREATE;
DELETE;
REGISTERED AS {cACommonNameBinding 17};
```

8.17 Vinculación de nombre servicio suplementario dependiente del servicio – teleservicio

```
supplementaryServiceServiceDependent-teleservice NAME BINDING
SUBORDINATE OBJECT CLASS supplementaryServiceServiceDependent AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS teleservice AND SUBCLASSES;
WITH ATTRIBUTE supplementaryServiceId;
BEHAVIOUR
sSSD-TS-NBBhv BEHAVIOUR
DEFINED AS
"This name binding is used to bind service dependent supplementary services to the containing teleservice and
establishes an association between the teleservice and the supplementary service.";;
CREATE;
DELETE;
REGISTERED AS {cACommonNameBinding 18};
```

8.18 Vinculación de nombre servicio suplementario independiente del servicio – perfil de cliente

supplementaryServiceServiceIndependent-customerProfile NAME BINDING
SUBORDINATE OBJECT CLASS supplementaryServiceServiceIndependent AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS customerProfile AND SUBCLASSES;
WITH ATTRIBUTE supplementaryServiceId;
BEHAVIOUR
sSSID-CP-NBBhv BEHAVIOUR
DEFINED AS
"This name binding is used to bind service independent supplementary services to the containing customer profile.
This name binding is applicable only to service independent supplementary services.";;
CREATE;
DELETE;
REGISTERED AS {cACommonNameBinding 19};

8.19 Vinculación de nombre teleservicio – perfil de cliente

teleservice-customerProfile NAME BINDING
SUBORDINATE OBJECT CLASS teleservice AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS customerProfile AND SUBCLASSES;
WITH ATTRIBUTE teleserviceId;
CREATE;
DELETE;
REGISTERED AS {cACommonNameBinding 20};

9 Acciones

9.1 Inserción de subgrupos de circuitos

insertCircuitSubgroups ACTION
BEHAVIOUR
insertCircuitSubgroupsBhv BEHAVIOUR

DEFINED AS "The action request contains the circuit subgroup to insert new data. The new data is a set of elements, each member consisting of three elements in a sequence; first, the name of the administeredCircuitEndPointSubgroup; second, delete element and the third the prefix element (see circuitEndPointSubgroupPtrList Bhv). The new members are inserted after the member whose administeredCircuitEndPointSubgroup name component matches the name of the object in the insert after field. The action specifies the name of an instance of CTP managed object class or its subclasses after which the new member must be inserted. The successful insertion is returned as a response to the action which contains only the invoke identifier. If the insertAfterCircuitSubgroup object instance is NULL the new members are inserted at the beginning of the sequence.";;

MODE CONFIRMED;
WITH INFORMATION SYNTAX CACommonModule.InsertCircuitSubgroups;
REGISTERED AS {cACommonAction 1};

9.2 Inserción de canales CSG

insertCSGChannels ACTION
BEHAVIOUR
insertCSGChannelsBhv BEHAVIOUR

DEFINED AS "The action is used to insert new members after a specific element in the sequence of the administeredCircuitEndPointSubgroupOrderedPtrList attribute. The action specifies the name of an instance of CTP managed object class or its subclasses after which the new members must be inserted. The successful insertion is returned as a response to the action which contains only the invoke identifier. If the insertAfter object instance is NULL the CSGs are inserted at the beginning of the sequence.";;

MODE CONFIRMED;
WITH INFORMATION SYNTAX CACommonModule.InsertCSGChannels;
REGISTERED AS {cACommonAction 2};

9.3 Modificación de subgrupos de circuitos

modifyCircuitSubgroup ACTION
BEHAVIOUR
modifyCircuitSubgroupBhv BEHAVIOUR

DEFINED AS "The action is used to modify the delete and prefix elements of an existing member of the **circuitEndPointSubgroupPtrList** attribute. The action specifies the name of **administeredCircuitEndPointSubgroup** and the new values for the delete and/or prefix elements. The successful modification is returned as a response to the action which contains only the **invoke identifier**.";;

MODE CONFIRMED;
WITH INFORMATION SYNTAX CACCommonModule.ModifyCircuitSubgroup;
REGISTERED AS {cACCommonAction 3};

9.4 Supresión de subgrupos de circuitos

removeCircuitSubgroups ACTION
BEHAVIOUR
removeCircuitSubgroupsBhv BEHAVIOUR

DEFINED AS "The action is used to remove existing members in the sequence of the **circuitEndPointSubgroupPtrList** attribute. The action specifies the name of **administeredCircuitEndPointSubgroup** that must be removed. The successful removal is returned as a response to the action which contains only the **invoke identifier**.";;

MODE CONFIRMED;
WITH INFORMATION SYNTAX CACCommonModule.RemoveCircuitSubgroups;
REGISTERED AS {cACCommonAction 4};

9.5 Supresión de canales CSG

removeCSGChannels ACTION
BEHAVIOUR
removeCSGChannelsBhv BEHAVIOUR

DEFINED AS "The action is used to remove existing members in the sequence of the CTP managed object class or its subclasses that must be removed. The successful removal is returned as a response to the action which contains only the **invoke identifier**.";;

MODE CONFIRMED;
WITH INFORMATION SYNTAX CACCommonModule.RemoveCSGChannels;
REGISTERED AS {cACCommonAction 5};

10 Definiciones de tipo

CACommonModule {itu-t(0) recommendation(0) q(17) ca(824) dot(127) common(0) informationModel(0) asn1Modules(2) cACCommonModule(0)}

DEFINITIONS IMPLICIT TAGS ::=
BEGIN

-- *EXPORTS Everything;*

IMPORTS

UsageState, OperationalState FROM **Attribute-ASN1Module** {joint-iso-ccitt ms(9) smi(3) part2(2) asn1Module (2) 1}

ObjectInstance,
ObjectClass
FROM **CMIP-1** {joint-iso-ccitt ms(9) cmip(1) modules(0) protocol(3)}

AlarmStatus,
Boolean,
NameType,
ObjectList,
Pointer,
PointerOrNull

FROM **ASN1DefinedTypesModule** {ccitt recommendation m(13) gnm(3100) informationModel(0) asn1Modules(2) asn1DefinedTypesModule(0)};

```

q824-0InformationModel OBJECT IDENTIFIER ::= {itu-t(0) recommendation(0) q(17) ca(824) dot(127) common(0)
informationModel(0)}
cACommonObjectClass OBJECT IDENTIFIER ::= {q824-0InformationModel managedObjectClass(3)}
cACommonPackage OBJECT IDENTIFIER ::= {q824-0InformationModel package(4)}
cACommonAttribute OBJECT IDENTIFIER ::= {q824-0InformationModel attribute(7)}
cACommonNameBinding OBJECT IDENTIFIER ::= {q824-0InformationModel nameBinding(6)}
cACommonAction OBJECT IDENTIFIER ::= {q824-0InformationModel action(9)}

-- default value definitions --
false Boolean ::= FALSE
emptySet SetOfInstances ::= { }
interceptTreatmentOrigin InterceptTreatmentOrigin ::= generic:siteTranslations
interceptTreatmentTerm InterceptTreatmentTerm ::= generic:siteTranslations

-- supporting productions --

AccessChannelPtrList ::= SET OF NameType
AccessPortPtr ::= ObjectInstance
AccessPortInterfaceIdPtr ::= SEQUENCE {
    accessPortPtr AccessPortPtr,
    interfaceIdentifier INTEGER(1..MAX)}

CircuitSubgroupChannelPtrList ::= SEQUENCE OF ObjectInstance

DirectoryNumber ::= CHOICE {
    e164DN [0] E164DN,
    x121DN [1] X121DN}

DirectoryNumberList ::= SET OF DirectoryNumber

E164DN ::= SEQUENCE {
    countryCode [0] NumericString(SIZE(1..4)) OPTIONAL,
    nationalSignificantNumber [1] SEQUENCE {
    nationalDestinationNumber [0] NumericString(SIZE(1..6)) OPTIONAL,
    subscriberNumber [1] NumericString(SIZE(1..8))}

InterceptTreatmentOrigin ::= CHOICE {
    customized NumericString(SIZE(1..5)),
    generic InterceptTreatmentOriginTypes}

InterceptTreatmentOriginTypes ::= ENUMERATED {
    siteTranslations (0), -- default value
    noDialTone (1),
    localAnnouncement (2),
    businessGroupSpecialAnnouncement (3),
    softDTEmergencyService/BusinessOffice (4)}

InterceptTreatmentTerm ::= CHOICE {
    customized NumericString(SIZE(1..5)),
    generic InterceptTreatmentTermTypes}

InterceptTreatmentTermTypes ::= ENUMERATED {
    siteTranslations (0),
    troubleOrSuspendServiceAnnouncement (1),
    operatorIntercept (2),
    dNChangeOrDisconnectAnnouncement (3),
    announceAndOperator (4),
    externalAutomaticInterceptSystem (5),
    businessGroupAnnouncementForDisconnectedOrTermRestrictedLines (6)}

Insert ::= CHOICE {
    firstElement NULL,
    after ObjectInstance}

InsertCSGChannels ::= SEQUENCE {
    insertAfter Insert,
    newMembers SET OF ObjectInstance}

InsertCircuitSubgroups ::= SEQUENCE {
    insertAfterCircuitSubgroup Insert,
    newCircuitSubgroups SET OF CircuitSubgroup}

```

```

Layer4InfoEntityType ::= INTEGER
Layer5InfoEntityType ::= INTEGER
Layer6InfoEntityType ::= INTEGER
Layer7InfoEntityType ::= INTEGER
ModifyCircuitSubgroup ::= SEQUENCE {
    circuitEndPointSubgroupName ObjectInstance,
    newDelete INTEGER OPTIONAL,
    newPrefix IA5String OPTIONAL}

NumberOfBChannels ::= INTEGER
RemoveCSGChannels ::= SET OF ObjectInstance
RemoveCircuitSubgroups ::= SET OF ObjectInstance
CircuitSubgroup ::= SEQUENCE {
    circuitEndPointSubgroupName ObjectInstance,
    delete INTEGER,
    prefix IA5String}

CircuitSubgroupPtrList ::= SEQUENCE OF CircuitSubgroup
SetOfInstances ::= SET OF ObjectInstance
StringName ::= GraphicString
SetOfStringNames ::= SET OF StringName
SupportedByAccessPortPtr ::= CHOICE {AccessPortPtr, AccessPortInterfaceIdPtr}
SupportedByAccessPortPtrList ::= SET OF SupportedByAccessPortPtr

X121DN ::= CHOICE {
    internationalDataNumber [0] SEQUENCE {
        dNIC [0] NumericString(SIZE(4)) OPTIONAL,
        networkTerminalNumber [1] NumericString(SIZE(1..10))},

    internationalDataNumberIntegrated [1] SEQUENCE {
        dCC [0] NumericString(SIZE(3)) OPTIONAL,
        nationalNumber [1] NumericString(SIZE(1..11))},

    internationalTelexNumber [2] SEQUENCE {
        tDC [0] NumericString(SIZE(3)) OPTIONAL,
        nationalTelexNumber [1] NumericString(SIZE(1..11))}}

```

END -- *Type definitions* --

11 Definiciones de servicio

Esta cláusula contiene las plantillas de parámetros para los servicios definidos en las cláusulas anteriores.

11.1 Convenios

La definición de cada servicio en esta Recomendación incluye un cuadro con los parámetros de sus primitivas. Para una primitiva dada, se describe la presencia de cada parámetro mediante uno de los siguientes valores:

- M El parámetro es obligatorio.
- (=) El valor del parámetro es igual al cuerpo del parámetro de la columna de la izquierda.
- U La utilización del parámetro es una opción del usuario del servicio – el parámetro no está presente en la interacción.
- C El parámetro está presente de forma condicional – las condiciones se definen mediante el texto que describe el parámetro.

11.2 Inserción de canales CSG

El servicio inserción de canales CSG se utiliza para permitir a un sistema de gestión (OS) añadir uno o varios canales a la lista ordenada de punteros de canales de subgrupo de puntos extremos de circuitos, a continuación de un canal específico. También puede añadirse un canal al comienzo de la lista ordenada. La acción modifica la lista ordenada de punteros de canales de subgrupo de puntos extremos de circuitos en el objeto subgrupo de puntos extremos de circuitos administrado. Esta acción utiliza el servicio CMIS M-ACTION. El Cuadro 1 contiene los parámetros para esta acción.

CUADRO 1/Q.824.0

Inserción de parámetros de canales CSG

| Nombre del parámetro | Pet./Ind. | Resp./Conf. |
|---------------------------------|-----------|-------------|
| Identificador de invocación | M | M= |
| Identificador enlazado | - | C |
| Modo | M | - |
| Clase de objetos de base | M | - |
| Ejemplar de objetos de base | M | - |
| Alcance | U | - |
| Filtro | U | - |
| Clase de objetos gestionados | - | C |
| Ejemplar de objetos gestionados | - | C |
| Control de acceso | U | - |
| Sincronización | U | - |
| Tipo de acción | M | C(=) |
| Información de acción | M | - |
| Inserción posterior | M | - |
| Nuevos miembros | M | - |
| Hora actual | - | U |
| Errores | - | C |

11.3 Supresión de canales CSG

El servicio supresión de canales CSG se utiliza para permitir a un sistema de gestión (OS) suprimir canales de la lista ordenada de punteros de canales de subgrupo de puntos extremos de circuitos. La acción modifica la lista ordenada de punteros de subgrupo de puntos extremos de circuitos en el objeto subgrupo de puntos extremos de circuitos administrado. Esta acción utiliza el servicio CMIS M-ACTION. El Cuadro 2 contiene los parámetros para esta acción.

CUADRO 2/Q.824.0

Supresión de parámetros de canales CSG

| Nombre del parámetro | Pet./Ind. | Resp./Conf. |
|---|-----------|-------------|
| Identificador de invocación | M | M= |
| Identificador enlazado | - | C |
| Modo | M | - |
| Clase de objetos de base | M | - |
| Ejemplar de objetos de base | M | - |
| Alcance | U | - |
| Filtro | U | - |
| Clase de objetos gestionados | - | C |
| Ejemplar de objetos gestionados | - | C |
| Control de acceso | U | - |
| Sincronización | U | - |
| Tipo de acción | M | C(=) |
| Información de acción | M | - |
| Supresión de canales de subgrupo de circuitos | M | - |
| Errores | - | C |

11.4 Inserción de subgrupos de circuitos

El servicio inserción de subgrupos de circuitos se utiliza para permitir a un sistema de gestión (OS) añadir uno o varios CSG a la lista de punteros de subgrupo de puntos extremos de circuitos en el objeto bloque de encaminamiento. Los CSG también pueden añadirse al comienzo de la lista. La acción modifica la lista de punteros de subgrupo de puntos extremos de circuitos de bloque de encaminamiento en el objeto grupo de encaminamiento. Esta acción utiliza el servicio CMIS M-ACTION. El Cuadro 3 contiene los parámetros para esta acción.

CUADRO 3/Q.824.0

Inserción de parámetros de subgrupos de circuitos

| Nombre del parámetro | Pet./Ind. | Resp./Conf. |
|--|-----------|-------------|
| Identificador de invocación | M | M= |
| Identificador enlazado | – | C |
| Modo | M | – |
| Clase de objetos de base | M | – |
| Ejemplar de objetos de base | M | – |
| Alcance | U | – |
| Filtro | U | – |
| Clase de objetos gestionados | – | C |
| Ejemplar de objetos gestionados | – | C |
| Control de acceso | U | – |
| Sincronización | U | – |
| Tipo de acción | M | C(=) |
| Información de acción | M | – |
| Inserción posterior de subgrupo de circuitos | M | – |
| Subgrupos de circuitos nuevos | M | – |
| Hora actual | – | U |
| Errores | – | C |

11.5 Supresión de subgrupos de circuitos

El servicio de supresión de subgrupos de circuitos se utiliza para permitir un sistema de gestión (OS) suprimir CSG de la lista de punteros de subgrupo de puntos extremos de circuitos. La acción modifica la lista de punteros de subgrupo de puntos extremos de circuitos en el objeto bloque de encaminamiento. Esta acción utiliza el servicio CMIS M-ACCIÓN. El Cuadro 4 contiene los parámetros para esta acción.

CUADRO 4/Q.824.0

Supresión de parámetros de subgrupos de circuitos

| Nombre del parámetro | Pet./Ind. | Resp./Conf. |
|-------------------------------------|-----------|-------------|
| Identificador de invocación | M | M= |
| Identificador enlazado | – | C |
| Modo | M | – |
| Clase de objetos de base | M | – |
| Ejemplar de objetos de base | M | – |
| Alcance | U | – |
| Filtro | U | – |
| Clase de objetos gestionados | – | C |
| Ejemplar de objetos gestionados | – | C |
| Control de acceso | U | – |
| Sincronización | U | – |
| Tipo de acción | M | C(=) |
| Información de acción | M | – |
| Supresión de subgrupos de circuitos | M | – |
| Errores | – | C |

11.6 Modificación de subgrupo de circuitos

El servicio de modificación de subgrupo de circuitos se utiliza para permitir a un sistema de gestión (OS) modificar datos de supresión y/o prefijo en la lista de punteros de subgrupo de puntos extremos de circuitos en el objeto bloque de encaminamiento. Debe estar presente por lo menos uno de los dos parámetros (nueva supresión, nuevo prefijo). Se cambian los datos para un determinado CSG. Esta acción utiliza el servicio CMIS M-ACTION. El Cuadro 5 contiene los parámetros para esta acción.

CUADRO 5/Q.824.0

Modificación de parámetros de subgrupo de circuitos

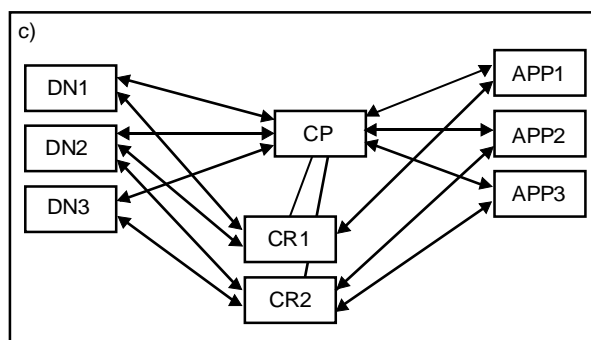
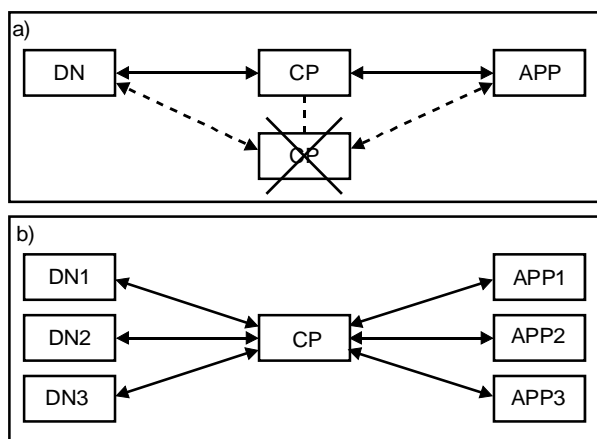
| Nombre del parámetro | Pet./Ind. | Resp./Conf. |
|---------------------------------|-----------|-------------|
| Identificador de invocación | M | M= |
| Identificador enlazado | - | C |
| Modo | M | - |
| Clase de objetos de base | M | - |
| Ejemplar de objetos de base | M | - |
| Alcance | U | - |
| Filtro | U | - |
| Clase de objetos gestionados | - | C |
| Ejemplar de objetos gestionados | - | C |
| Control de acceso | U | - |
| Sincronización | U | - |
| Tipo de acción | M | C(=) |
| Información de acción | M | - |
| Subgrupo de circuitos | M | - |
| Nueva supresión | C | - |
| Nuevo prefijo | C | - |
| Hora actual | - | U |
| Errores | - | C |

Apéndice I

Combinaciones de servicios con recursos

(Este apéndice es parte integrante de esta Recomendación.)

Cuando no se utilizan objetos de recursos personalizados, todos los servicios asociados con el perfil de cliente pueden aplicarse a todos los números de directorio y aparecen en todos los perfiles de puerto de acceso. No obstante, si un servicio debe ser limitado a cierta combinación DN/APP, se utilizan dos recursos personalizados: uno para el conjunto de servicio o servicios que está limitado al DN/APP y el segundo es necesario para vincular el resto del conjunto de servicio o servicios al resto de las combinaciones DN/APP.



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