Project	**IEEE P802.16g Broadband Wireless Access Working Group <http://ieee802.org/16>**	
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Re:	S802.16g-04/02	
Abstract	This document identifies key heading to be accepted as the table of content for P802.16g	
Purpose	A proposal for a table of contents	
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IEEE 802.16 Network Management Specification

1 Overview

For the purpose of Management Interface development an Interface Methodology known as Integration Reference Point (IRP) was developed to promote the wider adoption of standardized

Management interfaces in telecommunication networks. The IRP methodology employs Protocol & Technology Neutral modeling methods as well as protocol specific solution sets to help achieve its goals. The Integration Reference Point is a methodology to aid a modular approach to the development of standards interfaces.

There are three cornerstones to the IRP approach:

1. Top-down, process-driven modeling approach
   The process begins with a requirements phase, the aim at this step is to provide conceptual and use case definitions for a specific interface aspect as well as defining subsequent requirements for this IRP.

2. Technology-independent modeling
   The second phase of the process is the development of a protocol independent model of the interface. This protocol independent model is specified in the IRP Information Service.

3. Standards-based technology-dependent modeling

The third phase of the process is to create one or more interface technology and protocol dependent models from the Information Service model. This is specified in the IRP Solution Set(s).

2 References

Note: All 3GPP specifications are available at www.3gpp.org

[1] 3GPP TS 32.101 Telecommunication management; Principles and high-level requirements

[2] 3GPP TS 32.102 Telecommunication management; Architecture

[3] 3GPP TS 32.602 Telecommunication management; Configuration Management (CM); Basic configuration management Integration Reference Point (IRP): information service

[4] 3GPP TS 32.603 Telecommunication management; Configuration Management (CM); Basic configuration management Integration Reference Point (IRP): CORBA solution set.

[5] 3GPP TS 32.632 Telecommunication management; Configuration Management (CM); Core Network Resources Integration Reference Point (IRP): Network Resource Model (NRM).

3 Definitions and Abbreviations

This section is providing relevant definitions and abbreviations.

4 Concept & Requirements

This section is providing concept info and requirements – anticipated topics:

- Monitoring requirements
- Provisioning requirements
- IRP concept

5 Architecture Aspects

This section is providing relevant architecture definitions – anticipated topics:

- High-level architecture with respect to management interfaces
- … and how does 802.16, and this spec, fits into it

6 Management Interfaces / Interface IRP's

This section is providing Interface IRP reuse requirements and guidelines, including protocol aspects – anticipated topics:

- Based on requirements, listing Interface IRP's applicable for 802.16
- Listing applicable protocol technologies

7 IEEE 802.16 Resource Model IRP IS

This section is providing the IEEE 802.16 protocol neutral (IS) resource model (NRM/MIB) definitions, using the 3GPP IRP IS template.

7.1 Information entities imported and local labels

Label reference	**Local label**
32.622 [xx], information object class, ManagedElement	ManagedElement
32.622 [xx], information object class, ManagedFunction	ManagedFunction
32.622 [xx], information object class, SubNetwork	SubNetwork
32.622 [xx], information object class, Top	Top

7.2 Class diagram

7.2.1 Attributes and relationships

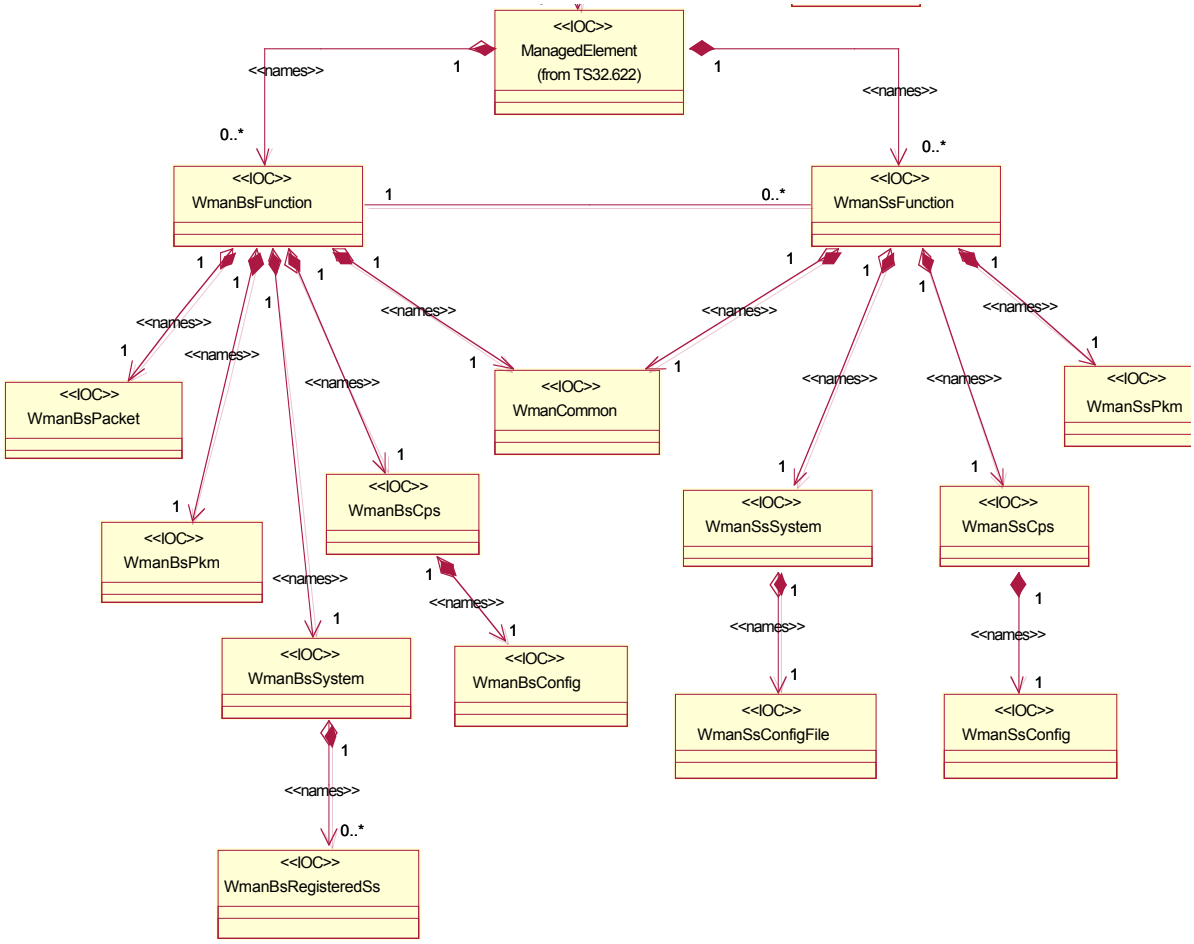

Figure 7-1: IEEE802.16 NRM IRP Containment/Naming (1/2)

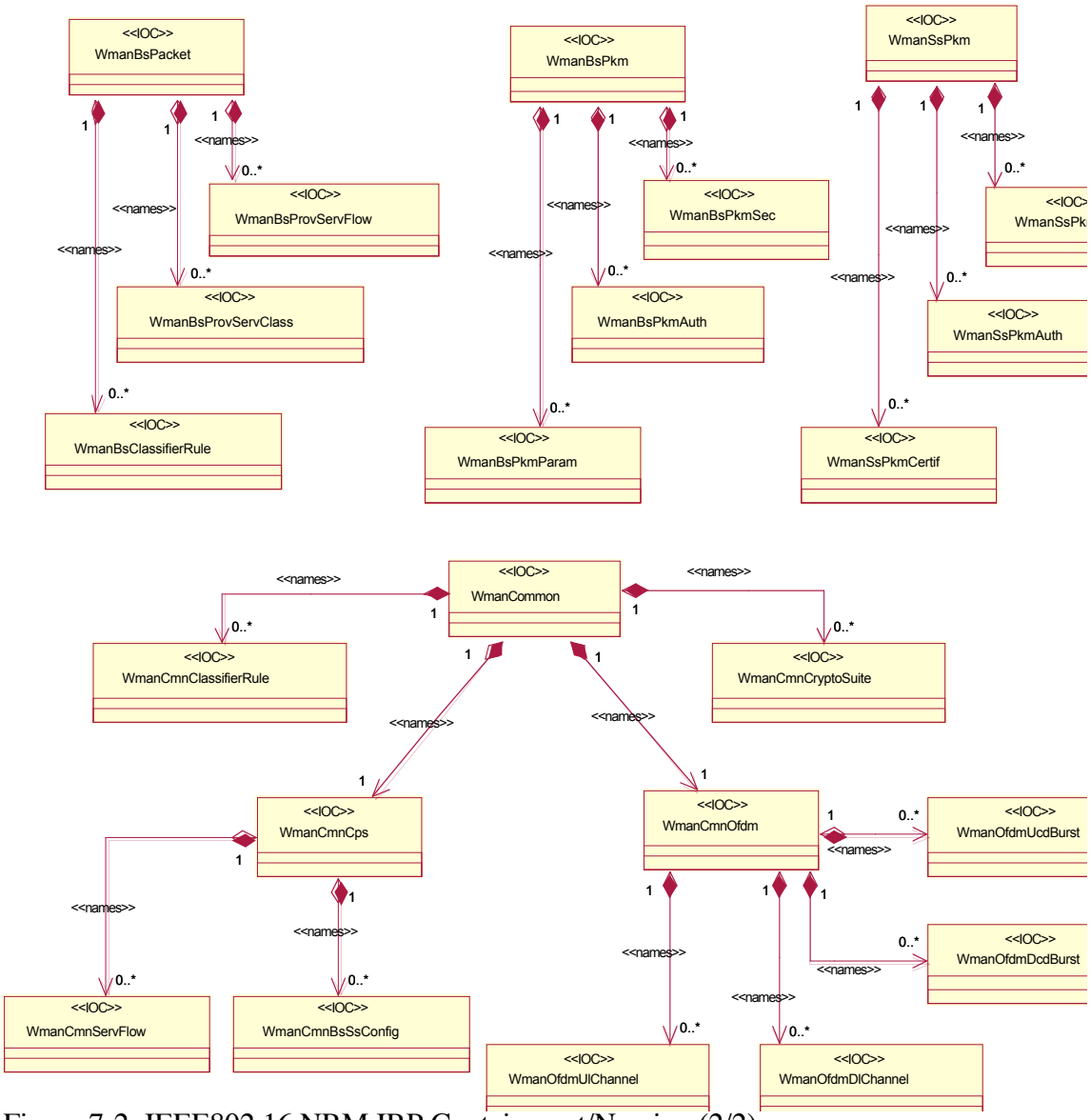

Figure 7-2: IEEE802.16 NRM IRP Containment/Naming (2/2)

7.2.2 Inheritance

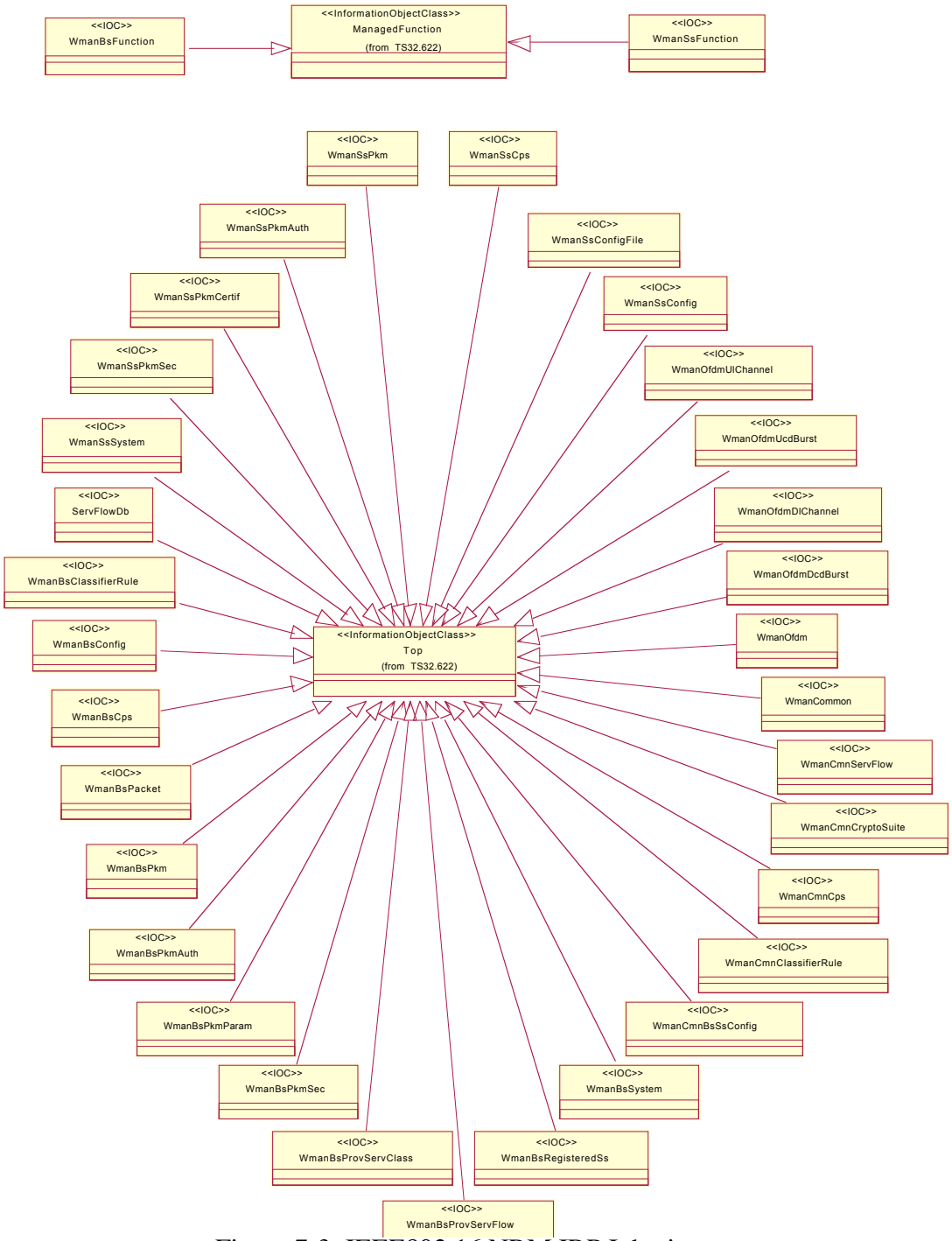

Figure 7-3: IEEE802.16 NRM IRP Inheritance

7.3 Information object classes definition

7.3.1 IOC `WmanBsFunction`

7.3.1.1 Definition

This IOC represents a WMAN base station. For more information, see [zz]. It is derived from `ManagedFunction`.

7.3.1.2 Attributes

Attribute name	Defined in	Visibility	Support Qualifier	Read Qualifier	Write Qualifier
wmanBsFunctionId	–	+	M	M	–
objectClass	Top	$+^{inherited}$	$M^{inherited}$	$M^{inherited}$	$-^{inherited}$
objectInstance	Top	$+^{inherited}$	$M^{inherited}$	$M^{inherited}$	$-^{inherited}$
userLabel	ManagedFunction	$+^{inherited}$	$M^{inherited}$	$M^{inherited}$	$M^{inherited}$
aaa	–	+	O	M	–
bbb	–	+	O	M	–
yyy	–	+	O	M	–
zzz	–	+	O	M	–

7.3.2 IOC `WmanSsFunction`

7.3.2.1 Definition

This IOC represents a WMAN subscriber station. For more information, see [zz]. It is derived from `ManagedFunction`.

7.3.2.2 Attributes

Attribute name	Defined in	Visibility	Support Qualifier	Read Qualifier	Write Qualifier
wmanSsFunctionId	–	+	M	M	–
objectClass	Top	$+^{inherited}$	$M^{inherited}$	$M^{inherited}$	$-^{inherited}$
objectInstance	Top	$+^{inherited}$	$M^{inherited}$	$M^{inherited}$	$-^{inherited}$
userLabel	ManagedFunction	$+^{inherited}$	$M^{inherited}$	$M^{inherited}$	$M^{inherited}$
ccc	–	+	O	M	–
ddd	–	+	O	M	–
www	–	+	O	M	–
xxx	–	+	O	M	–

7.3.3 IOC xxx

7.3.4 IOC yyy

7.4 Information relationships definition

7.5 Notifications

7.6 Information attributes definition

7.5.1 Definition and legal values

Attribute Name	Definition	Legal Values
wmanBsFunctionId	It contains 'name+value' that is the RDN, when naming an instance, of this object class containing this attribute.This RDN uniquely identifies the object instance within the scope of its containing (parent) object instance.	–
wmanSsFunctionId		–
wmanZzzId		–
aaa	tbd	tbd
bbb	tbd	tbd
ccc	tbd	tbd
ddd	tbd	tbd
objectClass	As defined in 32.622 [28]: An attribute which captures the name of the class from which the object instance is an occurrence of.	–
objectInstance	As defined in 32.622 [28]: An information which captures the Distinguished Name of any object.	–
userLabel	Based on definition from 32.622 [28]: A user-friendly (and user assigned) name of the associated instance.	–
www	tbd	tbd
xxx	tbd	tbd
yyy	tbd	tbd
zzz	tbd	tbd

7.5.2 Constraints

Annex A IEEE 802.16 Resource Model IRP SNMP SS

This section is providing the SNMP SS of the IEEE 802.16 NRM IRP – including:

- Mapping tables
- SNMP MIB (based on currently proposed SNMP MIB)

Annex B IEEE 802.16 Resource Model IRP CORBA SS

This section is providing the CORBA SS of the IEEE 802.16 NRM IRP – including:

- Mapping tables
- CORBA IDL

Annex C IEEE 802.16 Resource Model IRP XXXX SS

This section is providing the XXXX SS of the IEEE 802.16 NRM IRP – including:

- Mapping tables
- XXXX YYYY

Annex D Change History