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**3RD GENERATION
PARTNERSHIP
PROJECT 2
"3GPP2"**

Administration of Parameter Value Assignments for cdma2000 Spread Spectrum Standards

Release C

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REFERENCES

The following standards are referenced in this text. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based upon this document are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. ANSI and TIA maintain registers of currently valid national standards published by them.

1. Reserved.
2. 3GPP2 C.S0002-A, *Physical Layer Standard for cdma2000 Spread Spectrum Systems*, June 2000.
3. 3GPP2 C.S0003-A, *Medium Access Control (MAC) Standard for cdma2000 Spread Spectrum Systems*, June 2000.
4. Reserved.
5. 3GPP2 C.S0005-A, *Upper Layer (Layer 3) Signaling Standard for cdma2000 Spread Spectrum Systems*, June 2000.
6. Reserved.
7. 3GPP2 C.S0008-0, *Multi-Carrier Specification for Spread Spectrum Systems on GSM MAP (MC-MAP)*, June 2000.
8. 3GPP2 C.S0009-0, *Speech Service Option Standard for Wideband Spread Spectrum System*, December 1999.
9. 3GPP2 C.S0013-A, *Mobile Station Loopback Service Options Standard*, March 2001.
10. 3GPP2 C.S0014-0, *Enhanced Variable Rate Codec, Speech Service Option 3 for Wideband Spread Spectrum Digital Cellular System*, December 1999.
11. 3GPP2 C.S0015-A, *Short Message Services for Wideband Spread Spectrum Systems*, January 2002.
12. 3GPP2 C.S0016-A, *Over-the-Air Service Provisioning of Mobile Stations in Wideband Spread Spectrum Systems*, November 2001.
13. 3GPP2 C.S0017-0, *Data Services Standard for Wideband Spread Spectrum Systems*, December 1999.
14. 3GPP2 C.S0017-0-1, *Data Services Standard for Wideband Spread Spectrum Systems – Addendum 1*, December 1999.
15. 3GPP2 C.S0017-0-2, *Data Services Standard for Wideband Spread Spectrum Systems – Addendum 2*, August 2000.
16. 3GPP2 C.S0020-0, *High Rate Speech Service Option for Wideband Spread Spectrum Communication Systems*, December 1999.
17. 3GPP2 C.S0022-0, *Position Determination Service Standard for Dual Mode Spread Spectrum Systems*, December 1999.
18. 3GPP2 C.S0026, *Test Data Service Option (TDSO) for cdma2000 Spread Spectrum Systems*, March 2001.

- 1 19. 3GPP2 C.S0025, *Markov Service Option (MSO) for cdma2000 Spread Spectrum Systems*,
2 March 2001.
- 3 20. 3GPP2 N.S0005, *Cellular Radiotelecommunications Intersystem Operations*, December
4 1999.
- 5 21. TIA/EIA/IS-91-A, *Base Station – Mobile Station Compatibility Specification for 800 MHz*
6 *Cellular, Auxiliary, and Residential Services*, November 1999.
- 7 22. Reserved.
- 8 23. Reserved.
- 9 24. Reserved.
- 10 25. ANSI X3.4, *Information Systems – Coded Character Sets – 7-Bit American National*
11 *Standard Code*, 1986.
- 12 26. ARIB STD-T53 Ver 3.2, *CDMA Cellular System*, October 2001.
- 13 27. ISO 8859-1, *Information Technology – 8-Bit Single-Byte Coded Graphic Character Sets –*
14 *Part 1. Latin Alphabet No. 1*, 1988.
- 15 28. ISO 8859-8, *Information Technology – 8-Bit Single-Byte Coded Graphic Character Sets*,
16 1988.
- 17 29. ISO/IEC 10646-1, *Information Technology – Universal Multiple-Octet Coded Character*
18 *Set (UCS) – Part 1: Architecture and Basic Multilingual Plane*, 1993.
- 19 30. JIS X0201, *Code for Information Interchange*, 1976.
- 20 31. ITU-T T.50, *International Reference Alphabet (IRA) (Formerly International Alphabet No. 5*
21 *or IA5) Information Technology – 7-Bit Coded Character Set for Information Interchange*,
22 1992.
- 23 32. TTA.KO-006.0013, *Air Interface between Personal Station-Base Station Radio Interface*
24 *Standard for 1.7 to 1.9GHz CDMA PCS*, July 1997.
- 25 33. KS X 1001, *The coded character set for information interchange – Korean and Chinese*
26 *character*, 1998.
- 27 34. 3GPP2 C.S0024 version 4.0, *cdma2000 High Rate Packet Data Air Interface Specification*,
28 December 2001.
- 29 35. 3GPP2 C.S0029 version 2.0, *Test Application Specification (TAS) for High Rate Packet*
30 *Data Air Interface*, July 2001.
- 31 36. 3GPP2 C.S0030 version 2.0, *Selectable Mode Vocoder Service Option for Wideband*
32 *Spread Spectrum Communication Systems*, December 2001.
- 33 37. 3GPP TS 23.090, *Alphabets and language-specific information*.
- 34 38. Reserved.
- 35 39. 3GPP2 A.S0007, *Inter-Operability Specification (IOS) for High Rate Packet Data (HRPD)*
36 *Access Network Interfaces*, November 2001.
- 37 40. Reserved.
- 38 41. Reserved.

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2 No text.

1 INTRODUCTION

The cdma2000 family of standards specify the operating and performance characteristics of cdma2000 digital spread spectrum systems. These standards contain certain parameter values (e.g., service options and *Data Burst Message* burst types) that have been reserved for either standard or for proprietary (non-standard) usage. As new voice and non-voice-related services are defined, it is necessary to assign values to these parameters. To avoid confusion resulting from multiple assignments, 3GPP2 Technical Specification Group C (TSG-C) recognized the need to provide this single master registry of parameter values that it has authorized for use.

This document assigns values to parameters within certain cdma2000 specifications for standard and for proprietary usage. The affected standards are listed in the References section of this document. As assignments are identified, this document will be revised to accommodate the new parameter assignments. Manufacturers, service providers, and others wishing to use values for parameters that have not been assigned should refer to Section 2 of this document for parameter value assignment administration procedures. Services using proprietary parameter value assignments are not subject to standardization within TSG-C, but shall be interoperable with the requirements within the respective cdma2000 specifications.

In addition to the parameter values assigned in this document, TSG-C may assign parameter values to new services or to certain organizations according to the procedures described in Section 2. Parameter values that are not assigned in this document or that are not assigned according to the procedures in Section 2 are undefined; and, therefore, have not been approved by TSG-C. Organizations should not use unassigned parameter values, and are cautioned that use of unassigned parameter values may affect future compatibility.

The terms "Manufacturer-Specific" and "Proprietary" are used interchangeably, as are the terms "Standard" and "Specification."

This document may contain provisional value assignments for specifications under development. These specifications may not be approved by the date of publication of this document.

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2 No text.

2 ADMINISTRATION OF PARAMETER VALUE ASSIGNMENTS

Assignment of parameter values shall be governed by the administrative procedures contained in this section.

2.1 Request for Parameter Value Assignments

Requests for one or more parameter value assignments may be made by any 3GPP2 Technical Specification Group, as well as by individual manufacturers, service providers, and others. This includes requests for assignments within existing sections of this document, as well as requests for the inclusion of new parameters as the need arises. External requests must be made by way of written correspondence to the 3GPP2 Secretariat (see 2.4).

Upon receipt of a request, TSG-C will discuss the matter; upon approval, if granted, the TSG will designate a new parameter value assignment and, if necessary, will designate an appropriate new section within this document. This assignment will be considered as an addendum to this document and will be added to the next published revision.

TSG-C will decide the appropriate time for releasing an update of this document. If requested in a correspondence to the 3GPP2 Secretariat, the requester will be notified of the TSG-C decision on a proprietary parameter value assignment request prior to publication.

2.2 Selection of Parameter Value Assignments

The selection of any parameter value assignments will be at the sole discretion of TSG-C. Where the requester has a need for a specific parameter value assignment, such a request shall be included in the written correspondence to the 3GPP2 Secretariat, and the request will be considered by the TSG during its discussions.

2.3 Use of Proprietary Parameter Value Assignments

Use of all proprietary parameter value assignments is subject to the restrictions of this section.

Organizations that have been assigned proprietary parameter value assignments may use them to designate proprietary services, features, or options without further notification to 3GPP2 or TSG-C. Such services, features, or options shall conform to all applicable requirements of the cdma2000 specifications.

Any organization wishing to use a parameter value assignment that has been designated to another organization (the "assignee") shall obtain permission to use the parameter value assignment from the assignee and shall conform to all requirements imposed by the assignee regarding the corresponding parameter value assignment. In this case, the organization requesting use of the assignee's parameter value assignment shall also conform to all applicable requirements of the cdma2000 specifications.

A parameter value assignment that has been in proprietary use may, at the request of an assignee, be incorporated into a cdma2000 specification. At that time, 3GPP2 TSG-C may assign the parameter a new, non-proprietary value or may use the assignee's related

1 parameter value assignment. If the assignee's parameter value assignment is used, then
2 permission from the assignee for its use shall no longer be required.

3 When a parameter value assignment is no longer needed for proprietary use, the assignee
4 should notify the 3GPP2 Secretariat through written correspondence.

5 **2.4 Inquiries**

6 All inquiries and requests regarding this document should be addressed via e-mail to the
7 3GPP2 Secretariat at secretariat@3gpp2.org.

8 In the event e-mail communication is unavailable or deemed undesirable, printed
9 correspondence may be addressed to the 3GPP2 Secretariat as follows:

10 3GPP2 Secretariat
11 c/o Telecommunications Industry Association
12 2500 Wilson Boulevard
13 Suite 300
14 Arlington, Virginia 22201

3 SERVICE OPTION NUMBER ASSIGNMENTS

The cdma2000 specifications support the concept of service options on both the control and on the traffic channels. Service options allow various voice and non-voice services to be defined and to be specified independently within the confines of the physical layer and the multiplex sub-layer interface. Each service option is identified by a unique service option number to facilitate proper processing within the network and mobile stations. Service option numbers may be used for standard services, as well as for proprietary (non-standard) services.

A service option number may indicate a service option revision. For this interpretation, the 16-bit service option number is composed of three fields: the Proprietary Indicator field, the Service Option Revision field, and the Base Service Option Number field, as shown in Figure 3-1.

Service Option		
Proprietary Indicator	Service Option Revision	Base Service Option Number
1 bit	3 bits	12 bits

Figure 3-1 Service Option Number Format

3.1 Standard Service Option Number Assignments

The Proprietary Indicator of standard service option numbers is set to '0'.

Table 3.1-1 shows the service option number assignments that have been made and approved as of the date of this publication. It also identifies the service option group for each service option that has been assigned to a service option group.

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Table 3.1-1. Standard Service Option Number Assignments (part 1 of 3)

Service Option Number (Decimal)	Service Option Group (Decimal)	Designated Use/Type of Service	Associated Standard
1	0	Basic Variable Rate Voice Service (8 kbps)	[8]
2	None	Mobile Station Loopback (8 kbps)	[9]
3	0	Enhanced Variable Rate Voice Service (8 kbps)	[10]
4	1	Asynchronous Data Service (9.6 kbps)	[13]
5	2	Group 3 Facsimile (9.6 kbps)	[13]
6	6	Short Message Services (Rate Set 1)	[11]
7	4	Packet Data Service: Internet or ISO Protocol Stack (9.6 kbps)	[13]
8	5	Packet Data Service: CDPD Protocol Stack (9.6 kbps)	[13]
9	None	Mobile Station Loopback (13 kbps)	[9]
10	None	STU-III-Transparent Service	[13]
11	None	STU-III Non-Transparent Service	[13]
12	1	Asynchronous Data Service (14.4 or 9.6 kbps)	[13]
13	2	Group 3 Facsimile (14.4 or 9.6 kbps)	[13]
14	6	Short Message Services (Rate Set 2)	[11]
15	4	Packet Data Service: Internet or ISO Protocol Stack (14.4 kbps)	[13]
16	5	Packet Data Service: CDPD Protocol Stack (14.4 kbps)	[13]
17	0	High Rate Voice Service (13 kbps)	[16]
18	7	Over-the-Air Parameter Administration (Rate Set 1)	[12]
19	7	Over-the-Air Parameter Administration (Rate Set 2)	[12]
20	3	Group 3 Analog Facsimile (Rate Set 1)	[13]
21	3	Group 3 Analog Facsimile (Rate Set 2)	[13]
22	4	High Speed Packet Data Service: Internet or ISO Protocol Stack (RS1 forward, RS1 reverse)	[13]
23	4	High Speed Packet Data Service: Internet or ISO Protocol Stack (RS1 forward, RS2 reverse)	[13]

Table 3.1-1. Standard Service Option Number Assignments (part 2 of 3)

Service Option Number (Decimal)	Service Option Group (Decimal)	Designated Use/Type of Service	Associated Standard
24	4	High Speed Packet Data Service: Internet or ISO Protocol Stack (RS2 forward, RS1 reverse)	[13]
25	4	High Speed Packet Data Service: Internet or ISO Protocol Stack (RS2 forward, RS2 reverse)	[13]
26	5	High Speed Packet Data Service: CDPD Protocol Stack (RS1 forward, RS1 reverse)	[13]
27	5	High Speed Packet Data Service: CDPD Protocol Stack (RS1 forward, RS2 reverse)	[13]
28	5	High Speed Packet Data Service: CDPD Protocol Stack (RS2 forward, RS1 reverse)	[13]
29	5	High Speed Packet Data Service: CDPD Protocol Stack (RS2 forward, RS2 reverse)	[13]
30	None	Supplemental Channel Loopback Test for Rate Set 1	[9]
31	None	Supplemental Channel Loopback Test for Rate Set 2	[9]
32	None	Test Data Service Option (TDSO)	[18]
33	4	cdma2000 High Speed Packet Data Service, Internet or ISO Protocol Stack	[14], [15]
34	5	cdma2000 High Speed Packet Data Service, CDPD Protocol Stack	[14]
35	8	Location Services, Rate Set 1 (9.6 kbps)	[17]
36	8	Location Services, Rate Set 2 (14.4 kbps)	[17]
37	None	ISDN Interworking Service (64 kbps)	[15]
38	None	GSM Voice	[7]
39	None	GSM Circuit Data	[7]
40	None	GSM Packet Data	[7]
41	None	GSM Short Message Service	[7]
42 - 53	None	Reserved for MC-MAP standard service options	[7]
54	None	Markov Service Option (MSO)	[19]
55	None	Loopback Service Option (LSO)	[9]
56	0	Selectable Mode Vocoder	[36]

Table 3.1-1. Standard Service Option Number Assignments (part 3 of 3)

Service Option Number (Decimal)	Service Option Group (Decimal)	Designated Use/Type of Service	Associated Standard
57	None	32 kbps Circuit Video Conferencing	[38]
58	None	64 kbps Circuit Video Conferencing	[38]
59 ¹	None	HRPD Accounting Records Identifier	[39]
60	None	Header Stripping and Generation (HSG)	[40]
61	None	Link Layer Assisted Robust Header Compression (LLA ROHC)	[41]
62 - 4099	None	Reserved for standard service options.	None
4100	1	Asynchronous Data Service, Revision 1 (9.6 or 14.4 kbps)	[13]
4101	2	Group 3 Facsimile, Revision 1 (9.6 or 14.4 kbps)	[13]
4102	None	Reserved for standard service option.	None
4103	4	Packet Data Service: Internet or ISO Protocol Stack, Revision 1 (9.6 or 14.4 kbps)	[13]
4104	5	Packet Data Service: CDPD Protocol Stack, Revision 1 (9.6 or 14.4 kbps)	[13]
4105 - 32,767	None	Reserved for standard service options.	None

¹ This service option assignment made for identification defined in the Radio Access Network is not carried over-the-air interface.

3.2 Proprietary Service Option Number Assignments

The Proprietary Indicator of proprietary service option numbers is set to '1'.

Table 3.2-1 shows the proprietary service option number assignments made and approved as of the date of this publication. An 'x' represents either a zero or a one.

Table 3.2-1. Proprietary Service Option Number Assignments

Organization	Service Option Number (Decimal)	Service Option Number (Binary)
QUALCOMM Incorporated	32,768 – 32,771	1000 0000 0000 00xx
OKI telecom	32,772 – 32,775	1000 0000 0000 01xx
Lucent Technologies	32,776 – 32,779	1000 0000 0000 10xx
Nokia	32,780 – 32,783	1000 0000 0000 11xx
NORTEL NETWORKS	32,784 – 32,787	1000 0000 0001 00xx
Sony Electronics Inc.	32,788 – 32,791	1000 0000 0001 01xx
Motorola	32,792 – 32,795	1000 0000 0001 10xx
QUALCOMM Incorporated	32,796 – 32,799	1000 0000 0001 11xx
QUALCOMM Incorporated	32,800 – 32,803	1000 0000 0010 00xx
QUALCOMM Incorporated	32,804 – 32,807	1000 0000 0010 01xx
QUALCOMM Incorporated	32,808 – 32,811	1000 0000 0010 10xx
Lucent Technologies	32,812 – 32,815	1000 0000 0010 11xx
Denso International	32,816 – 32,819	1000 0000 0011 00xx
Motorola	32,820 – 32,823	1000 0000 0011 01xx
Denso International	32,824 – 32,827	1000 0000 0011 10xx
Denso International	32,828 – 32,831	1000 0000 0011 11xx
Denso International	32,832 – 32,835	1000 0000 0100 00xx
NEC America	32,836 – 32,839	1000 0000 0100 01xx
Samsung Electronics	32,840 – 32,843	1000 0000 0100 10xx
Texas Instruments Incorporated	32,844 – 32,847	1000 0000 0100 11xx
Toshiba Corporation	32,848 – 32,851	1000 0000 0101 00xx
LG Electronics Inc.	32,852 – 32,855	1000 0000 0101 01xx
Reserved	32,856 – 65,535	1000 0000 0101 1000 through 1111 1111 1111 1111

1 **3.3 Service Option Group Assignments**

2 A service option group is a bit map that identifies a logically related set of service options.
3 The bit map may contain 4, 8, or 12 bits, depending upon the number of logically related
4 service options in the group. Each bit in the bit map corresponds to one service option.

5 A mobile station or a base station indicates that it supports a service option in the group by
6 setting the bit corresponding to the service option to '1'. A mobile station or base station
7 can also indicate that it does not support a service option by setting the bit to '0'. All
8 reserved bits are set to '0'.

9 Table 3.3-1 shows the service option group numbers that have been made and approved as
10 of the date of this publication. The most significant bit of the service option group map is
11 on the left, and the least significant bit is on the right.

12

1

Table 3.3-1. Service Option Group Assignments (part 1 of 2)

Service Option Group (Decimal)	Type of Services in the Group	Service Option Group Bit Map and Associated Service Option Assignments
0	Voice Services	- - - x SO 1 - - x - SO 3 - x - - SO 17 x - - - SO 56
1	Low Speed Async Data Services	- - - x SO 4 - - x - SO 12 - x - - SO 4100 x - - - Reserved
2	Digital Facsimile Services	- - - x SO 5 - - x - SO 13 - x - - SO 4101 x - - - Reserved
3	Analog Facsimile Services	- - - x SO 20 - - x - SO 21 - x - - Reserved x - - - Reserved
4	Non-CDPD Packet Data Services	- - - - - - x SO 7 - - - - - x - SO 15 - - - - - x - - SO 4103 - - - - x - - - SO 22 - - - x - - - - SO 23 - - x - - - - - SO 24 - x - - - - - - SO 25 x - - - - - - - SO 33
5	CDPD Packet Data Services	- - - - - - x SO 8 - - - - - x - SO 16 - - - - - x - - SO 4104 - - - - x - - - SO 26 - - - x - - - - SO 27 - - x - - - - - SO 28 - x - - - - - - SO 29 x - - - - - - - SO 34

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Table 3.3-1. Service Option Group Assignments (part 2 of 2)

Service Option Group (Decimal)	Type of Services in the Group	Service Option Group Bit Map and Associated Service Option Assignments
6	SMS Services	- - - x SO 6 - - x - SO 14 - x - - Reserved x - - - Reserved
7	OTAPA Services	- - - x SO 18 - - x - SO 19 - x - - Reserved x - - - Reserved
8	Location Services	- - - x SO 35 - - x - SO 36 - x - - Reserved x - - - Reserved
9 - 30	Reserved	
31	Reserved for future extension	

2

4 DATA BURST MESSAGE BURST TYPE ASSIGNMENTS

The cdma2000 specifications support the use of *Data Burst Messages* on both the control channel and the traffic channel. *Data Burst Messages* can be sent by mobile stations over either the Reverse Control Channel or the Reverse Dedicated Channel, and can be sent by base stations over either the Forward Control Channel or the Forward Dedicated Channel. The burst types (values of the BURST_TYPE field) for mobile-station-originated and base-station-originated *Data Burst Messages* are defined in this section.

With the addition of other service options (e.g., asynchronous data and Group-3 fax) to the basic voice service, the use of the *Data Burst Message* is being defined to support specific service options. *Data Burst Messages* may be used for standard services, as well as for proprietary (non-standard) services. Thus, the need arises to distinguish the data burst types associated with individual service options, especially when multiple service options are allowed to be active simultaneously.

4.1 Standard Data Burst Message Burst Type Assignments

Table 4.1-1 shows the standard burst type assignments made and approved as of the date of this publication.

Table 4.1-1. Standard Data Burst Message Burst Type Assignments

Burst Type (Binary)	Designated Use/Type of Service	Associated Standards
000000	Unknown burst type	[2]
000001	Asynchronous Data Services	[13]
000010	Group-3 Facsimile	[13]
000011	Short Message Services	[11]
000100	Over-the-Air Service Provisioning	[12]
000101	Position Determination Services	[17]
000110	Short Data Bursts	[3]
000111	LLA ROHC	[xx]
001000 - 111101	Reserved	Not applicable
111110	Extended Burst Type - International	See Below
111111	Extended Burst Type	See Below

19

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Burst type '111110' indicates that an "Extended Burst Type - International" is contained in the first two octets of the CHARi field of the *Data Burst Message*. The first ten bits of "Extended Burst Type - International" contain a binary mapping of the Mobile Country Code (MCC) associated with the national standards organization administering the use of the remaining octets of the message. Encoding of the MCC shall be as specified in 2.3.1.3 of [5]. The remaining six bits of the "Extended Burst Type - International" shall specify the country-specific burst type.

Burst type '111111' indicates that an extended burst type is contained in the first two octets of the CHARi field of the *Data Burst Message*. Table 4.1-2 shows the standard extended burst type assignments (assigned values of the first two octets of the CHARi field) made and approved as of the date of this publication.

Table 4.1-2. Standard *Data Burst Message* Extended Burst Type Assignments

Extended Burst Type (Binary)	Designated Use/Type of Service	Associated Standards
0000 0000 0000 0000 – 0111 1111 1111 1111	Reserved for standard data burst types.	[5]
1000 0000 0000 0000 – 1111 1111 1111 1111	Reserved for proprietary data burst types.	[5]

4.2 Proprietary *Data Burst Message* Burst Type Assignments

All proprietary *Data Burst Message* burst types are assigned as extended burst types. Table 4.2-1 shows the proprietary extended burst type assignments that were made and approved as of the date of this publication. An 'x' represents either a zero or a one.

Table 4.2-1. Proprietary *Data Burst Message* Extended Burst Type Assignments

Organization	Extended Burst Type (Binary)
Motorola	1000 0000 0000 xxxx
Reserved	1000 0000 0001 0000 – 1111 1111 1111 1111

1 **5 MULTIPLEX OPTION NUMBER ASSIGNMENTS**

2 The cdma2000 specifications allow the multiplex sublayer to be tailored so as to provide
3 special capabilities. The multiplex sublayer is one of the conceptual layers of the system,
4 which multiplexes and demultiplexes traffic from different service option instances and
5 signaling traffic. Each multiplex option, designated by a multiplex option number, defines
6 the specific frame format for a particular set of capabilities.

7 **5.1 Standard Multiplex Option Number Assignments**

8 Refer to [3] for Multiplex Option Number Assignments.

9 **5.2 Proprietary Multiplex Option Number Assignments**

10 No proprietary multiplex option numbers have been assigned as of the date of release of
11 this document.

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2 No text.

6 BAND CLASS VALUE ASSIGNMENTS

The cdma2000 specifications use values of the band class parameter to designate CDMA frequency bands.

6.1 Band Class Value Assignments

Table 6.1-1 shows the band class value assignments (assigned values of the BAND_CLASS field) that were made and approved as of the date of this publication.

Table 6.1-1. Band Class Value Assignments

Band Class Value (Binary)	Frequency Band	Associated Standards
00000	800 MHz Cellular System	[2]
00001	1.850 to 1.990 GHz Broadband PCS	[2]
00010	872 to 960 MHz TACS Band	[2]
00011	832 to 925 MHz JTACS Band	[26]
00100	1.750 to 1.870 GHz Korean PCS	[32]
00101	450 MHz NMT	[2]
00110	2 GHz IMT-2000 Band	[2]
00111	North American 700 MHz Cellular Band	[2]
01000	1.710 to 1.880 GHz PCS	[2]
01001	880 to 960 MHz Band	None
01010	Secondary 800 MHz Band	None
01011-11111	Reserved	None

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2 No text.

1 **7 MANUFACTURER-SPECIFIC OTASP ASSIGNMENTS**

2 [12] reserves specific ranges of values for manufacturer-specific OTASP assignments.
3 Values in specified ranges are reserved as shown in Table 7-1. Specific assignments are
4 given in sections 7.1 through 7.9.

5

Table 7-1. Manufacturer-specific OTASP Assignments

OTASP Value	Reserved Manufacturer-Specific Range	Reference in [12]
Reverse Link Message Types (OTASP_MSG_TYPE)	'11000000' – '11111110'	3.5
Result Codes (RESULT_CODE)	'10000000' – '11111110'	3.5.1.2
Feature Identifier (FEATURE_ID)	'11000000' – '11111110'	3.5.1.7
Reverse Link NAM Parameter Block Types (BLOCK_ID)	'10000000' – '11111110'	3.5.2
Reverse Link SSPR Parameter Block Types (BLOCK_ID)	'10000000' – '11111110'	3.5.3
Reverse Link PUZL Parameter Block Types (BLOCK_ID)	'10000000' – '11111110'	3.5.6
Reverse Link 3GPD Parameter Block Types (BLOCK_ID)	'10000000' – '11111110'	3.5.8
Forward Link Message Types (OTASP_MSG_TYPE)	'11000000' – '11111110'	4.5
Forward Link NAM Parameter Block Types (BLOCK_ID)	'10000000' – '11111110'	4.5.2
Forward Link SSPR Parameter Block Types (BLOCK_ID)	'10000000' – '11111110'	4.5.3
Forward Link Validation Parameter Block Types (BLOCK_ID)	'10000000' – '11111110'	4.5.4
Forward Link PUZL Parameter Block Types (BLOCK_ID)	'10000000' – '11111110'	4.5.6
Forward Link 3GPD Parameter Block Types (BLOCK_ID)	'10000000' – '11111110'	4.5.7

7.1 Reverse Link Message Type Assignments

No Manufacturer-specific Reverse Link Message Type (OTASP_MSG_TYPE) values have been assigned as of the date of release of this document.

7.2 Result Code Assignments

Table 7.2-1 shows the proprietary assignments of Result Code. These assignments were made and approved as of the date of this publication. All block type values in the table are binary. An 'x' represents either a zero or a one.

Table 7.2-1. Proprietary Assignments of Result Code

Organization	Block Type (Binary)
QUALCOMM Incorporated	1000 00xx
Reserved	1000 0100 - 1111 1110

7.3 Feature Identifier Assignments

Table 7.3-1 shows the proprietary assignments of Feature Identifier. These assignments were made and approved as of the date of this publication. All block type values in the table are binary. An 'x' represents either a zero or a one.

Table 7.3-1. Proprietary Assignments of Feature Identifier

Organization	Block Type (Binary)
QUALCOMM Incorporated	1100 00xx
Reserved	1100 0100 - 1111 1110

7.4 Reverse Link NAM Parameter Block Type Assignments

Table 7.4-1 shows the proprietary assignments of Reverse Link NAM Parameter Block Type. These assignments were made and approved as of the date of this publication. All block type values in the table are binary. An 'x' represents either a zero or a one.

Table 7.4-1. Proprietary Assignments of Reverse Link NAM Parameter Block Types

Organization	Block Type (Binary)
QUALCOMM Incorporated	1000 00xx
Reserved	1000 0100 - 1111 1110

7.5 Reverse Link SSPR Parameter Block Type Assignments

No manufacturer-specific Reverse Link SSPR Parameter Block Type (BLOCK_ID) values have been assigned as of the date of release of this document.

7.6 Reverse Link PUZL Parameter Block Type Assignments

No manufacturer-specific Reverse Link PUZL Parameter Block Type (BLOCK_ID) values have been assigned as of the date of release of this document.

7.7 Reverse Link 3GPD Parameter Block Type Assignments

No manufacturer-specific Reverse Link 3GPD Parameter Block Type (BLOCK_ID) values have been assigned as of the date of release of this document.

7.8 Forward Link Message Type Assignments

No manufacturer-specific Forward Link Message Type (OTASP_MSG_TYPE) values have been assigned as of the date of release of this document.

7.9 Forward Link NAM Parameter Block Type Assignments

Table 7.7-1 shows the proprietary assignments of Forward Link NAM Parameter Block Type. These assignments were made and approved as of the date of this publication. All block type values in the table are binary. An 'x' represents either a zero or a one.

Table 7.9-1. Proprietary Assignments of Forward Link NAM Parameter Block Types

Organization	Block Type (Binary)
QUALCOMM Incorporated	1000 00xx
Reserved	1000 0100 - 1111 1110

7.10 Forward Link SSPR Parameter Block Type Assignments

No manufacturer-specific Forward Link SSPR Parameter Block Type (BLOCK_ID) values have been assigned as of the date of release of this document.

7.11 Forward Link Validation Parameter Block Type Assignments

No manufacturer-specific Forward Link Validation Parameter Block Type (BLOCK_ID) values have been assigned as of the date of release of this document.

7.12 Forward Link PUZL Parameter Block Type Assignments

No manufacturer-specific Forward Link PUZL Parameter Block Type (BLOCK_ID) values have been assigned as of the date of release of this document.

7.13 Forward Link 3GPD Parameter Block Type Assignments

No manufacturer-specific Forward Link 3GPD Parameter Block Type (BLOCK_ID) values have been assigned as of the date of release of this document.

1 **8 ROAMING DISPLAY INDICATOR ASSIGNMENTS**

2 The cdma2000 specifications support the concept of roaming display indicator on the
3 control channels. Roaming display indicator allows the network to indicate to the
4 subscriber the roaming condition of the mobile station. Each roaming display indicator is
5 identified by a unique roaming display number to facilitate proper processing within the
6 network and mobile stations. Roaming display numbers may be used for standard services
7 as well as for non-standard services.

8 **8.1 Standard Enhanced Roaming Indicator Number Assignments**

9 Table 8.1-1 shows the standard enhanced roaming indicator number assignments made
10 and approved as of the date of this publication.

11 **8.2 Non-Standard Enhanced Roaming Indicator Number Assignments**

12 No manufacturer-specific Non-Standard Enhanced Roaming Indicator values have been
13 assigned as of the date of release of this document.

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Table 8.1-1. Enhanced Roaming Indicator Number Assignments

Roaming Display Number (Binary)	Roaming Display Indication
00000000	Roaming Indicator On
00000001	Roaming Indicator Off
00000010	Roaming Indicator Flashing
00000011	Out of Neighborhood
00000100	Out of Building
00000101	Roaming - Preferred System
00000110	Roaming - Available System
00000111	Roaming - Alliance Partner
00001000	Roaming - Premium Partner
00001001	Roaming - Full Service Functionality
00001010	Roaming - Partial Service Functionality
00001011	Roaming Banner On
00001100	Roaming Banner Off
00001101 through 00111111	Reserved for Standard Enhanced Roaming Indicator Numbers
01000000 through 01111111	Reserved for Non-Standard Enhanced Roaming Indicator Numbers
10000000 through 11111111	Reserved

2

1 **9 SHORT MESSAGE SERVICES ASSIGNMENTS**

2 [11] defines the protocol and procedures associated with exchange of Short Message
3 Services (SMS). The protocol defined in [11] allows use of various data encoding schemes ,
4 various language indicators and various Service Categories for the Broadcast Messaging
5 Service.

6 **9.1 Data Field Encoding Assignments**

7 Table 9.1-1 shows the data encoding scheme assignments that were made and approved as
8 of the date of this publication.

1
2**Table 9.1-1.. Data Field Encoding Assignments**

CHARi Encoding Type	MSG_ENCODING Field^v	Length of CHARi, bits
Octet, unspecified	'00000'	8
Extended Protocol Message [21]	'00001'	(see iv)
7-bit ASCII [25]	'00010'	7
IA5 (Table 11 of [31])	'00011'	7
UNICODE [29] ⁱ	'00100'	16
Shift-JIS [30] ⁱⁱ	'00101'	8 or 16
Korean [33] ⁱⁱⁱ	'00110'	8 or 16
Latin/Hebrew [28]	'00111'	8
Latin [27]	'01000'	8
GSM 7-bit default alphabet [37]	'01001'	7
All other values are reserved.		
<p>ⁱ UNICODE is a fixed 2-byte encoding method intended as an international character encoding scheme. It encodes most of the national character sets of most countries, including support of local diacritical marks, and it unifies character sets across national boundaries. It is supported by many computer and telecommunication systems worldwide. UNICODE is a trademark of Unicode, Inc.</p> <p>ⁱⁱ Shift-JIS is a variable 1-2 byte non-modal encoding method widely implemented in Japan on a variety of computer platforms and pagers. It is used for the encoding of Kanji, Kana and Latin character sets defined in [30].</p> <p>ⁱⁱⁱ [33] is a variable 1-2 byte encoding method widely used in Korea.</p> <p>^{iv} Length is determined by the Message Type value. See Section 3.7.1 and Appendix B of [21].</p> <p>^v [20] uses an 8-bit field to carry short message data encoding information, so conversion to a 5-bit field is required for transmission over the air interface.</p>		

3

9.2 Language Indicator Value Assignments

Table 9.2-1 shows the data encoding scheme assignments that were made and approved as of the date of this publication.

Table 9.2-1.. Language Indicator Value Assignments

Language Indicator Value (Binary)	Language
'00000000'	Unknown or unspecified
'00000001'	English
'00000010'	French
'00000011'	Spanish
'00000100'	Japanese
'00000101'	Korean
'00000110'	Chinese
'00000111'	Hebrew
All other values are reserved.	
NOTE: Table 160 of [20] specifies PreferredLanguageIndicator value assignments for intersystem operation which may be different from the values defined above.	

9.3 Service Category Assignments

Service Categories for the Broadcast Messaging Service may be assigned for standard Service Categories and for proprietary Service Categories.

9.3.1 Standard Service Category Assignments

Table 9.3.1-1 shows the standard Service Category assignments made and approved as of the date of this publication.

Table 9.3.1-1. Standard Service Categories (Part 1 of 2)

Category	Description
0x0000	Unknown or unspecified
0x0001	Emergency Broadcasts
0x0002	Administrative
0x0003	Maintenance
0x0004	General News - Local
0x0005	General News - Regional
0x0006	General News - National
0x0007	General News - International
0x0008	Business/Financial News - Local
0x0009	Business/Financial News - Regional
0x000A	Business/Financial News - National
0x000B	Business/Financial News - International
0x000C	Sports News - Local
0x000D	Sports News - Regional
0x000E	Sports News - National
0x000F	Sports News - International
0x0010	Entertainment News - Local
0x0011	Entertainment News - Regional
0x0012	Entertainment News - National
0x0013	Entertainment News - International
0x0014	Local Weather
0x0015	Area Traffic Reports

1

Table 9.3.1-1. Standard Service Categories (Part 2 of 2)

Category	Description
0x0016	Local Airport Flight Schedules
0x0017	Restaurants
0x0018	Lodgings
0x0019	Retail Directory
0x001A	Advertisements
0x001B	Stock Quotes
0x001C	Employment Opportunities
0x001D	Medical/Health/Hospitals
0x001E	Technology News
0x001F	Multi-category
0x0020 - 0x8000	Reserved for standard service categories

2

3 **9.3.2 Proprietary Service Category Assignments**

4 Table 9.3.2-1 shows the proprietary Service Category assignments made and approved as
 5 of the date of this publication.

6

7 **Table 9.3.2-1. Proprietary Service Category Assignments**

Organization	Category	Category (Binary)
Reserved	0x8001 - 0xFFFF	1000 0000 0000 0001 through 1111 1111 1111 1111

8

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2 No text.

1 **10 ANALOG FAX ASSIGNMENTS**

2 [13] defines the protocol for Analog Fax services that allow identification of the IWF
 3 manufacturer in a tandem Analog Fax call. Using this, IWFs from the same manufacturer
 4 can invoke non-standardized protocols across the PSTN. The IWF manufacturer code is
 5 defined in Table 10-1.

6
 7 **Table 10-1. Analog Fax Inter-working Function Manufacturer Code Assignments**

IWF_MANUF	Analog Fax IWF Manufacturer
'00000000'	Reserved
'00000001'	QUALCOMM Incorporated
'00000010'	CommWorks Corporation, A 3Com Company
'00000011'	NEC Corporation
All other values are reserved.	

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2 No text.

11 PROTOCOL AND APPLICATION ASSIGNMENTS

11.1 Protocol Type and Protocol Subtype Assignments

[34] defines a set of protocols identified by protocol type. A specific instance of a protocol is identified by a protocol subtype. Table 11.1-1 shows the protocol type and protocol subtype assignments that were made and approved as of the date of this publication.

Table 11.1-1. Protocol Type and Protocol Subtype Assignments (part 1 of 2)

Protocol Type		Protocol Subtype	
Name	ID	Name	ID
Physical Layer	0x00	Default Physical Layer	0x0000
Control Channel MAC	0x01	Default Control Channel MAC	0x0000
Access Channel MAC	0x02	Default Access Channel MAC	0x0000
Forward Traffic Channel MAC	0x03	Default Forward Traffic Channel MAC	0x0000
Reverse Traffic Channel MAC	0x04	Default Reverse Traffic Channel MAC	0x0000
Key Exchange	0x05	Default Key Exchange	0x0000
Key Exchange	0x05	DH Key Exchange	0x0001
Authentication	0x06	Default Authentication	0x0000
Authentication	0x06	SHA-1 Authentication	0x0001
Encryption	0x07	Default Encryption	0x0000
Security	0x08	Default Security	0x0000
Security	0x08	Generic Security	0x0001
Packet Consolidation	0x09	Default Packet Consolidation	0x0000
Air-Link Management	0x0a	Default Air-Link Management	0x0000
Initialization State	0x0b	Default Initialization State	0x0000
Idle State	0x0c	Default Idle State	0x0000
Connected State	0x0d	Default Connected State	0x0000
Route Update	0x0e	Default Route Update	0x0000
Overhead Messages	0x0f	Overhead Messages	0x0000

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Table 11.1-1. Protocol Type and Protocol Subtype Assignments (part 2 of 2)

Protocol Type		Protocol Subtype	
Name	ID	Name	ID
Session Management	0x10	Default Session Management	0x0000
Address Management	0x11	Default Address Management	0x0000
Session Configuration	0x12	Default Session Configuration	0x0000
Stream	0x13	Default Stream	0x0000
Stream 0 Application	0x14	Application Subtype as per 11.2	See 11.2
Stream 1 Application	0x15	Application Subtype as per 11.2	See 11.2
Stream 2 Application	0x16	Application Subtype as per 11.2	See 11.2
Stream 3 Application	0x17	Application Subtype as per 11.2	See 11.2

3

1 **11.2 Application Subtype Assignments**

2 An application subtype identifies the application that is bound to a [34] stream. Table 11.2-
 3 1 shows the application subtype assignments that were made and approved as of the date
 4 of this publication.

5
 6 **Table 11.2-1. Application Subtype Assignments**

Value	Name	Associated Standards
0x0000	Default Signaling Application	[34]
0x0001	Default Packet Application bound to the access network.	[34]
0x0002	Default Packet Application bound to the service network.	[34]
0x0003	Test Application	[35]
0xFFFF	Stream not used	None
All other values are reserved.		

7

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- 1
- 2 No text.

12 MANUFACTURER-SPECIFIC POSITION LOCATION ASSIGNMENTS

[17] reserves specific ranges of values for manufacturer-specific Position Location assignments. Values in specified ranges are reserved as shown in Table 12-1. Specific assignments are given in sections 12.1 through 12.2.

Table 12-1. Manufacturer-specific Position Location Assignments

Position Location Value	Reserved Manufacturer-Specific Range	Reference in [17]
Reverse Link Message Types (PD_MSG_TYPE)	'11000000' - '11111110'	3.2.4
Forward Link Message Types (PD_MSG_TYPE)	'11000000' - '11111110'	4.2.4

12.1 Reverse Link Message Type Assignments

Table 12.1-1 shows the proprietary assignments of Reverse Link Message Type (PD_MSG_TYPE). These assignments were made and approved as of the date of this publication. All message type values in the table are binary. An 'x' represents either a zero or a one.

Table 12.1-1. Proprietary Assignments of Reverse Link Message Type

Organization	PD_MSG_TYPE (Binary)
QUALCOMM Incorporated	1100 00xx
Reserved	1100 0100 - 1111 1110

12.2 Forward Link Message Type Assignments

Table 12.2-1 shows the proprietary assignments of Forward Link Message Type (PD_MSG_TYPE). These assignments were made and approved as of the date of this publication. All message type values in the table are binary. An 'x' represents either a zero or a one.

1

Table 12.2-1. Proprietary Assignments of Forward Link Message Type

Organization	PD_MSG_TYPE (Binary)
QUALCOMM Incorporated	1100 00xx
Reserved	1100 0100 - 1111 1110

2