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.

Service Option	Function
1	dynamic variable rate 2-way voice communications using encoded speech packets in Traffic channel frames at 9600, 4800, 2400 or 1200 bps
2	mobile station loopback service option for Forward Fundamental Code Channel with Multiplex Option 1
3	Enhanced Variable Rate Codec (EVRC) Speech Service Option for Wideband Spread Spectrum Digital Systems using variable-rate 2-way voice communication
4, 4100, 12	asynchronous data transmission for wideband spread spectrum systems
6	The SMS Service Option described by this standard shall use service option number 6 and is called Service Option 6 when using Multiplex Option 1
7, 4103, 15	packet service through an IWF supporting Internet standard PPP interface to network layer protocols
8, 4104, 16	packet service through an IWF supporting CDPD data services over PPP interface to network layer protocols
9	loopback service option for Forward Fundamental Code Channel with Multiplex Option 2
5, 4101, 13	Group-3 facsimile transmission
4, 5, 4100, 4101	Async data & Group-3 FAX service using default service configuration including Multiplex Option 1 data rates
12, 13	Async data & Group-3 FAX service using default service configuration including Multiplex Option 2 data rates
14	The SMS Service Option described by this standard shall use service option number 6 and is called Service Option 6 when using Multiplex Option 2
17	high rate speech (13K) for Wideband Spread Spectrum Digital Systems using variable-rate 2-way voice communication
20, 21	Analog Group-3 FAX transmission
22, 23, 24, 25	packet service through an IWF supporting Internet standard PPP interface to network layer protocols
26, 27, 28, 29	packet service through an IWF supporting CDPD data services over PPP interface to network layer protocols
30	mobile station loopback service option for Forward Supplemental Code Channel with Multiplex Option 3
31	mobile station loopback service option for Forward Supplemental Code Channel with Multiplex Option 4
32	Test Data Service Option (TDSO)
33	packet service through a PDSN supporting internet standard PPP interface to network layer protocols
34	packet service through an IWF supporting CDPD data services over PPP interface to network layer protocols
35	The Position Determination Service Option described by this

	standard shall use service option number 35 and is called Service Option 35 when using Multiplex Option 1
36	The Position Determination Service Option described by this standard shall use service option number 35 and is called Service Option 35 when using Multiplex Option 2
54	Markov Service Option
55	testing of Fundamental Channel for systems with all radio configurations and with P-REV 6 or higher
56	Selectable Mode Vocoder (SMV) for Wide band Spread Spectrum Communication systems using a variable-rate 2-way voice communication at 8.55 kbps max.
60	variable rate Voice-over-IP (VOIP) for transport of header-removed IP/UDP/RTP packets carrying speech frames
61	variable rate Voice-over-IP (VOIP) for transport of header-compressed IP/UDP/RTP packets carrying speech frames
62	Source-Controlled Variable-Rate Multimode Wideband Speech Codec (VMR-WB) for Spread Spectrum Systems using variable-rate 2-way voice communication, primarily for circuit-switched wideband voice calls
63	initialization and call setup using MR-WB mode 4 or mode 4 with maximum half-rate
66	packet service through a PDSN supporting internet standard PPP interface to network layer protocols

Table 3.1.2-1. Service Options for CDMA Data Services

CDMA data service	Service Option	Base Service Option Number	Service Option Revision	Oldest Defining Document
async	4	4	0	TIA/EIA/IS-99
	4100	4	1	TIA/EIA/IS-707.4
	12	12	0	TIA/EIA/IS-707.4
fax	5	5	0	TIA/EIA/IS-99
	4101	5	1	TAI/EIA/IS-707.4
	13	13	0	TIA/EIA/IS-707.4
packet data bearer	7	7	0	TIA/EIA/IS-657
	4103	7	1	TIA/EIA/IS-707.5
	8	8	0	TIA/EIA/IS-657
	4104	8	1	TIA/EIA/IS-707.5
	15	15	0	TIA/EIA/IS-707.5
	16	16	0	TIA/EIA/IS-707.5
STU-III	10	10	0	TIA/EIA/IS-707.6
	11	11	0	TIA/EIA/IS-707.6
analog fax	20	20	0	TIA/EIA/IS-707-A.7
	21	21	0	TIA/EIA/IS-707-A.7
high speed packet data bearer	22	22	0	TIA/EIA/IS-707-A.9
	23	23	0	TIA/EIA/IS-707-A.9
	24	24	0	TIA/EIA/IS-707-A.9
	25	25	0	TIA/EIA/IS-707-A.9
	26	26	0	TIA/EIA/IS-707-A.9
	27	27	0	TIA/EIA/IS-707-A.9
	28	28	0	TIA/EIA/IS-707-A.9
	29	29	0	TIA/EIA/IS-707-A.9
cdma2000 packet data bearer	33	33	0	TIA-707-B.12
	34	34	0	TIA-707-B.11

Table 3.1.3-3 Supported Data Service Options and IS-2000 Radio Configurations

Type of Service	Async, Fax	Analog Fax	Packet Data	Packet Data	Packet Data
Supported Service Options	4, 5, 12, 13, 4100, 4101	20, 21	7, 8, 15, 16, 4103, 4104	22-29	33, 34
Supported RLP	RLP1	RLP1	RLP1	RLP2	RLP3
Supported Multiplex Options	0x1, 0x2	0x1, 0x2	0x1, 0x2	0x1-0x10	0x1, 0x2, 0x11 or greater
Supported Radio Configurations	IS-95: RC1, RC2 IS-2000: RC>2	IS-95: RC1, RC2 IS-2000: RC>2	IS-95: RC1, RC2 IS-2000: RC>2	IS-95-B: RC1, RC2	IS-2000: RC>2

- Service Option 1, a variable rate, two-way speech service option
    - Service Option 1 provides two-way voice communications between the base station and the mobile station using the dynamically variable data rate speech codec algorithm described in this standard. The transmitting speech codec takes voice samples and generates an encoded speech packet for every Traffic Channel frame. The receiving station generates a speech packet from every Traffic Channel frame and supplies it to the speech codec for decoding into voice samples. The two speech codecs communicate at one of four rates corresponding to the 9600 bps, 4800 bps, 2400 bps, and 1200 bps frame rates.
- The Mobile Station Loopback service option described by this standard shall use service option number 2 and is called Service Option 2 when using the Forward Fundamental Code Channel with Multiplex Option 1
- Enhanced Variable Rate Codec (EVRC), Speech Service Option 3 for Wideband Spread Spectrum Digital Systems, a variable-rate two-way speech service option
- The Mobile Station Loopback service option described by this standard shall use service option number 9 and is called Service Option 9 when using the Forward Fundamental Code Channel with Multiplex Option 2
- Service Options 4, 4100 and 12 provide asynchronous (abbreviated as “async” hereafter) data transmission capability on CDMA2000® wideband spread spectrum systems using the protocols and procedures defined herein

- Service Options 5, 4101 and 13 provide Group-3 facsimile (abbreviated as “fax” hereafter) transmission capability for these systems.
- Service Options 4, 5, 4100 and 4101 provide async data and group 3 fax service using a default service configuration including Multiplex Option 1 data rates. Service Options 12 and 13 provide async data and group 3 fax service using a default service configuration including Multiplex Option 2 data rates. Other combinations of service configuration attributes are available for service options 4, 5, 4100, 4101, 12, and 13 through the use of service negotiation procedures.
- Service Options 7, 4103 and 15 are used to request packet data service through an IWF supporting an Internet standard Point-to-Point Protocol (PPP) interface to network layer protocols (see 4.1 and 4.2).
- Service Option 8, 4104 and 16 are used to request packet data service through an IWF supporting CDPD data services over a PPP interface (see 4.3). Additional packet data service options may be defined in future revisions to select other types of IWF resources or services
- High Rate Speech (13k) Service Option 17 for Wide Band Spread Spectrum Communication Systems, a two-way speech service option
- Service Options 20 and 21 provide Analog Group-3 facsimile (abbreviated as “fax” hereafter) transmission on cdma2000®wideband spread spectrum systems using the protocols and procedures defined herein
- Service Options 22, 23, 24, and 25 are used to request packet data service through an IWF supporting an Internet standard Point-to-Point Protocol (PPP) interface to network layer protocols
- Service Options 26, 27, 28, and 29 are used to request packet data service through an IWF supporting CDPD data services over a PPP interface
- The Mobile Station Loopback service option described by this standard shall use service option number 30 and is called Service Option 30 when using the Forward Supplemental Code Channel with Multiplex Option 3
- The Mobile Station Loopback service option described by this standard shall use service option number 31 and is called Service Option 31 when using the Forward Supplemental Code Channel with Multiplex Option 4
- The TDSO described by this specification shall use service option number 32
- Service Option 33 is used to request packet data service through a PDSN supporting an Internet standard Point-to-Point Protocol (PPP) interface to network layer protocols.
- Service Option 34 is used to request packet data service through an IWF supporting CDPD data services over a PPP interface
- The Markov Service Option shall use service option number 54
- Service Option 55 allows testing of the Fundamental Channel for systems with all radio configurations, and with P_REV equal to 6 or higher. Based on the service option number 55 and the preferred RC indicated during call set-up, the correct

multiplex option can be derived without ambiguity. When Service Option 55 is used with Multiplex Option 0x01, most of the mobile station procedures for Service Option 2 apply. When Service Option 55 is used with Multiplex Option 0x02, most of the mobile station procedures for Service Option 9 apply

- Selectable Mode Vocoder (SMV), Service Option 56 for Wide Band Spread Spectrum Communication Systems, a variable-rate two-way speech service option. The maximum speech-coding rate of the service option is 8.55 kbps
- Service Option 60 (SO60) defines a variable rate Voice-over-IP (VoIP) service option for transport of header-removed IP/UDP/RTP packets carrying speech frames
- Service Option 61 (SO61) defines a variable rate Voice-over-IP (VoIP) service option for transport of header-compressed IP/UDP/RTP packets carrying speech frames
- Service Option 62, the source-controlled variable-rate multimode wideband speech codec (VMR-WB), provides two-way voice communication between the base station and the mobile station using the dynamically variable data rate speech codec algorithm described in this standard. Furthermore Service Option 62 shall be the primary Service Option for circuit-switched wideband voice calls in cdma2000® terminals that support VMR-WB codec. The applications and call setup using the AMR-WB interoperable mode are beyond the scope of this document. In addition, Service Option number 63 shall be used for initialization and call set up using VMR-WB mode 4 or mode 4 with maximum half-rate, and shall be called Service Option 63
- Service Option 33 and Service Option 66 are used to request packet data service through a PDSN supporting an Internet standard Point-to-Point Protocol (PPP) interface to network layer protocols