3GPP TSG_CN Plenary Meeting #9, Oahu, Hawaii 20th – 22nd September 2000.

TSG_N WG 1
CRs to R99 Work Item GSM/UMTS Interworking
"Octet Stream Protocol for Internet Hosted Octet Stream Service"
8.16.1
APPROVAL

Introduction:

This document contains 2 CRs on R99 Work Item GSM/UMTS Interworking, that has been agreed by TSG_N WG1, and is forwarded to TSG_N Plenary meeting #9 for approval.

Spec	CR	R	Doc-2nd-Level	Phase	Subject	Cat	Ver_C	Ver_N
04.08	A1039		N1-000928	R98	Deletion of references to OSP:IHOSS for R98	F	7.8.0	7.9.0
24.008	247		N1-000929	R99	Deletion of references to OSP:IHOSS for R99	A	3.4.1	3.5.0

e.g. for 3GPP use the format TP-99xxx or for SMG, use the format P-99-xxx

			CHANGE I	REQI	JEST	Please page fo	see embedded help or instructions on ho	o file at the bottom of t w to fill in this form co	his rrectly.
			04.08	CR	A10	39	Current Vers	ion: 7.8.0	
GSM (AA.BB) or	3G (J	AA.BBB) specifica	tion number ↑		↑ (CR number	as allocated by MCC	C support team	
For submissic	on to val m	D: CN#9 neeting # here ↑	for ap	oproval mation	X		strat	egic (for S egic use o	MG nly)
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Source:		TSGN1					Date	1/08/00	
Subject:		Deletion of	references to OSI	P:IHOS	S for R98	3			
Work item:		GSM/UMTS	interworking						
Category: (only one category shall be marked with an X)	F A B C D	Correction Correspond Addition of Functional Editorial mo	ls to a correction feature modification of fea odification	in an ea ature	rlier rele	ase	K <u>Release:</u>	Phase 2 Release 96 Release 97 Release 98 Release 99 Release 00	X
<u>Reason for</u> <u>change:</u>		In TdocS1-C Interworking and there is type OSP, t recommend from R98, R This CR del	000345 (SA1#8 - a to ISDN / PSTN no support in S1 hat was introduce ation that this fea 99 and R00. etes the reference	april 200 S1 has for this d to sup ture be es to OS	00) S1 no also dis feature. port the deleted. SP:IHOS	otes that cussed to Therefor se servic S1 will r S in 04.0	CN3 have de the support of re S1 sees no ces, and S1 ha aise CRs to re 08 R98	leted the support the IHOSS servineed for the PI as agreed with I smove this featu	ort of vice DP N3's ure
Clauses affect	ted	10.5.6.	3 10.5.6.4						
Other specs affected:	C C N E C	Other 3G corr Other GSM c specificati /IS test speci 3SS test specific 0&M specific	e specifications ore ons fications cifications ations		\rightarrow List o \rightarrow List o \rightarrow List o \rightarrow List o \rightarrow List o	f CRs: f CRs: f CRs: f CRs: f CRs: f CRs:			
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10.5.6.3 Protocol configuration options

The purpose of the *protocol configuration options* information element is to transfer external network protocol options associated with a PDP context activation.

The *protocol configuration options* is a type 4 information element with a minimum length of 2 octets and a maximum length of 253 octets.

The protocol configuration options information element is coded as shown in

figure 10.5.136/GSM 04.08 and table 10.5.154/GSM 04.08.

GSM 04.08 version 7.8.0 Release 1998

on 7.8	3.0 Relea	se 1998		3				
8	7	б	5	4	3	2	1	
	Proto	col co	onfigur	ation	option	s IEI		octet 1
Leng	gth of	proto	col con	nfig. (options	s conte	ents	octet 2
1 ext	0	0 Sp	0 are	0	Conf p:	igurat rotoco	ion l	octet 3
			Protoco	ol ID :	1			octet 4 octet 5
	Leng	th of	protoc	ol ID	1 cont	ents		octet 6
			_					octet 7
		Proto	col ID	l con	itents			octet m
			Protoco	ol ID :	2			octet m+1 octet m+2
		Decete		0	+ + -			octet m+4
		Proto	COI ID	2 con	itents			octet n
								octet n+1
			•	•••				octet x
		P	rotoco	l ID n	-1			octet x+1 octet x+2
	Lengt	h of p	protoco	lIDn	-1 con	tents		octet x+3
			_					octet x+4
		Protoc	col ID	n-1 cc	ntents			octet y
			Protoco	ol ID 1	n			octet y+1 octet y+2
	Leng	th of	protoc	ol ID	n cont	ents		octet y+3
		Droto			tonta			octet y+4
		PLOCC	JCOT ID	n con	LEIILS			octet z

Figure 10.5.136/GSM 04.08: *Protocol configuration options* information element

4

Table 10.5.154/GSM 04.08: Protocol configuration options information element

Configuration protocol (octet 3)
Bits
321
0 0 0 PPP for use with IP PDP type
0.0.1 for use with OSP:IHOSS PDP type
NOTE. The OSP: HOSS PDP type does not have a separately named configuration
protocol analogous to PPP
All other values are interpreted as PPP in this version of the protocol
Configuration protocol options list (octets 4 to 7)
The configuration protocol options list contains a variable number of logical units
the may occur in an arbitrary order within the <i>configuration</i> protocol antions list
Each unit is of variable length and consists of a
Each unit is of variable length and consists of a
- protocol identifier (2 octets):
- the length of the protocol identifier contents of the unit (1 octet): and
- the protocol identifier contents itself (n octets)
The <i>protocol identifier</i> field contains the hexadecimal coding of the configuration
protocol identifier Bit 8 of the first octet of the <i>protocol identifier</i> field contains
the most significant hit and hit 1 of the second octet of the <i>protocol identifier</i> field
contains the least significant bit
contains the least significant off.
If the configuration protocol options list contains a protocol identifier that is not
supported by the receiving entity the corresponding unit shall be discarded
The length of the protocol identifier contents field contains the binary coded
representation of the length of the <i>protocol identifier contents</i> field of a unit. The
first bit in transmission order is the most significant bit
The protocol identifier contents field of each unit contains information specific to
the configuration protocol specified by the protocol identifier
DDD
At least the following protocol identifiers (as defined in PEC 1700) shall be
At least the following protocol identifiers (as defined in KFC 1700) shall be
CO2111 (LCD)
- C021H (LCP; C02211 (DAD))
- C025H (PAP); $C222H (CHAD) cond$
- C225H (CHAP);alid
- 8021H (IPCP).
The support of other protocol identifiers is implementation dependent and outside
The superior of this specification.
I ne protocol identifier contents field of each unit corresponds to a Packet as
defined in RFC 1661 that is stripped off the Protocol and the Padding octets.
The detailed coding of the <i>protocol identifier contents</i> field is specified in the RFC
that is associated with the protocol identifier of that unit.
USP:IHUSS (Octet Stream Protocol for Internet Hosted Octet Stream Service)
In the logical units described above, OSP:IHOSS uses the term option identifier
rather than protocol identifier.
The currently defined <i>option identifiers</i> , their <i>lengths</i> , and the coding of the <i>option</i>
identifier contents fields are specified in GSM 07.60.

10.5.6.4 Packet data protocol address

The purpose of the *packet data protocol address* information element is to identify an address associated with a PDP.

The *packet data protocol address* is a type 4 information element with minimum length of 4 octets and a maximum length of 20 octets.

The *packet data protocol address* information element is coded as shown in figure 10.5.137/GSM 04.08 and table 10.5.155/GSM 04.08.

GSM 04.08 version 7.8.0 Release 1998

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8	7	б	5	4	3	2	1		
	Packet data protocol address IEI								
	Leng	gth of	PDP a	ddress	conte	nts		octet 2	
0	0 spa	0 are	0	PDP t	ype or	ganisa	ation	octet 3	
	5PC	ii C							
		PI	P type	e numbe	er			octet 4	
								octet 5	
		Addr	ress in	nformat	ion				
								octet n	

Figure 10.5.137/GSM 04.08: Packet data protocol address information element

Length of PDP address contents (octet 2) If the value of octet 2 equals 0000 0010, then : -No PDP address is included in this information element; and -If the PDP type is IP, dynamic addressing is applicable. NOTE : For PPP and OSP: IHOSS, no address is required in this information element. PDP type organisation (octet 3) Bits 4 3 2 1 In MS to network direction : 0 0 0 0 ETSI allocated address (e.g. X.121) 0 0 0 1 IETF allocated address 1 1 1 1 Empty PDP type All other values are reserved. In network to MS direction : 0 0 0 0 ETSI allocated address (e.g. X.121) 0 0 0 1 IETF allocated address All other values are reserved. If bits 4,3,2,1 of octet 3 are coded 0 0 0 0 PDP type number value (octet 4) Bits 8 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0 X.121 address 0 0 0 0 0 0 0 1 PDP-type PPP 0 0 0 0 0 1 0 PDP-type OSP: IHOSS All other values shall be interpreted as X.121 address in this version of the protocol. If bits 4,3,2,1 of octet 3 are coded 0 0 0 1 PDP type number value (octet 4) Bits 8 7 6 5 4 3 2 1 0 0 1 0 0 0 0 1 IPv4 address 0 1 0 1 0 1 1 1 IPv6 address All other values shall be interpreted as IPv4 address in this version of the protocol. In MS to network direction: If bits 4,3,2,1 of octet 3 are coded 1 1 1 1 PDP type number value (octet 4) bits 8 to 1 are spare and shall be coded all 0. Octet 3, bits 7, 6, and 5 are spare and shall be coded all O.

If PDP type number indicates X.121, the Address information is coded as follows:

GSM 04.08 version 7.8.0 Release 1998

-

8	7	б	5	4	3	2	1	_	
	dig	git 2			digi	t 1		octet	5
	dig	git 4			digi	t 3		octet	6
	digi	it m+1			digi	tm		octet	n*

Digit 1 contains the first BCD coded digit of the X.121 address. If the X.121 address has an odd number of digits, digit m+1 shall be padded with HEX(F).

If PDP type number indicates IPv4, the Address information in octet 5 to octet 8 contains the IPv4 address. Bit 8 of octet 5 represents the most significant bit of the IP address and bit 1 of octet 8 the least significant bit .

If PDP type number indicates IPv6, the Address information in octet 5 to octet 20 contains the IPv6 address. Bit 8 of octet 5 represents the most significant bit of the IP address and bit 1 of octet 20 the least significant bit.

Document N1-000929

e.g. for 3GPP use the format TP-99xxx or for SMG, use the format P-99-xxx

			CHANGE	REQ	UEST	Please s page for	see embedded help f r instructions on how	ile at the bottom of t to fill in this form cor	his rectly.
			24.008	CR	247		Current Versi	on: 3.4.1	
GSM (AA.BB) or	3G (AA.BBB) specifica	ation number \uparrow		1 C	CR number as	s allocated by MCC s	support team	
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Source:		TSGN1					Date:	1/08/00	
Subject:		Deletion of	references to OS	P:IHOSS	S for R99				
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Category: (only one category shall be marked with an X) Reason for change:	F A B C D	Correction Correspond Addition of Functional Editorial mo In TdocS1-6 Interworking and there is type OSP, t recommend from R98, F This CR de	ds to a correction feature modification of fe odification 200345 (SA1#8 - g to ISDN / PSTN to o support in S1 hat was introduce dation that this feat (S99 and R00. letes the reference	in an ea ature april 200 . S1 has for this ed to sup ature be es to OS	00) S1 no also disc feature. oport thes deleted. SP:IHOSS	ase X tes that (cussed the Therefore Se service S1 will range	CN3 have deletteres support of the support of the S1 sees no rest, and S1 has the CRs to render to the S0 sees no render to the S1 sees no render	Phase 2 Release 96 Release 97 Release 98 Release 99 Release 00 ted the support reed for the PI agreed with N nove this feature	x x vice DP J3's ire
Clauses affect Other specs affected:	ted C N E	ther 3G cor Other 3G cor Other GSM c AS test spec 3SS test spe O&M specific	3 10.5.6.4 e specifications ore specifications ifications cifications ations		\rightarrow List of \rightarrow List of \rightarrow List of \rightarrow List of \rightarrow List of	f CRs: f CRs: f CRs: f CRs: f CRs: f CRs:			
Other comments:									

<----- double-click here for help and instructions on how to create a CR.

10.5.6.3 Protocol configuration options

The purpose of the *protocol configuration options* information element is to transfer external network protocol options associated with a PDP context activation.

The *protocol configuration options* is a type 4 information element with a minimum length of 2 octets and a maximum length of 253 octets.

The *protocol configuration options* information element is coded as shown in figure 10.5.136/TS 24.008 and table 10.5.154/TS 24.008.

8	7	6	5	4	3	2	1		
		Protoco	l configu	iration op	tions IEI			octet 1	
Length of protocol config. options contents									
1	0	0	0	0	C	onfigurati	ion	octet 3	
exi		Sp	Broto			protocol		ootot 4	
			FIOLO					octet 5	
		Lenath	of proto	col ID 1 c	ontents			octet 6	
		Longar			ontonto			octet 7	
		Pr	otocol IE	D 1 contei	nts				
								octet m	
			Proto	col ID 2				octet m+1	
								octet m+2	
		_						octet m+4	
		Pr	otocol II	0 2 conter	nts				
								octet n+1	
				••				octet x	
			Protoc	ol ID n-1				octet x+1	
								octet x+2	
		Length o	of protoc	ol ID n-1	contents			octet x+3	
								octet x+4	
		Pro	tocol ID	n-1 conte	ents				
								octet y	
			Proto	col ID n				octet y+1	
		1						octet y+2	
		Length	or proto	COLID N C	ontents				
		Dr	otocol II) n conte	nte			ociel y+4	
					1.5			octet z	

Figure 10.5.136/TS 24.008: Protocol configuration options information element

Table 10.5.154/TS 24.008: Protocol configuration options information element

Configuration protocol (octet 3) Bits
0 0 0 PPP for use with IP PDP type 0 0 1 for use with OSP:IHOSS PDP type
NOTE. The OSP:IHOSS PDP type does not have a separately named configuration protocol analogous to PPP.
All other values are interpreted as PPP in this version of the protocol.
Configuration protocol options list (octets 4 to z)
The <i>configuration protocol options list</i> contains a variable number of logical units, the may occur in an arbitrary order within the <i>configuration protocol options list</i> .
Each unit is of variable length and consists of a
 protocol identifier (2 octets); the length of the protocol identifier contents of the unit (1 octet); and the protocol identifier contents itself (n octets).
The <i>protocol identifier</i> field contains the hexadecimal coding of the configuration protocol identifier. Bit 8 of the first octet of the <i>protocol identifier</i> field contains the most significant bit and bit 1 of the second octet of the <i>protocol identifier</i> field contains the least significant bit.
If the <i>configuration protocol options list</i> contains a protocol identifier that is not supported by the receiving entity the corresponding unit shall be discarded.
The <i>length of the protocol identifier contents</i> field contains the binary coded representation of the length of the <i>protocol identifier contents</i> field of a unit. The first bit in transmission order is the most significant bit.
The <i>protocol identifier contents</i> field of each unit contains information specific to the configuration protocol specified by the <i>protocol identifier</i> .
РРР
At least the following protocol identifiers (as defined in RFC 1700) shall be supported in this version of the protocol:
- C021H (LCP; - C023H (PAP)
- C223H (CHAP);and - 8021H (UPCP)
The support of other protocol identifiers is implementation dependent and outside the scope of this specification.
The <i>protocol identifier contents</i> field of each unit corresponds to a 'Packet' as defined in RFC 1661 that is stripped off the 'Protocol' and the 'Padding' octets.
The detailed coding of the <i>protocol identifier contents</i> field is specified in the RFC that is associated with the protocol identifier of that unit.
OSP:IHOSS (Octet Stream Protocol for Internet-Hosted Octet Stream Service)
In the logical units described above, OSP:IHOSS uses the term <i>option identifier</i> rather than <i>protocol identifier</i> .
The currently defined <i>option identifiers</i> , their <i>lengths</i> , and the coding of the <i>option identifier contents</i> fields are specified in GSM 07.60.

10.5.6.4 Packet data protocol address

The purpose of the *packet data protocol address* information element is to identify an address associated with a PDP.

The *packet data protocol address* is a type 4 information element with minimum length of 4 octets and a maximum length of 20 octets.

The *packet data protocol address* information element is coded as shown in figure 10.5.137/TS 24.008 and table 10.5.155/TS 24.008.



Figure 10.5.137/TS 24.008: Packet data protocol address information element

Table 10.5.155/TS 24.008: Packet data protocol address information element

Length of PDP address contents (octet 2)
If the value of octet 2 equals 0000 0010, then :
- No PDP address is included in this information element; and
- If the PDP type is IP, dynamic addressing is applicable.
NOTE : For PPP and OSP:IHOSS, no address is required in this information element.
PDP type organisation (octet 3) Bits 4 3 2 1 In MS to network direction : 0 0 0 0 ETSI allocated address 0 0 0 1 IETF allocated address 1 1 1 1 Empty PDP type
All other values are reserved.
In network to MS direction : 0 0 0 0 ETSI allocated address 0 0 0 1 IETF allocated address
All other values are reserved.
If bits 4,3,2,1 of octet 3 are coded 0 0 0 0 PDP type number value (octet 4) Bits 8 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 Reserved, used in earlier version of this protocol 0 0 0 0 0 0 1 PDP-type PPP 0 0 0 0 0 0 1 0 PDP type OSP:IHOSS
All other values are reserved in this version of the protocol.
If bits 4,3,2,1 of octet 3 are coded 0 0 0 1 PDP type number value (octet 4) Bits 8 7 6 5 4 3 2 1 0 0 1 0 0 0 0 1 IPv4 address 0 1 0 1 0 1 1 1 IPv6 address
All other values shall be interpreted as IPv4 address in this version of the protocol.
In MS to network direction: If bits 4,3,2,1 of octet 3 are coded 1 1 1 1 PDP type number value (octet 4) bits 8 to 1 are spare and shall be coded all 0.
Octet 3, bits 8, 7, 6, and 5 are spare and shall be coded all 0.

If PDP type number indicates IPv4, the Address information in octet 5 to octet 8 contains the IPv4 address. Bit 8 of octet 5 represents the most significant bit of the IP address and bit 1 of octet 8 the least significant bit .

If PDP type number indicates IPv6, the Address information in octet 5 to octet 20 contains the IPv6 address. Bit 8 of octet 5 represents the most significant bit of the IP address and bit 1 of octet 20 the least significant bit.