3GPP TSG_CN#7 **NP-000097**
ETSI SMG3 Plenary Meeting #7,
Madrid, Spain
13th – 15th March 2000

Agenda item: **5.1.3**

Source: **TSG_N WG1**

Title: **CRs to 3G Work Item NITZ**

Introduction:

This document contains **"4"** CRs on **Work Item NITZ,** that have been agreed by **TSG_N WG1,** and are forwarded to **TSG_N Plenary** meeting #7 for approval.

Tdoc	Spec	CR	Rev	CAT	Rel.	Old Ver	New Ver	Subject
N1-000194	04.08	CRA947	2	F	R96	5.14.0	5.15.0	Clarification of NITZ time stamp coding
N1-000196	04.08	CRA949	1	C	R97	6.7.0	6.8.0	Clarification of NITZ time stamp coding
N1-000197	04.08	CRA951	1	C	R98	7.4.0	7.6.0	Clarification of NITZ time stamp coding
N1-000198	24.008	CR096	1	C	R99	3.2.1	3.3.0	Clarification of NITZ time stamp coding

3GPP/SMG Meeting #10
Abiko, Japan, 11-14 Jan 2000

Document N1-000194
Revision of N1-000132

CHANGE REQUEST

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04.08	CR	A947r2	Current Version:	5.14.0

GSM (AA.BB) or 3G (AA.BBB) specification number ↑ *↑ CR number as allocated by MCC support team*

For submission to:	TSGN #7	for approval	X	strategic	X	*(for SMG use only)*
list expected approval meeting # here ↑		for information		non-strategic		

Form: CR cover sheet, version 2 for 3GPP and SMG *The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc*

Proposed change affects: *(at least one should be marked with an X)* (U)SIM [ ] ME [X] UTRAN / Radio [ ] Core Network [X]

Source: CN1 **Date:** 13.1.2000

Subject: Clarification of NITZ time stamp coding

Work item: NITZ

Category: *(only one category shall be marked with an X)*

F	Correction	X	**Release:**	Phase 2	
A	Corresponds to a correction in an earlier release			Release 96	X
B	Addition of feature			Release 97	
C	Functional modification of feature			Release 98	
D	Editorial modification			Release 99	
				Release 00	

Reason for change: Alignment of the Stage 3 with Stage 1 to avoid misinterpretations and incompatible implementations.

Clauses affected: 10.5.3.8 and 10.5.3.9

Other specs affected:

Other 3G core specifications	[ ]	→ List of CRs:
Other GSM core specifications	[ ]	→ List of CRs:
MS test specifications	[ ]	→ List of CRs:
BSS test specifications	[ ]	→ List of CRs:
O&M specifications	[ ]	→ List of CRs:

Other comments: TSGS #6 decided that stage 1 is right and stage 3 should be changed, see tdoc SP-99637.


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

9.2.15a MM information

This message is sent by the network to the mobile station to provide the mobile station with subscriber specific information. See table 9.51a/GSM 04.08.

Message type: MM INFORMATION

Significance: dual

Direction: network to mobile station

Table 9.51a/GSM 04.08 MM INFORMATION message content

IEI	Information element	Type / Reference	Presence	Format	Length
	Mobility management protocol discriminator	Protocol discriminator 10.2	M	V	1/2
	Skip Indicator	Skip Indicator 10.3.1	M	V	1/2
	MM Information message type	Message type 10.4	M	V	1
43	Full name for network	Network Name 10.5.3.5a	O	TLV	3-?
45	Short name for network	Network Name 10.5.3.5a	O	TLV	3-?
46	Network time zone	Time Zone 10.5.3.8	O	TV	2
47	Universal ~~Network~~ time and time zone	Time Zone and Time 10.5.3.9	O	TV	8

9.2.15a.1 Full name for network

This IE may be sent by the network. If this IE is sent, the contents of this IE indicate the "full length name of the network" that the network wishes the mobile station to associate with the MCC and MNC contained in the Location Area Identification of the cell to which the mobile station sent its Channel Request message.

9.2.15a.2 Short name for network

This IE may be sent by the network. If this IE is sent, the contents of this IE indicate the "abbreviated name of the network" that the network wishes the mobile station to associate with the MCC and MNC contained in the Location Area Identification of the cell to which the mobile station sent its Channel Request message.

9.2.15a.3 Network time zone

This IE may be sent by the network. The mobile station should assume that this time zone applies to the Location Area of the cell to which the Channel Request message was sent.

9.2.15a.4 Universal time and ~~Network~~ time zone ~~and time~~

This IE may be sent by the network. The mobile station should assume that this time zone applies to the Location Area of the cell to which the Channel Request message was sent. The mobile station shall not assume that the time information is accurate.

10.5.3.8 Time Zone

The purpose of this information element is to encode the offset between universal time and local time~~zone~~ in steps of 15 minutes.

The *Time Zone* information element is coded as shown in figure 10.67a/GSM 04.08 and table 10.66a/GSM 04.08.

The *Time Zone* is a type 3 information element with a length of 2 octets.

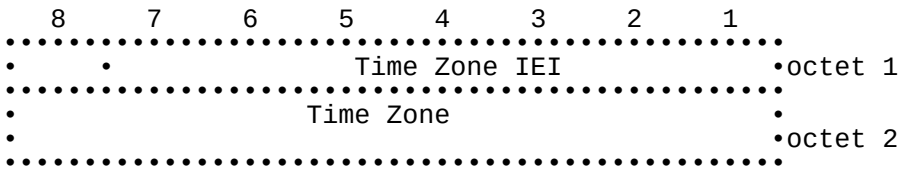

Figure 10.67a/GSM 04.08
***Time Zone* information element**

Table 10.66a/GSM 04.08
***Time Zone* information element**

Time Zone (octet 2, bits 1-8) This field uses the same format as the Timezone field used in the TP-Service-Centre-Time-Stamp, which is defined in GSM 03.40, and its value shall be set as defined in GSM 02.42~~The format of the TP-Service-Centre-Time-Stamp is defined in GSM 03.40 and the value shall be set as defined in GSM 02.42. This field is encoded in exactly the same way as the Time Zone field of the TP-Service-Centre-Time-Stamp in GSMá03.40 (ETS 300 536).~~

10.5.3.9 Time Zone and Time

The purpose of the~~is~~ timezone part of this information element is to encode the offset between universal time and local time~~local timezone~~ in steps of 15 minutes.

The purpose of the ~~and to indicate the~~ time part of this information element is to encode the universal time at which this information element may have been sent by the network.

The *Time Zone and Time* information element is coded as shown in figure 10.68a/GSM 04.08 and table 10.67a/GSM 04.08.

The *Time Zone and Time* is a type 3 information element with a length of 8 octets.

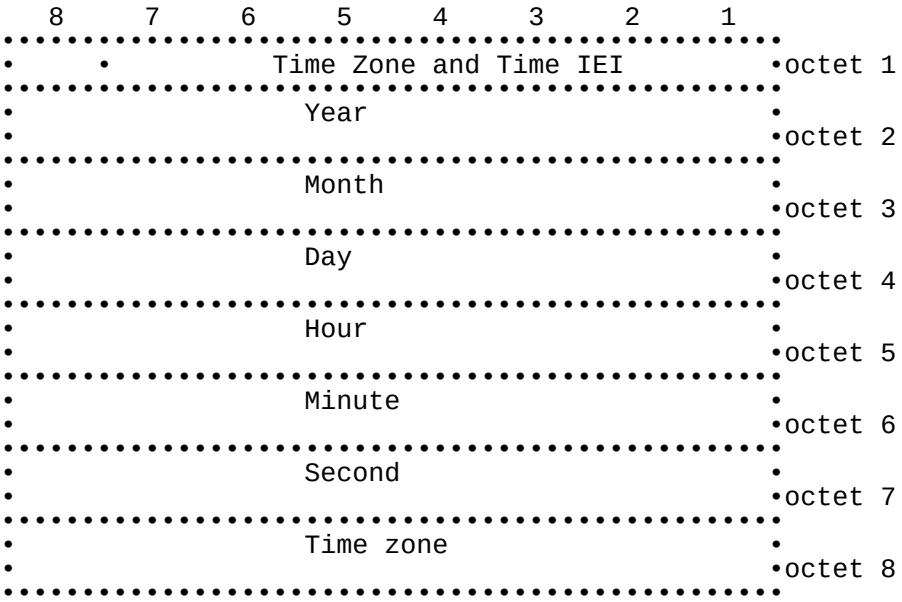

Figure 10.68a/GSM 04.08
***Time Zone and Time* information element**

Table 10.67a/GSM 04.08
***Timezone and Time* information element**

Year (octet 2, bits 1-8)
This field uses the same format as the Year field used in the TP-Service-Centre-Time-Stamp, which is defined in GSM 03.40, and its value shall be set as defined in GSM 02.42~~The format of the TP-Service-Centre-Time-Stamp is defined in GSM 03.40 and the value shall be set as defined in GSM 02.42This field is encoded in exactly the same way as the Year field of the TP-Service-Centre-Time-Stamp in GSM 03.40 (ETS 300 536)~~.

Month (octet 3, bits 1-8)
This field uses the same format as the Month field used in the TP-Service-Centre-Time-Stamp, which is defined in GSM 03.40, and its value shall be set as defined in GSM 02.42~~The format of the TP-Service-Centre-Time-Stamp is defined in GSM 03.40 and the value shall be set as defined in GSM 02.42This field is encoded in exactly the same way as the Month field of the TP-Service-Centre-Time-Stamp in GSM 03.40 ETS 300 536)~~.

Day (octet 4, bits 1-8)
This field uses the same format as the Day field used in the TP-Service-Centre-Time-Stamp, which is defined in GSM 03.40, and its value shall be set as defined in GSM 02.42~~The format of the TP-Service-Centre-Time-Stamp is defined in GSM 03.40 and the value shall be set as defined in GSM 02.42This field is encoded in exactly the same way as the Day field of the TP-Service-Centre-Time-Stamp in GSM 03.40 (ETS 300 536)~~.

Hour (octet 5, bits 1-8)
This field uses the same format as the Hour field used in the TP-Service-Centre-Time-Stamp, which is defined in GSM 03.40, and its value shall be set as defined in GSM 02.42~~The format of the TP-Service-Centre-Time-Stamp is defined in GSM 03.40 and the value shall be set as defined in GSM 02.42This field is encoded in exactly the same way as the Hour field of the TP-Service-Centre-Time-Stamp in GSM 03.40 (ETS 300 536)~~.

Minute (octet 6, bits 1-8)
This field uses the same format as the Minute field used in theTP-Service-Centre-Time-Stamp, which is defined in GSM 03.40, and its value shall be set as defined in GSM 02.42~~The format of the TP-Service-Centre-Time-Stamp is defined in GSM 03.40 and the value shall be set as defined in GSM 02.42This field is encoded in exactly the same way as the Minute field of the TP-Service-Centre-Time-Stamp in GSM 03.40 (ETS 300 536)~~.

Second (octet 7, bits 1-8)
This field uses the same format as the Second field used in the TP-Service-Centre-Time-Stamp, which is defined in GSM 03.40, and its value shall be set as defined in GSM 02.42~~The format of the TP-Service-Centre-Time-Stamp is defined in GSM 03.40 and the value shall be set as defined in GSM 02.42This field is encoded in exactly the same way as the Second field of the TP-Service-Centre-Time-Stamp in GSM 03.40 (ETS 300 536)~~.

Time Zone (octet 8, bits 1-8)
This field uses the same format as the Time Zone field used in the TP-Service-Centre-Time-Stamp, which is defined in GSM 03.40, and its value shall be set as defined in GSM 02.42~~The format of the TP-Service-Centre-Time-Stamp is defined in GSM 03.40 and the value shall be set as defined in GSM 02.42.This field is encoded in exactly the same way as the Time Zone field of the TP-Service-Centre-Time-Stamp in GSM 03.40 (ETS 300 536)~~

NOTE: Due to ambiguities in earlier versions of the protocol specifications, some mobile stations may interpret the received NITZ time as local time. This may result in incorrect time settings in the mobile.

3GPP/SMG Meeting #10
Abiko, Japan, 11-14 Jan 2000

Document N1-000196
Revision of N1-000061

CHANGE REQUEST

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04.08	CR	A949r1	Current Version:	6.7.0

GSM (AA.BB) or 3G (AA.BBB) specification number ↑ *↑ CR number as allocated by MCC support team*

For submission to:	TSGN #7	for approval	X	strategic	X	*(for SMG use only)*
list expected approval meeting # here ↑		for information		non-strategic		

Form: CR cover sheet, version 2 for 3GPP and SMG *The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc*

Proposed change affects: *(at least one should be marked with an X)* (U)SIM [ ] ME [X] UTRAN / Radio [ ] Core Network [X]

Source: CN1 **Date:** 13.1.2000

Subject: Clarification of NITZ time stamp coding

Work item: NITZ

Category: *(only one category shall be marked with an X)*

F	Correction		**Release:**	Phase 2	
A	Corresponds to a correction in an earlier release	X		Release 96	
B	Addition of feature			Release 97	X
C	Functional modification of feature			Release 98	
D	Editorial modification			Release 99	
				Release 00	

Reason for change: Alignment of the Stage 3 with Stage 1 to avoid misinterpretations and incompatible implementations.

Clauses affected: 10.5.3.8 and 10.5.3.9

Other specs affected:

Other 3G core specifications	[ ]	→ List of CRs:
Other GSM core specifications	[ ]	→ List of CRs:
MS test specifications	[ ]	→ List of CRs:
BSS test specifications	[ ]	→ List of CRs:
O&M specifications	[ ]	→ List of CRs:

Other comments: TSGS #6 decided that stage 1 is right and stage 3 should be changed, see tdoc SP-99637.


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

9.2.15a MM information

This message is sent by the network to the mobile station to provide the mobile station with subscriber specific information. See table 9.2.18/GSM 04.08.

Message type: MM INFORMATION

Significance: dual

Direction: network to mobile station

Table 9.2.18/GSM 04.08: MM INFORMATION message content

IEI	Information element	Type / Reference	Presence	Format	Length
	Mobility management protocol discriminator	Protocol discriminator 10.2	M	V	1/2
	Skip Indicator	Skip Indicator 10.3.1	M	V	1/2
	MM Information message type	Message type 10.4	M	V	1
43	Full name for network	Network Name 10.5.3.5a	O	TLV	3-?
45	Short name for network	Network Name 10.5.3.5a	O	TLV	3-?
46	Network time zone	Time Zone 10.5.3.8	O	TV	2
47	Universal ~~Network~~ time and time zone	Time Zone and Time 10.5.3.9	O	TV	8

9.2.15a.1 Full name for network

This IE may be sent by the network. If this IE is sent, the contents of this IE indicate the "full length name of the network" that the network wishes the mobile station to associate with the MCC and MNC contained in the Location Area Identification of the cell to which the mobile station sent its Channel Request message.

9.2.15a.2 Short name for network

This IE may be sent by the network. If this IE is sent, the contents of this IE indicate the "abbreviated name of the network" that the network wishes the mobile station to associate with the MCC and MNC contained in the Location Area Identification of the cell to which the mobile station sent its Channel Request message.

9.2.15a.3 Network time zone

This IE may be sent by the network. The mobile station should assume that this time zone applies to the Location Area of the cell to which the Channel Request message was sent.

9.2.15a.4 Universal time and ~~Network~~ time zone ~~and time~~

This IE may be sent by the network. The mobile station should assume that this time zone applies to the Location Area of the cell to which the Channel Request message was sent. The mobile station shall not assume that the time information is accurate.

9.4.19 GMM Information

This message is sent by the network at any time to sent certain information to the MS.
See table 9.4.19/GSM 04.08.

Message type: GMM INFORMATION

Significance: local

Direction: network to MS

Table 9.4.19/GSM 04.08: GMM INFORMATION message content

IEI	Information Element	Type/Reference	Presence	Format	Length
	Protocol discriminator	Protocol discriminator 10.2	M	V	1/2
	Skip indicator	Skip indicator 10.3.1	M	V	1/2
	GMM Information message identity	Message type 10.4	M	V	1
43	Full name for network	Network name 10.5.3.5a	O	TLV	3 - ?
45	Short name for network	Network name 10.5.3.5a	O	TLV	3 - ?
46	Network time zone	Time zone 10.5.3.8	O	TV	2
47	Universal ~~Network~~ time and time zone	Time zone and time 10.5.3.9	O	TV	8

9.4.19.1 Full name for network

This IE may be sent by the network. If this IE is sent, the contents of this IE indicate the "full length name of the network" that the network wishes the mobile station to associate with the MCC and MNC contained in the routing area identification of the current cell.

9.4.19.2 Short name for network

This IE may be sent by the network. If this IE is sent, the contents of this IE indicate the "abbreviated name of the network" that the network wishes the mobile station to associate with the MCC and MNC contained in the routing area identification of the cell the MS is currently in.

9.4.19.3 Network time zone

This IE may be sent by the network. The mobile station should assume that this time zone applies to the routing area of the cell the MS is currently in.

9.4.19.4 Universal time and ~~Network~~ time zone ~~and time~~

This IE may be sent by the network. The mobile station should assume that this time zone applies to the routing area the MS is currently in. The mobile station shall not assume that the time information is accurate.

10.5.3.8 Time Zone

The purpose of this information element is to encode offset between universal time and the local time~~zone~~ in steps of 15 minutes.

The *Time Zone* information element is coded as shown in figure 10.5.83/GSM 04.08 and table 10.5.96/GSM 04.08.

The *Time Zone* is a type 3 information element with a length of 2 octets.

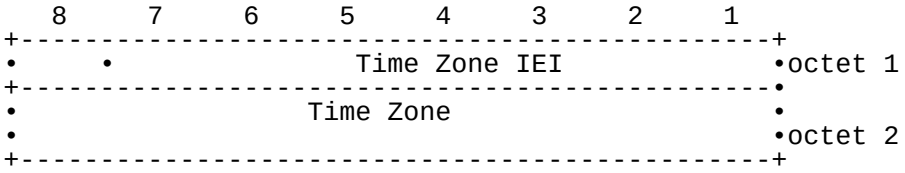

Figure 10.5.83/GSM 04.08: *Time Zone* information element

Table 10.5.96/GSM 04.08: *Time Zone* information element

Time Zone (octet 2, bits 1-8) This field uses the same format as the Timezone field used in the TP-Service-Centre-Time-Stamp, which is defined in GSM 03.40, and its value shall be set as defined in GSM 02.42 ~~The format of the TP-Service-Centre-Time-Stamp is defined in UMTS 23.040 and the value shall be set as defined in UMTS 22.042.~~ ~~This field is encoded in exactly the same way as the Time Zone field of the TP-Service-Centre-Time-Stamp in GSMß03.40~~

10.5.3.9 Time Zone and Time

The purpose of the~~is~~ timezone part of this information element is to encode the offset between universal time and local time~~local timezone~~ in steps of 15 minutes.

The purpose of the ~~and to indicate the universal~~ time part of this information element is to encode the universal time at which this information element may have been sent by the network.

The *Time Zone and Time* information element is coded as shown in figure 10.5.84/GSM 04.08 and table 10.5.97/GSM 04.08.

The *Time Zone and Time* is a type 3 information element with a length of 8 octets.

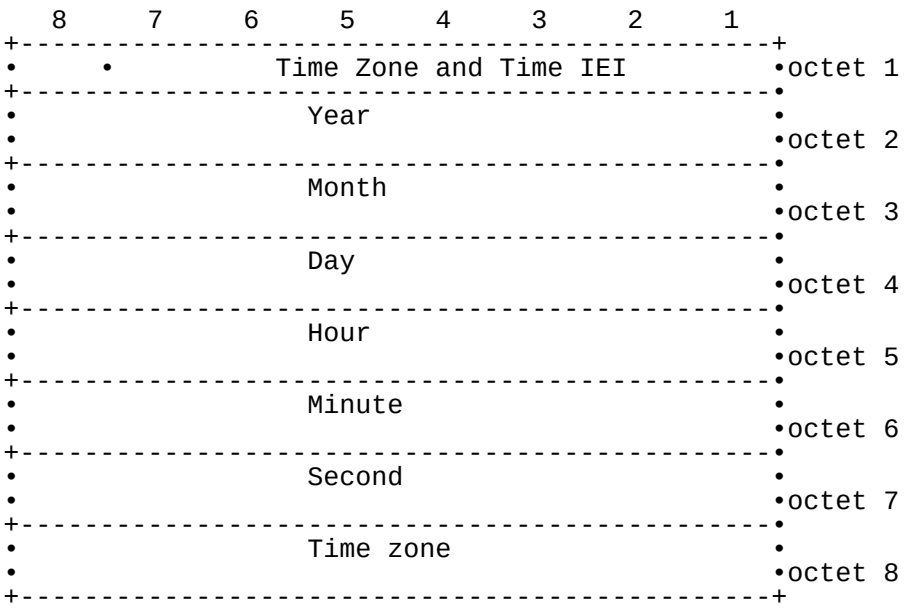

Figure 10.5.84/GSM 04.08: *Time Zone and Time* information element

Table 10.5.97/GSM 04.08: *Timezone and Time* information element

Year (octet 2, bits 1-8)
This field uses the same format as the Year field used in the TP-Service-Centre-Time-Stamp, which is defined in GSM 03.40, and its value shall be set as defined in GSM 02.42~~The format of the TP-Service-Centre-Time-Stamp is defined in GSM 03.40 and the value shall be set as defined in GSM 02.42This field is encoded in exactly the same way as the Year field of the TP-Service-Centre-Time-Stamp in GSM 03.40~~.

Month (octet 3, bits 1-8)
This field uses the same format as the Month field used in the TP-Service-Centre-Time-Stamp, which is defined in GSM 03.40, and its value shall be set as defined in GSM 02.42The format of the TP-Service-Centre-Time-Stamp is defined in GSM 03.40 and the value shall be set as defined in GSM 02.42~~This field is encoded in exactly the same way as the Month field of the TP-Service-Centre-Time-Stamp in GSM 03.40 ETS 300 536)~~.

Day (octet 4, bits 1-8)
This field uses the same format as the Day field used in the TP-Service-Centre-Time-Stamp, which is defined in GSM 03.40, and its value shall be set as defined in GSM 02.42~~The format of the TP-Service-Centre-Time-Stamp is defined in GSM 03.40 and the value shall be set as defined in GSM 02.42This field is encoded in exactly the same way as the Day field of the TP-Service-Centre-Time-Stamp in GSM 03.40~~.

Hour (octet 5, bits 1-8)
This field uses the same format as the Hour field used in the TP-Service-Centre-Time-Stamp, which is defined in GSM 03.40, and its value shall be set as defined in GSM 02.42~~The format of the TP-Service-Centre-Time-Stamp is defined in GSM 03.40 and the value shall be set as defined in GSM 02.42This field is encoded in exactly the same way as the Hour field of the TP-Service-Centre-Time-Stamp in GSM 03.40~~.

Minute (octet 6, bits 1-8)
This field uses the same format as the Minute field used in the TP-Service-Centre-Time-Stamp, which is defined in GSM 03.40, and its value shall be set as defined in GSM 02.42~~The format of the TP-Service-Centre-Time-Stamp is defined in GSM 03.40 and the value shall be set as defined in GSM 02.42This field is encoded in exactly the same way as the Minute field of the TP-Service-Centre-Time-Stamp in GSM 03.40~~.

Second (octet 7, bits 1-8)
This field uses the same format as the Second field used in the TP-Service-Centre-Time-Stamp, which is defined in GSM 03.40, and its value shall be set as defined in GSM 02.42~~The format of the TP-Service-Centre-Time-Stamp is defined in GSM 03.40 and the value shall be set as defined in GSM 02.42This field is encoded in exactly the same way as the Second field of the TP-Service-Centre-Time-Stamp in GSM 03.40~~.

Time Zone (octet 8, bits 1-8)
This field uses the same format as the Time Zone field used in the TP-Service-Centre-Time-Stamp, which is defined in GSM 03.40, and its value shall be set as defined in GSM 02.42~~The format of the TP-Service-Centre-Time-Stamp is defined in GSM 03.40 and the value shall be set as defined in GSM 02.42.This field is encoded in exactly the same way as the Time Zone field of the TP-Service-Centre-Time-Stamp in GSM 03.40)~~

NOTE: Due to ambiguities in earlier versions of the protocol specifications, some mobile stations may interpret the received NITZ time as local time. This may result in incorrect time settings in the mobile.

3GPP/SMG Meeting #10
Abiko, Japan, 11-14 Jan 2000

Document N1-000197
Revision of N1-000062

CHANGE REQUEST

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04.08	CR	A951r1	Current Version:	7.4.0

GSM (AA.BB) or 3G (AA.BBB) specification number ↑ *↑ CR number as allocated by MCC support team*

For submission to:	TSGN #7	for approval	X	strategic	X	*(for SMG use only)*
list expected approval meeting # here ↑		for information		non-strategic		

Form: CR cover sheet, version 2 for 3GPP and SMG *The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc*

Proposed change affects: *(at least one should be marked with an X)* (U)SIM [ ] ME [X] UTRAN / Radio [ ] Core Network [X]

Source: CN1 **Date:** 7.1.2000

Subject: Clarification of NITZ time stamp coding

Work item: NITZ

Category: *(only one category shall be marked with an X)*

F	Correction		**Release:**	Phase 2	
A	Corresponds to a correction in an earlier release	X		Release 96	
B	Addition of feature			Release 97	
C	Functional modification of feature			Release 98	X
D	Editorial modification			Release 99	
				Release 00	

Reason for change: Alignment of the Stage 3 with Stage 1 to avoid misinterpretations and incompatible implementations.

Clauses affected: 10.5.3.8 and 10.5.3.9

Other specs affected:

Other 3G core specifications	[ ]	→ List of CRs:
Other GSM core specifications	[ ]	→ List of CRs:
MS test specifications	[ ]	→ List of CRs:
BSS test specifications	[ ]	→ List of CRs:
O&M specifications	[ ]	→ List of CRs:

Other comments: TSGS #6 decided that stage 1 is right and stage 3 should be changed, see tdoc SP-99637.


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

9.2.15a MM information

This message is sent by the network to the mobile station to provide the mobile station with subscriber specific information. See table 9.2.18/GSM 04.08.

Message type: MM INFORMATION

Significance: dual

Direction: network to mobile station

Table 9.2.18/GSM 04.08 MM INFORMATION message content

IEI	Information element	Type / Reference	Presence	Format	Length
	Mobility management protocol discriminator	Protocol discriminator 10.2	M	V	1/2
	Skip Indicator	Skip Indicator 10.3.1	M	V	1/2
	MM Information message type	Message type 10.4	M	V	1
43	Full name for network	Network Name 10.5.3.5a	O	TLV	3-?
45	Short name for network	Network Name 10.5.3.5a	O	TLV	3-?
46	Network time zone	Time Zone 10.5.3.8	O	TV	2
47	Universal ~~Network~~ time and time zone	Time Zone and Time 10.5.3.9	O	TV	8
48	LSA Identity	LSA Identifier 10.5.3.11	O	TLV	2-5

9.2.15a.1 Full name for network

This IE may be sent by the network. If this IE is sent, the contents of this IE indicate the "full length name of the network" that the network wishes the mobile station to associate with the MCC and MNC contained in the Location Area Identification of the cell to which the mobile station sent its Channel Request message.

9.2.15a.2 Short name for network

This IE may be sent by the network. If this IE is sent, the contents of this IE indicate the "abbreviated name of the network" that the network wishes the mobile station to associate with the MCC and MNC contained in the Location Area Identification of the cell to which the mobile station sent its Channel Request message.

9.2.15a.3 Network time zone

This IE may be sent by the network. The mobile station should assume that this time zone applies to the Location Area of the cell to which the Channel Request message was sent.

9.2.15a.4 Universal time and ~~Network~~ time zone ~~and time~~

This IE may be sent by the network. The mobile station should assume that this time zone applies to the Location Area of the cell to which the Channel Request message was sent. The mobile station shall not assume that the time information is accurate.

9.2.15a.5 LSA Identity

This IE may be sent by the network. The contents of this IE indicate the LSA identity of the serving cell.

9.4.19 GMM Information

This message is sent by the network at any time to sent certain information to the MS.
See table 9.4.19/GSM 04.08.

Message type: GMM INFORMATION

Significance: local

Direction: network to MS

Table 9.4.19/GSM 04.08: GMM INFORMATION message content

IEI	Information Element	Type/Reference	Presence	Format	Length
	Protocol discriminator	Protocol discriminator 10.2	M	V	1/2
	Skip indicator	Skip indicator 10.3.1	M	V	1/2
	GMM information message identity	Message type 10.4	M	V	1
43	Full name for network	Network name 10.5.3.5a	O	TLV	3 - ?
45	Short name for network	Network name 10.5.3.5a	O	TLV	3 - ?
46	Network time zone	Time zone 10.5.3.8	O	TV	2
47	Universal ~~Network~~ time and time zone	Time zone and time 10.5.3.9	O	TV	8
48	LSA Identity	LSA Identifier 10.5.3.11	O	TLV	2-5

9.4.19.1 Full name for network

This IE may be sent by the network. If this IE is sent, the contents of this IE indicate the "full length name of the network" that the network wishes the mobile station to associate with the MCC and MNC contained in the routing area identification of the current cell.

9.4.19.2 Short name for network

This IE may be sent by the network. If this IE is sent, the contents of this IE indicate the "abbreviated name of the network" that the network wishes the mobile station to associate with the MCC and MNC contained in the routing area identification of the cell the MS is currently in.

9.4.19.3 Network time zone

This IE may be sent by the network. The mobile station should assume that this time zone applies to the routing area of the cell the MS is currently in.

9.4.19.4 Universal time and ~~Network~~ time zone ~~and time~~

This IE may be sent by the network. The mobile station should assume that this time zone applies to the routing area the MS is currently in. The mobile station shall not assume that the time information is accurate.

9.4.19.5 LSA Identity

This IE may be sent by the network. The contents of this IE indicate the LSA identity of the serving cell.

10.5.3.8 Time Zone

The purpose of this information element is to encode the offset between universal time and local time~~zone~~ in steps of 15 minutes.

The *Time Zone* information element is coded as shown in figure 10.5.83/GSM 04.08 and table 10.5.96/GSM 04.08.

The *Time Zone* is a type 3 information element with a length of 2 octets.

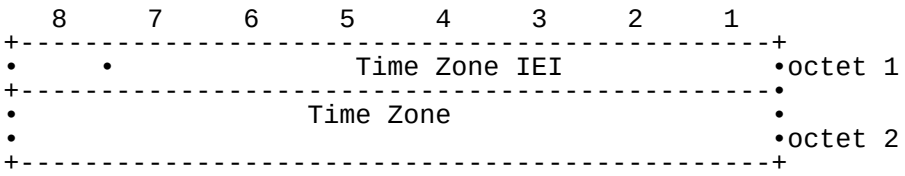

Figure 10.5.83/GSM 04.08: *Time Zone* information element

Table 10.5.96/GSM 04.08: *Time Zone* information element

Time Zone (octet 2, bits 1-8) This field uses the same format as the Timezone field used in the TP-Service-Centre-Time-Stamp, which is defined in GSM 03.40, and its value shall be set as defined in GSM 02.42 ~~The format of the TP-Service-Centre-Time-Stamp is defined in UMTS 23.040 and the value shall be set as defined in UMTS 22.042.~~ ~~This field is encoded in exactly the same way as the Time Zone field of the TP-Service-Centre-Time-Stamp in GSM 03.40~~

10.5.3.9 Time Zone and Time

The purpose of the~~is~~ timezone part of this information element is to encode the offset between universal time and local time~~local timezone~~ in steps of 15 minutes.

The purpose of the ~~and to indicate the universal~~ time part of this information element is to encode the universal time at which this information element may have been sent by the network.

The *Time Zone and Time* information element is coded as shown in figure 10.5.84/GSM 04.08 and table 10.5.97/GSM 04.08.

The *Time Zone and Time* is a type 3 information element with a length of 8 octets.

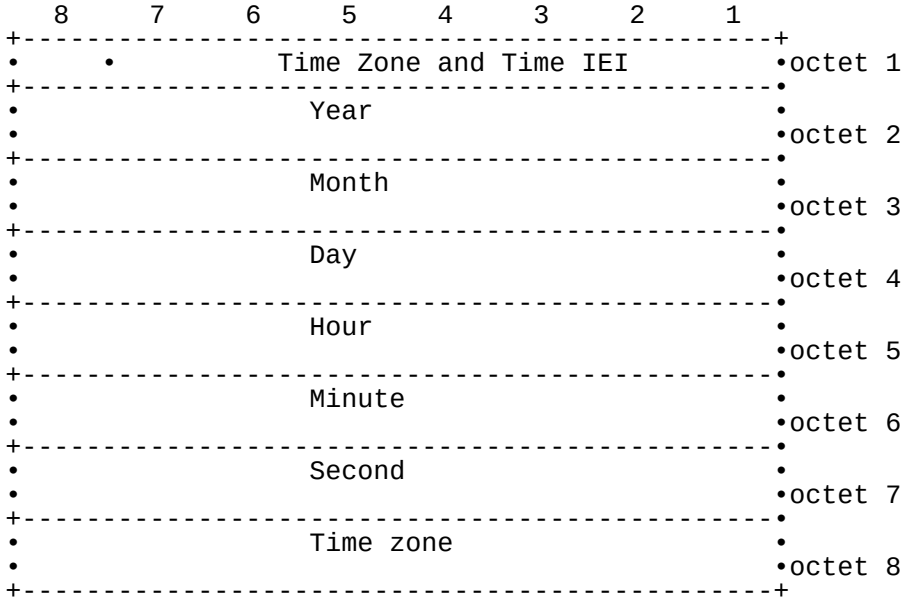

Figure 10.5.84/GSM 04.08: *Time Zone and Time* information element

Table 10.5.97/GSM 04.08: *Timezone and Time* information element

Year (octet 2, bits 1-8)
This field uses the same format as the Year field used in the TP-Service-Centre-Time-Stamp, which is defined in GSM 03.40, and its value shall be set as defined in GSM 02.42~~The format of the TP-Service-Centre-Time-Stamp is defined in GSM 03.40 and the value shall be set as defined in GSM 02.42This field is encoded in exactly the same way as the Year field of the TP-Service-Centre-Time-Stamp in GSM 03.40~~.

Month (octet 3, bits 1-8)
This field uses the same format as the Month field used in the TP-Service-Centre-Time-Stamp, which is defined in GSM 03.40, and its value shall be set as defined in GSM 02.42~~The format of the TP-Service-Centre-Time-Stamp is defined in GSM 03.40 and the value shall be set as defined in GSM 02.42This field is encoded in exactly the same way as the Month field of the TP-Service-Centre-Time-Stamp in GSM 03.40 ETS 300 536)~~.

Day (octet 4, bits 1-8)
This field uses the same format as the Day field used in the TP-Service-Centre-Time-Stamp, which is defined in GSM 03.40, and its value shall be set as defined in GSM 02.42~~The format of the TP-Service-Centre-Time-Stamp is defined in GSM 03.40 and the value shall be set as defined in GSM 02.42This field is encoded in exactly the same way as the Day field of the TP-Service-Centre-Time-Stamp in GSM 03.40~~.

Hour (octet 5, bits 1-8)
This field uses the same format as the Hour field used in the TP-Service-Centre-Time-Stamp, which is defined in GSM 03.40, and its value shall be set as defined in GSM 02.42~~The format of the TP-Service-Centre-Time-Stamp is defined in GSM 03.40 and the value shall be set as defined in GSM 02.42This field is encoded in exactly the same way as the Hour field of the TP-Service-Centre-Time-Stamp in GSM 03.40~~.

Minute (octet 6, bits 1-8)
This field uses the same format as the Minute field used in the TP-Service-Centre-Time-Stamp, which is defined in GSM 03.40, and its value shall be set as defined in GSM 02.42~~The format of the TP-Service-Centre-Time-Stamp is defined in GSM 03.40 and the value shall be set as defined in GSM 02.42This field is encoded in exactly the same way as the Minute field of the TP-Service-Centre-Time-Stamp in GSM 03.40~~.

Second (octet 7, bits 1-8)
This field uses the same format as the Second field used in the TP-Service-Centre-Time-Stamp, which is defined in GSM 03.40, and its value shall be set as defined in GSM 02.42~~The format of the TP-Service-Centre-Time-Stamp is defined in GSM 03.40 and the value shall be set as defined in GSM 02.42This field is encoded in exactly the same way as the Second field of the TP-Service-Centre-Time-Stamp in GSM 03.40~~.

Time Zone (octet 8, bits 1-8)
This field uses the same format as the Time Zone field used in the TP-Service-Centre-Time-Stamp, which is defined in GSM 03.40, and its value shall be set as defined in GSM 02.42~~The format of the TP-Service-Centre-Time-Stamp is defined in GSM 03.40 and the value shall be set as defined in GSM 02.42.This field is encoded in exactly the same way as the Time Zone field of the TP-Service-Centre-Time-Stamp in GSM 03.40)~~

NOTE: Due to ambiguities in earlier versions of the protocol specifications, some mobile stations may interpret the received NITZ time as local time. This may result in incorrect time settings in the mobile.

3GPP/SMG Meeting #10
Abiko, Japan, 11-14. Jan 2000

Document N1-000198
Revision of N1-000063

CHANGE REQUEST

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

24.008	CR	096r1	Current Version:	3.2.1

GSM (AA.BB) or 3G (AA.BBB) specification number ↑ *↑ CR number as allocated by MCC support team*

For submission to:	TSGN #7	for approval	X	strategic	X	*(for SMG use only)*
list expected approval meeting # here ↑		for information		non-strategic		

Form: CR cover sheet, version 2 for 3GPP and SMG *The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc*

Proposed change affects: *(at least one should be marked with an X)*	(U)SIM		ME	X	UTRAN / Radio		Core Network	X

Source: CN1 **Date:** 14.1.2000

Subject: Clarification of NITZ time stamp coding

Work item: NITZ

Category: *(only one category shall be marked with an X)*			**Release:**	
F	Correction		Phase 2	
A	Corresponds to a correction in an earlier release	X	Release 96	
B	Addition of feature		Release 97	
C	Functional modification of feature		Release 98	
D	Editorial modification		Release 99	X
			Release 00	

Reason for change: Alignment of the Stage 3 with Stage 1 to avoid misinterpretations and incompatible implementations.

Clauses affected: 9.2.15a, 9.4.19, 10.5.3.8 and 10.5.3.9

Other specs affected:			
Other 3G core specifications		→ List of CRs:	
Other GSM core specifications		→ List of CRs:	
MS test specifications		→ List of CRs:	
BSS test specifications		→ List of CRs:	
O&M specifications		→ List of CRs:	

Other comments: TSGS #6 decided that stage 1 is right and stage 3 should be changed, see tdoc SP-99637.


help.doc

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

9.2.15a MM information

This message is sent by the network to the mobile station to provide the mobile station with subscriber specific information. See table 9.2.18/TS 24.008.

Message type: MM INFORMATION

Significance: dual

Direction: network to mobile station

Table 9.2.18/TS 24.008 MM INFORMATION message content

IEI	Information element	Type / Reference	Presence	Format	Length
	Mobility management protocol discriminator	Protocol discriminator 10.2	M	V	1/2
	Skip Indicator	Skip Indicator 10.3.1	M	V	1/2
	MM Information message type	Message type 10.4	M	V	1
43	Full name for network	Network Name 10.5.3.5a	O	TLV	3-?
45	Short name for network	Network Name 10.5.3.5a	O	TLV	3-?
46	Local ~~Network~~ time zone	Time Zone 10.5.3.8	O	TV	2
47	Universal ~~Network~~ time and local time zone	Time Zone and Time 10.5.3.9	O	TV	8
48	LSA Identity	LSA Identifier 10.5.3.11	O	TLV	2-5
49	Network Daylight Saving Time	Daylight Saving Time 10.5.3.12	O	TLV	3

9.2.15a.1 Full name for network

This IE may be sent by the network. If this IE is sent, the contents of this IE indicate the "full length name of the network" that the network wishes the mobile station to associate with the MCC and MNC contained in the Location Area Identification of the cell to which the mobile station sent its Channel Request message.

9.2.15a.2 Short name for network

This IE may be sent by the network. If this IE is sent, the contents of this IE indicate the "abbreviated name of the network" that the network wishes the mobile station to associate with the MCC and MNC contained in the Location Area Identification of the cell to which the mobile station sent its Channel Request message.

9.2.15a.3 Local ~~Network~~ time zone

This IE may be sent by the network. The mobile station should assume that this time zone applies to the Location Area of the cell to which the Channel Request message was sent.

If the local ~~network~~ time zone has been adjusted for Daylight Saving Time, the network shall indicate this by including the IE Network Daylight Saving Time.

9.2.15a.4 Universal time and ~~Network~~ local time zone ~~and time~~

This IE may be sent by the network. The mobile station should assume that this time zone applies to the Location Area of the cell to which the Channel Request message was sent. The mobile station shall not assume that the time information is accurate.

If the ~~network~~ local time zone has been adjusted for Daylight Saving Time, the network shall indicate this by including the IE Network Daylight Saving Time.

9.2.15a.5 LSA Identity

This IE may be sent by the network. The contents of this IE indicate the LSA identity of the serving cell.

9.2.15a.6 Network Daylight Saving Time

This IE may be sent by the network. If this IE is sent, the contents of this IE indicates the value that has been used to adjust the ~~network~~local time zone.

9.4.19 GMM Information

This message is sent by the network at any time to sent certain information to the MS.
See table 9.4.19/TS 24.008.

Message type: GMM INFORMATION

Significance: local

Direction: network to MS

Table 9.4.19/TS 24.008: GMM INFORMATION message content

IEI	Information Element	Type/Reference	Presence	Format	Length
	Protocol discriminator	Protocol discriminator 10.2	M	V	1/2
	Skip indicator	Skip indicator 10.3.1	M	V	1/2
	GMM Information message identity	Message type 10.4	M	V	1
43	Full name for network	Network name 10.5.3.5a	O	TLV	3 - ?
45	Short name for network	Network name 10.5.3.5a	O	TLV	3 - ?
46	Local~~Network~~ time zone	Time zone 10.5.3.8	O	TV	2
47	Universal ~~Network~~ time and local time zone	Time zone and time 10.5.3.9	O	TV	8
48	LSA Identity	LSA Identifier 10.5.3.11	O	TLV	2-5
49	Network Daylight Saving Time	Daylight Saving Time 10.5.3.12	O	TLV	3

9.4.19.1 Full name for network

This IE may be sent by the network. If this IE is sent, the contents of this IE indicate the "full length name of the network" that the network wishes the mobile station to associate with the MCC and MNC contained in the routing area identification of the current cell.

9.4.19.2 Short name for network

This IE may be sent by the network. If this IE is sent, the contents of this IE indicate the "abbreviated name of the network" that the network wishes the mobile station to associate with the MCC and MNC contained in the routing area identification of the cell the MS is currently in.

9.4.19.3 Local~~Network~~ time zone

This IE may be sent by the network. The mobile station should assume that this time zone applies to the routing area of the cell the MS is currently in.

If the local~~network~~ time zone has been adjusted for Daylight Saving Time, the network shall indicate this by including the IE Network Daylight Saving Time.

9.4.19.4 Universal time and ~~Network~~ local time zone ~~and time~~

This IE may be sent by the network. The mobile station should assume that this time zone applies to the routing area the MS is currently in. The mobile station shall not assume that the time information is accurate.

If the ~~network~~local time zone has been adjusted for Daylight Saving Time, the network shall indicate this by including the IE Network Daylight Saving Time.

9.4.19.5 LSA Identity

This IE may be sent by the network. The contents of this IE indicate the LSA identity of the serving cell.

9.4.19.6 Network Daylight Saving Time

This IE may be sent by the network. If this IE is sent, the contents of this IE indicates the value that has been used to adjust the ~~network~~local time zone.

10.5.3.8 Time Zone

The purpose of this information element is to encode the offset between universal time and local time~~zone~~ in steps of 15 minutes.

The *Time Zone* information element is coded as shown in figure 10.5.83/TS 24.008 and table 10.5.96/TS 24.008.

The *Time Zone* is a type 3 information element with a length of 2 octets.

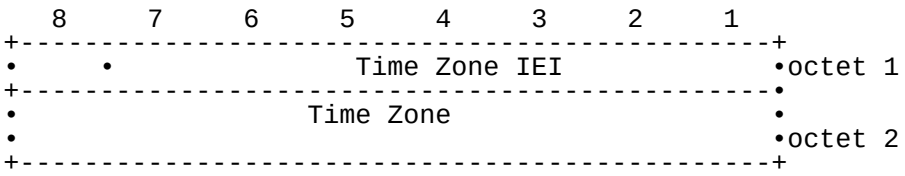

Figure 10.5.83/TS 24.008 *Time Zone* information element

Table 10.5.96/TS 24.008 *Time Zone* information element

Time Zone (octet 2, bits 1-8) This field uses the same format as the Timezone field used in the TP-Service-Centre-Time-Stamp, which is defined in GSM 03.40, and its value shall be set as defined in GSM 02.42~~The format of the TP-Service-Centre-Time-Stamp is defined in UMTS 23.040 and the value shall be set as defined in UMTS 22.042. This field is encoded in exactly the same way as the Time Zone field of the TP-Service-Centre-Time-Stamp in GSMß03.40~~

10.5.3.9 Time Zone and Time

The purpose of the~~is~~ timezone part of this information element is to encode the offset between universal time and local time~~local timezone~~ in steps of 15 minutes.

The purpose of the ~~and to indicate the universal~~ time part of this information element is to encode the universal time at which this information element may have been sent by the network.

The *Time Zone and Time* information element is coded as shown in figure 10.5.84/TS 24.008 and table 10.5.97/TS 24.008.

The *Time Zone and Time* is a type 3 information element with a length of 8 octets.

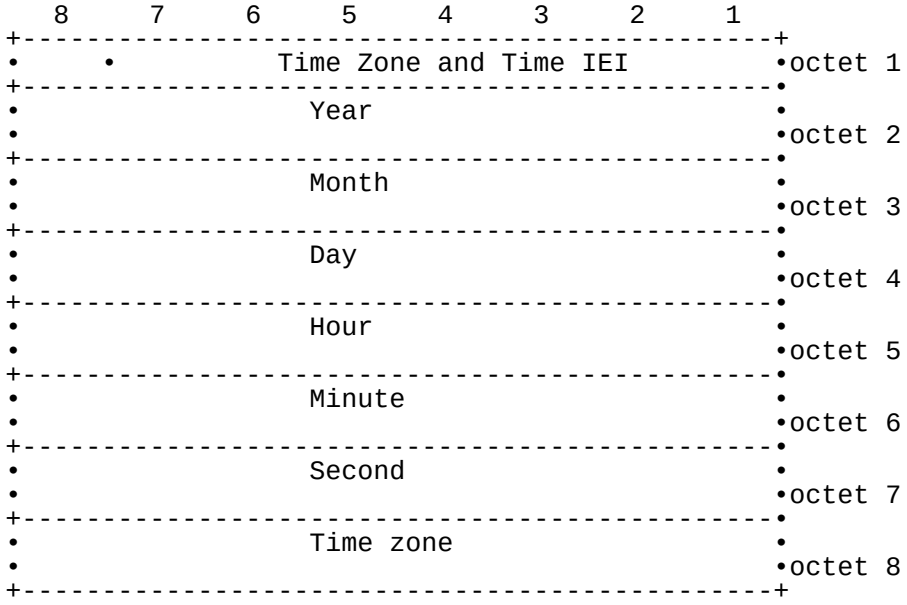

Figure 10.5.84/TS 24.008 *Time Zone and Time* information element

Table 10.5.97/TS 24.008 *Timezone and Time* information element

Year (octet 2, bits 1-8)
This field uses the same format as the Year field used in the TP-Service-Centre-Time-Stamp, which is defined in GSM 03.40, and its value shall be set as defined in GSM 02.42~~This field is encoded in exactly the same way as the Year field of the TP-Service-Centre-Time-Stamp in GSM 03.40. The format of the TP-Service-Centre-Time-Stamp is defined in UMTS 23.040 and the value shall be set as defined in UMTS 22.042.~~

Month (octet 3, bits 1-8)
This field uses the same format as the Month field used in the TP-Service-Centre-Time-Stamp, which is defined in GSM 03.40, and its value shall be set as defined in GSM 02.42~~The format of the TP-Service-Centre-Time-Stamp is defined in UMTS 23.040 and the value shall be set as defined in UMTS 22.042This field is encoded in exactly the same way as the Month field of the TP-Service-Centre-Time-Stamp in GSM 03.40 ETS 300 536)~~.

Day (octet 4, bits 1-8)
This field uses the same format as the Day field used in the TP-Service-Centre-Time-Stamp, which is defined in GSM 03.40, and its value shall be set as defined in GSM 02.42~~The format of the TP-Service-Centre-Time-Stamp is defined in UMTS 23.040 and the value shall be set as defined in UMTS 22.042This field is encoded in exactly the same way as the Day field of the TP-Service-Centre-Time-Stamp in GSM 03.40~~.

Hour (octet 5, bits 1-8)
This field uses the same format as the Hour field used in the TP-Service-Centre-Time-Stamp, which is defined in GSM 03.40, and its value shall be set as defined in GSM 02.42~~The format of the TP-Service-Centre-Time-Stamp is defined in UMTS 23.040 and the value shall be set as defined in UMTS 22.042This field is encoded in exactly the same way as the Hour field of the TP-Service-Centre-Time-Stamp in GSM 03.40~~.

Minute (octet 6, bits 1-8)
This field uses the same format as the Minute field used in the TP-Service-Centre-Time-Stamp, which is defined in GSM 03.40, and its value shall be set as defined in GSM 02.42~~The format of the TP-Service-Centre-Time-Stamp is defined in UMTS 23.040 and the value shall be set as defined in UMTS 22.042This field is encoded in exactly the same way as the Minute field of the TP-Service-Centre-Time-Stamp in GSM 03.40~~.

Second (octet 7, bits 1-8)
This field uses the same format as the Second field used in the TP-Service-Centre-Time-Stamp, which is defined in GSM 03.40, and its value shall be set as defined in GSM 02.42~~The format of the TP-Service-Centre-Time-Stamp is defined in UMTS 23.040 and the value shall be set as defined in UMTS 22.042This field is encoded in exactly the same way as the Second field of the TP-Service-Centre-Time-Stamp in GSM 03.40~~.

Time Zone (octet 8, bits 1-8)
This field uses the same format as the Time Zone field used in the TP-Service-Centre-Time-Stamp, which is defined in GSM 03.40, and its value shall be set as defined in GSM 02.42~~The format of the TP-Service-Centre-Time-Stamp is defined in UMTS 23.040 and the value shall be set as defined in UMTS 22.042.This field is encoded in exactly the same way as the Time Zone field of the TP-Service-Centre-Time-Stamp in GSM 03.40)~~

NOTE: Due to ambiguities in earlier versions of the protocol specifications, some mobile stations may interpret the received NITZ time as local time. This may result in incorrect time settings in the mobile.

[Editor's Note – this section is included for information only. No changes have been made]

10.5.3.12 Daylight Saving Time

The purpose of this information element is to encode the Daylight Saving Time in steps of 1 hour.

The *Daylight Saving Time* information element is coded as shown in figure 10.5.84b/TS 24.008 and table 10.5.97a/TS 24.008.

The *Daylight Saving Time* is a type 4 information element with a length of 3 octets.

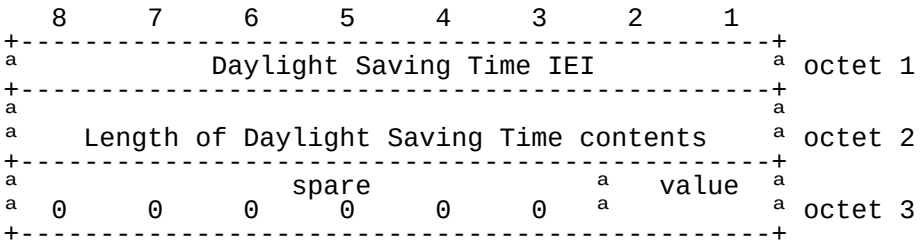

Figure 10.5.84b/TS 24.008 *Daylight Saving Time* information element

Table 10.5.97a/TS 24.008: *Daylight Saving Time* information element

Daylight Saving Time value (octet 3)	
Bits	
2 1	
0 0	No adjustment for Daylight Saving Time
0 1	+1 hour adjustment for Daylight Saving Time
1 0	+2 hours adjustment for Daylight Saving Time
1 1	Reserved