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**Source:** SA1  
**Title:** Release 99/4 CRs to 22.016 on Type approval code  
**Document for:** Approval  
**Agenda Item:** 7.1.3

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SA Doc	Spec	CR	Rev	Phase	Cat	Subject	Old Vers	New Vers	SA1 Doc
SP-020237	22.016	007		R99	F	Type approval code	3.2.0	3.3.0	S1-021148
SP-020237	22.016	008		Rel-4	A	Type approval code	4.0.0	4.1.0	S1-021149

CR-Form-v5.1

## CHANGE REQUEST

⌘ **22.016 CR 007** ⌘ rev **-** ⌘ Current version: **3.2.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

**Proposed change affects:** ⌘ (U)SIM  ME/UE  Radio Access Network  Core Network

**Title:** ⌘ Type Approval Code (TAC)

**Source:** ⌘ SA1

**Work item code:** ⌘ TEI

**Date:** ⌘ 16 May 2002

**Category:** ⌘ **F**

**Release:** ⌘ Rel-99

Use one of the following categories:

Use one of the following releases:

**F** (correction)

**2** (GSM Phase 2)

**A** (corresponds to a correction in an earlier release)

**R96** (Release 1996)

**B** (addition of feature),

**R97** (Release 1997)

**C** (functional modification of feature)

**R98** (Release 1998)

**D** (editorial modification)

**R99** (Release 1999)

Detailed explanations of the above categories can be found in 3GPP TR 21.900.

**REL-4** (Release 4)

**REL-5** (Release 5)

**Reason for change:** ⌘ The TAC code was considered following the implementation of the EU R&TTE directive – which removed the need for formal type approval before placing products on the market and moved to a self certification system . Under the old EU TTE directive the TAC code allocation was tied to the type approval tests being successfully completed, without a Type Approval Test another mechanism for allocating TAC codes was needed. This was discussed by an ad hoc group called "GISF" which involved Manufacturers (including Ericsson, Nokia, Motorola, Panasonic and Siemens) and Operators (including NTT-DoCoMo, 02, Orange, Telstra, T-Mobile, Vodafone and Voicestream) other Manufacturers were consulted through other Industry Groups as were Operators through the GSMA-TWG.

Old IMEI Structure:

Bits 0-5 : old TAC (type approval code)

Bits 6-7 : FAC (factory allocation code)

Bits 8-14 : Serial number

New IMEI Structure:

Bits 0-7 : new TAC (type allocation code)

Bits 8-14 : Serial number

The GISF group noted that to ensure that the numbering structure had a suitable capacity to address both 2G and 3G then the use of the FAC code field needed to be carefully considered. Many allocations of TAC codes have one or two FAC codes below them resulting in only 1-2% of the total number space under that FAC being allocated, the remaining numbers (up to 99,000,000) are not used. To address this issue the GISF group proposed a number of actions:

1. The GSM Association funded an administrator to issue TAC codes to UE Manufacturers following the supply of a limited amount of information. Currently

BABT are filling this role and are supplying TAC codes with 35 in the first two digits of the TAC.

2. The FAC code was removed from the structure with the 6 digit TAC becoming an 8 digit TAC. This is designed to be implemented in a backwardly compatible fashion. Initially the GSMA administrator will allocate 8 digit TAC codes with the last two digits (the old TAC field) set to 00. From Q2 2004 the full 8 digit TAC will be allocated with the unused numbers (those ending in 01 to 99) being allocated. The reason for this delay is to allow any systems searching on the TAC to have a reasonable time to be updated. Since a UE manufacturer has to request each block of 1 million numbers then the logistical change to operations of allocating a new TAC (rather than a FAC on an existing TAC) should be minimal.

3. The TAC code is renamed "Type Allocation Code" since in many regions the allocation of the TAC is not now tied to type approval.

**Summary of change:** ⌘ Removal of the phrase "type approved".

**Consequences if not approved:** ⌘ Formal Type Approval was removed with recent legislation in Europe. The TAC codes are now mainly being issued by the GSM Association's contractor on request from manufacturers without any 'type approval testing' being necessarily carried out. Currently 22.016 is incorrect and could mislead readers.

**Clauses affected:** ⌘ 7

**Other specs affected:** ⌘  Other core specifications ⌘ 23.003  
 Test specifications  
 O&M Specifications

**Other comments:** ⌘

— **Modified section** —

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## 7 MS Software Version Number (SVN)

A Software Version Number (SVN) field shall be provided. This allows the ME manufacturer to identify different software versions of a given ~~type-approved~~ mobile.

The SVN is a separate field from the IMEI, although it is associated with the IMEI, and when the network requests the IMEI from the MS, the SVN (if present) is also sent towards the network.

The white list shall use the IMEI, The Black and Grey Lists may also use the SVN.

— **End of Document** —

CR-Form-v5.1

## CHANGE REQUEST

⌘ **22.016 CR 008** ⌘ rev **-** ⌘ Current version: **4.0.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

**Proposed change affects:** ⌘ (U)SIM  ME/UE  Radio Access Network  Core Network

**Title:** ⌘ Type Allocation Code (TAC)

**Source:** ⌘ SA1

**Work item code:** ⌘ TEI

**Date:** ⌘ 16 May 2002

**Category:** ⌘ **A**

**Release:** ⌘ Rel-4

Use one of the following categories:

Use one of the following releases:

**F** (correction)

**2** (GSM Phase 2)

**A** (corresponds to a correction in an earlier release)

**R96** (Release 1996)

**B** (addition of feature),

**R97** (Release 1997)

**C** (functional modification of feature)

**R98** (Release 1998)

**D** (editorial modification)

**R99** (Release 1999)

Detailed explanations of the above categories can be found in 3GPP TR 21.900.

**REL-4** (Release 4)

**REL-5** (Release 5)

**Reason for change:** ⌘ The TAC code was considered following the implementation of the EU R&TTE directive – which removed the need for formal type approval before placing products on the market and moved to a self certification system . Under the old EU TTE directive the TAC code allocation was tied to the type approval tests being successfully completed, without a Type Approval Test another mechanism for allocating TAC codes was needed. This was discussed by an ad hoc group called "GISF" which involved Manufacturers (including Ericsson, Nokia, Motorola, Panasonic and Siemens) and Operators (including NTT-DoCoMo, 02, Orange, Telstra, T-Mobile, Vodafone and Voicestream) other Manufacturers were consulted through other Industry Groups as were Operators through the GSMA-TWG.

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Bits 8-14 : Serial number

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Bits 0-7 : new TAC (type allocation code)

Bits 8-14 : Serial number

The GISF group noted that to ensure that the numbering structure had a suitable capacity to address both 2G and 3G then the use of the FAC code field needed to be carefully considered. Many allocations of TAC codes have one or two FAC codes below them resulting in only 1-2% of the total number space under that FAC being allocated, the remaining numbers (up to 99,000,000) are not used. To address this issue the GISF group proposed a number of actions:

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