Technical Specification Group Services and System Aspects ***TSGS#18(02)0691***
Meeting #18, New Orleans, USA, 9 - 12 December 2002

**Source:** **TSG-SA WG4**

**Title: CRs to TS 26.140 - Corrections (Release 5)**

**Document for:** **Approval**

**Agenda Item:** **7.4.3**

The following CRs, agreed at the TSG-SA WG4 meeting #23, are presented to TSG SA #18 for approval.

| Spec | CR | Rev | Phase | Subject | Cat | Vers | WG | Meeting | S4 doc |
|---|---|---|---|---|---|---|---|---|---|
| 26.140 | 002 | | Rel-5 | Code points for H.263 | F | 5.1.0 | S4 | TSG-SA WG4#23 | S4-020540 |
| 26.140 | 003 | 1 | Rel-5 | File Format name change from MP4 to 3GP | F | 5.1.0 | S4 | TSG-SA WG4#23 | S4-020609 |

**3GPP TSG-SA4 Meeting #23** **Tdoc ⌘S4-020540**
**Montreal, Canada, 30 September–4 October 2002**

CR-Form-v7

# CHANGE REQUEST

⌘ **26.140** **CR** **002** ⌘ **rev** **-** ⌘ Current version: **5.1.0** ⌘

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

***Proposed change affects:*** UICC apps⌘ [ ] ME [X] Radio Access Network [ ] Core Network [ ]

| | | |
|---|---|---|
| ***Title:*** | ⌘ | Code points for H.263 |
| ***Source:*** | ⌘ | TSG SA WG4 |
| ***Work item code:*** | ⌘ | MMS |
| ***Date:*** | ⌘ | 10/12/2002 |
| ***Category:*** | ⌘ | **F** |
| ***Release:*** | ⌘ | Rel-5 |

*Use one of the following categories:*
***F*** *(correction)*
***A*** *(corresponds to a correction in an earlier release)*
***B*** *(addition of feature),*
***C*** *(functional modification of feature)*
***D*** *(editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

*Use one of the following releases:*

| | |
|---|---|
| *2* | *(GSM Phase 2)* |
| *R96* | *(Release 1996)* |
| *R97* | *(Release 1997)* |
| *R98* | *(Release 1998)* |
| *R99* | *(Release 1999)* |
| *Rel-4* | *(Release 4)* |
| *Rel-5* | *(Release 5)* |
| *Rel-6* | *(Release 6)* |

| | | |
|---|---|---|
| ***Reason for change:*** | ⌘ | H.263, profile 0 level 10, is a mandatory video decoder for MMS. However, a corresponding bitstream can also be decoded by an MPEG-4 visual decoder (optionally supported) using so-called “short header”. To ensure full support for H.263 it is therefore necessary to signal H.263 as H.263 and not as MPEG-4 visual (in RTP transport and file storage). |
| ***Summary of change:*** | ⌘ | A recommendation to transport and store H.263 profile 0 bitstreams as H.263, rather than MPEG-4 visual, has been added. |
| ***Consequences if not approved:*** | ⌘ | If the recommendation is not followed, there is no guarantee that an MMS terminal (supporting only H.263 profile 0) can detect all H.263 profile 0 bitstreams (as such a bitstream could be embedded in an MPEG-4 visual short header stream). |

| | | |
|---|---|---|
| ***Clauses affected:*** | ⌘ | 4.7 |
| ***Other specs affected:*** | ⌘ | Y N<br>[ ] N Other core specifications<br>[ ] N Test specifications<br>[ ] N O&M Specifications |
| ***Other comments:*** | ⌘ | |

**How to create CRs using this form:**
Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm.
Below is a brief summary:

1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

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3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

## 4.7 Video

For terminals supporting media type video, ITU-T Recommendation H.263 [10] profile 0 level 10 shall be supported. This is the mandatory video codec for the MMS. In addition, MMS should support:

- H.263 [11] Profile 3 Level 10;
- MPEG-4 Visual Simple Profile Level 0, [12] and [13].

These two video codecs are optional to implement.

An optional video buffer model is given in annex G document [14].

NOTE: ~~ITU-T Recommendation H.263 [10] baseline has been mandated to ensure that video-enabled MMS support a minimum baseline video capability and interoperability can be guaranteed (an H.263 baseline bitstream can be decoded by both H.263 and MPEG-4 decoders). It also provides a simple upgrade path for mandating more advanced codecs in the future (from both the ITU-T and ISO MPEG).~~ ITU-T Recommendation H.263 profile 0 has been mandated to ensure that video-enabled MMS supports a minimum baseline video capability. Both H.263 and MPEG-4 visual decoders can decode an H.263 profile 0 bitstream. It is strongly recommended, though, that an H.263 profile 0 bitstream is transported and stored as H.263 and not as MPEG-4 visual (short header), as MPEG-4 visual is not mandated by MMS.

**3GPP TSG-SA4 Meeting #23**
**Montreal, Canada, 30 September–4 October 2002**

***Tdoc ⌘S4-020609***

*CR-Form-v7*

# CHANGE REQUEST

⌘ **26.140** **CR** **003** ⌘ **rev** **1** ⌘ Current version: **5.1.0** ⌘

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

***Proposed change affects:*** UICC apps⌘ ☐ ME ☒ Radio Access Network ☐ Core Network ☐

| | | |
|---|---|---|
| ***Title:*** | ⌘ | File format name change from MP4 to 3GP |
| ***Source:*** | ⌘ | TSG SA WG4 |
| ***Work item code:*** | ⌘ | MMS |
| ***Date:*** | ⌘ | 10/12/2002 |
| ***Category:*** | ⌘ | **F** |
| ***Release:*** | ⌘ | Rel-5 |

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| *R99* | *(Release 1999)* |
| *Rel-4* | *(Release 4)* |
| *Rel-5* | *(Release 5)* |
| *Rel-6* | *(Release 6)* |

| | | |
|---|---|---|
| ***Reason for change:*** | ⌘ | MPEG has recently reorganized the file format specification upon which the 3GPP file format (3GP) is based. In particular, the file format structure (ISO base media file format) has been separated from the conformance of the MPEG-4 file format (MP4).<br>This reorganization has been made in order to accommodate 3GPP. This is also reflected in a joint CR for TS 26.234, which proposes that 26.234 defines the conformance for 3GP based on ISO and not MP4. |
| ***Summary of change:*** | ⌘ | The reference to the file format structure has been updated and the 3GPP file format is now consistently referred to as 3GP (and not MP4). |
| ***Consequences if not approved:*** | ⌘ | If this CR is not approved, we will refer to an outdated version of the MPEG-4 file format specification addressing both file format structure and MP4 conformance. This has already generated confusion, since it makes 3GP appear as a derivate of MP4, which is not the case. 3GP is a derivate of the ISO base media file format and not of MP4. |

| | | | | | |
|---|---|---|---|---|---|
| ***Clauses affected:*** | ⌘ | 3.2, 4.9 | | | |
| ***Other specs affected:*** | ⌘ | **Y** / **N** | Other core specifications | ⌘ | CR TS 26.234 041 |
| | | **N** | Test specifications | | |
| | | **N** | O&M Specifications | | |
| ***Other comments:*** | ⌘ | | | | |

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## 3.2 Abbreviations

For the purposes of the present document, the abbreviations given in 3GPP TR 21.905 [1] and the following apply:

| | |
|---|---|
| 3GP | 3GPP file format |
| AAC | Advanced Audio Coding |
| CC/PP | Composite Capability/Preference Profiles |
| GIF | Graphics Interchange Format |
| H.263 | ITU-T video codec |
| ITU-T | International Telecommunications Union - Telecommunications |
| JFIF | JPEG File Interchange Format |
| JPEG | Joint Picture Expert Group |
| MIDI | Musical Instrument Digital Interface |
| MIME | Multipurpose Internet Mail Extensions |
| MM | Multimedia Message |
| MMS | Multimedia Messaging Service |
| MPEG | Motion Picture Expert Group |
| MP4 | MPEG-4 file format |
| PSS | Packet-switched Streaming Service |
| SP-MIDI | Scalable Polyphony MIDI |
| SVG | Scalable Vector Graphics |
| UTF-8 | Unicode Transformation Format (the 8-bit form) |

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## 4.9 File Format for dynamic media

~~NOTE 1: The file format used in the present document for timed multimedia (such as video, associated audio and timed text) is structurally based on the MP4 file format as defined in [14]. However, since non ISO codecs are used here, it is called the 3GPP file format and has its own file extension and MIME type to distinguish these files from MPEG-4 files. When the present document refers to the MP4 file format, it is referring to its structure (ISO file format), not to its conformance definition.~~The 3GPP file format (3GP), used in this specification for timed multimedia (such as video, associated audio and timed text), is structurally based on the ISO base media file format. The conformance statement for 3GP files is defined in [14] by addressing the registration of codecs, file identification, file extension and MIME type definition.

To ensure interoperability for the transport of video and associated speech/audio and timed text in an MM, the ~~MP4~~ 3GPP file format shall be supported.

The usage of the ~~MP4~~ 3GPP file format shall follow the technical specifications and the implementation guidelines specified in TS 26.234 [14].

NOTE 2: When using speech media type alone, AMR or AMR-WB data is stored according to the file format specified in [32].

~~NOTE 3: 3GPP TS 26.234 [14] specifies a mechanism for the registration of AMR and H.263 codestreams to be included in MP4 files.~~