

**INTERNATIONAL ORGANISATION FOR STANDARDISATION  
ORGANISATION INTERNATIONALE DE NORMALISATION  
ISO/IEC JTC 1/SC 29/WG 11  
CODING OF MOVING PICTURES AND AUDIO**

**ISO/IEC JTC 1/SC 29/WG 11 N12254**

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**Source: Leonardo Chiariglione**  
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**Status**

**Resolutions of 98<sup>th</sup> meeting**

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## 1 Reports

### 1.1 Meeting reports

#### 1.1.1 WG11 approves

No.	Title	TBP	Available
	<i>Meeting report</i>		
12058	Report of the 97 <sup>th</sup> meeting	N	11/12/02
	Verbal reports from the Requirements, Systems, Video, Audio, 3DG, and HoD subgroups made at this meeting	N	11/12/02

## 2 Resolutions related to MPEG-2

### 2.1 Part 1 Systems

#### 2.1.1 The Systems subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>13818-1 – Systems</i>		
12261	List of errata items of ISO/IEC 13818-1:2007	No	11/12/02
12262	DoC on ISO/IEC 13818-1:2007/PDAM 8 Extensions for simplified carriage of MPEG-4 over MPEG-2	No	11/12/02
12263	Text of ISO/IEC 13818-1:2007/DAM 8 Extensions for simplified carriage of MPEG-4 over MPEG-2	No	11/12/16
12264	Request of ISO/IEC 13818-1:2007/AMD 9 DASH support, MIME Type & MVC View signalling for stereoscopic video	No	11/12/02
12265	Text of ISO/IEC 13818-1:2007/PDAM 9 DASH support, MIME Type & MVC view signalling for stereoscopic video	Yes	11/12/02

2.1.2 The Systems subgroup thanks the National Bodies of France and Germany for their valuable comments on ISO/IEC 13818-1:2007/PDAM 8.

### 2.2 Part 2 Video

#### 2.2.1 The video subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>13818-2 – Video</i>		
12357	Disposition of Comments on ISO/IEC 13818-2:2000/DAM 4 Frame Packing Arrangement Signalling	N	11/12/02
12358	Text of ISO/IEC FDIS 13818-2:201X (3 <sup>rd</sup> edition)	N	12/01/15
12359	Request for ISO/IEC 13818-2:201X/Amd.1	N	11/12/02
12360	Text of ISO/IEC 13818-2:201X/PDAM1 Frame Packing Arrangement Signalling for Quincunx Pattern	N	11/12/02

2.2.2 The video subgroup thanks the NB of Canada for the valuable comment on ISO/IEC 13818-2:2000/DAM 4. Instead of including the suggested method of frame packing arrangement signalling without thorough analysis at this very late stage, it was decided to start a new amendment for this purpose.

2.2.3 The video subgroup thanks the NBs of US and Japan for the comments in M21542 and M22731. It is expected that the action taken in the context of this MPEG-2 amendment resolves the concerns.

2.2.4 The video subgroup has decided to start integration of Amd.4 to a new edition of ISO/IEC 13818-2 immediately, such that ISO/IEC FDIS 13818-2:201X should be balloted instead of ISO/IEC 13818-2:2000/FDAM 4. The video subgroup recommends appointing Sam Narasimhan, Gary Sullivan and Teruhiko Suzuki as editors of ISO/IEC 13818-2:201X.

### 2.3 Part 4 Conformance testing

2.3.1 The video subgroup recommends approval of the following document

No.	Title	TBP	Available
	<i>13818-4 – Conformance testing</i>		
12326	Text of ISO/IEC 13818-4:2004/Cor.3	N	11/12/16

## 3 Resolutions related to MPEG-4

### 3.1 Part 4 Conformance testing

3.1.1 The video subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>14496-4 – Conformance testing</i>		
12361	Text of ISO/IEC 14496-4:2004/Amd.9:2006/DCOR2	N	11/12/09
12362	Text of ISO/IEC 14496-4:2004/Amd.38:2010/DCOR1	N	11/12/09

3.1.2 The video subgroup recommends appointing Teruhiko Suzuki as editor of ISO/IEC 14496-4:2004/Amd.9:2006/Cor.2.

3.1.3 The video subgroup recommends appointing Anthony Vetro as editor of ISO/IEC 14496-4:2004/Amd.38:2010/Cor.1.

### 3.2 Part 5 Reference Software

3.2.1 The Audio group recommends approval of the following documents

No.	Title	TBP	Available
	<i>14496-5 – Reference Software</i>		
12403	ISO/IEC 14496-5:2001/AMD 10:2007/DCOR 6, SLS Corrections	No	11/12/02

3.2.2 The 3DG subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>14496-5 – Reference Software</i>		
12417	Request for Amendment of ISO/IEC 14496-5	No	11/12/02
12418	WD for Amd. 32 of ISO/IEC 14496-5:2001	No	11/12/02

### 3.3 Part 10 Advanced Video Coding

3.3.1 The video subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>14496-10 – Advanced Video Coding</i>		
12363	Text of ISO/IEC IS 14496-10:201X (7 <sup>th</sup> edition)	N	12/01/31
12364	Working Draft of ISO/IEC 14496-10:201X/Amd.1 SEI messages	N	11/12/02

3.3.2 The video subgroup thanks the NBs for issuing only positive votes on ISO/IEC 14496-10:2010/DAM1, such that the new edition can be started immediately.

3.3.3 The video subgroup thanks the USNB for the comment on stereo formats in M21542. We agree that observing the impact on legacy devices and services must be one of the highest concerns in our decisions.

### 3.4 Part 11 Scene Description and Application Engine

3.4.1 The Systems subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>14496-11 – Scene Description and Application Engine</i>		
12266	Technologies under Consideration for use of BIFS in Collaborative Application	No	11/12/02

### 3.5 Part 12 ISO Base Media File Format

3.5.1 The Systems subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>14496-12 – ISO Base Media File Format</i>		
12267	DoC on ISO/IEC 14496-12:2008/FPDAM 2.2 Support for sub-track selection & switching, post-decoder requirements, and color information	No	11/12/02
12268	Text of ISO/IEC 14496-12:2008/FDAM 2 Support for sub-track selection & switching, post-decoder requirements, and color information	No	11/12/02
12269	DoC on ISO/IEC 14496-12:2008/PDAM 4 Various enhancements including support for large metadata	No	11/12/02
12270	Text of ISO/IEC 14496-12:2008/DAM 4 Various enhancements including support for large metadata	No	11/12/16
12342	Text of ISO/IEC 14496-12:2008/DCOR 5	No	11/12/09

3.5.2 The Systems subgroup thanks the National Bodies of Finland, France, Germany, Japan, Korea and UK for their valuable comments on ISO/IEC 14496-12:2008/FPDAM 2.2.

3.5.3 The Systems subgroup thanks the National Bodies of Finland, France, Japan, UK and USA for their valuable comments on ISO/IEC 14496-12:2008/FPDAM 4.

3.5.4 The Systems subgroup recommends changing the title of ISO/IEC 14496-12:2008/AMD 4 to “Various enhancements including support for large metadata.”

### 3.6 Part 15 AVC File Format

3.6.1 The Systems subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>14496-15 – AVC File Format</i>		
12343	Text of ISO/IEC 14496-15:2010/DCOR 2	No	11/12/09

### 3.7 Part 16 Animation Framework eXtension (AFX)

#### 3.7.1 The 3DG subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>14496-16 – Animation Framework eXtension (AFX)</i>		
12419	Core Experiments Description of AFX	No	11/12/02

### 3.8 Part 24 Audio and Systems Interaction

#### 3.8.1 The Audio group recommends approval of the following documents

No.	Title	TBP	Available
	<i>14496-24 – Audio and Systems Interaction</i>		
12404	WD 2 on ISO/IEC 14496-24:2007/AMD 1 - Audio Systems Interaction	No	11/12/16

### 3.9 Part 26 Audio Conformance

No.	Title	TBP	Available
	<i>14496-26 – Audio Conformance</i>		
12405	ISO/IEC 14496-26:2010/DCOR 5, SLS Corrections	No	11/12/02

### 3.10 Part 27 3DG Conformance

#### 3.10.1 The 3DG subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>14496-27 – 3DG Conformance</i>		
12420	Request for Amendment of ISO/IEC 14496-27	No	11/12/02
12421	WD for Amd. 5 of ISO/IEC 14496-27:2009 Conformance for multiresolution 3D mesh coding	No	11/12/31

### 3.11 Part 29 Web Video Coding

3.11.1 The Requirements and Video subgroups thank Apple, Cisco, Fraunhofer HHI, Magnum Semiconductor, Polycom, and RIM for their response to the CfP on Internet Video Coding.

3.11.2 The Requirements subgroup recommends that proponents of technology for Web Video Coding further improve the support for their proposal in order to meet market needs as identified in the IVC CfP.

#### 3.11.3 The video subgroup recommends to approve of the following documents

No.	Title	TBP	Available
	<i>14496-29 – Web Video Coding</i>		
12365	Request for subdivision: ISO/IEC 14496-29	N	11/12/02
12366	Working Draft of ISO/IEC 14496-29 Web Video Coding	Y	11/12/19

3.11.4 The availability of N12366 and its publication may be delayed if the Video chairs consider the working draft not sufficiently mature.

## 4 Resolutions related to MPEG-7

### 4.1 Part 3 Visual

#### 4.1.1 The video subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>15938-3 – Visual</i>		
12367	Test Model under Consideration: Compact Descriptions for Visual Search	N	12/01/02
12368	Test Plan and Experiments on Compact Descriptions for Visual Search	N	11/12/02
12433	MPEG-7 Experimentation Model (XM) v41	N	11/12/23

4.1.2 The video subgroup understands that the software implementation of N12367 will be transferred to the MPEG SVN after the 99<sup>th</sup> MPEG meeting.

4.1.3 The video subgroup thanks STMicroelectronics for supplying a suitable IT system as a platform for the cross-checks and exchange of data and results among the CDVS experts.

4.1.4 The video subgroup thanks the following companies and organizations for submissions to the CfP on Compact Descriptors for Visual Search: Aptina, ETRI, Huawei, NEC, Nokia, Northwestern University, Peking University, Samsung, Stanford University, Telecom Italia.

## 4.2 Part 5 Multimedia Description Schemes

4.2.1 The Systems subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>15938-5 – Multimedia Description Schemes</i>		
12271	Draft request for ISO/IEC 15938-5 AMD 4 Social Metadata	No	11/12/02
12272	Draft text of ISO/IEC 15938-5 FDAM 4 Social Metadata	No	11/12/02

## 4.3 Part 9 Profiles

4.3.1 The Requirements subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>15938-9 – Profiles</i>		
12397	Text of ISO/IEC 15938-9:2005/FDAM1	Y	11/12/02
12435	DoC of ISO/IEC 15938-9:2005/DAM1 AVDP Profile	Y	11/12/02

4.3.2 The Requirements subgroup thanks the National Body of Japan for its comments on ISO/IEC 15938-9:2005/DAM1.

## 4.4 Part 12 Query Format

4.4.1 The Systems subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>15938-12 – MPEG-7 Query Format</i>		
12273	DoC on ISO/IEC 15938-12:2008/PDAM 3 Conformance and Reference Software for Semantic Enhancement	No	11/12/02
12274	Text of ISO/IEC DIS 15938-12:201x 2nd edition	No	11/12/16
12275	Draft of ISO/IEC 15938-12:2008/DCOR 3	No	11/12/02

4.4.2 The Systems subgroup thanks the National Body of UK for their valuable comments on ISO/IEC 15938-12:2008/PDAM 3.

## 5 Resolutions related to MPEG-21

### 5.1 Part 3 Digital Item Identification

#### 5.1.1 The Systems subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>21000-3 – Digital Item Identification</i>		
12276	Request of ISO/IEC 21000-3:2003/Amd.2 Relationship description	No	11/12/02
12277	Text of ISO/IEC 21000-3:2003/PDAM 2 Relationship description	No	11/12/22

### 5.2 Part 4 IPMP Components

#### 5.2.1 The Systems subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>21000-4 – IPMP Components</i>		
12278	Text of ISO/IEC 21000-4:2006/COR 1	No	11/12/02

### 5.3 Part 20 Contract Expression Language

#### 5.3.1 The Systems subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>21000-20 – Contract Expression Language</i>		
12279	Draft DoC on ISO/IEC CD 21000-20 Contract Expression Language	No	11/12/02
12280	Study of ISO/IEC CD 21000-20 Contract Expression Language	No	11/12/02

#### 5.3.2 The Systems subgroup thanks the National Bodies of Japan, Spain and US for their valuable comments on ISO/IEC CD 21000-20.

## 6 Resolutions related to MPEG-A

### 6.1 Part 6 Professional Archival Application Format

#### 6.1.1 The Systems subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>23000-6 – Professional Archival MAF</i>		
12281	DoC on ISO/IEC 23000-6:2009/PDAM 2 Support of larger number of files	No	11/12/02
12282	Text of ISO/IEC DIS 23000-6 2nd edition	No	12/01/02

#### 6.1.2 The Systems subgroup thanks the National Bodies of Japan and USA for their valuable comments on ISO/IEC 23000-6:2009/PDAM 2.

### 6.2 Part 9 Digital Multimedia Broadcasting Application Format

#### 6.2.1 The Systems subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>23000-9 – Digital Multimedia Broadcasting Application Format</i>		
12283	Text of ISO/IEC 23000-9:2008/Amd.1:2010/COR.2	No	11/12/02

### 6.3 Part 10 Surveillance Application Format

#### 6.3.1 The Systems subgroup recommends approval of the following documents



No.	Title	TBP	Available
	<i>23000-10 – Video Surveillance Application Format</i>		
12284	DoC on ISO/IEC CD 23000-10 2nd edition Surveillance Application Format	No	11/12/02
12285	Draft Text of ISO/IEC DIS 23000-10 2nd edition Surveillance Application Format	No	11/12/02

6.3.2 The Systems subgroup thanks the National Bodies of France, Germany and USA for their valuable comments on ISO/IEC CD 23000-10 2nd edition.

## 6.4 Part 11 Stereoscopic Video Application Format

6.4.1 The Systems subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>23000-11 –Stereoscopic Video Application Format</i>		
12326	WD of ISO/IEC 23000-11:2009/AMD 3 DASH support	No	11/12/02

## 6.5 Part 13 Augmented Reality Application Format

6.5.1 The Requirements and 3DG subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>23000-13 – Augmented Reality Application Format</i>		
12423	Draft Requirements for Augmented Reality Application Format	Yes	11/12/31
12424	Use cases for Augmented Reality Application Format	Yes	11/12/31

6.5.2 The 3DG subgroup recommends approval of the following document

No.	Title	TBP	Available
	<i>23000-13 – Augmented Reality Application Format</i>		
12422	Request for subdivision of ISO/IEC 23000 (MPEG A): Part 13, Augmented reality application format	No	11/12/02
12425	WD of Augmented Reality Application Format	Yes	11/12/31

## 7 Resolutions related to MPEG-B

### 7.1 Part 4 Codec Configuration Representation

7.1.1 The video subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>23001-4 – Codec Configuration Representation</i>		
12369	Request for ISO/IEC 23001-4:201X/Amd.1	N	11/12/02
12370	Text of ISO/IEC 23001-4:201X/PDAM1 CAL Language Extensions	N	11/12/16
12371	Description of core experiments in RMC	N	11/12/02

### 7.2 Part 7 Common Encryption for ISO Base Media File Format Files

7.2.1 The Systems subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>23001-7 – Common Encryption for ISO Base Media File Format Files</i>		
12286	DoC on ISO/IEC 23001-7/PDAM 1 AES-CBC-128 and key rotation	No	11/12/02

12287	Text of ISO/IEC 23001-7/DAM 1 AES-CBC-128 and key rotation	No	11/12/09
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7.2.2 The Systems subgroup thanks the National Bodies of Germany, Japan and UK for their valuable comments on ISO/IEC 23001-7/PDAM 1.

## 8 Resolutions related to MPEG-C

8.1.1 The Video subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>23002-4 – Media Tool Library</i>		
12432	Text of ISO/IEC 23002-4 Amd. 2 Functional Units for AVC Progressive High Profile	No	11/12/16

8.1.2 The 3DG subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>23002-4 – Media Tool Library</i>		
12426	WD of ISO/IEC 23002-4 Amd. 3 Graphics Tool Library for Reconfigurable Multimedia Coding Framework	No	11/12/31

## 9 Resolutions related to MPEG-D

### 9.1 Part 1 MPEG Surround

9.1.1 The Audio subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>23003-1 – MPEG Surround</i>		
12406	Defect Report on ISO/IEC 23003-1:2007, MPEG Surround	No	11/12/02
12407	Defect Report on ISO/IEC 23003-1:2007/AMD 1:2008/ MPEG Surround Conformance	No	11/12/02
12408	Defect Report on ISO/IEC 23003-1:2007/AMD 2:2008/ MPEG Surround Reference Software	No	12/1/27

### 9.2 Part 2 Spatial Audio Object Coding

9.2.1 The Audio subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>23003-2 – SAOC</i>		
12409	Defect Report on ISO/IEC 23003-2:2010, SAOC	No	11/12/02

### 9.3 Part 3 Unified Speech and Audio Coding

9.3.1 The Audio group recommends approval of the following documents

No.	Title	TBP	Available
	<i>23003-3 – Unified Speech and Audio Coding</i>		
12410	WD on ISO/IEC 23003-3/AMD 1, Unified Speech and Audio Coding Conformance	No	11/12/02
12411	WD on ISO/IEC 23003-3/AMD 2, Unified Speech and Audio Coding Reference Software	No	11/12/02

## 10 Resolutions related to MPEG-V

### 10.1 General

#### 10.1.1 The Systems subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>23005 – General</i>		
12313	Technologies under Consideration for MPEG-V on haptic nodes for MPEG-4 scene	No	12/01/02

### 10.2 Part 1 Architecture

#### 10.2.1 The Systems subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>23005-1 – Architecture</i>		
12314	Draft DoC on ISO/IEC CD 23005-1 2nd edition Architecture	No	11/12/02
12315	Study of ISO/IEC CD 23005-1 2nd edition Architecture	No	12/01/02

10.2.2 The Systems subgroup thanks the National Bodies of France, Japan and UK for their valuable comments on ISO/IEC CD 23005-1 2nd edition.

### 10.3 Part 2 Control Information

#### 10.3.1 The Systems subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>23005-2 – Control Information</i>		
12316	Draft DoC on ISO/IEC CD 23005-2 2nd edition Control Information	No	11/12/02
12317	Study of ISO/IEC CD 23005-2 2nd edition Control Information	No	12/01/02

10.3.2 The Systems subgroup thanks the National Bodies of France and Korea for their valuable comments on ISO/IEC CD 23005-2 2nd edition.

### 10.4 Part 3 Sensory Information

#### 10.4.1 The Systems subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>23005-3 – Sensory Information</i>		
12318	Draft DoC on ISO/IEC CD 23005-3 2nd edition Sensory Information	No	11/12/02
12319	Study of ISO/IEC CD 23005-3 2nd edition Sensory Information	No	12/01/02

10.4.2 The Systems subgroup thanks the National Bodies of France, Japan and Korea for their valuable comments on ISO/IEC CD 23005-3 2nd edition.

### 10.5 Part 4 Avatar Characteristics

#### 10.5.1 The Systems subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>23005-4 – Virtual World Object Characteristics</i>		
12320	Draft DoC on ISO/IEC CD 23005-4 2nd edition Virtual World Object Characteristics	No	11/12/02
12321	Study of ISO/IEC CD 23005-4 2nd edition Virtual World Object	No	12/01/02

	<b>Characteristics</b>		
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10.5.2 The Systems subgroup thanks the National Bodies of France and Korea for their valuable comments on ISO/IEC CD 23005-4 2nd edition.

## 10.6 Part 5 – Data Formats for Interaction Devices

10.6.1 The Systems subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>23005-5 – Data Formats for Interaction Devices</i>		
12322	Draft DoC on ISO/IEC CD 23005-5 2nd edition Data Formats for Interaction Device	No	11/12/02
12323	Study of ISO/IEC CD 23005-5 2nd edition Data Formats for Interaction Device	No	12/01/02
12344	Description of GPS related types in MPEG-V	No	11/12/02

10.6.2 The Systems subgroup thanks the National Bodies of Japan and Korea for their valuable comments on ISO/IEC CD 23005-5 2nd edition.

10.6.3 The Systems subgroup recommends appointment of Sang-Kyun Kim as an additional editor of ISO/IEC 23005-5 2nd edition.

## 10.7 Part 6 Common types and tools

10.7.1 The Systems subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>23005-6 – Common types and tools</i>		
12324	Draft DoC on ISO/IEC CD 23005-6 2nd edition Common Data Format	No	11/12/02
12325	Study of ISO/IEC CD 23005-6 2nd edition Common Data Format	No	12/01/02

10.7.2 The Systems subgroup thanks the National Bodies of Japan and Korea for their valuable comments on ISO/IEC CD 23005-6 2nd edition.

## 10.8 Part 7 Reference Software and Conformance

10.8.1 The Systems subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>23005-7 – Media context and control – Conformance Testing</i>		
12327	WD of ISO/IEC 23005-7 2nd edition Conformance and Reference Software	No	12/01/02

## 11 Resolutions related to MPEG-M

### 11.1 Part 1 Architecture and Technologies

11.1.1 The Systems subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>23006-1 – Architecture and Technologies</i>		
12289	Study of ISO/IEC DIS 23006-1 2nd edition Architecture	No	11/12/22

### 11.2 Part 2 Application Programming Interface

11.2.1 The Systems subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>23006-2 – Application Programming Interface</i>		
12291	Study of ISO/IEC CD 23006-2 2nd edition MXM API	No	11/12/22

### 11.3 Part 3 Reference Software and Conformance

11.3.1 The Systems subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>23006-3 – Reference Software and Conformance</i>		
12292	Request of ISO/IEC 23006-3 2nd edition Conformance and Reference Software	No	11/12/02
12293	Text of ISO/IEC CD 23006-3 2nd edition Conformance and Reference Software	No	11/12/22

11.3.2 The Systems subgroup recommends change of the title of ISO/IEC 23006-3 to “Conformance and Reference Software”

### 11.4 Part 4 Elementary Services

11.4.1 The Systems subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>23006-4 – Elementary Services</i>		
12294	Draft DoC on ISO/IEC DIS 23006-4 2nd edition Elementary services	No	11/12/02
12295	Study of ISO/IEC DIS 23006-4 2nd edition Elementary services	No	11/12/22

11.4.2 The Systems subgroup recommends appointment of Angelo Difino as an additional editor of ISO/IEC 23006-4 2nd edition.

### 11.5 Part 5 Service Aggregation

11.5.1 The Systems subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>23006-5 – Services Aggregation</i>		
12296	Draft DoC on ISO/IEC DIS 23006-5 2nd edition Service aggregation	No	11/12/02
12297	Draft text of ISO/IEC 2nd FDIS 23006-5 2nd edition Service aggregation	No	11/12/22

## 12 Resolutions related to MPEG-U

### 12.1 Part 2 Advanced User Interaction Interface

12.1.1 The Systems subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>23007-2 – Advanced User Interaction Interface</i>		
12298	Study of ISO/IEC DIS 23007-2 Advanced user interaction interface	No	11/12/22

## 13 Resolutions related to MPEG-H

### 13.1 General

#### 13.1.1 The Requirements subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>23008 – High Efficiency Coding and Media Delivery in Heterogeneous Environments</i>		
12299	Request for New Project		11/12/02
12312	Context and Objectives of MPEG-H		11/12/02

13.1.2 The Requirements subgroup recommends to organize a forum on the Wednesday afternoon of the 99<sup>th</sup> MPEG meeting to disseminate MPEG-H vision and to receive industry feedback on future challenges in audio and coded media delivery.

13.1.3 The Requirements subgroup recommends to make aware of the event the following organisations: DVB, Open IPTV Forum, ATSC, EBU, NAB, CEA.

### 13.2 Part 1 MPEG Media Transport

13.2.1 The Requirements subgroup recommends seeking clarification on the relationship, application areas and use cases for MMT and DASH and on gaps in the current DASH and MMT scope as well as extensions. Contributions should be submitted for discussion at the meeting of the ad hoc group on “DASH and MMT” meeting on the 5<sup>th</sup> of February 2012 in San Jose.

#### 13.2.2 The Systems subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>23008-1 – MPEG Media Transport</i>		
12334	Working Draft of MPEG Media Transport	No	11/12/22
12335	Technology under Considerations on MPEG Media Transport	No	11/12/02
12336	Description of Evaluation Experiments on MPEG Media Transport	No	11/12/02

### 13.3 Part 2 High Efficiency Video Coding

#### 13.3.1 The Requirements subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>23008-2 – High Efficiency Video Coding</i>		
12399	Draft use cases for the scalable enhancement of HEVC	N	11/12/02
12400	Draft requirements for the scalable enhancement of HEVC	N	11/12/02
12398	Draft Call for Proposals on the Scalable Video Coding Extensions of HEVC	N	11/12/02

13.3.2 The Requirements subgroup requests WG11 member companies to provide 3840x2160x60/50p, 1280x720x60/50p and 1920x1080x60/50p video sequences (including some containing sports related scenes).

#### 13.3.3 The Video subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>23008-2 – High Efficiency Video Coding</i>		
12345	High Efficiency Video Coding (HEVC) Test Model 5 (HM 5)	N	12/01/31

	Encoder Description		
12346	High Efficiency Video Coding (HEVC) text specification Working Draft 5	N	12/01/31

13.3.4 The video subgroup thanks the USNB for the valuable comments on HEVC development (M21544). Regarding entropy coding and bit-depth, the JCT-VC has taken decisions that would comply with your suggestions. It is further anticipated that a subjective assessment will be performed, with results available by the time of the 99<sup>th</sup> MPEG meeting in February 2012.

## 13.4 3D Audio

13.4.1 The Audio group recommends approval of the following documents

No.	Title	TBP	Available
	<i>Exploration – 3D Audio</i>		
12412	Thoughts on 3D Audio	No	11/12/02

## 14 MPEG-DASH

### 14.1 General

14.1.1 The Systems subgroup recommends appointing the MP4 Registration Authority as the DASH profiles Registration Authority as currently specified in ISO/IEC 23009-3 in order to help harmonization among industry.

### 14.2 Part 1 Media Presentation Description and Segment Formats

14.2.1 The Systems subgroup recommend that WG11 respectfully asks ITTF to make 23009-1 freely available on the ITTF website, since ISO/IEC 23009-1 and 3GPP TS26.247 specifications share identical technical content in their common parts, and since 3GPP provides its specifications free of charge to the public.

14.2.2 The Systems subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>23009-1 – Media Presentation Description and Segment Formats</i>		
12328	DoC on ISO/IEC 2nd DIS 23009-1 Media Presentation Description and Segment Formats	No	11/12/02
12329	Text of ISO/IEC IS 23009-1 Media Presentation Description and Segment Formats	No	11/12/16
12330	Technologies under Considerations	No	11/12/02

14.2.3 The Systems subgroup thanks the National Bodies of Austria, Finland, Germany, UK and US for their valuable comments on ISO/IEC 2nd DIS 23009-1.

### 14.3 Part 2 Conformance and Reference Software

14.3.1 The Systems subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>23009-2 – Conformance and Reference Software</i>		
12331	WD of ISO/IEC 23009-2 Conformance and reference software	No	11/12/02
12332	Work plan for development of Conformance and reference software for DASH	No	11/12/02

## 14.4 Part 3 Implementation Guidelines

### 14.4.1 The Systems subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>23009-3 – Implementation Guidelines</i>		
12333	WD of ISO/IEC 23009-3 Implementation Guidelines	No	11/12/02

## 15 Resolutions related to Explorations

### 15.1 3D Video Coding

#### 15.1.1 The video subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>Exploration – 3D Video Coding</i>		
12347	Report of Subjective Test Results from the Call for Proposals on 3D Video Coding	Y	11/12/16
12434	Standardization tracks considered in 3D Video Coding	N	11/12/02
12348	Overview of 3DV coding tools proposed in the CfP	N	11/12/16
12349	Test Model under Consideration for AVC based 3D video coding	N	11/12/02
12350	Test Model under Consideration for HEVC based 3D video coding	N	11/12/09
12351	WD of MVC extension for inclusion of depth maps	N	11/12/21
12352	Common test conditions for 3DV experimentation	N	11/12/02
12353	Description of Core experiments in AVC based 3D video coding	N	11/12/02
12354	Description of Core experiments in HEVC based 3D video coding	N	11/12/09

15.1.2 The video subgroup thanks the following companies and organizations for submissions to the CfP on 3D Video Coding: Disney Research Zürich, Ericsson, ETRI, Fraunhofer HHI, Gent University/IBBT, Kwangwoon University, LG Electronics, Mitsubishi Electric, Nagoya University, NICT, Nokia, NTT, Philips, Poznan University of Technology, Qualcomm Inc., RWTH Aachen University, Samsung, Sharp, Sony, Zhejiang University.

15.1.3 The video subgroup kindly requests National Bodies to comment by the 99th MPEG meeting on the possible standardisation tracks outlined in N12434 and express expectations about potential use.

15.1.4 The video subgroup thanks EPFL and Vittorio Baroncini for providing equipment that was used for subjective viewing in 3D video during the 98<sup>th</sup> MPEG meeting.

15.1.5 The video subgroup thanks Vittorio Baroncini for his extraordinary engagement in planning and conducting the subjective tests in the context of the CfP on 3D Video Coding.

15.1.6 The video subgroup thanks COST Action Qualinet and the 12 laboratories involved in 3DV evaluations (ACREO, Canadian Research Centre, École Polytechnique Fédérale de Lausanne, France Telecom – Orange, FUB-ISCOM, Norges Teknisk-Naturvitenskapelige Universitet, Queen Mary University of London, SISVEL, Technical University of British Columbia, University of Munich, University of Poitiers, Universidad Politécnica de Madrid, Yonsei University) for their efforts.

### 15.2 Codec Independent Media Description

#### 15.2.1 The Systems subgroup recommends approval of the following documents:



No.	Title	TBP	Available
	<i>Exploration – Codec Independent Media Description</i>		
12337	WD of codec independent media description	No	11/12/02

### 15.3 Internet Video Coding

15.3.1 The Requirements and Video subgroups thank HKUST, Peking University, Tsinghua University and Zhejiang University for their response to the CFP on Internet Video Coding.

15.3.2 The Video subgroup recommends approval of the following documents:

No.	Title	TBP	Available
	<i>Exploration – Internet Video Coding</i>		
12355	Internet Video Coding Test Model (ITM) v 1.0	N	11/12/16
12356	Description of Core Experiments in Internet Video Coding	N	11/12/10

15.3.3 The Requirements subgroup recommends that MPEG members make WG 11 aware of market developments in the space addressed by IVC.

### 15.4 Preservation

15.4.1 The Requirements subgroup recommends approval of the following documents:

No.	Title	TBP	Available
	<i>Exploration – Preservation</i>		
12401	Multimedia Preservation Description Information (MPDI) Requirements Document, Version 2	Y	11/12/02
12402	Call for Multimedia Preservation Description Information (MPDI) Requirements	Y	11/12/02

### 15.5 Scene Technology for Collaborative Applications

15.5.1 The Requirements subgroup recommends approval of the following documents:

No.	Title	TBP	Available
	<i>Exploration – Scene Technology for Collaborative Applications</i>		
12396	Call for Proposals for Scene Technologies for Collaborative Applications		11/12/02

## 15.6 User Description

15.6.1 The Systems subgroup invites MPEG members to participate in the ad hoc group (N12288) activities and provide contributions on this topic.

## 16 Management

### 16.1 Collaboration with ITU-T

16.1.1 ITU-T and ISO/IEC have been working together in the development of an epoch-marking video coding standard that will soon reach Committee Draft level in the ISO/IEC standard approval process. Because of the growing industry interest it is of the utmost importance that all parties concerned publicly reference the common standard with its agreed HEVC name in recognition of the common effort spent by ITU-T and ISO/IEC in the development of HEVC.

### 16.2 Terms of reference

16.2.1 WG11 recommends approval of the following document

No.	Title	TBP	Available
	<i>Terms of reference</i>		
11700	Terms of reference	Y	11/12/02

### 16.3 Liaisons

16.3.1 The Systems subgroup recommends approval of the following document

No.	Title	TBP	Available
	<i>Liaison Statements</i>		
12437	Liaison statement to 3GPP on Dynamic Adaptive Streaming over HTTP	No	11/12/02
12438	Liaison statement to OIPF on Dynamic Adaptive Streaming over HTTP	No	11/12/02
12439	Liaison statement to DTG on Dynamic Adaptive Streaming over HTTP	No	11/12/02
12440	Liaison statement template on DASH Specification	No	11/12/02
12441	Liaison statement to SC 6/WG 7 on MPEG Media Transport	No	11/12/02
12442	Liaison statement to SC 34/WG 2 on Font Format Activities	No	11/12/02
12443	Liaison statement to IEC TC 79 on Surveillance System	No	11/12/02
12444	Liaison statement to IEC TC 223 on Video Surveillance AF	No	11/12/02
12445	Liaison statement to IEC TC 100 on NP OIPF consumer Terminal Function and Network Interfaces for Access to IPTV and Open Internet Multimedia Services	No	11/12/02
12446	Liaison statement to IEC TC 100 on Encoding Guidelines for Portable Multimedia CE Products using MP4 File Format with AVC Video Codec and AAC Audio Codec	No	11/12/02
12447	Liaison statement to IEC TC 130 on eXtensible Metadata Platform	No	11/12/02
12448	Liaison statement template on codec independent media description	No	11/12/02
12449	Liaison statement template on GPS related sensors	No	11/12/02
12450	Liaison statement template on MPEG-2 MIME type	No	11/12/02

16.3.2 The Systems subgroup recommends sending liaison letters to DECE, DVB, EBU, HBBTV, SCTE, ATSC, W3C Web & TV IG, IETF CDNI, ATIS-IIF, IMTC PSS with the template provided in N12440

16.3.3 The Systems subgroup recommends sending liaison letters to IETF MMUSIC, ATSC, DVB, EBU, SCTE, SMPTE with the template provided in N12448

16.3.4 The Systems subgroup recommends sending liaison letters to Open Mobile Alliance, Open geospatial Consortium, W3C, Khronos Group, ISO TC 211 and ITU-T IOT-GSI with the template provided in N12449

16.3.5 The Systems subgroup recommends sending liaison letters to ATSC, DVB and SCTE with the template provided in N12450

16.3.6 The video subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>Liaison Statements</i>		
12372	Liaison statement to SCTE on 2D SEI message	N	11/12/02
12373	Liaison statement to DVB on MVC view signalling SEI message	N	11/12/02
12374	Liaison statement to ITU-R SG 6/WP 6C on HEVC	N	11/12/02
12375	Liaison statement to IEEE 3D on 3D Quality Assessment	N	11/12/02
12376	Liaison statement to Qualinet	N	11/12/02
12436	Liaison statement template on 3D Video Coding	N	11/12/02

16.3.7 The video subgroup suggests to send N12436 to 3GPP, 3D@Home, ARIB, ATSC, BDA, CableLabs, CEA, DVB, EBU, ITU-R SG6, ITU-R SG9, ITU-T SG16, IEC TC100, SMPTE, SCTE, TTA.

16.3.8 The Audio group recommends approval of the following documents

No.	Title	TBP	Available
	<i>Liaison Statements</i>		
12413	Response to Speech and Audio Coding Standardization	No	11/12/02
12414	Response to ITU-R Working Party 6C Concerning BS.1534	No	11/12/02
12415	Liaison Statement template on new MPEG standard suite and San Jose Event	No	11/12/02

16.3.9 WG11 recommends approval of the following document

No.	Title	TBP	Available
	<i>MPEG Liaisons</i>		
12311	List of Organisations with which MPEG entertains liaisons	Y	11/12/02

## 16.4 Ad hoc groups

16.4.1 WG11 approves the following document

No.	Title	TBP	Available
	<i>Ad hoc groups</i>		
12255	Ad hoc groups established at Geneva	Y	11/12/02

## 16.5 Asset management

16.5.1 WG11 recommends approval of the following document

No.	Title	TBP	Available
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	<i>Assets</i>		
12305	Schema assets	N	11/12/02
12306	Software assets	N	11/12/02
12307	Conformance assets	N	11/12/02
12308	Content assets	N	11/12/02
12309	URI assets	N	11/12/02

## 16.6 IPR management

### 16.6.1 WG11 recommends approval of the following documents

No.	Title	TBP	Available
	<i>IPR management</i>		
12310	Standards under development for which a call for patent statements is issued	Y	11/12/02

## 16.7 Work plan and time line

### 16.7.1 WG11 recommends approval of the following documents

No.	Title	TBP	Available
	<i>Work plan</i>		
12301	MPEG Standards	Y	11/12/02
12302	Table of unpublished FDISs	N	11/12/02
12303	Work plan and time line	Y	11/12/02

## 17 Administrative matters

### 17.1 Schedule of meetings

#### 17.1.1 WG11 adopts the following meeting schedule

#	City	Country	yy	mm	dd-dd
98	Geneva	CH	11	11-12	28-02
99	San Jose	US	12	02	06-10
100	Geneva	CH	12	04-05	30-04
101	Stockholm	SE	12	07	16-20
102	Shanghai	CN	12	10	15-19
103	Geneva	CH	13	01	21-25
104	Incheon	KR	13	04	22-26
105	Vienna	AT	13	07-08	29-02
106	Geneva	CH	13	10-11	28-01

### 17.2 Promotion

#### 17.2.1 The Systems subgroup recommends approval of the following documents

No.	Title	TBP	Available
	<i>Promotion</i>		
12338	Short descriptions	Yes	11/12/02
12339	White Paper on DASH	Yes	11/12/02
12340	Presentation Material on DASH	Yes	11/12/02
12341	MPEG-V Overview	Yes	11/12/22

## 17.3 Press release

### 17.3.1 WG11 recommends approval of the following document

No.	Title	TBP	Available
	<i>Press release</i>		
12258	Geneva press release	Y	10/10/22

## 18 Appreciation

### 18.1 Convenor's thanks

18.1.1 The Convenor would like to thank Yukiko Ogura, Pierrick Philippe and Anthony Vetro for their help in preparing the Friday plenary

### 18.2 Thanks to host

18.2.1 WG11 would like to thank Kenzler Conference Management and the team for their support to the 98<sup>th</sup> MPEG meeting

Margot  
Norbert  
Rudolf  
Silke  
Sonja  
Stefanie  
Svenja

Meeting closed at 2011/12/02T20:30