

**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 **N2112**

March 1998

**Source:** Leonardo Chiariglione – Convenor  
**Title:** Resolutions of 43rd WG 11 meeting  
**Status:**

**1 WG11 approves the reports from the Requirements, Delivery, Systems, Video, Audio, SNHC, Test, Implementation, Liaison and HoD.**

**2 Subgroup recommendations**

**2.1 The Requirements group recommends**

**2.1.1 to approve the following documents :**

<b>Title</b>	<b>No.</b>
<b>Advanced Layered Coding Applications and Requirements</b>	<b>N2193</b>
<b>MPEG-4 Requirements Document</b>	<b>N2194</b>
<b>MPEG-4 Applications Document</b>	<b>N2195</b>
<b>MPEG-4 Version 1 Overview</b>	<b>N2196</b>
<b>MPEG-4 Version 2 Overview</b>	<b>N2197</b>
<b>Overview of MPEG-4 Profile and Level definitions</b>	<b>N2226</b>
<b>The Why and How of IP Management and Protection in MPEG-4</b>	<b>N2198</b>
<b>MPEG-4 Profiling Policy</b>	<b>N2199</b>
<b>MPEG-4 Version Management Procedures</b>	<b>N2200</b>
<b>MPEG-7 Context and Objectives</b>	<b>N2207</b>
<b>MPEG-7 Requirements Document</b>	<b>N2208</b>
<b>MPEG-7 Applications Document</b>	<b>N2209</b>
<b>MPEG-7 Draft Proposal Package Description</b>	<b>N2214</b>
<b>MPEG-7 Second draft of Evaluation Process Document</b>	<b>N2217</b>
<b>MPEG-7 Advance Call for Proposals</b>	<b>N2218</b>
<b>MPEG-7 Call for Test and Evaluation Material</b>	<b>N2219</b>
<b>Delta to CD of 14496-1 (MPEG-4 Systems)</b>	<b>N2188</b>
<b>Delta to CD of 14496-2 (MPEG-4 Visual)</b>	<b>N2171</b>
<b>Delta to CD of 14496-3 (MPEG-4 Audio)</b>	<b>N2247</b>
<b>Disposition of Comments Report on CD 14496-1 (Systems)</b>	<b>N2118</b>
<b>Disposition of Comments Report on CD 14496-2 (Visual)</b>	<b>N2119</b>
<b>Disposition of Comments Report on CD 14496-3 (Audio)</b>	<b>N2120</b>
<b>Disposition of Comments Report on CD 14496-6 (DMIF)</b>	<b>N2122</b>

<b>FCD of 14496-1 (MPEG-4 Systems)</b>	<b>N2201</b>
<b>FCD of 14496-2 (MPEG-4 Visual)</b>	<b>N2202</b>
<b>FCD of 14496-3 (MPEG-4 Audio)</b>	<b>N2203</b>

**2.1.2** to ask NB's to provide input related to splice delay parameters for 4:2:2 @ High Level.

**2.1.3** to ask NB to comment on the PDAM N2125 (4:2:2 Profile @ High Level) with respect to the desirability to replace the maximum horizontal and vertical picture size with a maximum number of pixels, given that the maximum number of pixels per second is already specified.

**2.1.4** that National Bodies are requested to comment on the need for extending MPEG-2 4:2:2 Profile to Very High Level needing resolutions higher than High Level, for example 1920 x 1080 at 60 fps progressive scan or 2048 x 2048 at 24 fps, etc., considering that 4:2:2 Profile supports both 4:2:2 and 4:2:0 formats.

**2.1.5** that National Bodies comment on the desirability of adding the Simple Facial Animation Object Profile to the Main and Core Combination Profiles, given the fact that it is not possible to predict the appearance of the decoded face(s).

**2.1.6** to establish the following AdHoc Groups :

<b>Title</b>	<b>Chair(s)</b>	<b>No.</b>	<b>Meeting</b>
<b>AHG on MPEG-4 Profiles and Levels</b>	<b>Rob Koenen</b>	<b>N2190</b>	<b>No</b>
<b>AHG on MPEG-7 Requirements</b>	<b>Ibrahim Sezan et. al.</b>	<b>N2192</b>	<b>no</b>
<b>AHG on MPEG-7 Test and Evaluation Methods</b>	<b>Sylvie Jeannin et. al.</b>	<b>N2189</b>	<b>3-5 June 3-5 July</b>
<b>AHG on Normative Composition</b>	<b>Graham Thomas et al.</b>	<b>N2191</b>	<b>5 July</b>

**2.1.7** to make publicly available the following documents :

<b>Title</b>	<b>No.</b>
<b>MPEG-4 Requirements Document</b>	<b>N2194</b>
<b>MPEG-4 Applications Document</b>	<b>N2195</b>
<b>MPEG-4 Version 1 Overview</b>	<b>N2196</b>
<b>MPEG-4 Version 2 Overview</b>	<b>N2197</b>
<b>MPEG-7 Context and Objectives</b>	<b>N2207</b>
<b>MPEG-7 Requirements Document</b>	<b>N2208</b>
<b>MPEG-7 Applications Document</b>	<b>N2209</b>
<b>MPEG-7 Draft Proposal Package Description</b>	<b>N2212</b>
<b>MPEG-7 Call for Test and Evaluation Material</b>	<b>N2219</b>
<b>MPEG-7 Advance Call for Proposals</b>	<b>N2218</b>

## **2.2 The Delivery group recommends**

**2.2.1** to approve the following documents:

<b>Title</b>	<b>No.</b>
<b>Disposition of Comments Report on CD 14496-6 DMIF</b>	<b>N2122</b>
<b>Text of FCD 14496-6 DMIF</b>	<b>N2206</b>
<b>Changes to WD 14496-4 for DMIF</b>	<b>N2225</b>
<b>Text of FCD 13818-10 DSMCC Conformance</b>	<b>N2210</b>

<b>Disposition of Comments Report on CD 13818-10 DSMCC Conformance</b>	<b>N2123</b>
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**2.2.2 to approve the following AdHoc Group:**

<b>Title</b>	<b>No.</b>	<b>Meeting</b>
<b>AHG on Mobile Network Connections</b>	<b>N2124</b>	<b>4-5 July</b>

**2.2.3 to make public the following documents:**

<b>Title</b>	<b>No.</b>
<b>Text of FCD 14496-6 DMIF</b>	<b>N2206</b>
<b>DMIF FAQ</b>	<b>N2060</b>
<b>Text of FCD 13818-10 DSMCC Conformance</b>	<b>N2210</b>

## **2.3 The Systems group recommends**

**2.3.1 the approval of the following documents:**

<b>Title</b>	<b>No.</b>
<b>Text of FCD 14496-1</b>	<b>N2201</b>
<b>Disposition of Comments Report on CD 14496-1</b>	<b>N2218</b>
<b>Description of changes to CD 14496-1 to FCD</b>	<b>N2188</b>
<b>Status of the Systems Version 1 Software Implementation</b>	<b>N2220</b>
<b>Systems Software Implementation Workplan</b>	<b>N2221</b>
<b>Systems Software Player and Samples</b>	<b>N2222</b>
<b>Systems FAQ</b>	<b>N2223</b>
<b>MPEG-4 Systems Version 2 WD 2.0</b>	<b>N2211</b>
<b>MPEG-4 Systems Version 2 VM 2.0</b>	<b>N2224</b>

**2.3.2 that the Systems AHG on Im1 will publish the Status of the Im1 software at the date of 15<sup>th</sup> of May. This information shall be made available to the National Bodies for the balloting on the Systems part of the FCD.**

**2.3.3 that the Systems FCD editors will enhance the FCD in terms of overall edition and integration and will be given freedom to make editing choice such as language fixes, organization of the document, ... and to provide informative clarification to the normative text such as figures, tables, ...**

**2.3.4 that the Systems FCD editors will publish the Text of FCD 14496-1 not later than the 15<sup>th</sup> of May.**

**2.3.5 given that the Systems sub-group published a set of APIs for the MPEG Player platform (Im1) within which Version 1 tools developed by other MPEG-4 sub-groups can be integrated (plug-in interfaces), the Systems sub-group expects to receive from other MPEG-4 sub-groups more effective pluggable decoders in order to achieve a full implementation of an MPEG-4 browser and to progress in making demonstrations of MPEG-4 capabilities.**

**2.3.6 that the different parts of the MPEG-4 Version 2 WD and VM will be integrated within one weeks after the Tokyo meeting.**

**2.3.7 to establish the following AdHoc Groups:**

Title	Chair(s)	No.
AHG on Systems Specifications Editing	Eleftheriadis & al.	N2236
AHG on Elementary Streams Management	Herpel & al.	N2237
AHG on Systems and DMIF Specification Evolution	Franceschini & al.	N2238
AHG on Systems Conformance	Dufourd & al.	N2239
AHG on Advanced BIFS	Signes & al.	N2240
AHG on MPEG-J Specification and Implementation	Fernando & al.	N2241
AHG on M4F	Dave Pawson	N2242
AHG on Intellectual Property Management & Protection within MPEG-4	Niels Rump	N2243
AHG on IM 1 Software Platform	Lifshitz & al.	N2244

2.3.8 to make publicly available the following documents:

Title	No.
Text of FCD 14496-1 MPEG-4 Version 1 Systems	N2201
Systems FAQ	N2223

## 2.4 The Video group recommends

2.4.1 approval of the following documents :

Title	No.
PDAM of 4:2:2 P@HL	2125
Disposition of National Body Comments to CD ballot on ISO/IEC 14496-2	N2119
Text of FCD 14496-2	N2202
Description of changes to ISO/IEC 14496-2 CD to FCD	N2171
Text of ISO/IEC 14496-2 video verification model V.11.0	N2172
Text of ISO/IEC 14496-2 visual working draft Version 2 Rev. 3.0	N2212
Description of core experiments on shape coding in MPEG-4 video	N2173
Description of core experiments on region-oriented texture coding in MPEG-4 video	N2174
Description of core experiments on error resilience in MPEG-4 video	N2175
Description of core experiments on multifunctional and advanced layered coding aspects in MPEG-4 video	N2176
Description of core experiments on coding efficiency in MPEG-4 video	N2177
Results of the 2nd Pre-Evaluation of Content-Based Coding Verification Test	N2166
Preliminary Specification of Test Conditions for Video Scalability Verification Tests	N2177
Specification of formal Verification Test on Video Error Resilience	N2165
WD 3.0 of MPEG-4 Conformance Testing	N2204

2.4.2 to establish the following AdHoc Groups :

Title	No.	Meeting
AHG on core experiments on coding of arbitrarily shaped objects in MPEG-4 video (Ostermann)	N2178	5 July

<b>AHG on core experiments on error resilience in MPEG-4 video (Frater)</b>	<b>N2179</b>	<b>5 July</b>
<b>AHG on core experiments on multifunctional and advanced layered coding in MPEG-4 video (Ohm)</b>	<b>N2180</b>	<b>5 July</b>
<b>AHG on core experiments on coding efficiency in MPEG-4 video (Tan)</b>	<b>N2181</b>	<b>5 July</b>
<b>AHG on editing the documents of the MPEG-4 video verification model and the MPEG-4 visual working draft (Ebrahimi &amp; Horne)</b>	<b>N2182</b>	
<b>AHG on MPEG-4 video encoder optimization (Chiang &amp; Sun)</b>	<b>N2183</b>	
<b>AHG on MPEG-4 texture coding (Sodagar &amp; Moccagatta)</b>	<b>N2184</b>	<b>5 July</b>
<b>AHG on MPEG-2 4:2:2@High Level (Luthra)</b>	<b>N2185</b>	
<b>AHG on Video Verification Tests (Miki, Wollborn, Suzuki)</b>	<b>N2169</b>	

**2.4.3 that the following documents are made publicly available :**

<b>Title</b>	<b>No.</b>
<b>Text of ISO/IEC 14496-2 video verification model V.11.0</b>	<b>N2172</b>
<b>PDAM of 4:2:2P@HL</b>	<b>N2125</b>
<b>Description of core experiments on shape coding in MPEG-4 video</b>	<b>N2173</b>
<b>Description of core experiments on region-oriented texture coding in MPEG-4 video</b>	<b>N2174</b>
<b>Description of core experiments on error resilience in MPEG-4 video</b>	<b>N2175</b>
<b>Description of core experiments on multifunctional and advanced layered coding aspects in MPEG-4 video</b>	<b>N2176</b>
<b>Description of core experiments on coding efficiency in MPEG-4 video</b>	<b>N2177</b>

## **2.5 The Audio group recommends**

**2.5.1 to approve the following documents:**

<b>Title</b>	<b>No.</b>
<b>Study on Conformance 13818-4/DAM 1 (covering 13818-7 AAC)</b>	<b>N2151</b>
<b>Study on Technical Report 13818-5/DAM 1 (covering both 13818-3 Second Edition and 13818-7 AAC)</b>	<b>N2152</b>
<b>Study on MPEG-2 AAC 13818-7 Draft Technical Corrigendum 1</b>	<b>N2153</b>
<b>Study on DoC on MPEG-2 AAC 13818-7 Draft Technical Corrigendum 1</b>	<b>N2154</b>
<b>MPEG-2 AAC 13818-7 Dynamic Range Control Proposal and Workplan</b>	<b>N2155</b>
<b>MPEG-4 Audio Final Committee Draft 14496-3</b>	<b>N2203</b>
<b>DoC on MPEG-4 Audio Committee Draft 14496-3</b>	<b>N2120</b>
<b>Consideration for Conformance of the MPEG-4 Audio TTSI</b>	<b>N2140</b>
<b>MPEG-4 Reference Software Final Committee Draft 14496-5</b>	<b>N2205</b>
<b>DoC on MPEG-4 Reference Software Committee Draft 14496-5</b>	<b>N2121</b>
<b>MPEG-4 Audio AAC/TwinVQ convergence workplan</b>	<b>N2156</b>
<b>MPEG-4 Audio verification test specification: narrowband audio broadcasting</b>	<b>N2157</b>
<b>Plan for MPEG-4 Audio verification tests: speech codecs</b>	<b>N2158</b>
<b>Plan for MPEG-4 Audio verification tests: music on Internet</b>	<b>N2159</b>

<b>Information on MPEG-4 Audio systems issues</b>	<b>N2160</b>
<b>MPEG-4 Requirements</b>	<b>N2194</b>
<b>MPEG-4 Audio Proposed Amendment WD</b>	<b>N2213</b>
<b>MPEG-4 Audio error resilience workplan update</b>	<b>N2161</b>
<b>MPEG Audio FAQs version 7</b>	<b>N2162</b>
<b>Proposals for the MPEG Audio web site content</b>	<b>N2163</b>
<b>Bibliography of MPEG Audio documentation</b>	<b>N2164</b>

**2.5.2** to ask the Convenor to notify to the appropriate bodies that some of the Audio group members have encountered unexpected difficulties in obtaining licensing of ISO/IEC 13818-7 (AAC) technology in apparent contradiction of the principle that all organisations wishing to develop and manufacture compliant devices can have access to the IPR on fair and reasonable terms.

**2.5.3** to establish the following AdHoc Groups:

<b>Title</b>	<b>No.</b>	<b>Meeting</b>
<b>AHG on MPEG-2 Audio AAC Conformance and Technical Report (Coleman/Thom/Paley)</b>	<b>N2131</b>	
<b>AHG on MPEG-2 AAC dynamic range control (Schreiner)</b>	<b>N2132</b>	<b>9:00-15:00 Sun</b>
<b>AHG on MPEG-4 Audio FCD and Reference Software FCD progression (Grill/Purnhagen)</b>	<b>N2133</b>	<b>Sun p.m.</b>
<b>AHG on MPEG-4 Audio Conformance (Spille)</b>	<b>N2134</b>	
<b>AHG on MPEG-4 Structured Audio (Scheirer/Ray)</b>	<b>N2135</b>	
<b>AHG on MPEG-4 Audio Verification tests (Edler/S-W Kim)</b>	<b>N2136</b>	<b>Sat p.m.</b>
<b>AHG on MPEG-4 Audio narrowband audio broadcasting verification tests (Contin/Dietz)</b>	<b>N2137</b>	<b>Sun a.m.</b>
<b>AHG on MPEG-4 Audio tool complexity (Spille &amp; Mattavelli)</b>	<b>N2138</b>	
<b>AHG on MPEG-4 Audio/Systems issues (Coleman/Herpel)</b>	<b>N2139</b>	<b>Sun p.m.</b>
<b>AHG on MPEG-4 TTSI/FBA convergence (Lee/Ostermann)</b>	<b>N2141</b>	
<b>AHG on MPEG-4 Audio error resilience for Version 2 (Dietz/Miki)</b>	<b>N2142</b>	<b>Sun p.m.</b>
<b>AHG on MPEG Audio web site (Thom/Purnhagen)</b>	<b>N2143</b>	
<b>AHG on MPEG-4 Audio CELP optimisation (Sugiyama)</b>	<b>N2144</b>	

**2.5.4** to make publicly available the following documents :

<b>Title</b>	<b>No.</b>
<b>MPEG-4 Audio FCD</b>	<b>2203</b>
<b>MPEG Audio FAQs version 7</b>	<b>N2162</b>
<b>Audio contribution to Tokyo Press statement</b>	<b>N2116</b>

**2.6** The SNHC group recommends

**2.6.1** to approve the following documents :

<b>Title</b>	<b>No.</b>
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<b>Systems changes on CD to FCD 14496-1</b>	<b>N2188</b>
<b>SNHC Updates to the Visual FCD</b>	<b>N2227</b>
<b>SNHC Software Workplan</b>	<b>N2228</b>
<b>SNHC Verification Model 8.0</b>	<b>N2229</b>
<b>Description of Visual SNHC CGD experiment</b>	<b>N2126</b>
<b>Core Experiments on Body Animation</b>	<b>N2230</b>
<b>Core Experiments on Face Animation</b>	<b>N2231</b>
<b>Core Experiments on 3D Model Coding</b>	<b>N2232</b>

**2.6.2 to establish the following AdHoc Groups :**

<b>Title</b>	<b>No.</b>	<b>Meeting</b>
<b>AHG on Face and Body Animation (Eric Petajan)</b>	<b>N2233</b>	
<b>AHG on 3D Model Coding (Touradj Ebrahimi)</b>	<b>N2234</b>	
<b>AHG on SNHC VM Editing (Gabriel Taubin)</b>	<b>N2235</b>	

**2.6.3 to make publicly available the following documents :**

<b>Title</b>	<b>No.</b>
<b>SNHC Verification Model 8.0</b>	<b>2229</b>

## **2.7 The Test group recommends**

**2.7.1 to approve the following documents:**

<b>Title</b>	<b>No.</b>
<b>Specification of Formal Verification Tests on Video Error Resilience</b>	<b>N2165</b>
<b>Results of the second Pre-evaluation of content-based coding verification test</b>	<b>N2166</b>
<b>MPEG-4 audio verification test specification: narrow-band audio broadcastings</b>	<b>N2157</b>
<b>Plan for MPEG-4 audio verification tests: speech coding</b>	<b>N2158</b>
<b>Plan for MPEG-4 audio verification tests: music on Internet</b>	<b>N2159</b>
<b>Preliminary specification of test conditions for video scalability verification test</b>	<b>N2167</b>
<b>Call for new critical segmented audiovisual sequences</b>	<b>N2168</b>

**2.7.2 to establish the following AdHoc Groups:**

<b>Title</b>	<b>No.</b>	<b>Meeting</b>
<b>AHG on audio verification tests (B. Edler, S.W. Kim )</b>	<b>N 2136</b>	<b>\$ July</b>
<b>AHG on narrowband audio broadcasting verification test (L. Contin, M. Dietz)</b>	<b>N 2137</b>	<b>5 July</b>
<b>AHG on MPEG-4 Video verification tests (T. Miki, M. Wollborn, T. Suzuki)</b>	<b>N 2169</b>	

**2.7.3 to approve the following workplan for the verification tests:**

<b>Date</b>	<b>Verification test</b>
<b>July meeting</b>	<b>Narrow band audio broadcasting test Video error resilience test</b>
<b>October meeting</b>	<b>Test of Music on Internet Speech coding Content-based video coding</b>

<b>December meeting</b>	<b>Scalability tests</b>
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2.7.4 to publish the following document

<b>Call for new critical segmented audiovisual sequences</b>	<b>N2168</b>
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## 2.8 The Implementation Studies group recommends

2.8.1 The approval of the following documents:

<b>Title</b>	<b>No.</b>
<b>Description of visual SNHC CGD experiments</b>	<b>N2126</b>
<b>Description of video decoder QoS experiments</b>	<b>N2127</b>
<b>Call for new critical segmented audio-visual sequences</b>	<b>N2168</b>

2.8.2 to establish the following AdHoc Groups:

<b>Title</b>	<b>No.</b>	<b>Meeting</b>
<b>AHG on Computational Graceful Degradation</b>	<b>N2128</b>	
<b>AHG on video Decoder Quality of Service</b>	<b>N2129</b>	

2.8.3 that the ISG recommends the definition of levels of bounded complexity for synthetic audio profile2 (downloadable wave-table MIDI) and syntetic audio profile3 (SAOL).

## 2.9 The Liaison group recommends

2.9.1 the approval of the response to National Bodies (WG11 N2130)

2.9.2 the approval of the following liaison documents:

<b>Title</b>	<b>No.</b>
<b>Liaison to VRML on modes of collaboration</b>	<b>N2145</b>
<b>Liaison to ITU-T SG16 on MPEG-4 DMIF</b>	<b>N2146</b>
<b>Liaison to ITU-T SG16 on MPEG-4 Audio</b>	<b>N2147</b>
<b>Liaison to ITU-T SG16 on MPEG-4 Video</b>	<b>N2148</b>
<b>Liaison to MMA on MIDI</b>	<b>N2149</b>
<b>Liaison to JPEG on the VCP for texture coding</b>	<b>N2150</b>
<b>Liaison to CEN on MPEG-7 activities</b>	<b>N2186</b>
<b>Liaison to SMPTE on MPEG-7 activities</b>	<b>N2187</b>

3 **WG11 approves the Disposition of Comments of CD 13818-10 (WG11 N2123) and the text of FCD 13818-10 (WG11 N2210) and requests the Convenor to forward the documents to the SC29 Secretariat for further processing.**

4 **WG11 acknowledges the need expressed by several members to develop a higher level of the 4:2:2 profile. WG11 requests the approval of two amendments, viz. to part 1 and part 2 of ISO/IEC 13818 to respond to this need. WG11 N2245 and N2246 are the requests for these amendments. WG11 request the SC29 Secretariat issue a PDAM ballot based on document WG11 N2125.**



**5 WG11 approves the MPEG-2 workplan:**

Part	Title	CfP	WD	CD PDAM PDTR	FCD FPDAM FPDTR	FDIS FDAM DTR DCOR	IS AMD TR COR
MPEG-2							
10	Conformance testing extensions - DSM-CC				98/03	98/10	98/12
1/Amd 5	Systems-related table entries for AAC						98/04
2/Amd 5				98/03	98/07	98/12	99/02
4/Amd 1	AAC Conformance Testing					98/07	98/09
4/Cor 2							98/07
5/Amd 1	Revised MPEG-2 Simulation Software						98/07
6/Amd 1	Additions to support data broadcasting				98/07	98/12	99/02
7/Cor 1							98/07

**6 WG11 approves the MPEG-4 Requirements document (WG11 N2194).**

**7 WG11 requests National Bodies to propose alternative wording to the disclaimer text that appears on top of all software modules donated to ISO that implement parts of the MPEG-4 standard.**

**8 WG11 confirms that part 5 of MPEG-4 is normative. The software for the encoder process is provided in informative annexes. Errors in part 5 or discrepancies between part 5 and the other parts will be handled by means of corrigenda.**

**9 WG11 approves:**

<b>MPEG-4 ver. 1 Systems</b>	
<b>CD DoC</b>	<b>WG11 N2118</b>
<b>FCD text</b>	<b>WG11 N2201</b>

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All NBs who have cast a negative ballot have converted it into a positive vote.

WG11 understands that nodes that are present in the FCD and for which a software implementation available to anybody according to WG11 rules will not exist by the time of October meeting will be removed from FDIS as they will not satisfy the basic policy of having a software implementation donated to ISO.

VRML nodes, currently not in the FCD, that will be implemented in software will be introduced into the FDIS, if NBs will so request.

<b>MPEG-4 ver. 1 Visual</b>	
<b>CD DoC</b>	<b>WG11 N2119</b>
<b>FCD text</b>	<b>WG11 N2202</b>

All NBs who have cast a negative ballot have converted it into a positive vote.

NBs are informed that work will be progressing to incorporate **Boundary Block Merging**

**Quarter-pel Motion Compensation**

**Global Motion Compensation**

into part 2 and part 5. WG11 intends to provide evidence of the

successful inclusion of these tools into the standard prior to 22

September for NB deliberation for possible inclusion into the FDIS.

<b>MPEG-4 ver. 1 Audio</b>	
<b>CD DoC</b>	<b>WG11 N2120</b>
<b>FCD text</b>	<b>WG11 N2203</b>

All NBs who have cast a negative ballot have converted it into a positive vote.

<b>MPEG-4 ver. 1 Reference Software</b>	
<b>CD DoC</b>	<b>WG11 N2121</b>
<b>FCD text</b>	<b>WG11 N2205</b>

All NBs who have cast a negative ballot, with the exception of Germany, have converted it into a positive vote.

<b>MPEG-4 ver. 1 DMIF</b>	
<b>CD DoC</b>	<b>WG11 N2122</b>
<b>FCD text</b>	<b>WG11 N2206</b>

All NBs who have cast a negative ballot, with the exception of Germany, have converted it into a positive vote.

The FCD text of all parts will be forwarded to the SC29 Secretariat for further processing by 15 May after the editors will have executed the agreed changes contained in the Disposition of Comment documents and delta documents.

**10 WG11 approves the verification test plan:**

<b>Date</b>	<b>Verification test</b>
<b>July meeting</b>	<b>Narrow band audio broadcasting Video error resilience</b>
<b>October meeting</b>	<b>Music on Internet Speech coding Content-based video coding</b>
<b>December meeting</b>	<b>Scalability</b>

**This plan will be extended as studies currently under way in the Audio and Video Subgroups mature.**

- 11 WG11 would like to thank the companies that have responded to resolution 16 of the Fribourg meeting requesting patent statements related to the MPEG-4 standard under development (WG11 N2170). WG11 reiterates its request to companies that have not yet produced such statements. WG11 notes that the following companies have submitted a patent for the MPEG-2 standard and not for MPEG-4**

**AT&T  
Bellcore  
Belgian Science Policy Office  
France Telecom CNET  
GC Technology Corporation  
General Instruments  
Goldstar  
Hitachi, Ltd.  
IRT  
KDD  
KPN  
Lucent Technologies  
Massachusetts Institute of Technology  
Matsushita Electric Industrial Co., Ltd.  
National Transcommunications Limited  
NEC Corporation  
Nippon Hoso Kyokai  
Norwegian Telecom Research  
OKI  
Qualcomm Incorporated  
Scientific Atlanta  
Texas Instruments  
Toshiba Corporation  
TV/Com  
Victor Company of Japan Limited**

**12 WG11 approves the Guidelines for the MPEG-4 Version Procedure (WG11 N2200).**

**13 WG11 approves:**

<b>MPEG-4 Systems ver. 2 VM</b>	<b>WG11 N2224</b>
<b>MPEG-4 Video ver. 2 VM</b>	<b>WG11 N2172</b>
<b>MPEG-4 SNHC ver. 2 VM</b>	<b>WG11 N2229</b>

**14 WG11 approves:**

<b>MPEG-4 Systems ver. 2.0 WD</b>	<b>WG11 N2211</b>
<b>MPEG-4 Audio ver. 2.0 WD</b>	<b>WG11 N2213</b>

**15 WG11 approves the list of MPEG-4 version 2 editors:**

<b>Part 1</b>	<b>Renaud Cazoulat, Gerard Fernando, Niels Rump, David Singer</b>
<b>Part 2</b>	<b>Touradj Ebrahimi, Caspar Horne, <u>Euee Jang</u>, Yuichiro Nakaya, Jörn Ostermann, Atul Puri</b>
<b>Part 3</b>	<b>TBD</b>
<b>Part 5</b>	<b><u>Mike Coleman</u></b>
<b>Part 6</b>	<b>TBD</b>

**16 WG11 approves the MPEG-4 workplan:**

Part	Title	CfP	WD	CD PDAM PDTR	FCD FPDAM FPDTR	FDIS FDAM DTR DCOR	IS AMD TR COR
<b>MPEG-4</b>							
1	Systems					98/10	98/12
2	Visual					98/10	98/12
3	Audio					98/10	98/12
4	Conformance Testing			98/12	99/07	99/12	00/02
5	Reference Software					98/10	98/12
6	DMIF					98/10	98/12
1/Amd 1	Systems Extensions		97/10	98/12	99/07	99/12	00/02
2/Amd 1	Visual Extensions		97/10	98/12	99/07	99/12	00/02
3/Amd 1	Audio Extensions		97/10	98/12	99/07	99/12	00/02
4/Amd 1	Reference Software Extensions		97/10	98/12	99/07	99/12	00/02
6/Amd 1	DMIF Extensions		97/10	98/12	99/07	99/12	00/02

**17 WG11 approves the MPEG-7 Applications document (WG11 N2209).**

**18 WG11 approves the MPEG-7 Requirements document (WG11 N2208).**

**19 WG11 approves the MPEG-7 Draft Proposal Package Description (WG11 N2214).**

**20 WG11 approves the draft of the MPEG-7 evaluation procedure (WG11 N2189).**

**21 WG11 approves the MPEG-7 advance Call for Proposals (WG11 N2218).**

**22 WG11 urges its members to bring technical contributions to the next meeting describing how the MPEG-7 goals could be achieved.**

**23 WG11 approves the MPEG-7 workplan:**

Part	Title	CfP	WD	CD PDAM PDTR	FC FPDAM FPDTR	FDIS DAM DTR DCOR	IS AMD TR COR
MPEG-7							
1	Multimedia Content Description Interface	98/10	99/07	00/10	01/03	01/07	01/09

**24 WG11 approves its integrated workplan:**

Part	Title	CfP	WD	CD PDAM PDTR	FC FPDAM FPDTR	FDIS DAM DTR DCOR	IS AMD TR COR
MPEG-2							
10	Conformance testing extensions - DSM-CC				98/03	98/10	98/12
1/Amd 5	Systems-related table entries for AAC						98/04
2/Amd 5				98/03	98/07	98/12	99/02
4/Amd 1	AAC Conformance Testing					98/07	98/09
4/Cor 2							98/07
5/Amd 1	Revised MPEG-2 Simulation Software						98/07
6/Amd 1	Additions to support data broadcasting				98/07	98/12	99/02
7/Cor 1							98/07
MPEG-4							
1	Systems					98/10	98/12

2	Visual					98/10	98/12
3	Audio					98/10	98/12
4	Conformance Testing			98/12	99/07	99/12	00/02
5	Reference Software					98/10	98/12
6	DMIF					98/10	98/12
1/Amd 1	Systems Extensions		97/10	98/12	99/07	99/12	00/02
2/Amd 1	Visual Extensions		97/10	98/12	99/07	99/12	00/02
3/Amd 1	Audio Extensions		97/10	98/12	99/07	99/12	00/02
4/Amd 1	Reference Software Extensions		97/10	98/12	99/07	99/12	00/02
6/Amd 1	DMIF Extensions		97/10	98/12	99/07	99/12	00/02
MPEG-7							
1	Multimedia Content Description Interface	98/10	99/07	00/10	01/03	01/07	01/09

**25 WG11 approves its five-year meeting schedule:**

No.	yy	mm	dd	City	Country
44	98	07	06-10	Dublin	IE
45	98	10	12-16	Princeton, NJ	US
46	98	12	07-11	Eilat	IL
47	99	03	15-19	?	KR
48	99	07	12-16	Vancouver	CA
49	99	12	06-10	?, HI	US

**26 WG11 approves its Tokyo press release for publication on the MPEG home page (WG11 N2116).**

**27 The Convenor would like to express his thanks to Kai-kuan Ma, Philippe Salembier and Peter Schirling for their support in the preparation of the Friday Plenary.**

**28 WG11 thanks the Japanese Industrial Standards Committee (JISC) for hosting its 43<sup>rd</sup> meeting and the Information Processing Society of Japan/Information Technology Standards Commission of Japan (IPSJ/ITSCJ) for organising it, in particular  
Nobuaki Takahashi (JVC)  
Hirohisa Jozawa (NTT)  
Masahiro Iwadare (NEC)**

**Yasuji Ota (Fujitsu)**  
**Satoshi Miyaji (KDD)**  
**Toshiya Takahashi (Matsushita)**  
**Seishi Takamura (NTT)**  
**Zhixiong Wu (Oki)**  
**Ryoko Kato (ITSCJ)**  
**Narumi Hirose (ITSCJ)**  
**Tomomi Haruhana (ITSCJ)**  
**Isao Nagayoshi (Waseda University)**  
**Maya Yokoi (Waseda University).**

**The following companies are thanked for providing facilities in support of the meeting**

**Apple Computer**  
**ASCII Lab.**  
**Canon**  
**Fujitsu**  
**Fuji Xerox**  
**IBM**  
**JVC**  
**Matsushita**  
**Matsushita Communication**  
**Mitsubishi**  
**NEC**  
**NHK**  
**NTT**  
**NTT DoCoMo**  
**Oki**  
**Pioneer**  
**Ricoh**  
**Sanyo**  
**Sharp**  
**SONY**  
**Toshiba**  
**Waseda University.**

WG11 adjourned on 98/03/20 21:45