TU Telecommunication Standardization Sector
Study Group 15
Experts Group for Video Coding and Systems
in ATM and Other Network Environments

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INTERNATIONAL ORGANIZATION FOR STANDARDIZATION
ORGANISATION INTERNATIONALE DE NORMALISATION
ISO/IEC JTC1/SC29/WG11
CODING OF MOVING PICTURES AND ASSOCIATED AUDIO

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Source: **DSM-CC SWG**
Title: **Liaison requesting the creation of a DSS2 Correlation Identifier Information Element**

To: Rajiv Kapoor, ITU-T SG11 Question 15/11 Rapporteur
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cc: Sakae Okubo, ITU-T SG15 Question 2/15 Rapporteur
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From: Leonardo Chiariglione, ISO/IEC JTC1/SC29/WG11 MPEG Convenor

Subject: Proposed DSS2 Information Element to support MPEG DSM-CC Correlation Identifier

The Experts Group for the Coding of Moving Pictures and Associated Audio (MPEG) has defined the Digital Storage Media Command and Control (DSM-CC) protocol in ISO/IEC 13818-6 "MPEG-2 DSM-CC" Committee Draft, May 1995. DSM-CC is intended to provide control functions and operations specific to managing services using ISO/IEC 13818 MPEG-2. MPEG systems are deployed in diverse network environments to support many applications such as, for example, video on demand and interactive multimedia. The MPEG-2 DSM-CC protocol is defined to provide many control functions such as establishing and clearing of sessions (including network connections in some environments) and interactions between Client, Server and a network controlling entity. The use of DSM-CC in an ATM environment has been specified also. The following configurations have been defined:

1. Hybrid ATM core network - shared access MPEG Transport Stream (e.g., on Hybrid Fiber Coax)
2. Hybrid ATM core - shared access ATM (e.g., on Hybrid Fiber Coax)
3. End-to-End ATM, segregated session/connection signalling, Q.2931 proxy signalling
4. End-to-End ATM, segregated session/connection signalling, Q.2931 direct (first party) signaling
5. End-to-End ATM, integrated session/connection signalling

A careful analysis of the requirements for the carriage of a correlation identifier was performed at the ISO/IEC JTC1/SC29/WG11 meeting on 24-28 July 1995 in Tokyo. The result was a consensus that a new DSS2 Information Element would satisfy the requirements.

As such, WG11 would like to request that SG11 consider the following extension to DSS2 for a Correlation Identifier Information Element. The correlation identifier, in WG11's case, shall be a DSM-CC resourceId associated with a DSM-CC ATM connection resource descriptor.

In order to satisfy our requirements, the Correlation Identifier IE needs to be transported transparently across the ATM network.

Please note that WG11 is aware that other study groups have similar requirements for a correlation identifier (e.g., H.245) and we believe the same IE may also satisfy those requirements; hence providing an interoperability point. In each case, a different Correlation ID Type code point could be used to differentiate the contents of the Correlation ID Value field which follows.

Correlation Identifier Information Element

Bits	8	7	6	5	4	3	2	1	Octet
	Correlation ID Information Element								1
	0	x	x	x	x	x	x	x	
	Coding standard, IE instruction field and length of Correlation ID contents								2, 3
	0/1 ext	Correlation ID Type							4
	Correlation ID Value								5 - N

Correlation ID Information Element Name (octet 1)

Specific code point value to be assigned by ITU-T.

Correlation ID Type (octet 4)

Bits
7 6 5 4 3 2 1
x x x x x x x ISO/IEC 13818-6 MPEG-2 DSM-CC (Note 1)

All other values reserved to ITU-T.

Note 1: When the Correlation ID type is coded as ISO/IEC 13818-6 MPEG-2 DSM-CC, a DSM-CC resourceId shall be coded in the Correlation ID value field (octets 5-N).

Specific code point value to be assigned by ITU-T.

Correlation ID value field (octets 5-N)

Value of the Correlation ID. The encoding format shall be specified in ISO/IEC 13818-6. The Correlation ID Value field shall be long enough to support a DSM-CC resourceId of at least 20 octets.

ISO/IEC JTC1/SC29/WG11 would like to take this opportunity to thank ITU-T SG11 for its continued cooperation and requests to be informed of the decision reached within SG11 on the above matter, including the expected date of its incorporation in the appropriate ITU-T Recommendation.

Sincerely,

L. Chiariglione

Convenor, ISO/IEC JTC1/SC29/WG11