

ISO/IEC JTC 1 N 9177

2008-07-15

ISO/IEC JTC 1 **Information Technology**

Proposed NP Document Type:

Document Title: SC 29 Proposal for a New Work Item, Information technology -- Advanced

Image Coding (AIC)

Document Source: SC 29 Secretariat

Reference:

Document Status: This document is circulated to JTC 1 National Bodies for concurrent

> review. If the JTC 1 Secretariat receives no objections to this proposal by the due date indicated, we will so inform the SC 29

Secretariat.

Action ID: ACT

Due Date: 2008-10-16

No. of Pages: 10

Secretariat, ISO/IEC JTC 1, American National Standards Institute, 25 West 43rd Street, New York, NY 10036; Telephone: 1 212 642 4932;

Facsimile: 1 212 840 2298; Email: lrajchel@ansi.org

ISO/IEC JTC 1/SC 29 N 9601

DATE: 2008-07-15

ISO/IEC JTC 1/SC 29 Coding of Audio, Picture, Multimedia and Hypermedia Information

Secretariat: <u>Japan (JISC)</u>

DOC. TYPE		Text for NP ballot			
TITLE	C	Proposal for a New Work Item, Information technology Advanced Image Coding (AIC) [SC 29/WG 1 N 4736]			
SOUR	CE	ISO/IEC JTC 1/SC 29/WG 1			
PROJECT					
STATUS		In accordance with Resolution 30 taken at the 45th SC 29/WG 1 meeting, 2008-07-07/11, Poitiers, France, the SC 29 Secretariat issued NP ballot. [Requested action: For ballot by SC 29 P-members]			
ACTION ID		LB			
DUE DATE		2008-10-14			
DISTRIBUTION		P, O and L Members of ISO/IEC JTC 1/SC 29; ISO/IEC JTC 1 Secretariat; ISO/IEC ITTF			
ACCESS LEVEL		Open			
ISSUE NO.		965			
FILE	NAME SIZE (KB) PAGES	29n9601c.htm 29n9601t.doc 29n9601b.doc 58.4 35.3 6 1			

Secretariat, ISO/IEC JTC 1/SC 29

IPSJ/ITSCJ (Information Processing Society of Japan/Information Technology Standards Commission of Japan)* Room 308-3, Kikai-Shinko-Kaikan Bldg., 3-5-8, Shiba-Koen, Minato-ku, Tokyo 105-0011 Japan Telephone: +81-3-3431-2808; Facsimile: +81-3-3431-6493; E-mail: ogura@itscj.ipsj.or.jp

New Work Item Proposal

file name: <u>29n9601t.doc</u>
format: MS Word 2002
file size: 58,368 bytes

• pages: 6

^{*}Standard Organization Accredited by JISC

NP ballot form

- file name: <u>29n9601b.doc</u>
 Web balloting (<u>http://lucia.itscj.ipsj.or.jp/servlets/ScmBlt10?Com_Id=29</u>).

PROPOSAL FOR A NEW WORK ITEM

	Proposer: ISO/IEC JTC 1/SC 29 (WG 1)
	ISO/IEC JTC 1 N XXXX
National Body of Japan	ISO/IEC JTC 1/SC 29 N 9601

A proposal for a new work item shall be submitted to the secretariat of the ISO/IEC joint technical

committee concerned with a copy to the ISO Central Secretariat.
Presentation of the proposal - to be completed by the proposer
Title Advanced Image Coding (AIC)
Scope To specify evaluation methodologies and compression technologies
Purpose and justification – SC 29/WG 1 has initiated an activity to study potential technologies for future generation image compression systems. This activity which is referred to as Advanced Image Coding (AIC), could become a new work item for standardization of a new image compression system if any potential technologies can be identified which significantly would improve the performance of current image compression standards. By image one means not only still pictures, but also any visual content such as image sequences, stereoscopic, multiview, volumetric, animated volumetric, etc.
This specification will provide evaluation methodologies, including test data, and anchors to be compared to. as well as contribution of new compression technologies.
Programme of work
If the proposed new work item is approved, which of the following document(s) is (are) expected to be developed? a single International Standard
more than one International Standard (expected number:) X_ a multi-part International Standard consisting of 2 parts an amendment or amendments to the following International Standard(s)
And which standard development track is recommended for the approved new work item?
Xa. Default Timeframe
b. Accelerated Timeframe
c. Extended Timeframe
Relevant documents to be considered
Co-operation and liaison
SC 29/WG 1 desires to cooperate with ITU-T SG16 in the creation of a next generation of image coding technologies and evaluation methodologies.
Preparatory work offered with target date(s)
NP: 2008-07, CD: 2010-07, FCD/DTR: 2010-11, FDIS/FDTR: 2011-03
Signature:

Will the service of a maintenance agency or registration authority be required? .NO
Are there any known requirements for coding? .YES
Does the proposed standard concern known patented items? .YES /NO ? - If yes, please provide full information in an annex
Are there any known accessibility requirements and/or dependencies (see: http://www.jtc1access.org)? NOT AT THIS STAGE, BUT WILL BE CONSIDEREDIf yes, please specify on a separate page Are there any known requirements for cultural and linguistic adaptability? NO
-If yes, please specify on a separate page

Comments and recommendations of the JTC 1 or SC 29Secretariat - attach a separate page as an annex, if necessary

Comments with respect to the proposal in general, and recommendations thereon: It is proposed to assign this new item to JTC 1/SC 29

Voting on the proposal - Each P-member of the ISO/IEC joint technical committee has an obligation to vote within the time limits laid down (normally three months after the date of circulation).

Date of circulation:	Closing date for voting:	Signature of Secretary:
2008-07-15	2008-10-14	

NEW WORK ITEM PROPOSAL - PROJECT ACCEPTANCE CRITERIA		
Criterion	Validity	Explanation
A. Business Requirement		
A.1 Market Requirement	Essential X Desirable Supportive	There are no current standards which provide effective delivery of imaging technology through a combination of coding techniques in an integrated manner. Opportunities exist with high quality components already present on the desktop to marry many technologies and delivery methods, including those developed by SC29/WG1 together

A.2 Regulatory Context	Essential X Desirable Supportive Not Relevant	Proactive development of standards in the multimedia arena is increasingly hampered by the late discovery or disclosure of patented items. By paying attention to patent status form the start, and encouraging the use of components with a proven patent status under favourable (ideally fee free) terms, SC 29/WG 1 believes that they can continue to leverage leading standards using the JPEG name into an active and thriving marketplace.
B. Related Work		
B.1 Completion/Maintenance of current standards	Yes _X No	The work may entail separation of some components developed specifically for JPEG 2000 to provide alternate and viable delivery scenarios
B.2 Commitment to other organisation	Yes X No	Both de jure and de facto standards already provide components of an overall digital imaging architecture throughout the delivery chain. Other bodies will be encourage to provide inputs and technologies which can be added effectively, within the constraints that will apply to this new work item
B.3 Other Source of standards	Yes X No	The de jure standard offered in the latest Windows operating system will be an initial and capable input (in a normative form), hopefully offering a practical and positive validation of the novel approach offered by the proposed work item
C. Technical Status		
C.1 Mature Technology	Yes X No	The work will be based on pragmatic and proven existing standards, providing the glue by which they may be linked together

C.2 Prospective Technology	Yes X No	Many components already exist - examples include the JPSec, and JPIP components within JPEG 2000, existing JPEG compression standards, and the Windows Imaging Components in Microsoft's Vista
C.3 Models/Tools	Yes X No	These will be part of the deliverables for specific parts of the standards, offering flexible and useful conformance test streams and testers.
D. Conformity Assessment and Interoperability		
D.1 Conformity Assessment	Yes X No	Conformity to the normatively referenced technology is an essential part of the new work item
D.2 Interoperability	Yes X No	This is the core reason for the proposal
E. Adaptability to Culture, Language, Human Functioning and Context of Use		
E.1 Cultural and Linguistic Adaptability	Yes_ No_X	The standards are expected to be independent of national language and locale variations
E.2 Adaptability to Human Functioning and Context of Use	Yes_ No_X_	Variation of capture, delivery and presentation methods are again a key aspect of the new work item, and it is expected that the standard will find effective use in this environment.
F. Other Justification		

Notes to Proforma

- **A. Business Relevance.** That which identifies market place relevance in terms of what problem is being solved and or need being addressed.
- A.1 Market Requirement. When submitting a NP, the proposer shall identify the nature of the Market Requirement, assessing the extent to which it is essential, desirable or merely supportive of some other project.
- A.2 Technical Regulation. If a Regulatory requirement is deemed to exist e.g. for an area of public concern e.g. Information Security, Data protection, potentially leading to regulatory/public interest action based on the use of this voluntary international standard the proposer shall identify this here.
- **B.** Related Work. Aspects of the relationship of this NP to other areas of standardisation work shall be identified in this section.
- B.1 Competition/Maintenance. If this NP is concerned with completing or maintaining existing standards, those concerned shall be identified here.
- B.2 External Commitment. Groups, bodies, or for external to JTC 1 to which a commitment has been made by JTC for Co-operation and or collaboration on this NP shall be identified here.
- B.3 External Std/Specification. If other activities creating standards or specifications in this topic area are known to exist or be planned, and which might be available to JTC 1 as PAS, they shall be identified here.
- **C. Technical Status.** The proposer shall indicate here an assessment of the extent to which the proposed standard is supported by current technology.
- C.1 Mature Technology. Indicate here the extent to which the technology is reasonably stable and ripe for standardisation.
- C.2 Prospective Technology. If the NP is anticipatory in nature based on expected or forecasted need, this shall be indicated here.
- C.3 Models/Tools. If the NP relates to the creation of supportive reference models or tools, this shall be indicated here.
- **D. Conformity Assessment and Interoperability** Any other aspects of background information justifying this NP shall be indicated here.
- D.1 Indicate here if Conformity Assessment is relevant to your project. If so, indicate how it is addressed in your project plan.
- D.2 Indicate here if Interoperability is relevant to your project. If so, indicate how it is addressed in your project plan
- E. Adaptability to Culture, Language, Human Functioning and Context of Use

NOTE: The following criteria do not mandate any feature for adaptability to culture, language, human functioning or context of use. The following criteria require that if any features are provided for adapting to culture, language, human functioning or

context of use by the new Work Item proposal, then the proposer is required to identify these features.

E.1 Cultural and Linguistic Adaptability. Indicate here if cultural and natural language adaptability is applicable to your project. If so, indicate how it is addressed in your project plan.

ISO/IEC TR 19764 (Guidelines, methodology, and reference criteria for cultural and linguistic adaptability in information technology products) now defines it in a simplified way:

"ability for a product, while keeping its portability and interoperability properties, to:

- be internationalized, that is, be adapted to the special characteristics of natural languages and the commonly accepted rules for their se, or of cultures in a given geographical region;
- take into account the usual needs of any category of users, with the exception of specific needs related to physical constraints"

Examples of characteristics of natural languages are: national characters and associated elements (such as hyphens, dashes, and punctuation marks), writing systems, correct transformation of characters, dates and measures, sorting and searching rules, coding of national entities (such as country and currency codes), presentation of telephone numbers and keyboard layouts. Related terms are localization, jurisdiction and multilingualism.

E.2 Adaptability to Human Functioning and Context of Use. Indicate here whether the proposed standard takes into account diverse human functioning and diverse contexts of use. If so, indicate how it is addressed in your project plan.

NOTE:

- 1. Human functioning is defined by the World Health Organization at http://www3.who.int/icf/beginners/bg.pdf as: http://www3.who.int/icf/beginners/bg.pdf as: http://www3.who.int/icf/beginners/bg.pdf and http://www3.who.int/icf/beginners/bg.pdf and http://www3.who.int/icf/beginners/bg.pdf and <a href="http://www3.who.in
- 2. Content of use is defined in ISO 9241-11:1998 (Ergonomic requirements for office work with visual display terminals (VDTs) Part 11: Guidance on usability) as:

 </Users, tasks, equipment (hardware, software and materials), and the

physical and societal environments in which a product is used.>>

- 3. Guidance for Standard Developers to address the needs of older persons and persons with disabilities).
- **F. Other Justification** Any other aspects of background information justifying this NP shall be indicated here.

NP Letter Ballot

VOTE ON A PROPOSED NEW WORK ITEM

ISO/IEC JTC 1/SC 29 N 9601

Date of Circulation of NP: 2008-07-15

Date of Ballot Close: 2008-10-14

Please return all votes and comments directly to the JTC 1/SC 29 Secretariat by the due

date indicated.

Web balloting (http://lucia.itscj.ipsj.or.jp/servlets/ScmBlt10?Com_Id=29).

Proposal for a new work item on

Title Supplemental media technologies

Any proposal to add a new item to the programme of work shall be voted on by correspondence, even if it has appeared in the agenda of a meeting.

A. Vote		YES	NO	Comments
Q.1	Do you accept the proposal in document SC 29 N 9601 as a sufficient definition of the new work item? (If you have responded "NO" to the above question, you are required to comment.)			
Q.2	Do you support the addition of the new work item to the programme of work of the joint technical committee?			
B. Participation				
Q.3	Do you commit yourself to participate in the development of this new work item?			
Q.4	Are you able to offer a project editor who will dedicate his/her efforts to the advancement and maintenance of this project? (If "YES," please identify)			
C. Documentation				
Q.5	Do you have a major contribution or a reference document ready for submittal?			
Q.6	Will you have such a contribution in ninety days?			

P-member Voting:	Date:	Submitted by:
National Body		Name