ARC: A Strategy for the Future of SC 24 Standardization Efforts

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Ha-Jine Kimn
ISO/IEC JTC 1/SC 24 Chairman

hjkimn@hallym.ac.kr

Ha-Jine Kimn: JTC1 SC24 Computer Graphics, Image
Processing and Environmental Data Representation

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Talks on :

- About ISO/IEC JTC 1/SC 24 : Computer graphics, image processing and environmental representation

- Past ISs on Virtual Reality in SC 24/ WG 6

- Future Standardizations on ARC in SC 24/WG 6 & 9

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SC24 Status :

Chairman : **Ha-Jine Kimn**, Secretariat : **Charles A. Whitlock**

Four Working Groups :

WG6 : **ARC Presentation and Interchange (R. Puk)**

WG7 : **Image Processing and Interchange (Y. Chung)**

WG8 : **Environmental Representation (J. Cogman)**

WG9 : **ARC Concept and Reference Model (G. Kim)**

Membership : **34 Nations**

- Actively Participating **6** National Bodies :

   Australia, China, Japan, Korea, UK, US

- **25** Observing Nations + 9 Participating Nations

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Liaisons :

6 internals to ISO & IEC :

ISO TC211, Joint Steering Group on Spatial Standards and Interoperability, JTC 1/SC29, ISO TC130, IEC TC100, ISO TC215 Health Informatics.

11 externals :

Forums in **geospatial, navigation, virtual environments and simulation** technologies :

W3C, Web3D, Khronos Group, SISO, SEDRIS Organization, MEDSEC, Open GIS Consortium, Digital Geographic Information Working Group (DGIWG), NATO Air Group IV and Modeling and Simulation Co-ordination Office, IHO, WMO etc.

SC24 Area of Work :

- Area of Work (JTC 1 N10933, 2011) - Standardization of interfaces for information technology based applications relating to :

- • **computer graphics,**

- • **image processing,**

- • **environmental data representation,**

- • **support for the augmented reality continuum (ARC)****, and**

- • **interaction with, and visualization presentation of information**.

Inclusions :

Included are the following related areas :

Modeling and simulation related reference models; virtual reality accompanying augmented reality/ augmented virtuality aspects, related reference model; application program interfaces; functional specifications; representation models; Interchange formats, encodings and their specifications including metafiles; device interfaces; testing methods; registration procedures; presentation and support for creation of multimedia and hypermedia documents.

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Exclusions :

Excluded are the following related area :

Character and image coding; Coding of multimedia and hypermedia document interchange formats, JTC 1 work in user system interfaces and document presentation; **ISO TC207** work on ISO14000 environmental management, **ISO TC 211** work on geographic information and geomatics; Software environments as described by **ISO/IEC JTC 1 SC22.**

Past ISs on Virtual Reality in SC 24/WG 6:

- ISO/IEC 14772-1:1997 - The Virtual Reality Modeling Language-part 1: Functional Specification and UTF-8

- ISO/IEC 14772-2 : 2004 - The Virtual Reality Modeling Language(VRML)-part 2 : External authoring interface (EAI)

- ISO/IEC 19776-2 : 2008 - Extensible 3D(X3D) encoding-part 2 : classical VRML encoding

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Future Standardizations on ARC in SC 24/WG 6

Scopes of activity : ToR provide descriptions on standardization

- of computer graphics functional specifications for ARC

- of techniques for presentation of ARC multimedia informations

- of interfaces for ARC multimedia objects

Future Standardizations on ARC in SC 24/WG 9

Scopes of activity : ToR provide descriptions

- to identify architectural elements of ARC

- to study relationship between ARC architectural elements

- to develop general purpose reference model

- to study and identify one or more abstract levels

- to identify available standards supporting ARC architecture

- to provide a focus point for ARC

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Future Meetings :

- **Future Plenary Meetings :**

  19 – 24 August 2012 : Brussels, Belgium

  2013 : Sydney, Australia

  2014 : North America

- **Teleconferencing Meetings with X3D :**

  4 meetings in every month on H-Anim, KC, CAD and AR

- **Editing meetings on ARC : TBD**

Thank you for your attention!

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