Stuff for ARC including AccessForAll 3.0

Andy Heath,
Axelrod Access for All
http://www.axelafa.com
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Me

- Ex-Computer Science Lecturer with and Ed. focus (Schools, FE, Uni)

- 10 years Accessibilty Standards work (list at end) - includes AccessForAll in several stables

- SHU, CETIS, Ufi, BECTA, OU, IMS, various corporations

- Achieving adoption of personalisation (supported by standards)

  - Architecture, technical strategy, standard development, implementation - all these kind of things

Why Am I saying the same things now as I was ten years ago

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- Personalisation is hard. We must make it easy

Hard Questions

- What is cohesion in individualisation (e.g. audio description)

- How to get cohesion across technologies, organisations, standards .. (needs?)

  - The maximum common ground, no more, no less

  - Modifiable standards is hard

AccessForAll (Afa)

Simplified (devices can be on both sides)

Personal Needs and Preferences PNP

Matches

Digital Resource Description DRD

(selects, gathers adaptations, configures etc.)

Schematic diagram showing how a Digital Resource Description can describe properties that can match the content/system to a Personal Needs and Preferences instance

AccessForAll (Afa)

- UToronto ATRC, IMS Afa 1.0

- -> ISO Individualized Adaptability and Accessibility for eLearning, Education and Training (24751) [NOTE - NOT education-specific] - Free ISO standard (google 24751 finds it)

- See Why Afa3

- -> IMS Afa 3.0 - Public Draft for comment at http://tinyurl/afa3publicdraft

Afa 3.0 goals

- Very simple model

- Easily modifiable

- XML and RDF bindings – maybe XML for tight control, RDF for modelling and modification

- Accessibility knowledge made explicit

- Core and Extended

How does it work

Properties and Terms:

- DRD AccessMode (visual, auditory, tactile, textual (also textOnImage, colour)), AccessModeAdapted

- DRD AdaptationType

- DRD HasAdaptation, IsAdaptationOf

- DRD AdaptationMediaType (experimental)

- PNP AccessModeRequired, AdaptationTypeRequired

For Example

- (visual, AccessModeRequired, auditory)

  - For a visual AccessMode in a resource this user requires an AccessMode of auditory (for example AudioDescription)

- (auditory, adaptationTypeRequired, captions)

  - For an auditory resource modality

- (http://thisResource, hasAdaptation, http://thatResource)

  - thisResource has an adaptation identified as thatResource

Relationships

AdaptationType	AccessMode	AccessModeAdapted	Notes
alternativeText	textual	visual	short text
audioDescription	auditory	visual	
captions	textual	auditory	when audio and visual are synchronized together

Etc..

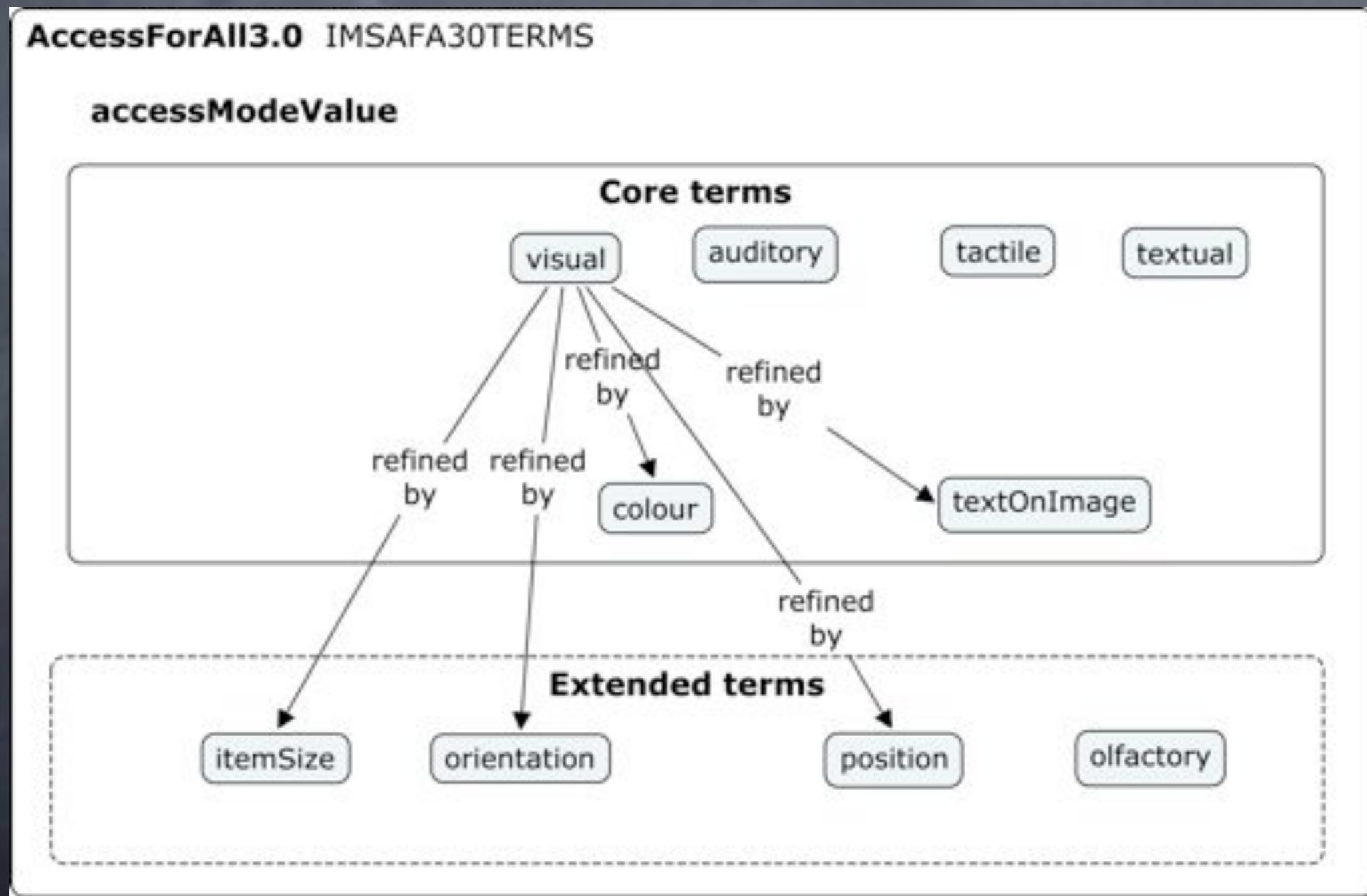| AdaptationMediaType	AdaptationType	AccessMode	AdaptationDetail	Notes
Daisy	e-book	auditory and/or textual	recorded or synthesized	
NIMAS	e-book	textual		
MathML	e-book	textual	symbolic	

Etc..

Two tables of information:
The first three lines of a table relating Adaptation Type values, AccessModes, the AccessModes they adapt and nots on how to use each. The full table is in Afa30BestPractices section 4.2table 1 available in the Public Draft for comment at 28th February 2011.
The first three lines of a table relatiing AdaptationMediaType, AdaptationType, AccessMode, AdaptationDetail and Notes on the use of each. The full table and explanation of its use is in Afa30BestPractices Appendix B. Advanced Material section 2.3 Table 3 – AdaptationMediaType values – available in the Public Draft for comment at 28th February 2011.

Refinement

- An element or term can refine another (be a more-precise form of), similar to Dublin Core

AccessForAll3.0 IMSAFA30TERMS

accessModeValue

Core terms: visual, auditory, tactile, textual. visual refined by colour, refined by textOnImage, refined by itemSize, refined by orientation, refined by position.

Extended terms: itemSize, orientation, position, olfactory.

Diagram of relationships between properties from Section 3.3 of Afa30BestPracticesGuide.doc available in the Public Draft for comment at 28th February 2011. Diagram shows terms for visual refined by each of itemSize, orientation, position, colour and textOnImage and the terms auditory, tactile, textual and olfactory. Some terms are shown as being Core terms and some are shown as extended terms.
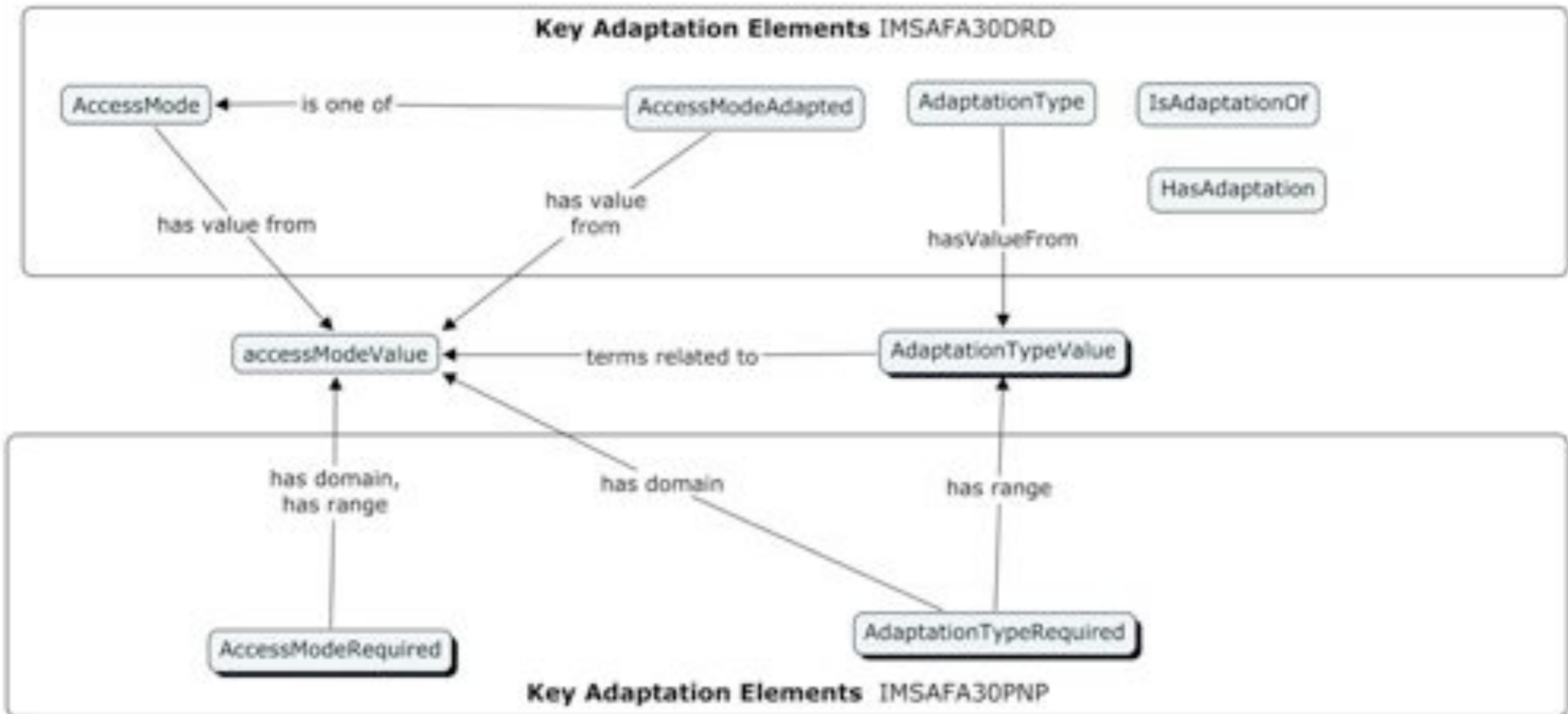
Terms and Properties

- Modelled in harmony with ISO Metadata for Learning Resources - a very new Metadata Standard - Framework document complete, other parts approaching FDIS

- You get a set of Properties and terms - freely use what you wish, add your own (but we recommend Core or Extended set (see the specification)

Afa3.0 Key Elements

Diagram showing the Core elements from Digital Resource Description and Personal Needs and Preferences Statement and how each are related. A full description of the terms and relations in this diagram is given in the PNP30.doc and DRD30.doc available in the Public Draft for comment at 28.2.11. See the explanatory text accompanying each of DRD30.doc Figure 2.0 Digital Resource Description (DRD) and PNP30.doc Figure 2.0 Personal Needs and Preferences (PNP). The diagram on this slide is a simplified version of the key elements for adaptation drawn from the Core Elements of those two diagrams showing how they have accessModeValue and AdaptationTypeValue in common.

Where is it "at" ?

- In Public Draft for Comment

    - http://tinyurl.com/afa3publicdraft

- Enough to work now but many other terms need modelling

    - Do we need community ontologies

    - What formalism(s) ?

- Acceptance by major players ?????

Where is it "at" ?

- Relationship with ISO 24751 ?

  - 24751 needs revision

    - likely to go into Metadata for Learning Resources (MLR)

    - 24751 mappings to Afa3.0 are easy for elements modelled in Afa3.0

    - Afa 3.0 can have many bindings (XML-Schema, RDF) and be used for modelling and for strict conformance

  - The IMS Accessibility SIG

  - http://www.imsglobal.org/accessibility/

Other Stuff

- Under Construction in 24751

    - Part-9: ITLET - Access for All Personal User Interface Preferences

    - Part-10: ITLET - Access for All User Interface Characteristics

    - Part-11: Access For All Personal needs and Preferences for Non- digital Resources (PNP-ND)

    - Part-12:Access For All Non-digital Resource Description (NDRD)

    - Part-13: Access For All Personal Needs and Preferences for LET Events (PNP-EV)

    - Part-14: Access For All LET Events Description (EVD)

- GPII (http://gpii.org), work in other groups e.g. eTextbooks, Interfaces (e.g. SC35), User Needs in SWG-A, Mandate 376 etc.

Sample Standards Participations

- IMS Accessibility SIG (invited expert)

- ISO Special Working Group on Accessibility

- ISO

    - Information technology for learning, education and training (SC36)

        - Culture, Language and Individual Needs

        - Management and Delivery of LET: Metadata for Learning Reources

    - User Interfaces (SC35)

- BSI

    - IST/43 IT for LET

    - IST/45 Web Accessibility (e.g. 8878)

    - ICT/-/6 Accessibility Standards Co-ordination (Vice Chair)

- ISO Study Group on Green ICT