Issues Enabling Multi-locational Accessibility

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Accessibility

“The matching of people’s information and service needs with their needs and preferences in terms of intellectual and sensory engagement with that information or service, and control of it.”
Location-specific problems

“Problems associated with accessibility that are caused by changes in location.”

- Macro and micro changes in location
Accessibility in all contexts (1)

- In which technical access is available - issue of possession of communications out of scope
- Instead, location-independent accessibility
Accessibility in all contexts (2)

Accessibility is worked on as a device, location, context, ability independent requirement for all content and services, across borders.
Two complementary approaches (1)

- W3C develops requirements and techniques for making every resource independently accessible
- IMS/DC extend this to distributed resources
Two complementary approaches (2)

- W3C and universal accessibility
  - i.e. just-in-case accessibility
- IMS/DC and universal user-centred accessibility
  - Just-in-time
- W3C - all accessibility in one place
- IMS/DC - accessibility distributed
Standard descriptions of objects

- Cross-sectoral
- Multi-disciplinary
- In range of international languages
- i.e. inter-operable
Metadata

- Standard form descriptions
- Similarly structured
- Machine-readable
User’s needs and preferences

- Change with time and contexts so
- Multiple profiles
- Adjusted dynamically
- Cascading e.g. corporate to personal
Structured descriptions of needs

- No problem, no comment
- Accommodating finest detail needed
- With respect to: controls, display modalities, and content
Location specific *versus* location independent

For example to find the nearest ATM:

- Location specific information
- Location independent instructions
Location problems

- Identifying location with precision
- In 3 D space
- In moving spaces, e.g. a train
- Absolute *versus* relative locations
- Dependence *versus* independence
Accessibility of language

- Usually changes with location
- User needs independent of change of location
Resources

- Usually composite
- Often need equivalents
- Equivalents often distributed
- Sometimes need to create equivalents
- Not known at time of creation of original
Resource descriptions

- Need to match user needs and preferences descriptions
- Same needs for interoperability
- Primary or equivalent
- Suitable for distributed content objects
Accessibility servers

- Application for matching user and resource metadata
- Facility for user to change profile
- Choice of cascading profiles
- Ability for user to choose what to do when there are mismatches
Emerging possibilities

- ISO/TC 211 Geographic information
- Dublin Core Metadata Initiative
- IMS Global
- TILE
- Web-4-All