

# MMI Workshop Feedback

Research/Other

# Description of devices

- Need for standardized description of devices
  - Work in DI, CC/PP UAProf, but more work needed for vocabularies and extension to more kinds of devices
  - Positive feedback for already started collaboration between MMI System and Environment, DI, OMA

# Description of components

- In addition to description of devices, interest also in description of capabilities of software components/resources
  - Distributed multimodal applications, Ambient Intelligence
  - Capabilities of speech, vision, handwriting recognition and understanding systems

# Multiple level models for generation/adaptation of interfaces

- Several talks present multiple level models aimed at producing concrete interfaces of different kinds from abstract underlying specifications
- Is there sufficient support for these kinds of models in existing W3C standards?
  - Lots of work addresses this
    - XFORMS, CSS, DI
    - More coordination?
    - Unified vision?
- Support for more abstract representation of interaction and shallower abstraction
  - Tension of authoring/hand-tuning need vs. generality
- Authoring tools to help you arrive at a more abstract representation based on concrete specification

# Coordination of output

- Coordination of speech with graphical actions, pen, gestures
- Coordination of graphical output
- Does SMIL provide all we need for multimodal output synchronization?
  - Timing expressions are there
  - Bring together SSML, with SMIL, and SVG, MPEG (FAP)
- What do we use to represent the input of the fission?