

Standards in AAL

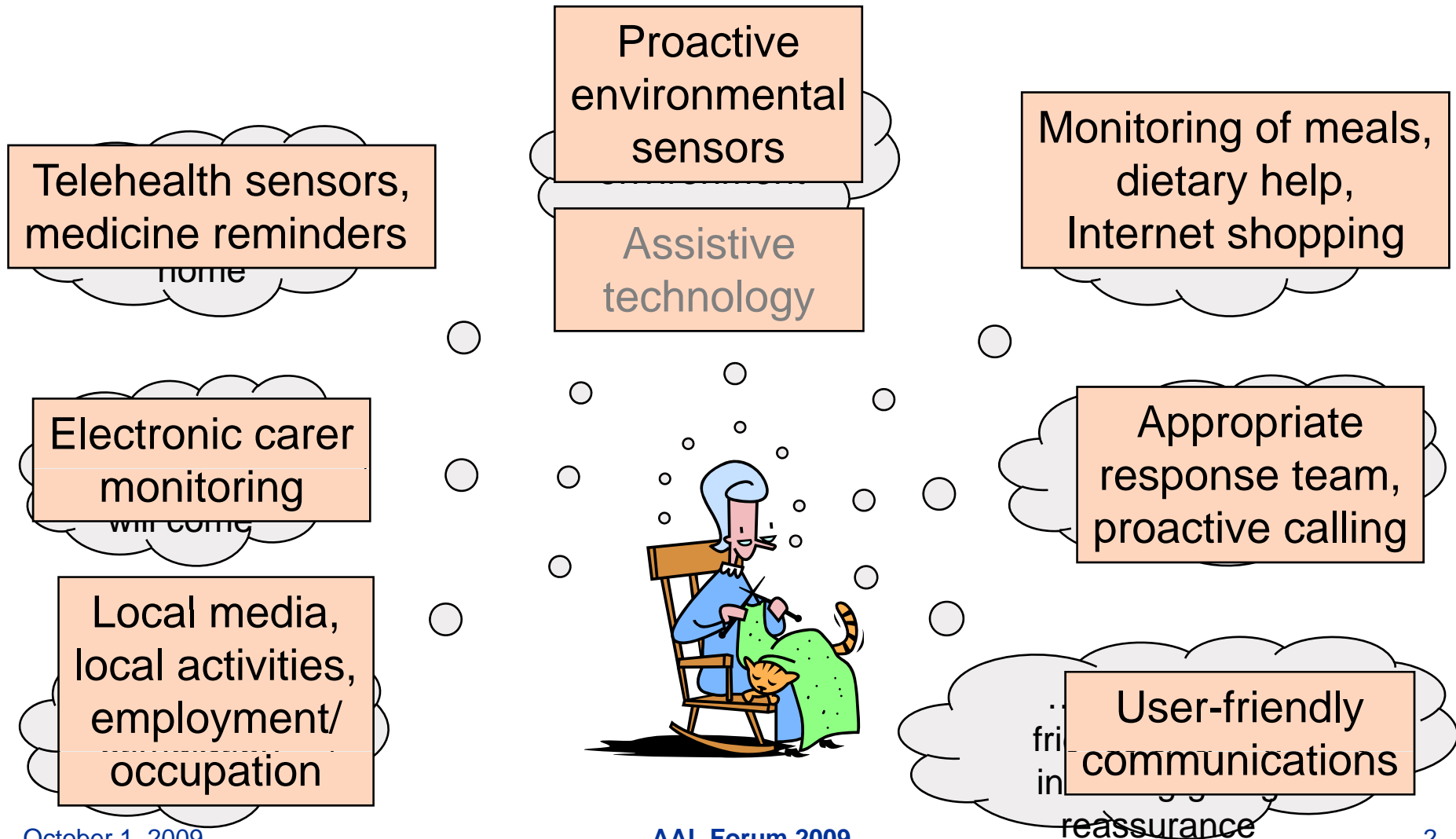
AAL Forum 2009

Standards and Interoperability

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Vienna

To live independently I need... ...where electronics helps lots



Observations related to this scope for AAL

- The AAL domain consists of a large set of independently developed systems and services
- There is an added value when data from these systems and services can be exchanged, aggregated and used by reasoning services resulting in better support for the clients

This can only be achieved when these system and services are interoperable and can be integrated dynamically.

Interoperability dimensions as defined by HL7

- These systems and services should fit (mechanic, electronic, EMS,), in existing environments (physical or environmental interoperability)
- These systems and services should be able to communicate and exchange data with each other (technical or syntactically interoperability)
- These systems and services should be able to understand each others data (semantic interoperability)
- The exchanged data should fit the needs of the systems and services (process interoperability)

This can only be achieved when standards are being used

Categories of standards

Institutional categories:

- official,
- voluntary,
- proprietary, and
- open standards.

Industry groups play an important role:
CONTINUA, DLNA, WiMedia...

Some observations

Many standards around but:

- Conflicting versions
- Conflicting implementations of same standard
- Lack of specific standards
- Lack of certification of products and services

Barriers for adoption

- **Supplier barriers:**
 - Focus on internal efficiency within supplier
 - Standards not designed to user needs
 - Ignorance about standards
 - Implementation or migration costs
- **Care delivery organization barriers:**
 - Focus on internal efficiency within care delivery organization
 - Lack of financial incentive to electronically exchange data with other care delivery organizations
- **Political barriers, regulations, SDO barriers**

Categories of Standards in the context of AAL

AAL integration like:
Exchange formats
Ontology's

Domain specific like:
Healthcare: tele-monitoring, medication management, care organisation
Home control, safety and security
Infotainment and social connectedness
Electronic shopping, ordering and payment

Generic technologies like:
Connectivity: PAN, LAN, WAN
Web based services, privacy and security technologies
Distributed systems, middleware

Equipment and environment standards like:
Home and building electronics
Safety, EMC, Connectors, material

Inventory of standards

In our standards document we identified a number of standards, spread as follows on the categories

- 11 on domain specific standards
- 9 on equipment and environment standards
- 14 on generic technologies

But there are many more

Document available at:

<http://www.aaliance.eu/public/documents/standardisation/policy-paper-on-standardisation-in-aal-february-2009/view>

SmartHome related standards

CENELEC



We are not alone ..

- From R&D projects most of them are using standards, only a few are contributing to standardization : OASIS, EMERGE, EASY LINE+, MPOWER, SOPRANO, WAY-AGE, Persona, SENIOR, e-PAL, CAPSIL, i2HOME, Amigo, NUADU (ITEA)
- CENELEC SmartHouse working on a roadmap
- Home TAHI Interoperability Framework Initiative
- CONTINUA alliance
- ... and probably more

Recommendation

- Increase awareness of the need and the opportunities
- Identify and select standards
- Promote these selected standards
- Develop design guidelines using those selected standards
- Label and certification of products and services

**Thank you
for your attention**