

- Standardisation has multiple dimensions: *defining* them (e.g. HL7), *using* them (e.g. CONTINUA), *implementing* them (e.g. OHT) and “*constraining*” them/defining styles of using them (e.g. CONTINUA guidelines).

Is this last dimension (constraining) one we need to do more work on to achieve more pragmatic and widespread adoption?

- Continua, HL7 etc. are too much focussing on standardization of health & welfare applications and services. Should there not come more efforts in applications and services for prevention of illness and diseases?
- As previous question: should standardization efforts on health & welfare coincide with those for applications and services in the social domain?

- Multiple standards exist, sometimes overlapping, even rivals. One way to deal with this is to include a software layer in a platform supporting multiple standards.  
Is this the solution – if universAAL does this, is the problem solved? Or should we instead (or in addition) to try to reconcile standards and have only one for each issue?

# General questions (1)

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- Sensors and actors for monitoring energy consumption will soon be developed and deployed, preferably via plug and play as well. The same products might be used for both energy and AAL applications. Will the standardization efforts in the energy area go much faster than in AAL?

- Interoperability at the syntactic level is on the way to being solved. At the semantic level there is much less progress, but the the use of ontologies has a major contribution to make here, and some projects focus a lot on this.

Do people (even developers) understand the benefits of ontologies and how to use them? Why have they not been adopted more widely? Should universAAL, at least, act as a promoter of ontologies in the AAL domain?

- There are no viable business models for AAL; instead there are stand-alone solutions.

Can this change? Is the idea of mixing *open-source* and *profit-driven* approaches the way to go?

- Our dream scenario for devices: users go to the local hardware store, buys the devices they want, come home, plug them in – and everything just works.

How close are we to achieving that? Do we really want to – is that really our dream scenario? Are the approaches we promote going to achieve that in our lifetime?

- We need to be able to “discover” devices in the home and in other environments.

There are standards for communicating with devices. But is there any unified approach to knowing which ones you might want to communicate with, and which are irrelevant?



- Support for heterogeneous devices is a key part of any overall AAL solution.

Do we know how to do this in a way that can be just *part* of an overall platform (like universAAL) – or do we need “specialist” platforms like Hydra?

- Many platforms have modules for “context management”.  
Is the concept of “context” meaningful in the AAL environment? Does the distinction between “context” and “non context” data really help us?

- Technical approaches to dealing with security and privacy issues exist in some platforms.

Is it enough to have technical approaches that we, the technicians, believe in? Isn't the bigger issue how we convince people that they can *trust* them?

- universAAL has produced a set of “reference use cases”, trying to encapsulate the core aspects of what is important in AAL. What can we do to validate that it is “correct”, and achieve widespread acceptance? Is this a job for AALOA?

- Jan Alexanderson showed us the “elderly suit” with the lead weights etc.

Should there be an EU parliament ruling that everyone working in AAL is obliged to wear one for at least one hour of each working day (and certainly when assessing solutions)?

*More seriously:* what can we do to help researchers understand better what obstacles are encountered in real-life situations, and how they might be overcome by AAL solutions?

- Many projects focus on platforms and techniques. Some (like NetCarity) focus on developing services that work.  
Do we need more “bottom-up” projects so that projects like universAAL have a clearer idea of what kind of services need to be easy to develop?

- From earlier projects, we have some ideas about what we think are key AAL services, the “favourite” ones for adoption. Should we try to refine this list to reach a “perfect” picture of what AAL is all about? Or does that constrain creativity: we don’t know what kind of sensors and other technologies will appear even in the near future (or indeed what end-users will want) – so we should continue full speed ahead on platforms and just try to be as flexible as we can?

- The URC concept provides a standardized way to deal with UIs and make it easy to “plug in” different UIs for different users. It has obvious advantages.

The idea has been around since around 1980 when it was called UIMS. Why has it not been adopted widely, and is it going to be soon? Is there any real excuse for not doing so?



- Many projects are developing services, based on different components.

In future, who will develop components? Where will they put them, for use by others? Who will certify that they are “safe” to use? Is the univesAAL “uStore” **the** answer? Or just one possible answer? Or no answer at all?

- Is “self-monitoring” (to detect failures or “rogue” devices) something that belongs in a platform, or is it part of a service?

- Certification of medical devices usually takes a lot of time because it is necessary to comply with strict regulations. In the AAL domain there are many non-medical devices. Might this lead to a situation where there are two “classes” of devices in peoples homes? *Or worse:* the fact that devices are to be used together might lead to complications in the approval process?

- Is there enough attention for development, and thus standardization, of devices and services that can be personalized and customized?

- AALOA has issues its manifesto, and want people to join.  
Will **you** join?