



Positioning and location
in hospitals



The Overall Purpose: Efficient healthcare

General lack of resources



Specific funding requirements

Demand for optimization



Better logistics



Positioning and Location

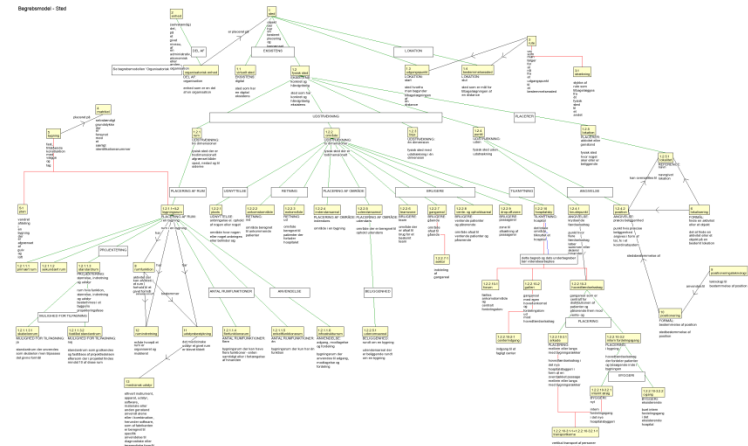
Location is a basic innovation.

- Location must be:
 - A generally available service.
 - Broad-spectred.
 - Technology agnostic.
 - Suitable for hospitals.
- So that:
 - We can locate colleagues and patients.
 - We can locate equipment, instruments, articles, beds, samples, etc.
 - It-systems can make use of relevant context information.
 - Equipment may navigate (AGV).
 - ...

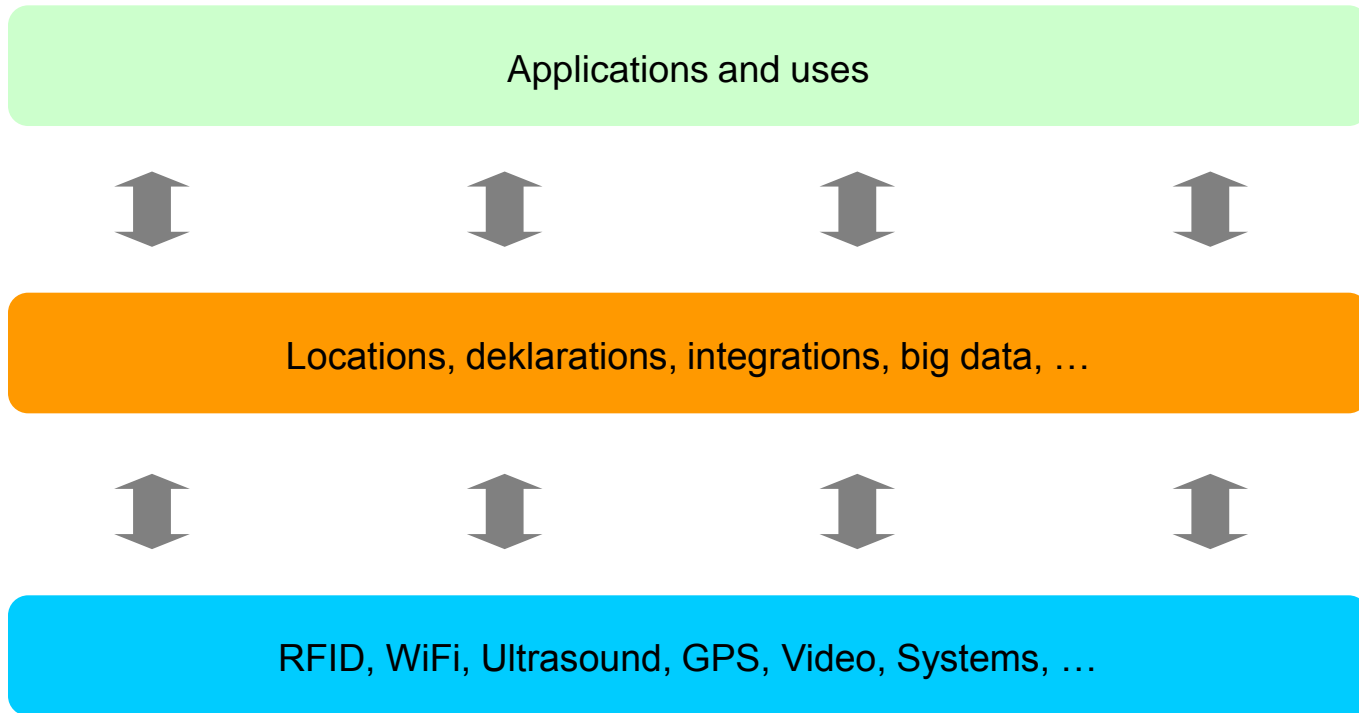


Some preliminary work.

- Reference architecture
 - Localization and item identification.
- Conceptual model.
 - The concept of *place* in a hospital context.
- Use scenarios
 - 42 use cases of automatic location.



Basic system architecture.



Standards

Interfaces based on standards must use EPCGlobal standards

Same interface to all systems. EPCIS Query interface.

Standard based interfaces preferred over proprietary.

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Standard based protocols used if available.

When several types of ID may occur, use multiprotocol readers .

Layer 5: Application systems.
Use of location data.



Layer 4: Integration system for location
Collection, enrichment and communication of relevant location data.



Layer 3: Location system
Filtering and display of location data.



Layer 2: Detectors
Physical registration of motions and events.



Layer 1: Mobile objects
Physical objects with IDs, sensors or similar.



Tender

- Framework contract:
 - One contractor: Design contest.
 - Contest determined medio June
 - Contract signed primo September
 - 5 customers: Danish regions.
- Supply contract:
 - Region
 - Hospital
 - ...



Supply kontrakt #1: DNU.

- The Initial System.
- Four applications:
 - General search.
 - Track and trace of blood components..
 - Bed management.
 - Logistics management.
- Time plan:
 - Basic edition, autumn 2014.

Info:

www.dnu.rm.dk/bygherre/it/sporbarhed+og+emne-id?

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