Accessibility of Sustained eServices

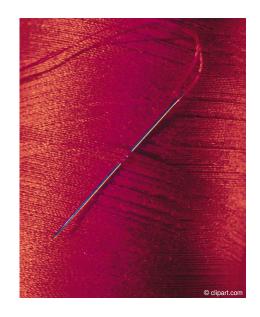
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The project environment

This research is part of the ongoing project The Read Thread (in Norwegian: Den Røde Tråd), supported by the Norwegian Research Council's IT Funk programme.



Det Norske Veritas (DNV) is the project owner.

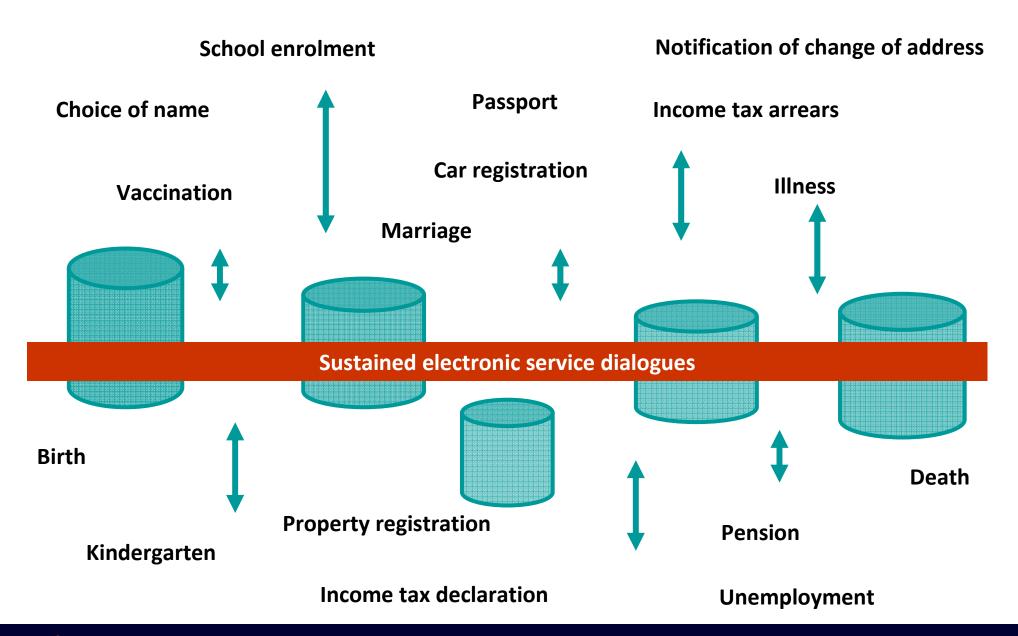
Tellu AS participates in the project and provides the project team with technology prototypes.

Current accessibility focus

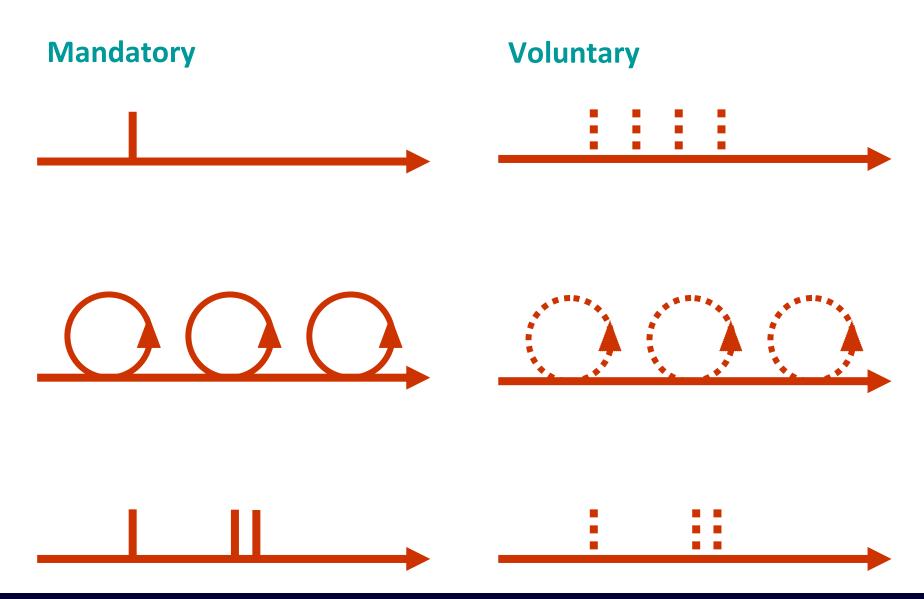
Accessibility standards and guidelines...

- ... are designed to increase the accessibility of eservices that are used "here and now".
- ... are more or less based on disabilities or diagnoses.
- ... have heavy focus on visual impairments and reading/writing (learning) disabilities.

E-services on a timeline



How does time "behave"?

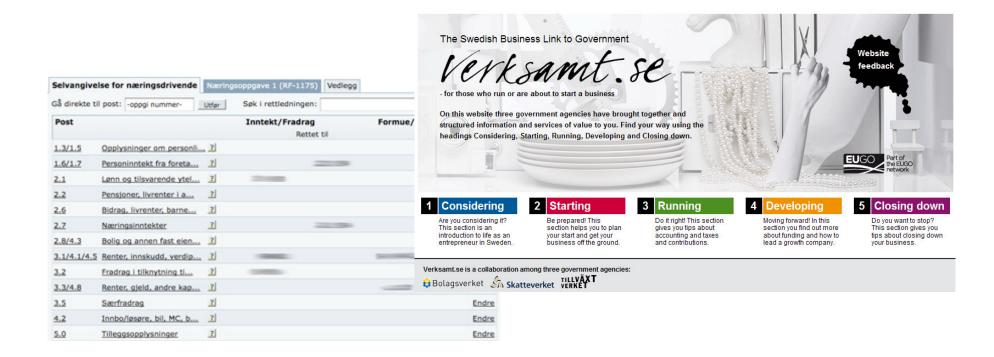


Accessibility challenges

- Current understanding of accessibility is insufficient in the context of electronic services that are used *over* time, thus gradually forming a "continuum".
- The aspect of time is inadequately treated by accessibility standards and guidelines, although time plays an essential role in the use of many e-services.

Relevance: Three examples

- 1. Starting a business
- 2. Income tax declaration
- 3. Children/families with special needs



Analysing existing guidelines ...



Find, learn, recognize, recall, ...



Principles to increase the accessibility sustained eservices (based on established accessibility guidelines):

- 1. Overview and general information
- Targeted and relevant information
- 3. Safety and trust
- 4. Support for multi-channel platform and "family resemblance"
- 5. Logical process and progression
- 6. Storage and retrieval of information
- 7. Timeline

Overview and general information



Make locating the service among numbers of portals and other access points easy (joint portal solutions, "one-stop-shopping").

Provide information about the scope and purpose of the e-service, and about access methods (username, password etc.).

Targeted and relevant information



Update information about the service.

Provide quick access to different parts of the service (alphabetic lists, site-maps).

Security and trust



Provide sufficient authentication mechanisms, but do not "overkill".

Provide possibility to print documents, web pages and so on.

Provide contact information to user support.

Provide an overview (receipt) of completed work.

Support for multi-channel platform and "family resemblance"



Provide alternative modalities.



Take care of consistency of appearance; that is how objects in the user interface etc. look.



Take care of a minimum level of design conventions, e.g. placement of visual elements, functionality, navigation, contact information etc.

Logical process and progression



Provide user the opportunity to:

- to know where in the work process s/he is,
- to receive acknowledgements of successful actions, and
- to receive meaningful, process-related notifications of failure.

Easy storage and retrieval of information



Provide mechanisms that make it possible for the user to find, retrieve and save information.

- Use hypertext or links.
- Use time stamps.
- Provide search functionality and adequate metadata to facilitate this.

Timeline

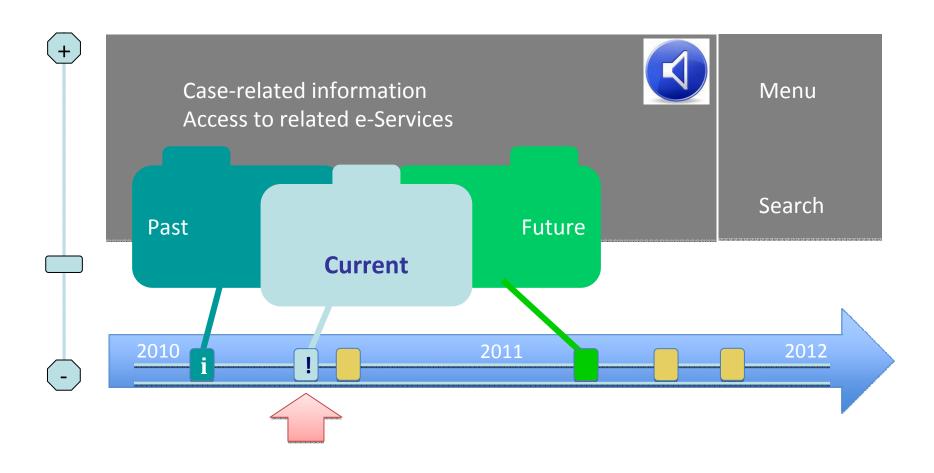


The main asset of a timeline must be that it is easy to read, it presents information in a logical manner, and that it supports the user in (re-)grasping the task or process even after a longer period of latency.

Find, learn, recognize, recall, ...

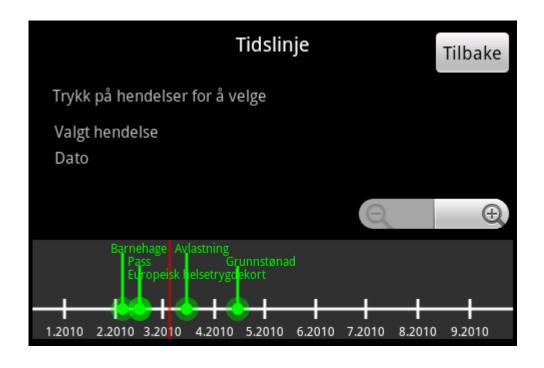
Timeline paper prototype





Timeline prototype, Red Thread-project





NB: First basic functionality in laboratory, not universally designed HCI.



Requirement landscape for good HCI

