TO: Archives New Zealand
rkconsultation@dia.govt.nz

Opinion about Records and Information Management Standard

First of all, a lot of thanks to Archives New Zealand organising this important consultation.

This opinion represents an opinion of an individual citizen, not any legal entity.

This opinion does not contain:

- any business secrets
- any trade secrets
- any confidential information.

This opinion is public.

Archives New Zealand can add the PDF file of this opinion to a relevant web page.

Annex 1 holds a list of my opinions related to information systems.
Annex 2 holds information about disclaimers and copyright.

Best Regards,

Jukka S. Rannila
citizen of Finland

signed electronically

[Continues on the next page]

Respondent information

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I am making this submission: as an INDIVIDUAL

General remarks

Annex 1 holds a list of my opinions related to information systems.

Based on the previous opinions it is possible to make some observations for Records and Information Management Standard draft(s).

From this consultation it is possible to compare different issues in Finland and in New Zealand. Possibly there is something to be learned.

General remarks / Alternate ways for representing requirements?

> Cooper, A. (1999). The Inmates Are Running the Asylum: Why High Tech Products Drive Us Crazy and How to Restore the Sanity. Sams - Pearson Education.
>
> Cooper, A., Reimann, R., & Cronin, D. (2007). About face 3: the essentials of interaction design. Indianapolis: Wiley.

Cooper (1999) and Cooper, Reimann & Cronin (2007) gives us different/alternate ways for describing requirements. One thesis is that long lists of requirements are not efficient and they propose using different personas for presenting requirements.

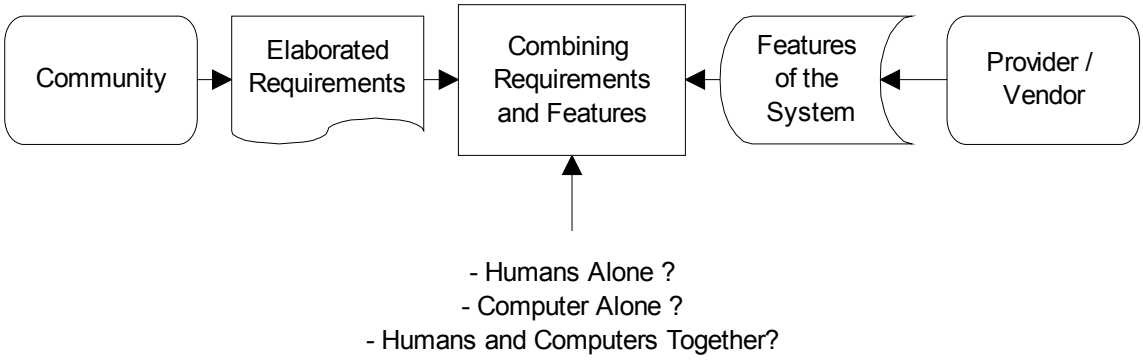
General remarks / Alternate ways for assessing usability / Light methods and other methods

> Krug, S. (2006). Don’t make me think! a common sense approach to web usability. Berkeley, Calif : New Riders.
>
> Sinkkonen, I., Kuoppala, H., Parkkinen, J., & Vastamäki, R. (2006). Psychology of Usability. Helsinki: IT Press.

Krug (2006) describes and proposes light usability assessment methods for an information (web page) assessment. Sinkkonen et. al (2006, Appendix) describes rather extensive and large-scale usability assessment methods. One thesis (Krug 2006) is that it is easier to do light usability assessments during a information (web page) system development.

General remarks / Difference between requirements and features

It can be said, that the Archives New Zealand is now a community for elaborating different requirements to a (new) information system. The (new) information system features should conform to the requirements. Requirements engineering is very high-risk task in the information and communication technology (ICT) field. Therefore we have even today very high-risk projects failing because of the requirements engineering problems.



Traditionally requirements engineering has been divided in to three distinct areas:

1) discovery
2) specification
3) validation and verification.

However, the scientific information about requirements engineering is not cumulated extensively. Mainly the scientific information about requirements is still based on describing different issues in the requirements process. (Jarke et al. 2011)

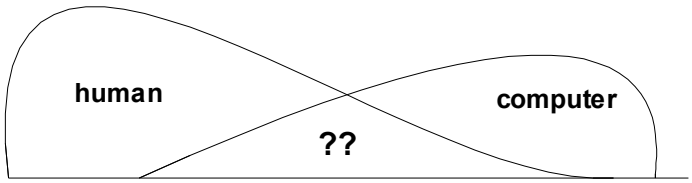
> Jarke, M., Loucopoulos, P., Lyytinen, K., Mylopoulos, J., & Robinson, W. (2011). The brave new world of design requirements. Information Systems, 36(7), 992-1008. doi:10.1016/j.is.2011.04.003

One thing is sure, requirements engineering is very high-risk task in the information and communication technology (ICT) field. Therefore we have even today very high-risk projects failing because of the requirements engineering problems.

However, it can be said with high certainty that this consultation will not result full discovery and totally unambiguous specification. Therefore the actual implementation of the (new) information system can open totally new scenes of new and unforeseen requirements – thus opening a way for a new information system failure.

Different requirements for an IT system can be described in many ways, and there can be mismatches between features and requirements. Also, the division of labour between humans and

123 computers can cause problems, and there are always real possibilities for creating cumbersome IT
124 solutions.
125



126
127
128 In reality there are several ways for organising task: humans only; computers only; combinations
129 for human and computers. Naturally the last task (combinations for human and computers) is
130 hardest to implement in reality – sometimes we create wrong combinations for these tasks.
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132 **General remarks / Domain experts and ICT experts**
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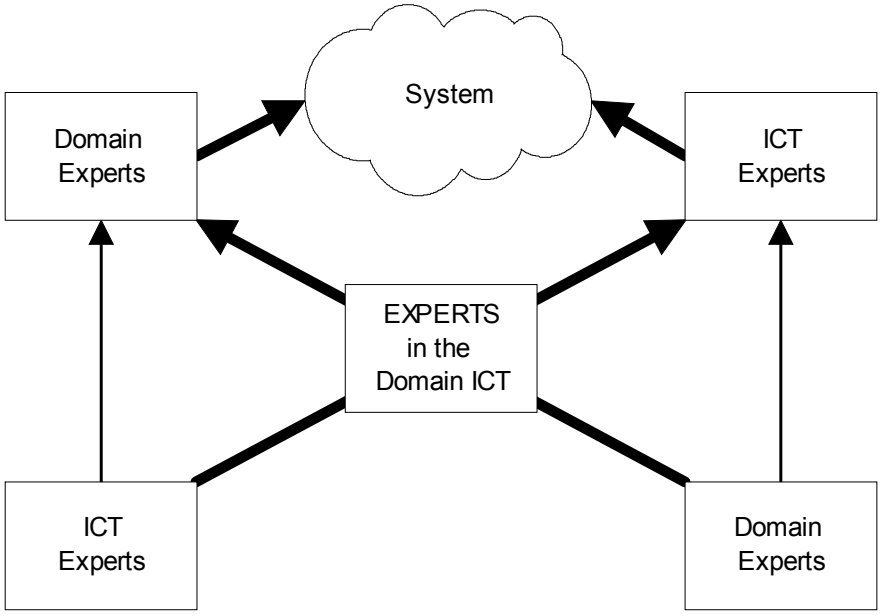


134
135
136 Based on previous opinions (check Annex 1) I have presented the previous figure. Generally
137 speaking different ICT experts try to understand a specific domain. Generally speaking different
138 domain experts try to understand ICT. There can be several several mismatches between ICT
139 experts and domain experts.
140
141 There could be more understanding between different experts when different issues are carefully
142 and presented with more clarity.
143
144 **General remarks / Conception of information technology (IT)**
145
146 We have the four basic functions: add, retrieve, change and remove. Then there are databases and

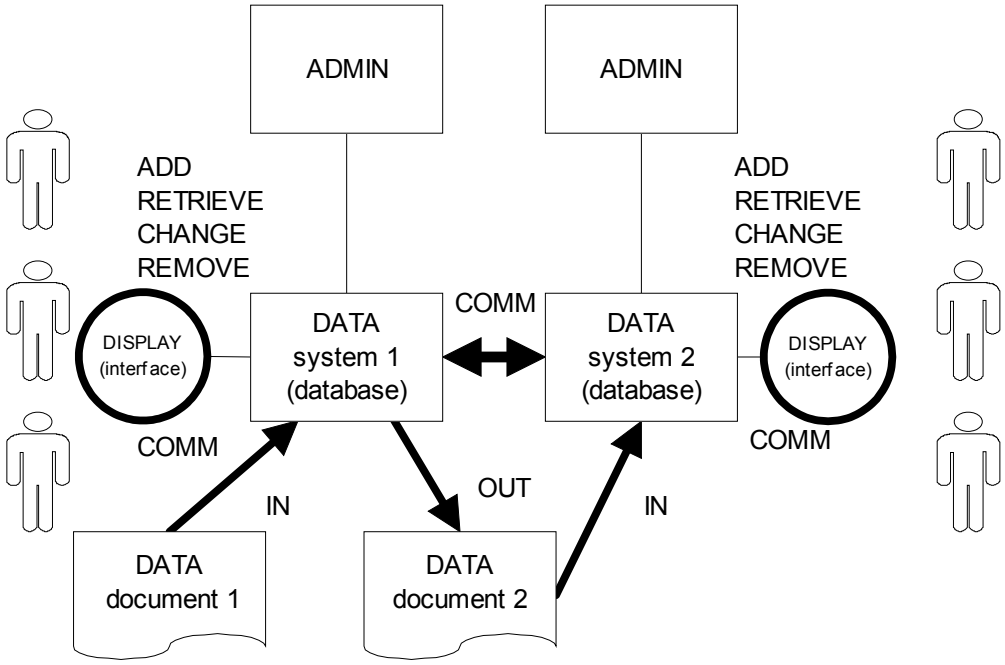
documents used in different systems. Users use different displays (interfaces). Different systems need administration (also maintenance) for keeping a system functional. Then there is communication (also standards) for direct and indirect usage of an information system.

In practical reality, different information systems are interrelated, and practical added value is based on the seamless cooperation between systems.

Here we can note some general issues with information systems. Generally speaking there can be direct system-to-system connections. Generally speaking cooperation between systems are based on transmitting different documents to different systems.

Note: There may be a need for both solutions – direct system-to-system connections and transmitting different documents between systems.

Proposal: Probably there has to both options implemented – direct system-to-system connections and transmitting different documents between systems.



Like the figure indicates, there are databases in different information systems. Then there are different documents for transmitting data between different systems. Here we can note especially following standardisation needs for different parts of the proposed IT platform:

* communication standards
* data standards (also document standards)
* database standards
* display / interface standards.

Proposal: There could different standardisation efforts for communication, data, document, database, display/interface standards.

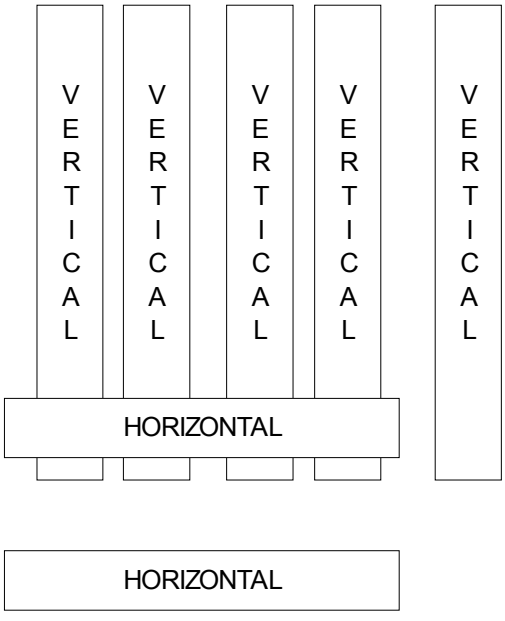
Proposal: Assessing previously developed standards could be done seriously.

One comprehensive list for different standard developing organisations (SDO) is provided [1] ConsortiumInfo.org. It may possible to use previously developed standards.

Here we can note that there can be direct system-to-system connections, which can mean some standardised interfaces. Also we can note that different document formats can be used when there is system-to-system connections.

One of the main themes can be division standards: horizontal standards and vertical standards. What this means? Generally speaking, different ICT solutions will implement a large collection of different standards: open standards and closed standards. In many cases, different ICT solutions do not work together and this might not constitute a problem. However, in many cases different ICT solutions has to work together seamlessly – possibly without further problems.

An example can be different email standards. There are numerous email systems developed with numerous technologies (vertical), but the cooperation between numerous email systems is possible with different (horizontal) email standards.



Opinion: The number of redundant standardisation efforts should be minimal.

Proposal: There could be separation of horizontal standards and vertical standards.

1 http://www.consortiuminfo.org/links/linksall.php, List of different standard developing organisations

Proposal: There could be different standardisation efforts to horizontal standards and vertical standards.

Personally I advocate using different horizontal standards. For example email standards (horizontal) are implemented with very different technologies (vertical).

Proposal: Archives New Zealand could asses both vertical and HORIZONTAL standards.

Proposal: Archives New Zealand could favour usage of HORIZONTAL standards.

Here we can note that developing horizontal standards is very demanding compared to developing vertical standards. Therefore NSW Fair Trading has to carefully assess situation of horizontal standards before developing new horizontal standards. On the other hand NSW Fair Trading could/can endorse and enforce usage of different horizontal standards.

Here we can note some problems:

- some systems are based on **de-facto** standards
- some systems are based on **de-jure** standards
- there can be confrontations between **de-facto** and **de-jure** standards
- there can be a monopoly situation in some domain
- some standards may inhibit possible actions of some stakeholders
- there can be a standard war on some domains
- standards have different life-cycles
- systems have different life-cycles
- there can be mismatches between different life-cycles
- there can be failed standards
- there can be deprecated standards.

General remarks / Actual reality / Different standards and standards versions

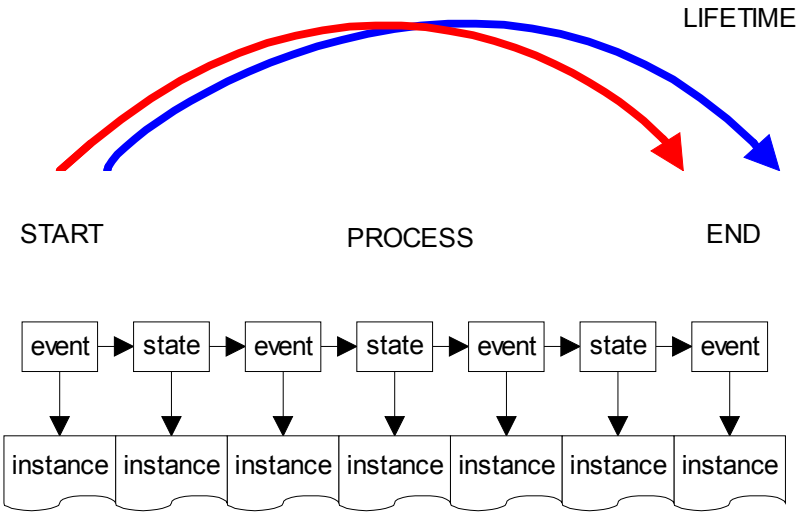
Previously I have advocated open standards for different information systems.

It is quite normal situation in the information technology field that there is competing standards for some application field. Therefore there are all the time ongoing “standards wars” or “format wars”. The information technology standards tend to be interrelated and one “standards war” or “format war” can lead to another similar situation.

I have advocated open standards, even though in some cases open standards are not de facto standards. In practice public sector has very important role, when some standards are competing in the market place. Because public sector has a considerable power when buying/developing information systems, and therefore public sector can sometimes direct markets to certain standards. Therefore, there should be serious vigilance when assessing different standards and “standards” in

some application fields.

General remarks / Processes, events, states, lifetime, instances, start and end



Important concepts can noted: processes, events, states, lifetime, instances start and end. It can noted that during the lifetime of an information system there can be significant changes with the selected and implemented standards.

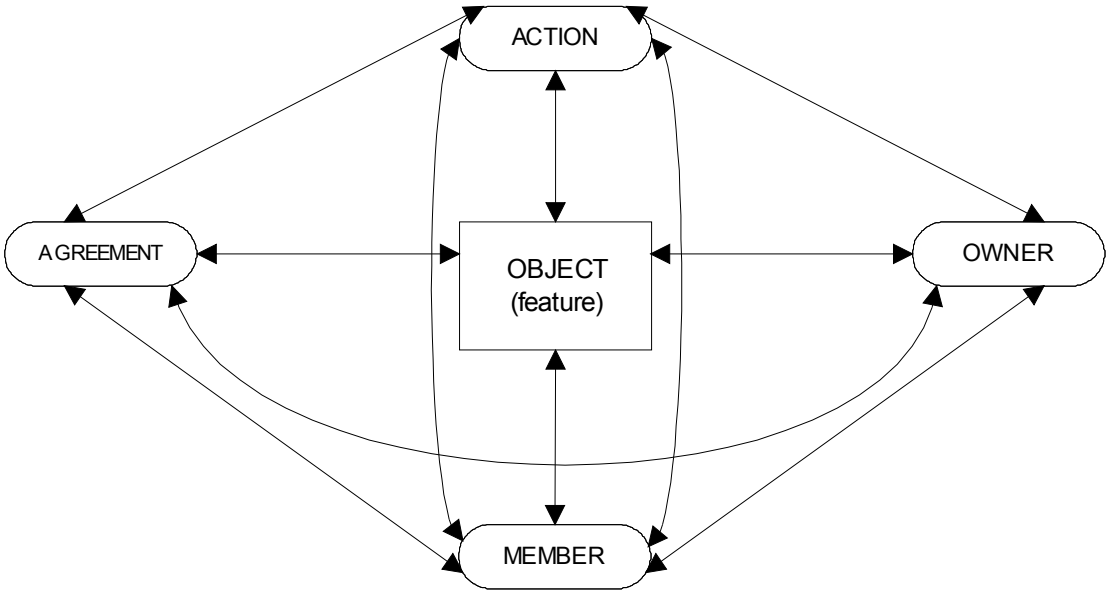
Proposal: Based on the results of this consultation Archives New Zealand could create a roadmap for implementing different open and/or especially horizontal standards.

It can noted that there are very cumbersome information systems on on different application fields. Therefore Archives New Zealand could have a clear roadmap for implementing different standards in the near and distant future. Archives New Zealand could formally join to some important (standards developing) organisations based on the results of this consultation.

General remarks / Owner, member or agreement?

Here we can note the difference between owners, agreements and members. In reality ownerships agreements and memberships cause very complex networks, and those networks are changing all the time: divisions, mergers, ownership changes, agreement changes, cooperation with other entities, life-cycles, etc.

Here we can note that ownership, agreement and membership are interlinked in different ways. Generally speaking average usage of a system means an unique combination of ownership, agreement and membership. When everything works fine there are not problems. However changes with ownership, agreement and membership can result difficult situations.



Proposal: There could be some considerations for assessing possible / future changes in ownerships, agreements and memberships.

In the previous consultations I have advocated following solution as the maximum solution:

* public sector institute owns the machinery and processor of the information system
* the machinery and processor are based on relevant open standards
* the operating system is based on an open-source solution
* public sector institute owns the source code of the information system
* public sector institute owns the database of the information system
* the database is based on open-source solution and on relevant open standards
* public sector institute owns all data in the information system.

Naturally, there can be solutions, which are not based on the maximum solution.

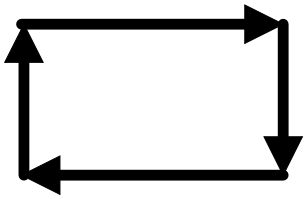
Next table gives us some possibilities for assessing possibilities for open solutions and closed solutions.

[Continues on the next page]

	Owner? Member? Agreement?	OPEN	CLOSED
1. Device / Machinery			
2. Operating system			
3. Program(s)			
4. Data models / Conceptual models			
5. Documents		**THIS CONSULTATION?**	
6. Databases		**THIS CONSULTATION?**	
7. Communications			
8. Retrieve / Interface / Display			
9. Add / Interface / Display			
10. Remove / Interface / Display			
11. Change / Interface / Display			

So there can be several ways for organising different (sub)systems. In many cases there are problems with different concepts since many systems are developed by different communities.

Requirement: 1.1 Records and information management is directed by policy and strategy, and is regularly reviewed.



There are several models for policy and strategy. Many of those models contains different phases and repetition of those phases (circle). For example there can be following a model: Plan, Do, Check, Act.

Proposal: There could be a phased model (circle) for assessing systematically policy and strategy.

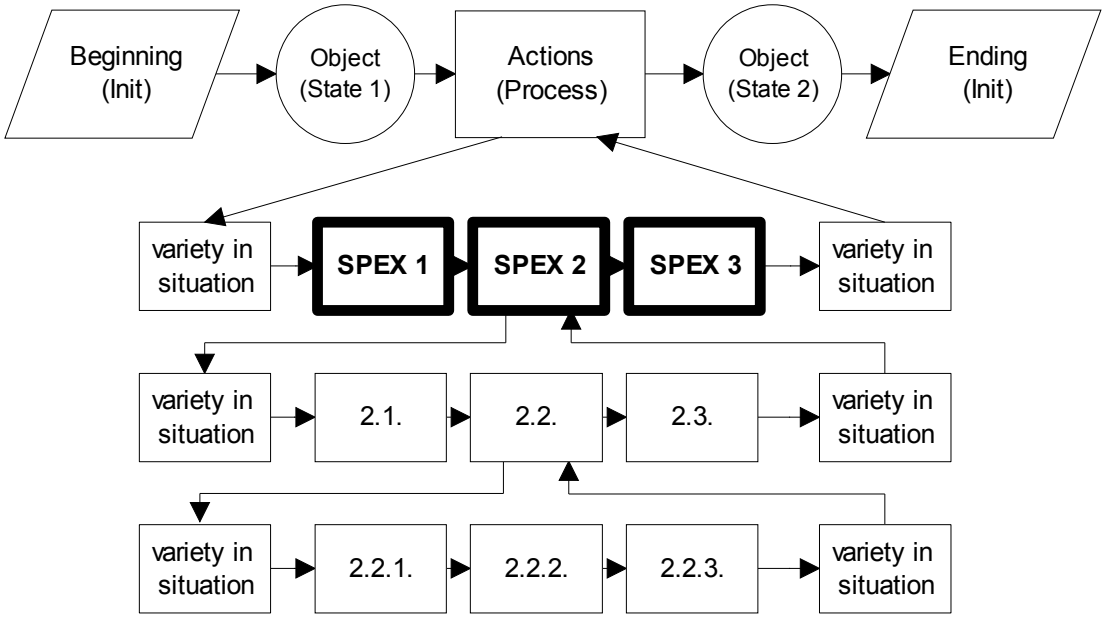
Requirement: 1.2 Records and information management is the responsibility of senior management who provide direction and support for records and information management in accordance with business requirements and relevant laws and regulations.

Proposal: Here we can reiterate that long lists of requirements can be cumbersome.

Previously mentioned personas (Cooper 1999; Cooper, Reimann & Cronin 200) can be used for describing requirements since it is different compared with long list(s) of requirements.

Requirement: 1.5 Responsibility for ensuring that records and information management is integrated into work processes, systems, and services, is allocated to business owners and business units.

In previous consultations I have advocated standardisation of interfaces. There are different processes (Beginning → Actions → Ending), which can be described in different levels of details.



Requirement: 1.5 / Standardising (SPEX) different parts of processes

Based on the previously proposed actions there can be a clear understanding of different processes. It can noted that describing different processes can mean a lot of work for different stakeholders.

It can be noted here that describing different processes are implement in information systems which are hierarchically structured. So there is always some possible mismatches between actual process

models and actual hierarchy of system.

Here we can note, that in a process some objects change their state in different stages.

Proposal: After some serious assessment there could be some serious work for standardised (SPEX) interfaces and displays.

Proposal: Some parts of the processes could be standardised for interfaces (SPEX) for different stakeholders.

Proposal: Some standardised customer interfaces (SPEX) could be used for having better service processes for different stakeholders.

It can be noted, that several systems could implement (SPEX) the same parts of different processes, even though the technology in different systems can be totally different.

Requirement: 1.7 Records and information management responsibilities are identified and addressed in outsourced and similar service arrangements.

Requirement: 1.7 / Question about open data?

In some cases public sector information systems can provide open data – either free or with nominal fees. Here we can note that data can be provided in documents and/or in databases. Data can be provided either realtime or in some timeframes.

Proposal: Providing open data from could be assessed carefully.

Proposal: Providing (open) data with different timeframes could be assessed carefully.

Proposal: Providing (open) data directly from database(s) could be assessed carefully.

Proposal: Providing (open) data as documents could be assessed carefully.

Generally speaking different stakeholder communities can use open data in very intelligently – also adding other (open) data for creation an information service is a possibility.

Requirement: 3.3 Records and information are identifiable, retrievable, accessible and useable for as long as they are required

Requirement: 3.3 / More different identifiers (ID)?

More IDs is one of the consequences of digitalisation (of everything). The ID is identifier in an information system.

In the previous consultations there has been discussion about different identifiers (ID) in the

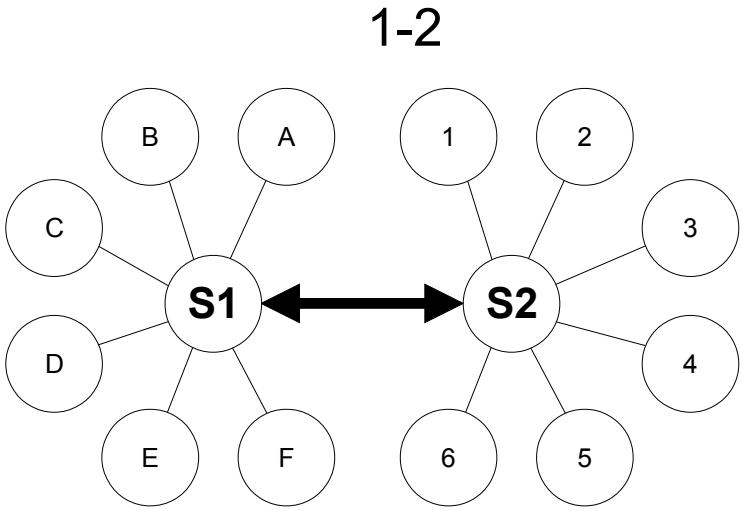
different systems. It can be noted from the previous opinions, that there will be several and different identifiers (ID) for different levels. There can be several identifiers (ID), e.g. following:

Proposal: There could be a systematic review of different identifiers (ID) which records and information management.

An example could be that stakeholder communities may have a national identifier (ID) in some member states. Not all member states require registration of interest representatives on the national level.

Note: The number of different identifiers (ID) is increasing all the time.

Requirement: 3.3 / Added value of different identifiers (ID)?



Here we can note possible cooperation between different systems and usually cooperation between different systems means using different identifiers (ID). There can be some central (S1 ↔ S2) systems which collect information from other systems which have own identifiers (ID).

Final remarks

I have proposed in some cases more technically oriented consultations. Also I have proposed different questionnaires for members on different national IT expert associations. Naturally there should be only a limited number of technical consultations for different IT expert associations.

Proposal: There could be more more technically oriented consultation(s) based on the results of this consultation.

ANNEX 1

I have constructed different opinions about different issues, and on the following web page are all written (PDF files) opinions:
http://www.jukkarannila.fi/lausunnot.html

I have constructed specifically opinions related to information systems – both in English and in Finnish.

Here is the list of opinions related to information systems.

EN: Opinion 8: European Interoperability Framework, version 2, draft
http://www.jukkarannila.fi/lausunnot.html#nro_8

EN: Opinion 9: CAMSS: Common Assessment Method for Standards and Specifications, CAMSS proposal for comments
http://www.jukkarannila.fi/lausunnot.html#nro_9

EN:Opinion 13: Final Committee Draft ISO/IEC FCD3 19763-2
http://www.jukkarannila.fi/lausunnot.html#nro_13

EN: Opinion 14: SFS discussion paper / SFS:n keskusteluasiakirja
http://www.jukkarannila.fi/lausunnot.html#nro_14

EN: Opinion 17: Opinion to Antitrust Case No. COMP/C-3/39.530
http://www.jukkarannila.fi/lausunnot.html#nro_17

EN: Opinion 18: Opinion Related to the Public Undertaking by Microsoft
http://www.jukkarannila.fi/lausunnot.html#nro_18

EN: Opinion 19: Official Acknowledgement by the Commission
http://www.jukkarannila.fi/lausunnot.html#nro_19

EN: Opinion 20: SECOND Opinion Related to the Public Undertaking by Microsoft
http://www.jukkarannila.fi/lausunnot.html#nro_20

EN: Opinion 21: Opinion about the European Interoperability Strategy proposal
http://www.jukkarannila.fi/lausunnot.html#nro_21

EN: Opinion 23: Public consultation on the review of the European Standardisation System
http://www.jukkarannila.fi/lausunnot.html#nro_23

EN: Opinion 24: ISO/IEC JTC 1 / SC 34 / WGs 1, 4 and 5 in Helsinki 14-17 June 2010
http://www.jukkarannila.fi/lausunnot.html#nro_24

FI: Lausunto 29: Avoimen demokratian avoimen datan avaamisen detaljit (ADADAD)
http://www.jukkarannila.fi/lausunnot.html#nro_29

EN: Opinion 30: Internet Filtering
http://www.jukkarannila.fi/lausunnot.html#nro_30

FI: Lausunto 31: Terveydenhuollon tietotekniikasta
http://www.jukkarannila.fi/lausunnot.html#nro_31

EN: Opinion 32: COMP/C-3/39.692/IBM - Maintenance services
http://www.jukkarannila.fi/lausunnot.html#nro_32

FI: Lausunto 33: Julkishallinnon tietoluovutusten periaatteet ja käytännöt
http://www.jukkarannila.fi/lausunnot.html#nro_33

EN: Opinion 34: REMIT Registration Format
http://www.jukkarannila.fi/lausunnot.html#nro_34

EN: Opinion 37: CASE COMP/39.654 - Reuters instrument codes
http://www.jukkarannila.fi/lausunnot.html#nro_37

FI: Lausunto 38: SADe-ohjelman avoimen lähdekoodin toimintamallin luonnos
http://www.jukkarannila.fi/lausunnot.html#nro_38

EN: Opinion 39: Registry options to facilitate linking of emissions trading systems
http://www.jukkarannila.fi/lausunnot.html#nro_39

EN: Opinion 41: AT.39398: observations on the proposed commitments
http://www.jukkarannila.fi/lausunnot.html#nro_41

EN: Opinion 43: Publication of extracts of the European register of market participants
http://www.jukkarannila.fi/lausunnot.html#nro_43

EN: Opinion 45: About ICT standardisation
http://www.jukkarannila.fi/lausunnot.html#nro_45

EN: Opinion 46: Review of the EU copyright rules
http://www.jukkarannila.fi/lausunnot.html#nro_46

EN: Opinion 47: Sharing or collaborating with government documents
http://www.jukkarannila.fi/lausunnot.html#nro_47

FI: Lausunto 49: JSH 166 -suosituksen päivitys
http://www.jukkarannila.fi/lausunnot.html#nro_49

EN: Opinion 52: Trusted Cloud Europe Survey
http://www.jukkarannila.fi/lausunnot.html#nro_52

EN: Opinion 53: Trade Reporting User Manual (TRUM) (Draft)
http://www.jukkarannila.fi/lausunnot.html#nro_53

EN: Opinion 54: Government Content Management System
http://www.jukkarannila.fi/lausunnot.html#nro_54

EN: Opinion 55: European Energy Regulation
http://www.jukkarannila.fi/lausunnot.html#nro_55

EN: Opinion 56: National Identity Proofing Guidelines
http://www.jukkarannila.fi/lausunnot.html#nro_56

FI: Lausunto 58: Puoluekokousaloitteet / 2010 ja 2014
http://www.jukkarannila.fi/lausunnot.html#nro_58

EN: Opinion 59: Green paper on mobile Health
http://www.jukkarannila.fi/lausunnot.html#nro_59

EN: Opinion 60: Cross-border inheritance tax problems within the EU
http://www.jukkarannila.fi/lausunnot.html#nro_60

EN: Opinion 61: European Register of Products Containing Nanomaterials
http://www.jukkarannila.fi/lausunnot.html#nro_61

FI: Lausunto 65: Lausuntopyyntö nettiäänestystyöryhmän väliraportista
http://www.jukkarannila.fi/lausunnot.html#nro_65

EN: Opinion 66: Net Innovation for the Work Programme 2016-2017
http://www.jukkarannila.fi/lausunnot.html#nro_66

FI: Lausunto 67: Valtioneuvoston hanketiedon esiselvityksestä
http://www.jukkarannila.fi/lausunnot.html#nro_67

EN: Opinion 68: European Network Code Stakeholder Committees
http://www.jukkarannila.fi/lausunnot.html#nro_68

FI: Lausunto 69: Hallituksen esitys (luonnos 16.4.2015) vieraslajeista
http://www.jukkarannila.fi/lausunnot.html#nro_69

EN: Opinion 70: Providing better APIs in New Zealand
http://www.jukkarannila.fi/lausunnot.html#nro_70

EN: Opinion 71: Common Schema for the Disclosure of Inside Information
http://www.jukkarannila.fi/lausunnot.html#nro_71

EN: Opinion 72: Queensland biofuel mandate
http://www.jukkarannila.fi/lausunnot.html#nro_72

EN: Opinion 73: Financial / Conceptual Frameworks
http://www.jukkarannila.fi/lausunnot.html#nro_73

EN: Opinion 74: Enabling the Internet of Things
http://www.jukkarannila.fi/lausunnot.html#nro_74

EN: Opinion 78: Consumer Complaints Register (NSW)
http://www.jukkarannila.fi/lausunnot.html#nro_78

EN: Opinion 79: PCEHR (Information Commissioner Enforcement Powers) Guidelines 2015
http://www.jukkarannila.fi/lausunnot.html#nro_79

EN: Opinion 80: Mandatory Transparency Register
http://www.jukkarannila.fi/lausunnot.html#nro_80

I have constructed different opinions about different issues, and on the following web page are all written (PDF files) opinions:
http://www.jukkarannila.fi/lausunnot.html

[Continues on the next page]

ANNEX 2

DISCLAIMERS

Legal disclaimer:

All opinions in this opinion paper are personal opinions and they do not represent opinions of any legal entity I am member either by law or voluntarily. This opinion paper is only intended to trigger thinking and it is not legal advice. This opinion paper does not apply to any past, current or future legal entity. This opinion paper will not cover any of the future changes in this fast-developing area. Any actions made based on this opinion is solely responsibility of respective actor making those actions.

Political disclaimer:

These opinions do not represent opinions of any political party. These opinions are not advices to certain policy and they are only intended to trigger thinking. Any law proposal based on these opinions are sole responsibility of that legal entity making law proposals.

These opinions are not meant to be extreme-right, moderate-right, extreme-centre [2], moderate-centre, extreme-left or moderate-left. They are only opinions of an individual whose overall thinking might or might not contain elements of different sources. These opinions do not reflect past, current or future political situation in the Finnish, European or worldwide politics.

These opinions are not meant to rally for a candidacy in any public election in any level.

Content of web pages:

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Use of broken English

This text is in English, but from a person, whose is not a native English-speaking person. Therefore the text may or may not contain bad, odd and broken English, and can contain awkward linguistic solutions.

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2 Based on the Finnish three-party system there is a phenomenon called extreme-centre in Finland. The 2011 parliamentary elections in Finland challenged the three-party system, since three “old” parties were not traditionally as the three largest parties. On 2015 this “new” party is part of the current Finnish Government. We all must be interested about this new development in Finland.