1
2   Delivered to: identity.security@ag.gov.au
3
4   Cyber and Identity Security Policy Branch
5   Attorney-General's Department
6   3-5 National Circuit
7   BARTON ACT 2600
8
9
10   **Opinion: National Identity Proofing Guidelines**
11
12
13   First of all, a lot of thanks to Attorney-General's Department for organising this interesting
14   consultation.
15
16   This opinion represents an opinion of an individual citizen, not any legal entity.
17
18   This opinion does not contain:
19   –   any business secrets
20   –   any trade secrets
21   –   any confidential information.
22
23   This opinion is public.
24   Attorney-General's Department can add the PDF file of this opinion on relevant web page.
25
26   Annex 1 holds information about previous consultations related to information technology.
27   Annex 2 holds information about disclaimers and copyright.
28
29
30
31   Best Regards,
32
33
34
35   Jukka S. Rannila
36   citizen of Finland
37
38   signed electronically
39
40
41   [Continues on the next page]
42

43 **Previous consultations and previous opinions about information technology (Annex 1)**
44
45 Annex 1 contains information about my opinions related to information technology – both in
46 Finnish and English. Opinions written in English are the majority of different opinions, and there
47 are also some opinions about other issues.
48
49 **The Finnish context**
50
51 It is interesting to see, what will be Australian solutions for National Identity Proofing Guidelines.
52 In Finland [1] National Audit Office of Finland has issued some critical reviews about public sector
53 information systems and also about national identifier proofing mechanisms.
54
55 In short: there has been serious governmental waste in Finland related to national identifier proofing
56 mechanisms.
57
58 **Some contributions from the previous consultations?**
59
60 One of the main contributions from the previous consultations has been simplified descriptions of
61 information technology. In many consultation documents, there has been quite ambiguous
62 descriptions about information technology in different application fields.
63
64 **The Australian case – National Identity Proofing Guidelines**
65
66 One simple conception of information technology solutions is the following figure.
67
68 The figure gives us four basic functions: add, retrieve, change and remove. Then there are databases
69 and documents used in different systems. Users use different displays (interfaces). Different
70 systems need administration (also maintenance) for keeping a system functional. Then there is
71 communication (also standards) for direct and indirect usage of an information system.
72
73 It can be said, that in all parts of an information systems there can be open solutions and closed
74 solutions.
75
76 In short:
77
78   * the world is full of different objects (things)
79   * objects can be nowadays be digital in all phases
80   * someone owns some objects
81   * usage can be based on ownership, agreements and membership
82   * the linkages between ownership, agreements and membership can be very complex
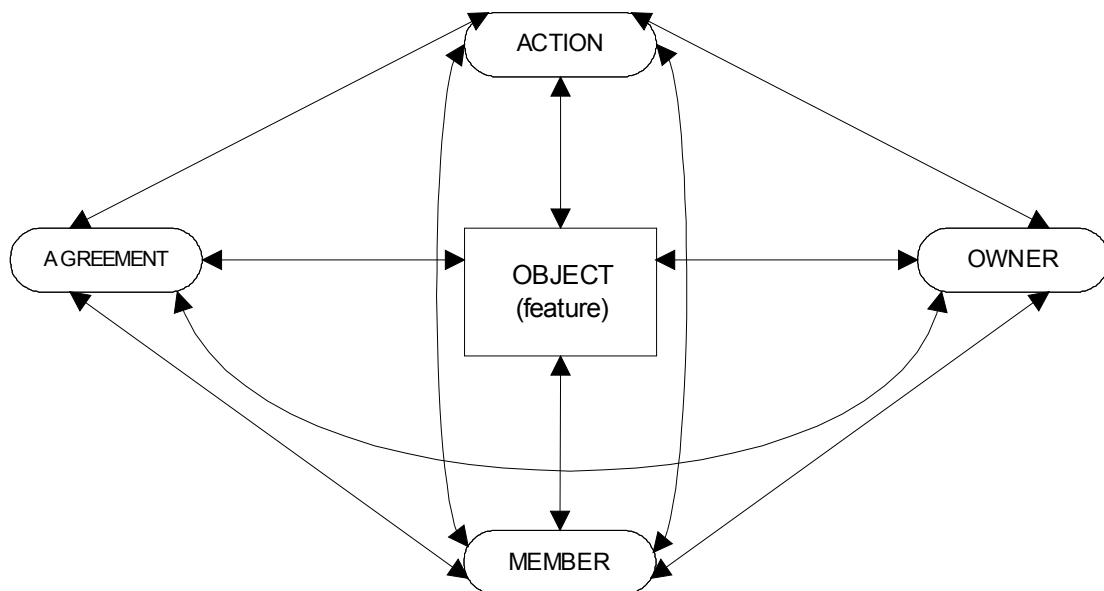83   * the linkages between ownership, agreements and membership can change very often.
84

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1   http://www.vtv.fi/en, National Audit Office of Finland, English welcome page

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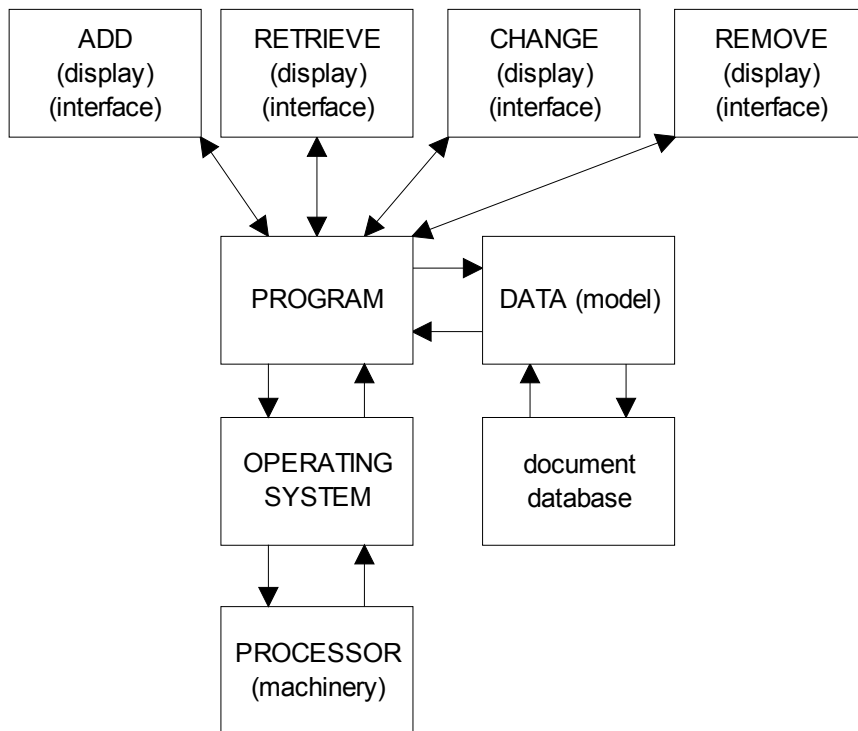
85
86
The mentioned linkages linkages between ownership, agreements and membership can also be
divided to two actions: distribution and usage.

89

90
91
There is nothing new on the previous explanations. However, the difference between distribution
and usage should be as clear as possibile; also the juridical text should explicate this difference

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94   between distribution and usage.
95
96   Next table gives us some possibilities for assessing possibilities for open solutions and closed
97   solutions.
98

	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		**This consultation?**	
8. Retrieve / Interface / Display			
9. Add / Interface / Display			
10. Remove / Interface / Display			
11. Change / Interface / Display			

99
100 In the previous consultations I have advocated following solution as the maximum solution:
101
102   * public sector institute owns the machinery and processor of the information system
103   * the machinery and processor are based on relevant open standards
104   * the operating system is based on an open-source solution
105   * public sector institute owns the source code of the information system
106   * public sector institute owns the database of the information system
107   * the database is based on open-source solution and on relevant open standards
108   * public sector institute owns all data in the information system.
109
110 Naturally, there can be solutions, which are not based on the maximum solution
111
112   **Proposal 1: There is need to assess openness of several parts of proposed systems:**
113   **machinery (processor), operating system, programs using the operating system,**
114   **documents, databases, communication, adding data, retrieving data, changing data,**
115   **removing data, needed interfaces, needed displays.**

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116
117   **Proposal 2: Attorney-General's Department could use and/or demand open standards**
118   **in several layers of the proposed system .**
119
120 It is quite normal situation in the information technology field that there is competing standards.
121 Therefore there is all the time ongoing "standards wars" or "format wars". The information
122 technology standards tend to be interrelated and one "standards war" or "format war" can lead to
123 another similar situation.
124
125 In a information system there are a numerous features implemented; these features can be based on
126 agreements, ownership or membership. Also, there is a complex web of combinations among
127 agreements, ownership or membership. Generally speaking, we use different information systems
128 without considering agreements, ownership or membership related to a specific solution.
129
130   **Proposal 3: Attorney-General's Department could systematically reveal complex webs**
131   **of combinations among agreements, ownership or membership in different application**
132   **fields.**
133
134 In practice public sector has very important role when some standards are competing in the market
135 place. Because public sector has a considerable buying power due to its size, it can sometimes direct
136 markets to certain standard.
137
138 On the other hand public sector has to stick to certain procurement regulations even though there
139 might be pressure from the commercial market.
140

141
142

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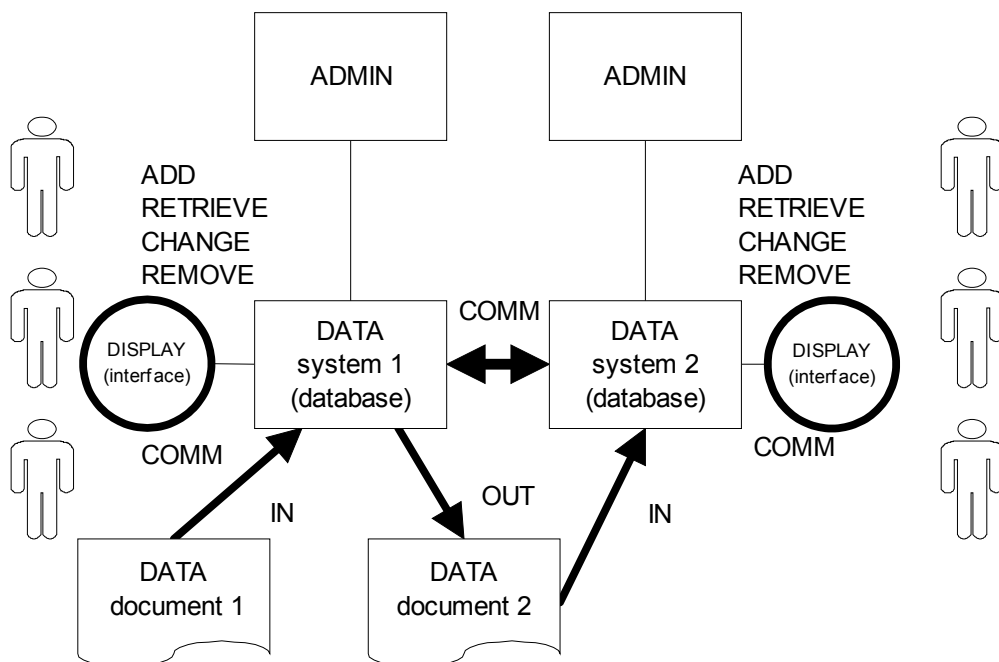
143
144 I suppose, that there are several systems in Australia (federal level and state level), and those
145 systems have their own life-cycle at the moment. I also suppose, that there is need for transmitting
146 data between system.
147
148 **Proposal 4: Different systems could be classified:**
149   **1) direct system-to-system communication**
150   **2) communication based on transmitting documents.**
151
152 Both options for system-to-system communications have weaknesses and strengths, and the
153 situation with tens (or even hundreds) different systems has to be assessed carefully.
154
155 There are a lot of different standard setting organisations (SDO), and one comprehensive list is
156 provided [2] for us by ConsortiumInfo.org.
157
158 Examples are naturally different XML documents and CSV documents.
159
160   **Proposal 5: Attorney-General's Department could systematically assess existing**
161   **standard setting organisations (SDO) and assess existing standards provided by those**
162   **communities.**
163
164   **Proposal 6: The number of redundant standardisation efforts should be minimal.**
165
166   **Proposal 7: Attorney-General's Department could consult different stakeholders to**
167   **find out support for different standards.**
168
169   **Proposal 8: Attorney-General's Department could support and/or demand usage of**
170   **open standards.**
171
172 **Standardisation of interfaces for customers (citizens)**
173
174 In previous consultations I have advocated standardisation of interfaces. There are different
175 processes (Beginning → Actions → Ending), which can be described in different levels of details.
176
177 There can be highly detailed points in different processes (SPEX), which could be standardised.
178
179   **Proposal 9: There could be a project for modelling different customer (care) processes.**
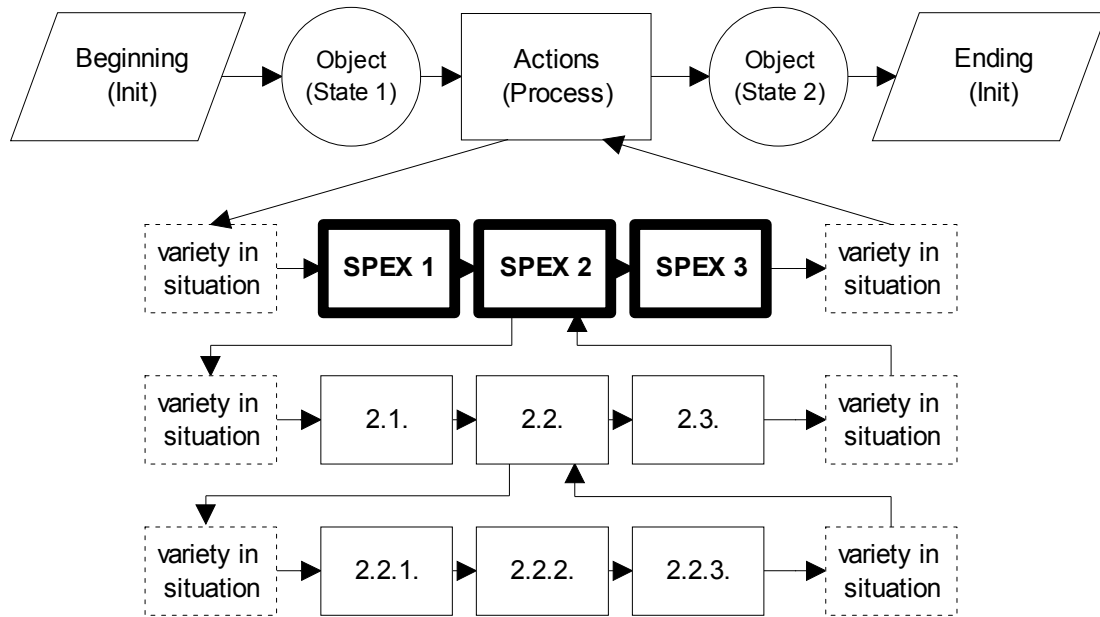180
181   **Proposal 10: Some parts of the customer (care) processes could be standardised for**
182   **customer interfaces.**
183
184   **Proposal 11: Some standardised customer interfaces could be used for having better**
185   **customer (care) processes (in the federal level).**
186

---

2   http://www.consortiuminfo.org/links/linksall.php, Standard Setting Organizations and Standards List

187
188
189 It can be noted, that different actors can naturally have other non-standardised interfaces for
190 customer(s) (care), and there is nothing wrong with that approach.
191
192 Also, we have to assess the need for several customer (care) interfaces. In other words, different
193 stakeholder groups need different interfaces, and identity proofing is not an exception of this
194 situation.
195
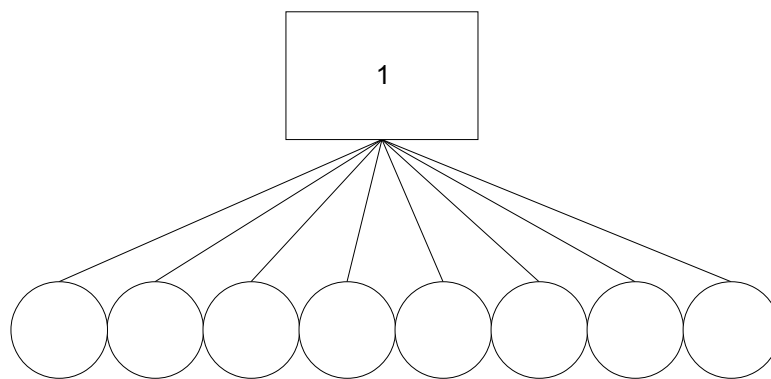
196
197
198   **Proposal 12: There could be a project for analysing the quality and the quantity of**
199   **different interfaces for different stakeholder groups, e.g. citizens as one group.**
200
201   **Proposal 13: Attorney-General's Department can advocate standardised user**
202   **interfaces in different levels.**
203
204 Naturally, there can be even tens of different user interfaces depending on the nature of different

205   systems.
206
207   For example, there could be one standardised interface for security configurations for different
208   applications, which mean that there could be one standardised interface even though the technology
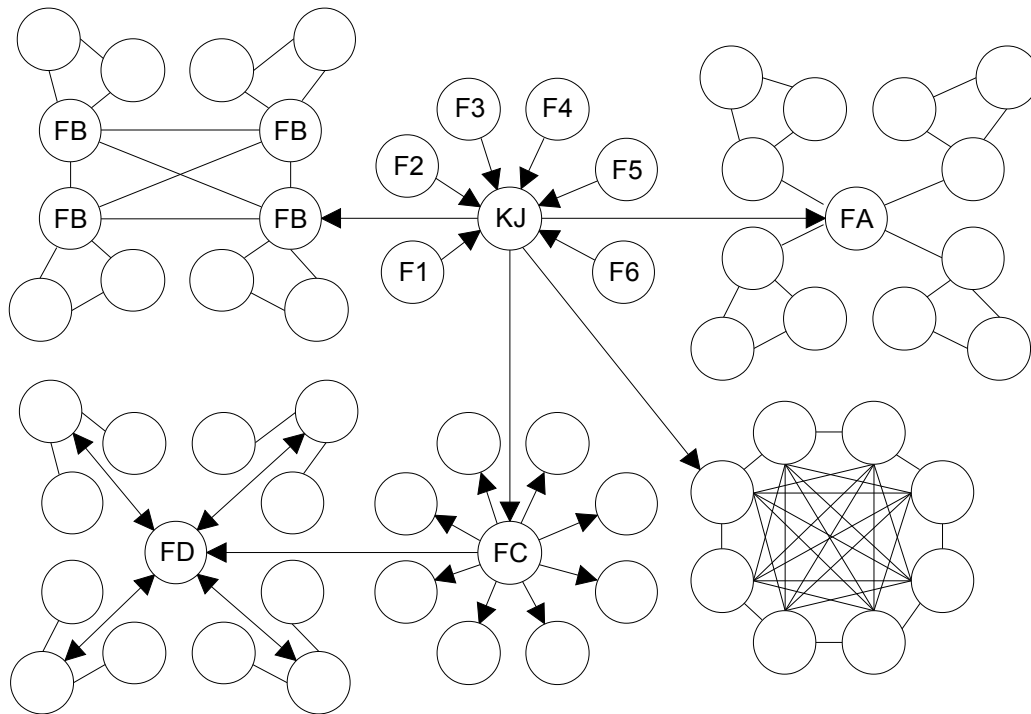209   underneath a cloud application could vary.
210
211   One interface to all users will not work, and so-called heavy users will complain about the one
212   interface being too complex and demanding several selections before the actual functions (add,
213   remove, change, retrieve).
214
215   **Layered systems**
216

217
218
219   In some previous consultations I have presented the figure above. In practical reality, there are
220   different systems, which use very different standards/formats for cooperation between different
221   systems.
222
223   In reality different systems are layered, and there can be several standards and different versions of
224   different standards.
225
226   **Proposal 14: There might be need for several versions of different standards to be used**
227   **for system-to-system cooperation.**
228
229   It depends on a system, how easy it is to use different systems. I also suppose, that in Australia there
230   are different public sector systems with different life-cycles.

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231
232 **One theme: horizontal standards and vertical standards**
233
234 One of the main themes can be division standards: horizontal standards and vertical standards. What
235 this means? Generally speaking, different ICT solutions will implement a large collection of
236 different standards: open standards and closed standards. In many cases, different ICT solutions do
237 not work together and this might not constitute a problem. However, in many cases different ICT
238 solutions has to work together seamlessly – possibly without further problems.
239
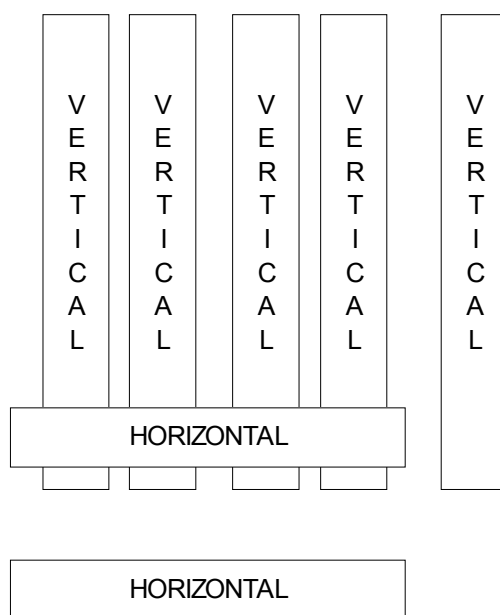
240
241
242   **Proposal 15: Attorney-General's Department could collect all relevant information**
243   **about horizontal standards.**
244
245   **Proposal 16: Attorney-General's Department could collect all relevant information**
246   **about vertical standards.**
247
248   **Proposal 17: There could be separation of horizontal standards and vertical standards.**
249
250 It can be said, that in some point there will be need for horizontal standardisation. This means, that
251 several vertical systems can cooperate in different levels. The general development is, that there can
252 be several vertical solutions for the same computerisation area. An example for this standardisation
253 is the email standard (horizontal), when there are numerous email systems (vertical) created with
254 very wide variety of technologies.
255
256   **Proposal 18: There could be different standardisation efforts related to horizontal**
257   **standards and vertical standards.**
258

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Jukka S. Rannila

www.jukkarannila.fi

OPINION

30 May 2014

10 (16)

Public / WWW

259   **Proposal 19: Developing horizontal standards should favoured in the development of**
260   **new and/or revised standards.**
261
262 **Example of standards / Different information feeds**
263
264 In the previous consultations I have used RSS feeds as an example.
265

266
267
268 To be precise, there are some standards for RSS feeds: RSS 2.0 [3] standard and Atom [4] [5] standards.
269 There are different systems, which comply with these example standards (RSS and Atom)
270 differently.
271
272 It can be said, that there is need for different information feeds between different systems. Like said
273 before, Attorney-General's Department can assess different existing standards in order to avoid
274 redundant (even useless) standardisation.
275
276 **One governmental (customer) identifier (ID)?**
277
278 Generally speaking people are not happy with ever-increasing number of different identifiers and
279 number of different passwords.
280
281   **Proposal: 20 Attorney-General's Department has to assess the possibility of just one**
282   **governmental customer identifier and one password for a average user.**
283
284   **NOTE: Creation of just one governmental customer identifier and just one password**
285   **may be impossible based on the life-cycle of different governmental systems.**
286
287 **Avoiding redundant work (or standards)**
288
289 There can be hundreds of different informations systems. It can be concluded, that these systems are
290 layered in different ways and implement several standard (technology) generations. Generally
291 speaking, there can be several many-to-many connections, which are very cumbersome to
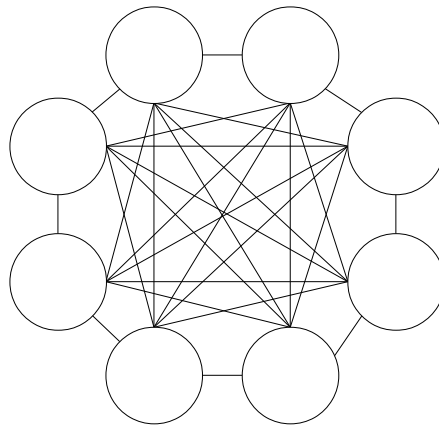292 implement and maintain.
293

---

3   http://www.rssboard.org/rss-specification, RSS 2.0 specification
4   http://tools.ietf.org/html/rfc4287, The Atom Syndication Format
5   http://tools.ietf.org/html/rfc5023, The Atom Publishing Protocol

1

294
295
296   **Proposal 21: Attorney-General's Department could assess the situation with complex**
297   **many-to-many relations between different systems.**
298
299   The problem with complex many-to-many systems is that changes/updates in a system causes a
300   large amount of internal changes (also in source code) in other systems. This situation can be called
301   "spaghetti", which means a large number of different interrelations, that changes/updates can be
302   very cumbersome.
303
304   The opposite solution is naturally having just one central system, and with that central system
305   cooperation between systems can be different one-to-many situation.
306

2
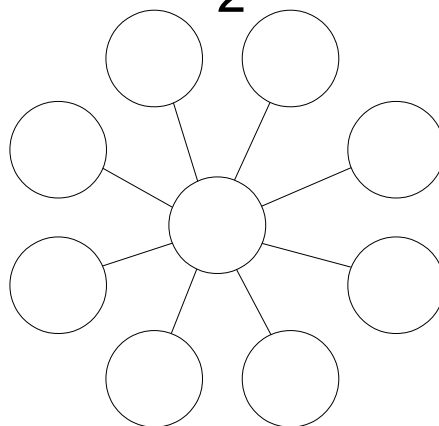
307
308
309   The problem with this option is dependence on a single system, and defects in a central system
310   causes instantly problems with dependent systems.
311
312

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313   **Proposal 22: Attorney-General's Department has to assess the situation of different**
314   **central systems.**
315
316   **Proposal 23: Attorney-General's Department could select one central system for**
317   **cooperation between different systems.**
318
319   One option is to have a hierarchical system-to-systems connections, when there is less dependence
320   on just one central system.
321
322   **Proposal 24: Attorney-General's Department could assess the needed hierarchy**
323   **between the systems.**
324
325   **NOTE: It is possible, that there could be a needed central system.**
326
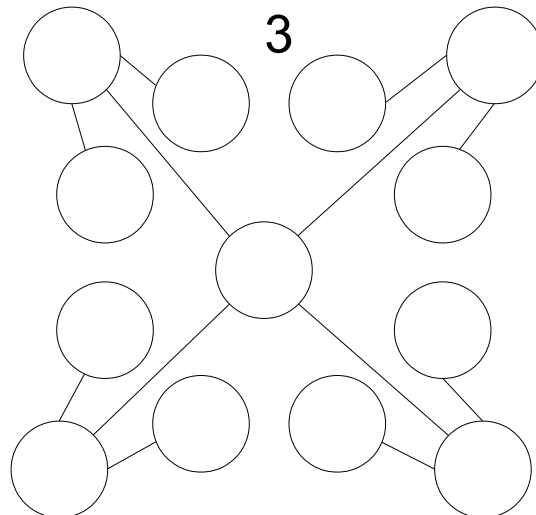
327
328
329   **Need for very detailed technical consultation?**
330
331   However, there could be a consultation based on these technical documents, and the main target
332   audience could be chief information officers in different stakeholder communities and/or specialist
333   of information system providers in different communities. In some communities, consulting
334   information system providers (and subcontractors) of those communities may result need for highly
335   detailed technical specifications.
336
337   **Proposal 25: Attorney-General's Department could organise a technical consultation**
338   **about system(s) based on very detailed technical issues.**
339
340   **Good luck!!!**
341
342   This opinion is quite limited. Hopefully there are constructive ideas presented in other opinions.
343   This remains to be seen.

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Jukka S. Rannila

www.jukkarannila.fi

OPINION

30 May 2014

13 (16)

Public / WWW

344
345 **ANNEX 1**
346
347 My opinions to the previous and relevant consultations – there consultations were mostly organised
348 by the Commission of the Europan Union.
349
350 General page to all consultations – both in English and in Finnish:
351 http://www.jukkarannila.fi/lausunnot.html
352
353
354 Here is a list of my opinions about information technology – both in English and in Finnish.
355
356
357 EN: Opinion 8: European Interoperability Framework, version 2, draft
358 http://www.jukkarannila.fi/lausunnot.html#nro_8
359
360 EN: Opinion 9: CAMSS: Common Assessment Method for Standards and Specifications, CAMSS
361 proposal for comments
362 http://www.jukkarannila.fi/lausunnot.html#nro_9
363
364 EN:Opinion 13: Final Committee Draft ISO/IEC FCD3 19763-2
365 http://www.jukkarannila.fi/lausunnot.html#nro_13
366
367 EN: Opinion 14: SFS discussion paper / SFS:n keskusteluasiakirja
368 http://www.jukkarannila.fi/lausunnot.html#nro_14
369
370 EN: Opinion 17: Opinion to Antitrust Case No. COMP/C-3/39.530
371 http://www.jukkarannila.fi/lausunnot.html#nro_17
372
373 EN: Opinion 18: Opinion Related to the Public Undertaking by Microsoft
374 http://www.jukkarannila.fi/lausunnot.html#nro_18
375
376 EN: Opinion 19: Official Acknowledgement by the Commission
377 http://www.jukkarannila.fi/lausunnot.html#nro_19
378
379 EN: Opinion 20: SECOND Opinion Related to the Public Undertaking by Microsoft
380 http://www.jukkarannila.fi/lausunnot.html#nro_20
381
382 EN: Opinion 21: Opinion about the European Interoperability Strategy proposal
383 http://www.jukkarannila.fi/lausunnot.html#nro_21
384
385 EN: Opinion 23: Public consultation on the review of the European Standardisation System
386 http://www.jukkarannila.fi/lausunnot.html#nro_23
387
388 EN: Opinion 24: ISO/IEC JTC 1 / SC 34 / WGs 1, 4 and 5 in Helsinki 14-17 June 2010

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389   http://www.jukkarannila.fi/lausunnot.html#nro_24
390
391   FI: Lausunto 29: Avoimen demokratian avoimen datan avaamisen detaljit (ADADAD)
392   http://www.jukkarannila.fi/lausunnot.html#nro_29
393
394   EN: Opinion 30: Internet Filtering
395   http://www.jukkarannila.fi/lausunnot.html#nro_30
396
397   FI: Lausunto 31: Terveydenhuollon tietotekniikasta
398   http://www.jukkarannila.fi/lausunnot.html#nro_31
399
400   EN: Opinion 32: COMP/C-3/39.692/IBM - Maintenance services
401   http://www.jukkarannila.fi/lausunnot.html#nro_32
402
403   FI: Lausunto 33: Julkishallinnon tietoluovutusten periaatteet ja käytännöt
404   http://www.jukkarannila.fi/lausunnot.html#nro_33
405
406   EN: Opinion 34: REMIT Registration Format
407   http://www.jukkarannila.fi/lausunnot.html#nro_34
408
409   EN: Opinion 37: CASE COMP/39.654 - Reuters instrument codes
410   http://www.jukkarannila.fi/lausunnot.html#nro_37
411
412   FI: Lausunto 38: SADe-ohjelman avoimen lähdekoodin toimintamallin luonnos
413   http://www.jukkarannila.fi/lausunnot.html#nro_38
414
415   EN: Opinion 39: Registry options to facilitate linking of emissions trading systems
416   http://www.jukkarannila.fi/lausunnot.html#nro_39
417
418   EN: Opinion 41: AT.39398: observations on the proposed commitments
419   http://www.jukkarannila.fi/lausunnot.html#nro_41
420
421   EN: Opinion 43: Publication of extracts of the European register of market participants
422   http://www.jukkarannila.fi/lausunnot.html#nro_43
423
424   EN: Opinion 45: About ICT standardisation
425   http://www.jukkarannila.fi/lausunnot.html#nro_45
426
427   EN: Opinion 46: Review of the EU copyright rules
428   http://www.jukkarannila.fi/lausunnot.html#nro_46
429
430   EN: Opinion 47: Sharing or collaborating with government documents
431   http://www.jukkarannila.fi/lausunnot.html#nro_47
432
433   FI: Lausunto 49: JSH 166 -suosituksen päivitys

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434   http://www.jukkarannila.fi/lausunnot.html#nro_49
435
436   EN: Opinion 52: Trusted Cloud Europe Survey
437   http://www.jukkarannila.fi/lausunnot.html#nro_52
438
439   EN: Opinion 53: Trade Reporting User Manual (TRUM) (Draft)
440   http://www.jukkarannila.fi/lausunnot.html#nro_53
441
442   EN: Opinion 54: Government Content Management System
443   http://www.jukkarannila.fi/lausunnot.html#nro_54
444
445   EN: Opinion 55: European Energy Regulation
446   http://www.jukkarannila.fi/lausunnot.html#nro_55
447
448
449
450
451   My opinions to the previous and relevant consultations – there consultations were mostly organised
452   by the Commission of the Europan Union. General page to all consultations – both in English and
453   in Finnish: http://www.jukkarannila.fi/lausunnot.html
454
455   [Continues on the next page]
456

457
458   **ANNEX 2**
459   DISCLAIMERS
460
461   Legal disclaimer:
462   All opinions in this opinion paper are personal opinions and they do not represent opinions of any legal entity I am
463   member either by law or voluntarily. This opinion paper is only intended to trigger thinking and it is not legal advice.
464   This opinion paper does not apply to any past, current or future legal entity. This opinion paper will not cover any of the
465   future changes in this fast-developing area. Any actions made based on this opinion is solely responsibility of respective
466   actor making those actions.
467
468   Political disclaimer:
469   These opinions do not represent opinions of any political party. These opinions are not advices to certain policy and
470   they are only intended to trigger thinking. Any law proposal based on these opinions are sole responsibility of that legal
471   entity making law proposals.
472
473   These opinions are not meant to be extreme-right, moderate-right, extreme-centre [6], moderate-centre, extreme-left or
474   moderate-left. They are only opinions of an individual whose overall thinking might or might not contain elements of
475   different sources. These opinions do not reflect past, current or future political situation in the Finnish, European or
476   worldwide politics.
477
478   These opinions are not meant to rally for a candidacy in any public election in any level.
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485   content found on the referred web pages is not on the responsibility of the author of this document, and producing that
486   kind content is not endorsed by the author of this document.
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496   the following web page:
497   http://creativecommons.org/licenses/by-nc-nd/4.0/
498   The English explanation is on the following web page:
499   http://creativecommons.org/licenses/by-nc-nd/4.0/legalcode
500

501
502

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6   Based on the Finnish three-party system there is a phenomenon called extreme-centre in Finland. The 2011
     parliamentary elections in Finland challenge the three-party system, since three "old" parties were not traditionally
     as the three largest parties. The is now a "new" party as the third largest party. We all must remain being interested
     about this new development in Finland.