	Jukka S. Rannila	a	OPINION	1 (22)
	www.jukkaranni	<u>ila.fi</u>	27 May 2015	Public / WWW
1 2 3	TO: <u>API@busin</u>	<u>ess.govt.nz</u>		
4 5 6 7		APIs for Business iness, Innovation and Emp	loyment	
8 9 10 11 12	1	about providing better A tal services in New Zealar	PIs (Application Programming nd (and abroad)	Interfaces) for
12 13 14 15	-	of thanks to the Ministry of mportant consultation abo	of Business, Innovation and Empl ut providing better APIs.	oyment (Ministry) for
16	This opinion rep	presents an opinion of an ir	ndividual citizen, not any legal en	tity.
17 18 19 20 21	– ai	es not contain: ny business secrets ny trade secrets ny confidential information	n.	
22 23	This opinion is p	public.		
24 25 26 27	Ministry of Busi web page.	iness, Innovation and Emp	loyment can add the PDF of this	opinion to a relevant
28 29 30		nformation about previous nformation about disclaim		
31 32 33 34 35	Best Regards,			
36 37 38	Jukka S. Rannila citizen of Finlan			
39 40	signed electronic	cally		

Jukka S. Rannila	OPINION	2 (22)
www.jukkarannila.fi	27 May 2015	Public / WWW

41 Importance of different APIs (Application Programming Interfaces)

42

As a general note it can be concluded all relevant information systems provide different APIs to be
used by other systems. Generally speaking it can be concluded, that the number of different APIs is
increasing – not decreasing.

46

However, it can be also concluded, that there are serious problems with some/different APIs, and
this consultation may give us different solutions (national, regional and global) for mitigating
problems with APIs.

- 50
 51 Limitation: Opinion of an individual citizen not any legal entity
- 52

53 Since this opinion is created by an individual citizen, the knowledge base for this consultation is 54 naturally rather limited, since there has not been a group of experienced experts writing this 55 opinion.

56

57 European Union (EU) context / Finnish context58

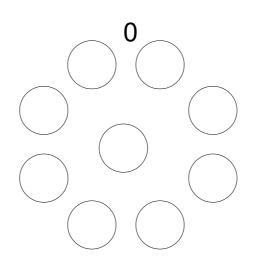
59 At the moment it can be said, that also in European Union and in Finland there is ongoing some 60 serious work related to different aspects of computerisation of different public sector services.

6162 Possibly we can learn something (EU and Finland) from New Zealand based on this consultation.

64 The current reality in many cases

- 6566 Here we can conclude that generally speaking we use some systems which are stand-alone solutions
 - 67 and there is not a need for integrating different systems.
 - 68

63



69 70

- 71 However, real added value of different systems is based on actual cooperation between different
- 72 systems. Then we face the question different integrations / integration strategies.

www.jukkarannila.fi

27 May 2015

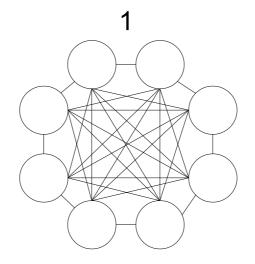
OPINION

Public / WWW

3 (22)

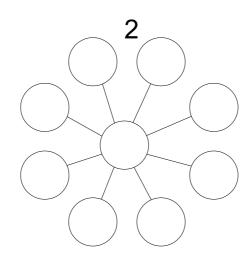
73

- 74 One problem is naturally complex system-to-system connections, and this can lead to very serious
- 75 problems in the maintenance and development. The next figure tries to describe this situation. I
- ⁷⁶ suppose that also in the New Zealand context there can be different interlinked / interconnected
- 77 systems.



78 79

- 80 One obvious solution is to have a contact point, and different (national) systems could be
- 81 connected. In reality having one contact point can lead to a situation with too many connections,
- 82 and this can lead to different IT havocs when the contact point is facing different problems. I
- 83 suppose that there are similar situations in New Zealand, and connecting a selection of state systems
- 84 to a (national) contact point can mean a lot of integration efforts, which mean using time and 85 resources.

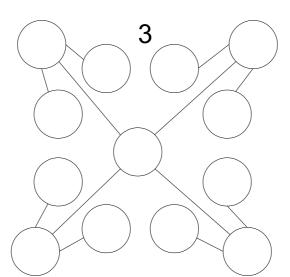


86 87

- 88 I suppose that there are similar situations in New Zealand, and connecting a selection of state
- 89 systems to a state-level contact point can mean less integration projects.

27 May 2015

Public / WWW



90 91	
92	Here we can note that systems can be also hierarchically organised and then then there is less
93	pressure for different central systems.
94	
95	Note: The situation with New Zealand (public sector) information systems is naturally
96	between these different extremes.
97	
98	Some basic features of different information systems
99	
100	Like the following figure indicates, there are databases in different information systems. Then there
101	are different documents for transmitting data between different system.
102	
103	Here we can note especially following standardisation needs for different parts of the proposed IT
104	platform:
105	* communication standards
106	* data standards (also document standards)
107	* database standards
108	* display / interface standards.
109	
110	Proposal: There could different standardisation efforts for communication, data,
111	document, database, display/interface standards.
112	
113	Proposal: Assessing previously developed standards could be done seriously.
114	
115	One comprehensive list for different standard developing organisations (SDO) is provided ¹
116	ConsortiumInfo.org. It may possible to use previously developed standards.

^{1 &}lt;u>http://www.consortiuminfo.org/links/linksall.php</u>, List of different standard developing organisations

Copyright, licence and disclaimers: check Annex 2.

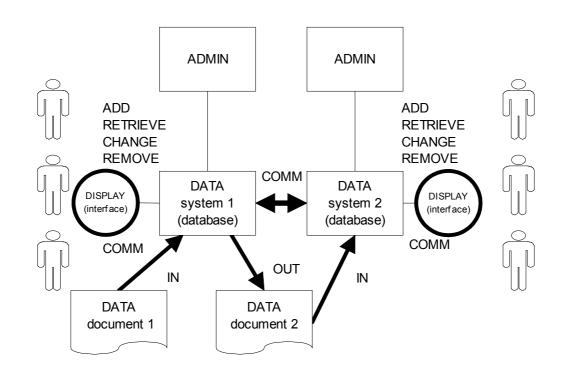
OPINION

5 (22)

www.jukkarannila.fi

27 May 2015

Public / WWW



117 118

119 Here we can note that there can be direct system-to-system connections, which can mean some

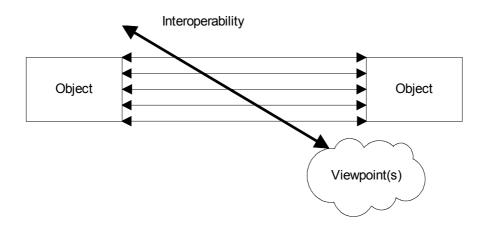
120 standardised interfaces. Also we can note that different document formats can be used when there is

121 system-to-system connections.

122

123 Managing different viewpoints

124



125

126

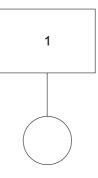
127 Here we can conclude, that there can be several viewpoints to be handled when developing different

- 128 information systems. There can be several viewpoints: e.g. (case) law, time, environment, waste,
- 129 quality, effectiveness, outsourcing, different technologies, information technology in specific,
- 130 money, security, internationalisation, anti-trust, competition, process models, etc.

131

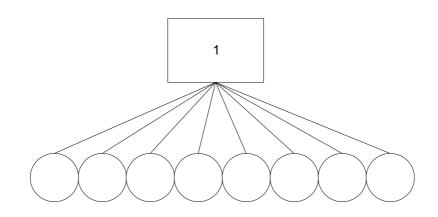
Jukka S. Rannila	OPINION	6 (22)
www.jukkarannila.fi	27 May 2015	Public / WWW

132 Proposal: The Ministry could collect information based on different viewpoints. 133 134 Parts of interoperability in a system are based on different viewpoints. This consultation about APIs is naturally one way of collecting information based on different viewpoints. Generally speaking 135 many processes are quite easy to model, but some viewpoint means rather long learning processes; 136 137 e.g. understanding parts of medical information (expertise) can demand a lot of learning. 138 139 Note: Implementing interfaces based on all possible viewpoints in a system can take 140 some time. 141 142 Different interfaces based on different viewpoints 143



144 145

- 146 It is possible that some information systems can provide only one interface. However, I have noted
- 147 that different viewpoints can mean different interfaces for an information system. Here we can note
- 148 that there can be more than one interface for a system.
- 149



- 150 151
- Here we can note that this consultation is about different APIs. It can be noted that there will be
 different interfaces for different purposes (viewpoints).
- 155 Proposal: There could be serious assessment of different viewpoints.156
- 157 **Proposal: After serious assessment of different viewpoints there can be proposals for**

Jukka S. Rannila	OPINION	7 (22)
<u>www.jukkarannila.fi</u>	27 May 2015	Public / WWW

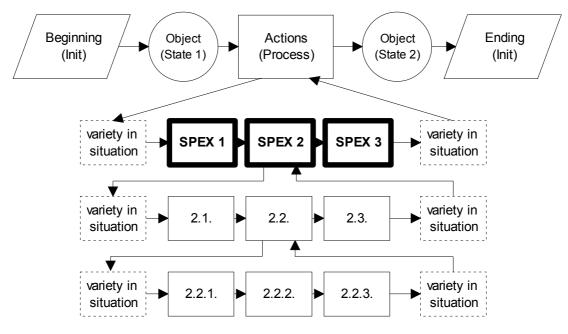
different interfaces.

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.

- Actual reality / Different standards and standards versions

Jukka S. Rannila	OPINION	8 (22)
www.jukkarannila.fi	27 May 2015	Public / WWW

Previously (different consultations) I have advocated open standards for different informationsystems.

188

189 It is quite normal situation in the information technology field that there are competing standards 190 for some application field. Therefore there are all the time ongoing "standards wars" or "format 191 wars". The information technology standards tend to be interrelated and one "standards war" or 192 "format war" can lead to another similar situation.

192 193 194

Note: It is always possible that some wrong standards are selected.

195
196 I have advocated open standards, even though in some cases open standards are not de facto
197 standards. In practice public sector has very important role, when some standards are competing in
198 the market place. Public sector has a considerable power when buying/developing information
199 systems, and therefore public sector can sometimes direct markets to certain standards. Therefore,
200 there should be serious vigilance when assessing different standards and "standards" in some
201 application fields.

Proposal: There could be a roadmap for implementing different open standards in different timeframes.

This roadmap for open standards can mean cataloguing different (all?) information systems. Then it
could be possible to have a description of life-cycles of different information systems. It may be
possible to enforce open standards when a "old" system is to be terminated and there is
considerations for a "new" system.

Note: This enforcement of different open standards can mean some work for years based on the nature of current information systems.

- 214 Horizontal standards and vertical standards for system-to-system communication
- 216 In previous opinions I have advocated developing different horizontal standards.

Proposal: The could be some assessment(s) for comparing different horizontal standards.

Proposal: The could be some assessment(s) for comparing different vertical standards.

One example of an horizontal standard is the email standard, since there are several vertical
systems, which comply with email standards, and email messages can be transmitted between
different email systems based on very different technological solutions.

226 227

228

211

212

213

215

217

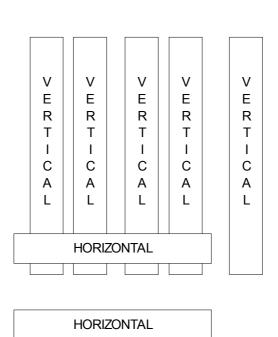
220 221

222

Proposal: Developing different horizontal standards could be favoured.

27 May 2015

Public / WWW



229 230

Discussion about SOAP and REST – what must be implemented?

231 232

239

241

248

251

253

There was some considerations of SOAP and REST on the "Better APIs for Business" web page.

It may be possible that there has to implementation of both standards since different receiving systems outside the government are implemented with very different technologies. Then these receiving systems have different life-cycles and this affects possibilities for implementing different standards – e.g. SOAP and REST.

240 Layered systems – the hard reality

Next figure tries to describe the reality of layered systems. In reality the added value for users
(citizens and different legal entities) is achieved by combining different systems to provide different
services.

In reality the added value for different stakeholders is cooperation between different systems. In
 reality this consolidation of different systems mean a lot of work with different stakeholders.

Proposal: The Ministry could collect information about different chains of different information systems.

252 Note: Some of these chained information systems are CLOSED systems.

254 Note: Some of these chained information systems are OPEN systems.

255

256 Next figure tries to explicate different standards/formats between different systems. Some

OPINION

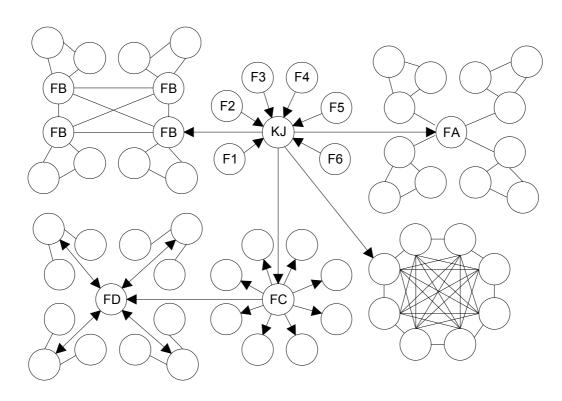
www.jukkarannila.fi

27 May 2015

Public / WWW

standards/formats are closed and some standards are closed.

258



259 260

261 More and more different codes and/or identifiers (ID)? 262

From the previous consultations we can conclude the importance of different identifiers (ID). More
IDs is one of the consequences of digitalisation (of everything). The ID is identifier in an
information system.

266

Like the previous figure indicated, there can be several formats (FA-FD and FI-F6) to be used in different information systems. Different information systems have also internal identifiers (ID) and external identifiers (ID) for (possible) public usage. The added value for different stakeholders is provided by combination of different identifiers (ID) in a specific information system.

Proposal: The could be some assessment(s) based on different versions of different identifiers (ID).

It can be possible, that there are some legacy identifiers (ID) in the near future. It can be possible,
that gradually some legacy identifiers (ID) can be consolidated for more standardised identifiers
(ID), but this consolidation means some serious technical and administrative actions.

278 279

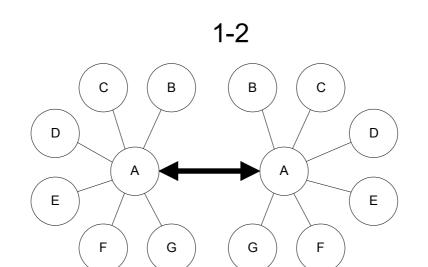
280

274

Proposal: Legacy identifiers (ID) could be assessed seriously.

27 May 2015

```
Public / WWW
```



281 282 283

284

Proposal: Consolidating different legacy identifiers (ID) could be assessed seriously.

It could be said, that consolidation to one format (A in the figure) can be hided to different background systems (B-G in the figure); in this way there could be one well-defined and public API,
which uses just one identifier (ID).

288 289

290

297 298

299 300

301

Proposal: The number of different identifiers (ID) should be assessed critically.

Proposal: There could be a systematic project to collect relevant information of different identifiers: e.g. global, regional and national.

When information about relevant identifiers is collected, there could be a serious assessment of possible (near) monopoly situation of some identifiers. Depending on the nature of an identifier, there may be a need for serious (anti-trust?) negotiations with providers of some identifiers.

Proposal: The nature of different identifiers (ID) could be assessed.

Proposal: There could be serious negotiations with some providers of identifiers (ID).

302 In the European Union there has been different anti-trust cases which are related to different private 303 sector identifiers (ID), since some of those private sector identifiers (ID) have been used in several 304 other systems. Some private sector identifiers (ID) can mean a (near) monopoly situation and this 305 kind situations can be also in the New Zealand context.

306

307 About brokered systems – actual usage of identifiers (ID)

308

309 Here we can conclude that there are different broker (can be called also as "trusted third parties")

310 system, e.g. with electronic commerce there are some trusted third parties to handle monetary

311 transactions between a buyer and a seller.

OPINION

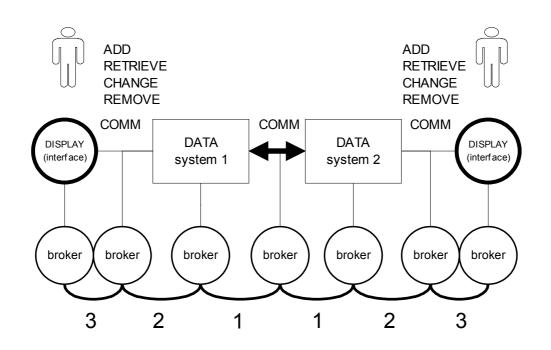
www.jukkarannila.fi

27 May 2015

Public / WWW

312 313

314



Proposal: Different broker systems ("trusted third parties") could be assessed.

315 316

317 **Owner, member or agreement?**

318

319 Here we can note the difference between owners, agreements and members. In reality ownerships 320 agreements and memberships cause very complex networks, and those networks are changing all the time: divisions, mergers, ownership changes, agreement changes, cooperation with other 321 322 entities, life-cycles, etc.

323

324 Here we can note the difference between owners, agreements and members. In reality ownerships 325 agreements and memberships cause very complex networks, and those networks are changing all 326 the time: divisions, mergers, ownership changes, agreement changes, cooperation with other 327 entities, life-cycles, etc.

328 329

Question: Can different APIs take care of changes with ownership, agreement(s) and membership?

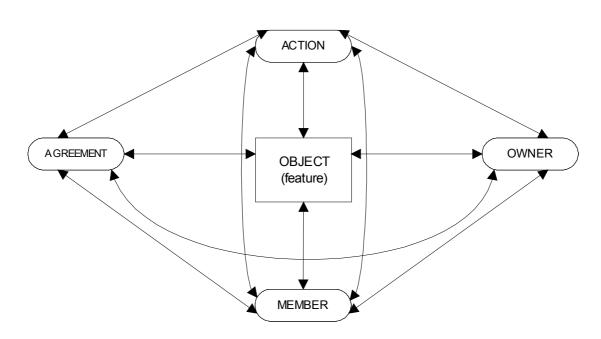
330 331

332 Here we can note that ownership, agreement and membership are interlinked in different ways.

- 333 Generally speaking average usage of a system means an unique combination of ownership,
- 334 agreement and membership. When everything works fine there are not problems.
- 335
- 336 However changes with ownership, agreement and membership can result difficult situations.

27 May 2015

Public / WWW



- 337 338
- Proposal: There could be some considerations for assessing possible / future changes in ownerships, agreements and memberships.
- 339 340 341

342 Next table gives us some possibilities for assessing possibilities for open solutions and closed343 solutions.

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

344

Jukka S. Rannila	OPINION	14 (22)
www.jukkarannila.fi	27 May 2015	Public / WWW

In practical reality, different (digital) objects are used by different actors, and there can be several
interlinked agreements, ownerships and memberships. When everything is working well different
interlinked agreements, ownerships and memberships do not constitute any problems. However,
different changes during the life-cycle of an information can be based on interlinked agreements,

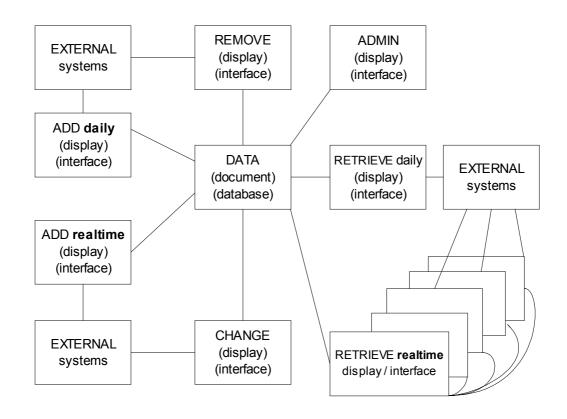
- 349 ownerships and memberships.
- 350

351 Different timeframes for different information systems

352

Like the next figure indicates, there is a difference between realtime systems and other systems.

- 355Proposal: There can be different realtime systems, and the need for different realtime356systems could be assessed.
- 357
 358 Proposal: There can be different systems with other timeframes, and the need for
 359 systems should with different timeframes could be assessed
- 360



- 361
- 362
- In some cases there is a clear need for different replicated information systems. There may a need
 for several/different interfaces based on timeframes in systems.
- 365 366

367

Proposal: Replicating some systems could be assessed critically.

368Proposal: Possibly there could be several/different interfaces based on timeframes in
different systems.

Jukka S. Rannila	OPINION	15 (22)
www.jukkarannila.fi	27 May 2015	Public / WWW

370

An example is the difference between desk-top computers and mobile devices. It may be feasible toprovide different interfaces for desk-top computers and mobile devices.

373

374 Event, states, processes and lifetime

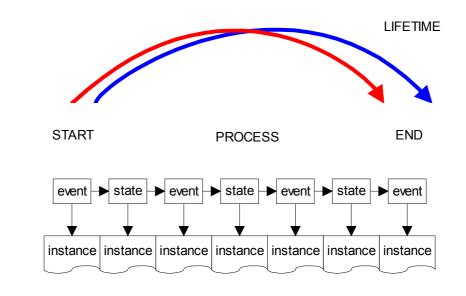
375

376 Systems can be terminated in some timeframes. Also some new systems can be created to have

377 more functions than the previously terminated systems. With a state-level contact point these

378 integration solutions can be consolidated in different state-level timeframes.

379



380 381

382

383

384

Proposal: There could be some efforts to cataloguing state-leve systems and federal systems.

Proposal: Based on the mentioned catalogue there could be some development efforts in the near future and in distant future.

It can be also noted, that different state systems have different life-cycles. One option is naturally
enforcing different open standards, which could be implemented gradually to all relevant
information systems. These efforts can mean work for several years in the near future and in the
distant future. Then we can go back to different APIs.

392 393

Proposal: Based on previous proposals could different OPEN APIs could be gradually implemented in different systems.

394 395

396 Different requirements

397398 I have advocated following solution as the maximum solution for different information systems:399

400

Jukka S. Rannila	OPINION	16 (22)
<u>www.jukkarannila.fi</u>	27 May 2015	Public / WWW

401	* public sector institute owns the machinery and processor of the information system
402	* the machinery and processor are based on relevant open standards
403	* the operating system is based on an open-source solution
404	* public sector institute owns the source code of the information system
405	* public sector institute owns the database of the information system
406	* the database is based on open-source solution and on relevant open standards
407	* public sector institute owns all data in the information system.
408	r
409	Note: It is possible, that the maximum solution is not implemented for different
410	reasons.
411	
412	Here we can note, that the IT platform can be realised with different technologies – some of those
413	technologies are closed and open.
414	technologies are closed and open.
415	One option is to create a detailed roadmap for different phases of the proposed IT platform. With
416	this roadmap it could be easier to develop the proposed IT platform.
417	this foadmap it could be easier to develop the proposed 11 platform.
418	Proposal: Detailed roadmap could be created.
419	Toposal. Detaneu toaumap coulu de createu.
419	Dronosal, Datailed readman could part of more technical and more detailed
420	Proposal: Detailed roadmap could part of more technical and more detailed consultation.
421	consultation.
422	Note: In some consultations I have proposed a readman, which could gradually move
	Note: In some consultations I have proposed a roadmap, which could gradually move
424	to the previously explicated maximum solution for different information systems
425	Note: A stually onforcing different onen technologies in different systems oon telve yeers
426	Note: Actually enforcing different open technologies in different systems can take years
427	since there are different commitments with current/different systems.
428	Cuesting highly used able desum onto four different numbers
429	Creating highly readable documents for different purposes
430	
431	In previous consultations I have advocated creation of highly readable documents – especially
432	different legal documents. Legal texts in many cases can be presented with very readable text.
433	
434	Proposal: The Department could support work, which would develop highly readable
435	documents in different application fields (of net innovations) – e.g. licences, (standard)
436	agreements, user documentation, technical references, etc.
437	
438	An example ² of readable documents / Creative Commons
439	
440	Here we can have an example of readable documents, i.e. Creative Commons. On a dedicated web
441	page ³ it is possible to choose a licence. Based on selections there can be different figures of
442	different licences.

 <u>http://creativecommons.org/</u>, Creative Commons
 <u>http://creativecommons.org/choose/</u>, Creative Commons – Choosing a licence

OPINION

www.jukkarannila.fi

27 May 2015

Public / WWW

443	BY NC ND
444	http://creativecommons.org/licenses/by-nc-nd/4.0/
445	http://creativecommons.org/licenses/by-sa/4.0/legalcode
446	
4 4 7	
447	
448 449	http://creativecommons.org/licenses/by-sa/4.0/
449 450	http://creativecommons.org/licenses/by/4.0/legalcode
450 451	Like the links show there can be three levels for selecting a licence; a figure, short description and
451 452	Like the links show there can be three levels for selecting a licence: a figure, short description and finally the actual legal (complicated?) text.
4 <i>52</i> 453	many the actual legal (complicated?) text.
453	Proposal: All legal texts should be very readable.
455	Troposal. All legal texts should be very readable.
456	Proposal: There can be different ways for describing licences: e.g. a figure, short
457	description and actual legal text.
458	ueseription and actual legal text.
459	Organising more technical consultations?
460	organising more technical consultations.
461	Proposal: The Ministry could organise more technically oriented consultations based
462	on results of this consultation.
463	
464	One idea is distributing questionnaires for ⁴ different IT expert associations, and members of those
465	associations could assess different IT standard proposals. Nowadays a lot of questionnaires can be
466	distributed and answered using different electronic measures.
467	
468	Proposal: Part of the evaluation could be organising (electronic) questionnaires for
469	members of different stakeholder/expert associations based on the application field.
470	
471	The questionnaires can be very structured or very free-form. The advantage of very structured
472	questionnaire is naturally the ease of processing the results of an questionnaire. Answers to free-
473	form questionnaires can result a lot of documents, and their assessment can mean a lot of manual
474	processing.
475	
476	One example
477	
478	In the previous consultations I have used web feeds as an example.
479 480	

480 481

^{4 &}lt;u>http://www.tivia.fi/in-english</u>, e.g. The Finnish Information Processing Association, FIPA (Tieto- ja viestintätekniikan ammattilaiset ry)

Jukka S. Rannila	OPINION	18 (22)
www.jukkarannila.fi	27 May 2015	Public / WWW

To be precise, there are some standards for ⁵ web feeds: RSS 2.0 ⁶ standard and Atom ^{7 8} standards. 482 483 There are different systems, which comply with these example standards (RSS and Atom) 484 differently. 485 486 It can be noted, that different back-office systems (with a wide variety of different technologies) can 487 implement RSS standards, and these RSS feeds can be used in the front-office systems. With this 488 kind solutions front-office systems dont need direct system-to-system communications with back-489 office systems. 490 491 492 493 Good luck!!! 494 495 This opinion is quite limited. Hopefully, there are other constructive ideas presented in other 496 opinions. This remains to be seen. 497 498 499 Best Regards, 500 501 502 Jukka S. Rannila 503 citizen of Finland (Europe) 504 505 signed electronically 506

^{5 &}lt;u>http://en.wikipedia.org/wiki/Web_feed</u>, Web feed

⁶ http://www.rssboard.org/rss-specification, RSS specification

⁷ http://tools.ietf.org/html/rfc4287, The Atom Syndication Format

^{8 &}lt;u>http://tools.ietf.org/html/rfc5023</u>, The Atom Publishing Protocol

OPINION

19 (22)

<u>www.jukkarannila.fi</u>

27 May 2015

Public / WWW

507	
508	<u>ANNEX 1</u>
509	
510	
511	I have constructed different opinions about different issues, and on the following web page
512	are all written (PDF files) opinions:
513	http://www.jukkarannila.fi/lausunnot.html
514	
515	
516	I have constructed specifically opinions related to information systems – both in English and in
517	Finnish.
518	
519	Here is the list of opinions related to information systems
520	
521	EN: Opinion 8: European Interoperability Framework, version 2, draft
522	http://www.jukkarannila.fi/lausunnot.html#nro_8
523	
524	EN: Opinion 9: CAMSS: Common Assessment Method for Standards and Specifications, CAMSS
525	proposal for comments
526	http://www.jukkarannila.fi/lausunnot.html#nro_9
527	
528	EN:Opinion 13: Final Committee Draft ISO/IEC FCD3 19763-2
529	http://www.jukkarannila.fi/lausunnot.html#nro_13
530	
531	EN: Opinion 14: SFS discussion paper / SFS:n keskusteluasiakirja
532	http://www.jukkarannila.fi/lausunnot.html#nro_14
533	ENI- Opinion 17: Opinion to Antitude Cose No. COMD/C 2/20 520
534	EN: Opinion 17: Opinion to Antitrust Case No. COMP/C-3/39.530
535 536	http://www.jukkarannila.fi/lausunnot.html#nro_17
530 537	EN: Opinion 18: Opinion Related to the Public Undertaking by Microsoft
538	http://www.jukkarannila.fi/lausunnot.html#nro_18
539	
540	EN: Opinion 19: Official Acknowledgement by the Commission
541	http://www.jukkarannila.fi/lausunnot.html#nro_19
542	
543	EN: Opinion 20: SECOND Opinion Related to the Public Undertaking by Microsoft
544	http://www.jukkarannila.fi/lausunnot.html#nro_20
545	
546	EN: Opinion 21: Opinion about the European Interoperability Strategy proposal
547	http://www.jukkarannila.fi/lausunnot.html#nro_21
548	
549	EN: Opinion 23: Public consultation on the review of the European Standardisation System
550	http://www.jukkarannila.fi/lausunnot.html#nro_23
551	_ _ _

	Jukka S. Rannila	OPINION	20 (22)	
	www.jukkarannila.fi	27 May 2015	Public / WWW	
552	EN: Opinion 24: ISO/IEC JTC 1 / SC 34 / WGs 1,	4 and 5 in Helsinki 14-17 June 2	2010	
553 554	http://www.jukkarannila.fi/lausunnot.html#nro_24			
555 556	FI: Lausunto 29: Avoimen demokratian avoimen datan avaamisen detaljit (ADADAD)			
557	http://www.jukkarannila.fi/lausunnot.html#nro_29			
558 559	EN: Opinion 30: Internet Filtering http://www.jukkarannila.fi/lausunnot.html#nro_30			
560				
561 562	FI: Lausunto 31: Terveydenhuollon tietotekniikasta http://www.jukkarannila.fi/lausunnot.html#nro_31	L		
563				
564 565	EN: Opinion 32: COMP/C-3/39.692/IBM - Mainte http://www.jukkarannila.fi/lausunnot.html#nro_32	nance services		
566				
567 568	FI: Lausunto 33: Julkishallinnon tietoluovutusten p http://www.jukkarannila.fi/lausunnot.html#nro_33	eriaatteet ja käytännöt		
569				
570 571	EN: Opinion 34: REMIT Registration Format http://www.jukkarannila.fi/lausunnot.html#nro_34			
572	http://www.jukkarannia.n/lausunnot.ntmi#nro_54			
573 574	EN: Opinion 37: CASE COMP/39.654 - Reuters in http://www.jukkarannila.fi/lausunnot.html#nro_37	strument codes		
574 575				
576 577	FI: Lausunto 38: SADe-ohjelman avoimen lähdeko	odin toimintamallin luonnos		
577 578	http://www.jukkarannila.fi/lausunnot.html#nro_38			
579 580	EN: Opinion 39: Registry options to facilitate linki	ng of emissions trading systems		
580 581	http://www.jukkarannila.fi/lausunnot.html#nro_39			
582	EN: Opinion 41: AT.39398: observations on the pro	oposed commitments		
583 584	http://www.jukkarannila.fi/lausunnot.html#nro_41			
585	EN: Opinion 43: Publication of extracts of the Euro	opean register of market particip	ants	
586 587	http://www.jukkarannila.fi/lausunnot.html#nro_43			
588	EN: Opinion 45: About ICT standardisation			
589 590	http://www.jukkarannila.fi/lausunnot.html#nro_45			
591	EN: Opinion 46: Review of the EU copyright rules			
592 593	http://www.jukkarannila.fi/lausunnot.html#nro_46			
594	EN: Opinion 47: Sharing or collaborating with gov	ernment documents		
595 596	http://www.jukkarannila.fi/lausunnot.html#nro_47			
270				

Copyright, licence and disclaimers: check Annex 2.

	Jukka S. Rannila	OPINION	21 (22)	
	www.jukkarannila.fi	27 May 2015	Public / WWW	
597 598 599	FI: Lausunto 49: JSH 166 -suosituksen päivitys http://www.jukkarannila.fi/lausunnot.html#nro_49			
600 601	EN: Opinion 52: Trusted Cloud Europe Survey http://www.jukkarannila.fi/lausunnot.html#nro_52			
602 603 604 605	EN: Opinion 53: Trade Reporting User Manual (TRUM) (Draft) http://www.jukkarannila.fi/lausunnot.html#nro_53			
 EN: Opinion 54: Government Content Management System <u>http://www.jukkarannila.fi/lausunnot.html#nro_54</u> 				
609 610 611	 EN: Opinion 55: European Energy Regulation <u>http://www.jukkarannila.fi/lausunnot.html#nro_55</u> 			
 611 612 EN: Opinion 56: National Identity Proofing Guidelines 613 <u>http://www.jukkarannila.fi/lausunnot.html#nro_56</u> 614 				
615 616 617	FI: Lausunto 58: Puoluekokousaloitteet / 2010 ja 2014 http://www.jukkarannila.fi/lausunnot.html#nro_58			
618 619 620	EN: Opinion 59: Green paper on mobile Health http://www.jukkarannila.fi/lausunnot.html#nro_59			
621 622 623	EN: Opinion 60: Cross-border inheritance tax problems within the EU <u>http://www.jukkarannila.fi/lausunnot.html#nro_60</u>			
624 625 626	EN: Opinion 61: European Register of Products Co http://www.jukkarannila.fi/lausunnot.html#nro_61	ntaining Nanomaterials		
627 628 629	FI: Lausunto 63: Helsingin kaupungin tietotekniikk http://www.jukkarannila.fi/lausunnot.html#nro_63	aohjelmasta 2015-2017		
630 631 632	EN: Opinion 64: Corporate Social Responsibility - <u>http://www.jukkarannila.fi/lausunnot.html#nro_64</u>	European Commission		
633 634 635 636 637 638		different issues, and on the foll PDF files) opinions: annila.fi/lausunnot.html	owing web page	

	Jukka S. Rannila	OPINION	22 (22)
	<u>www.jukkarannila.fi</u>	27 May 2015	Public / WWW
639		ANINEV 2	
640 641	DISCLAIMERS	<u>ANNEX 2</u>	
642 643	Legal disclaimer:		
644	All opinions in this opinion paper are personal opinions		
645 646	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		
647	future changes in this fast-developing area. Any actions		
648	actor making those actions.		
649 650	Political disclaimer:		
651	These opinions do not represent opinions of any political party. These opinions are not advices to certain policy and		
652 653			
654			1.0
655 656	These opinions are not meant to be extreme-right, mod moderate-left. They are only opinions of an individual		
657	different sources. These opinions do not reflect past, current or future political situation in the Finnish, European or		
658 659	worldwide politics.		
659 660	These opinions are not meant to rally for a candidacy in	any public election in any level.	
661 662	Content of web pages:		
663	This text may or may not refer to web pages. The conte	nt of those web pages is not respon	sibility of author of this
664	document. They are referenced on the date of this docu		
665 666	this document is dated, that situation is not responsibili document refers are sole responsibility of those organis		
667	content found on the referred web pages is not on the re-	esponsibility of the author of this do	
668 669	kind content is not endorsed by the author of this docur	nent.	
670	<u>Use of broken English</u>		
671	This text is in English, but from a person, whose is not a native English-speaking person. Therefore the text may or may		
672 673	not contain bad, odd and broken English, and can conta	in awkward linguistic solutions.	
674	COPYRIGHT		
675 676	This opinion paper is distributed under Creative Comm	ons licence to be specific the licen	ce is "Attribution-
677	NonCommercial-NoDerivatives 4.0 International (CC		
678	the following web page:	/l	
679 680	http://creativecommons.org/licens The English explanation is on the followin		
681	http://creativecommons.org/licens		
682			
683	6		
684			

⁹ 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.