

1  
2 TO:  
3 Office of the Australian Information Commissioner / Australian Government  
4 [consultation@oaic.gov.au](mailto:consultation@oaic.gov.au)  
5

6 TO:  
7 Information and Privacy Commission / New South Wales  
8 [ipcinfo@ipc.nsw.gov.au](mailto:ipcinfo@ipc.nsw.gov.au)  
9

10 TO:  
11 Productivity Commission / Australian Government  
12 A formal submission on the following web page: [www.pc.gov.au/inquiries/current/data-access](http://www.pc.gov.au/inquiries/current/data-access)  
13

14  
15 **Assessing privacy and big data on the Internet – possible Australian legislative efforts**  
16

17 This opinion represents an opinion of an individual citizen, not any legal entity.  
18

19 This opinion does not contain:  
20 – any business secrets  
21 – any trade secrets  
22 – any confidential information.  
23

24 This opinion is public.  
25 PDF file of this opinion can be added to a relevant web page.  
26

27  
28 Annex 1 holds information about previous opinions related to information technology.  
29 Annex 2 holds information about disclaimers and copyright.  
30

31  
32 Best Regards,  
33

34  
35 Jukka S. Rannila  
36 citizen of Finland  
37

38 signed electronically  
39

40  
41 [Continues on the next page]  
42

43

**44 Three consultations in Australia / Federal level and state level**

45

46 Interestingly there was three (open) consultations in Australia when writing this opinion:

47

48 Guide to big data and the Australian Privacy Principles

49 <https://www.oaic.gov.au/engage-with-us/consultations/guide-to-big-data-and-the-australian-privacy-principles/>

50

51

Deadline: 25 July 2016

52

53

Data Availability and Use

54

<http://www.pc.gov.au/inquiries/current/data-access/issues>

55

Deadline: 29 July 2016

56

57

Privacy Guidance – Identifiability

58

<http://www.haveyoursay.nsw.gov.au/consultations/privacy-guidance-identifiability/>

59

Deadline: 31 July 2016

60

61

**61 Consultation in the European Union**

62

63

Here we can note that there was a consultation in the European Union.

64

65

Public Consultation on the Evaluation and Review of the ePrivacy Directive

66

<https://ec.europa.eu/digital-single-market/en/news/public-consultation-evaluation-and-review-eprivacy-directive>

67

Deadline: 5 July 2016

68

69

Here we can note that privacy issues are important issue worldwide – e.g. in the European Union.

70

71

Possibly European Union results could be consulted after Australian consultations.

72

73

**74 Conclusion: privacy and data issues are discussed in several countries**

75

76

Like previously mentioned consultations indicate there is a lot of action for assessing privacy issues

77

an data usage in several countries.

78

79

**79 Identifiability / Several identifiers (ID) / Digitalisation of everything**

80

81

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

82

different systems. It can be noted from the previous opinions, that there will be several and different

83

identifiers (ID) for different levels. On the European Union level there can be several identifiers

84

(ID), e.g. following:

85

\* global identifiers (ID)

86

\* general state identifiers (ID)

87

\* identifiers (ID) on the federal level

88

89 Examples of these identifiers (ID) are following:

90

91 1) Facebook ID for an individual person

92 2) Facebook ID for the individual up-dates of individuals

93 3) Data Universal Numbering System (D-U-N-S)

94 4) Reuters instruments codes (RICs)

95 5) Social security code for individual citizens in the European Union member states

96 6) Business identity code for a company in an European Union member state

97 7) Value added tax code for a company in an European Union member state.

98

99 The examples of private identifiers (Facebook IDs, Data Universal Numbering System (D-U-N-S),  
100 Reuters Instrumens Codes (RICs)) show, that persons and/or communities can use or even demand  
101 of using identifiers (ID) from privately owned information systems.

102

103 **Proposal: There could be a systematic review of different identifiers (ID) on different**  
104 **levels.**

105

106 **Proposal: Possible systematic review of different identifiers (ID) should assess different**  
107 **situations – state, federal and global.**

108

109 Different information systems have also internal identifiers (ID) and external identifiers (ID) for  
110 (possible) public usage. The added value for different stakeholders is provided by combination of  
111 different identifiers (ID) in a specific information system.

112

113 **Proposal: There could be some assessment(s) based on different versions of different**  
114 **identifiers (ID).**

115

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

119

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

121

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

125

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

127

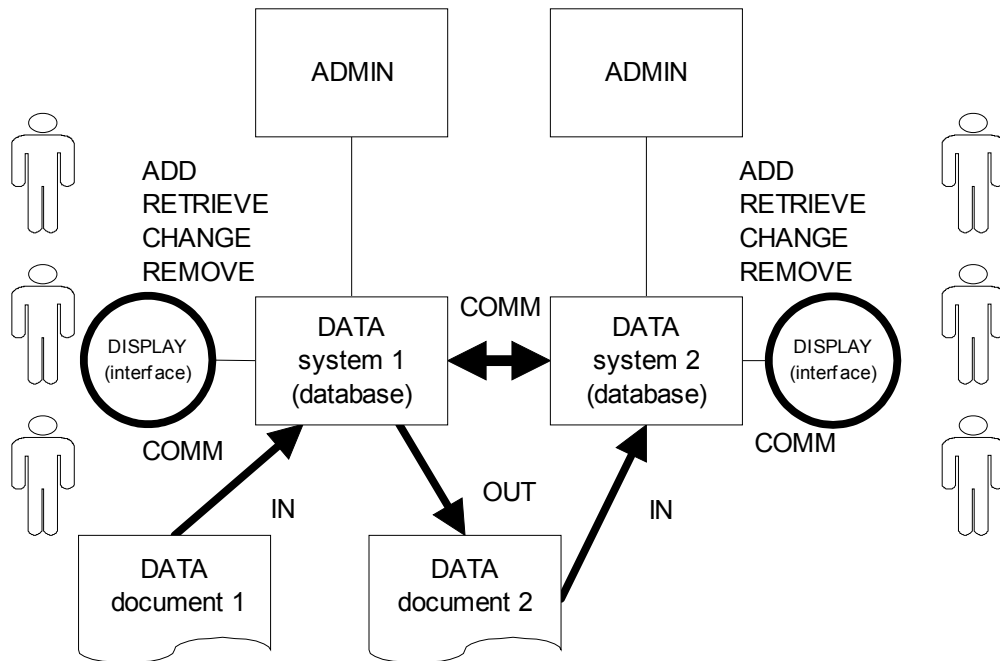
128 **Proposal: There could be serious negotiations with some providers of identifiers (ID).**

129

130 In the European Union there has been different anti-trust cases which are related to different private  
131 sector identifiers (ID), since some of those private sector identifiers (ID) have been used in several  
132 other systems. Some private sector identifiers (ID) can mean a (near) monopoly situation.

133  
134  
135

**Basic functions in information systems**



136  
137

Basic functions in an information system (retrieve, add, change, remove, data and documents) can be noted once more. Cooperation between systems can be based on direct system-to-system connections (standards) or transferring documents (standards) between systems.

141

**Standardisation efforts**

143

There are different standards setting organisations on the information technology field. One list <sup>1</sup> of these standards setting organisations is provided by ConsortiumInfo.org.

146

Like the lists (ConsortiumInfo.org) indicates there are some standards setting organisations for standardising some aspects of vehicles (road). Naturally the relevance of different standards setting organisations vary.

150

One warning can be said about standards setting organisations. All standards setting organisations are not successes based on several factors and there can be many irrelevant standards setting organisations. Market situation on different vehicle markets varies a lot based on different factors.

154

Here we can note some problems:

156

157

158

<sup>1</sup> Standard Setting Organizations and Standards List, [www.consortiuminfo.org/links/linksall.php](http://www.consortiuminfo.org/links/linksall.php)

- 159 • some systems are based on **de-facto** standards
- 160 • some systems are based on **de-jure** standards
- 161 • there can be confrontations between **de-facto** and **de-jure** standards
- 162 • there can be a monopoly situation in some domain
- 163 • some standards may inhibit possible actions of some stakeholders
- 164 • there can be a standard war on some domains
- 165 • standards have different life-cycles
- 166 • systems have different life-cycles
- 167 • there can be mismatches between different life-cycles
- 168 • there can be failed standards
- 169 • there can be deprecated standards.

170

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

175

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

182

183 There are differences between horizontal and vertical standards. A simple example is naturally  
184 email solutions. There are several vertical standards when creating technically email solutions. Then  
185 there are horizontal standards which enable sending messages between technically different email  
186 solutions.

187

188 **Proposal: There could be assessment of vertical and horizontal standards.**

189

190 **Proposal: Using horizontal standards could be favoured when creating different  
191 information systems.**

192

193 Horizontal standards enables technological solutions which can work together. Horizontal standards  
194 hides different complexities in information systems.

195

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

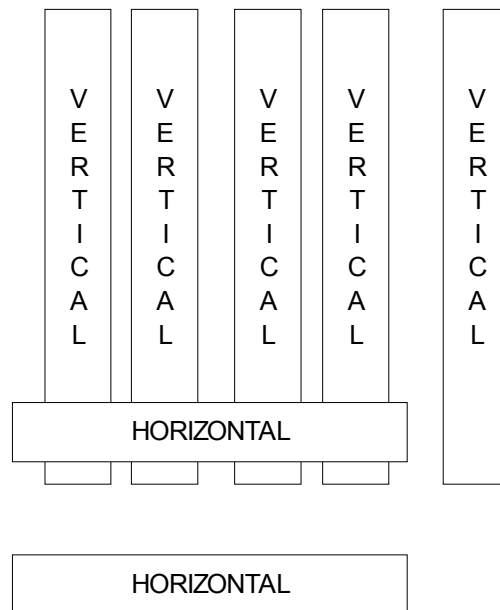
197

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

199

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

202



203  
204

205 Personally I have advocated using different horizontal standards. For example email standards  
206 (horizontal) are implemented with very different technologies (vertical).

207

208 **Proposal: Governments should especially concentrate on horizontal standards.**

209

210 **Proposal: Some government agencies could apply for memberships of different  
211 standard setting organisations which develop especially horizontal standards.**

212

213 **Proposal: Government agencies should not be passive by-standers when different  
214 horizontal standards are developed.**

215

216 **Proposal: Government agencies could financially support development of horizontal  
217 standards.**

218

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

221

222

223

224 [Continues on the next page]

225

226

227

228

229

230

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

231

232 It can be concluded, that this consultation is not (yet) about technical details. Based on previous  
 233 consultations I have advocated following solution as the maximum solution:

234

235 \* public sector institute owns the machinery and processor of the information system

236 \* the machinery and processor are based on relevant open standards

237 \* the operating system is based on an open-source solution

238 \* public sector institute owns the source code of the information system

239 \* public sector institute owns the database of the information system

240 \* the database is based on open-source solution and on relevant open standards

241 \* public sector institute owns all data in the information system.

242

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

244

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

247

248 **Proposal: Assessing previously developed standards could be done seriously.**

249

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

251

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

253

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

255 Generally speaking different stakeholder communities can use open data in very intelligently – also  
256 adding other (open) data for creation an information service is a possibility. Here we can note that  
257 there can be direct system-to-system connections, which can mean some standardised interfaces.  
258 Also we can note that different document formats can be used when there is system-to-system  
259 connections.

260  
261 One comprehensive list for different standard developing organisations (SDO) is provided <sup>2</sup>  
262 ConsortiumInfo.org. It may possible to use previously developed standards.

263  
264 **Proposal: In many cases both options must be implemented – direct system-to-system**  
265 **connections and transmitting different documents between systems.**

266  
267 Generally speaking different stakeholder communities can use open data in very intelligently – also  
268 adding other (open) data for creation an information service is a possibility. Here we can note that  
269 (open) data must be processed with different software. There can be closed software or open  
270 software.

271  
272 **Proposal: There can be different software to process open data.**

273  
274 **Proposal: Open source software could be favoured when processing open data.**

275  
276 Then there is the problem of developing new software. Both open software and closed software  
277 mean a lot of work for developers. Personally I have advocated creation of non-profit foundations  
278 which can handle open standards with open source program. Examples of these foundations are  
279 following:

- 280
- 281 • Apache Software Foundation <sup>3 4</sup>
  - 282 • Document Foundation <sup>5 6</sup>
  - 283 • Eclipse Foundation <sup>7 8</sup>
  - 284 • Linux Foundation <sup>9 10</sup>
  - 285 • OpenStack Foundation <sup>11 12</sup>
  - 286 • Python Software Foundation <sup>13 14</sup>
- 287

288 There are also some non-profit communities which are not foundations:

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

3 <https://www.apache.org>

4 [https://en.wikipedia.org/wiki/Apache\\_Software\\_Foundation](https://en.wikipedia.org/wiki/Apache_Software_Foundation)

5 <https://www.documentfoundation.org>

6 [https://en.wikipedia.org/wiki/The\\_Document\\_Foundation](https://en.wikipedia.org/wiki/The_Document_Foundation)

7 <https://www.eclipse.org>

8 [https://en.wikipedia.org/wiki/Eclipse\\_Foundation](https://en.wikipedia.org/wiki/Eclipse_Foundation)

9 <http://www.linuxfoundation.org>

10 [https://en.wikipedia.org/wiki/Linux\\_Foundation](https://en.wikipedia.org/wiki/Linux_Foundation)

11 <http://www.openstack.org>

12 <https://en.wikipedia.org/wiki/OpenStack>

13 <https://www.python.org/psf/>

14 [https://en.wikipedia.org/wiki/Python\\_Software\\_Foundation](https://en.wikipedia.org/wiki/Python_Software_Foundation)



- 289
- 290 • Creative Commons<sup>15 16</sup>
  - 291 • Open Knowledge International<sup>17 18</sup>
  - 292 • Open Source Hardware Association<sup>19</sup>
  - 293 • Open Source Initiative<sup>20 21</sup>
  - 294 • Open Source Matters<sup>22</sup>
  - 295 • Open Source Robotics Foundation<sup>23</sup>
  - 296 • PHP Group<sup>24 25</sup>
- 297

298 Standards and/or software provided by these non-profit communities (foundations and other) are  
299 usually concentrating on some specific information technology domain. I have advocated single-  
300 issue non-profit foundations.

301

302 **Proposal: Information about non-profit single-issue foundations could be collected.**

303

304 **Proposal: Information about other non-profit single-issue communities could be**  
305 **collected.**

306

307 **Proposal: Membership for these non-profit single-issue foundations and/or**  
308 **communities could be assessed carefully.**

309

310 **Proposal: In some cases it can be reasonable to join some non-profit foundation(s)**  
311 **and/or non-profit communities.**

312

313 In reality all these non-profit communities need some financial support for their activities.

314

315 **Proposal: In some cases it can be reasonable to give financial support to non-profit**  
316 **communities.**

317

318 **Note: Here we can note that some non-profit communities are not real successes**  
319 **and some non-profit communities might be closed down after different failures.**

320

321 **Data warehouse?**

322

323 I have given some opinions for the European Commission. I have advocated some data warehouse  
324 systems which could handle archival data. I have proposed creation (EU) of member state systems

15 <https://creativecommons.org/>

16 [https://en.wikipedia.org/wiki/Creative\\_Commons](https://en.wikipedia.org/wiki/Creative_Commons)

17 <https://okfn.org>

18 [https://en.wikipedia.org/wiki/Open\\_Knowledge\\_International](https://en.wikipedia.org/wiki/Open_Knowledge_International)

19 [www.oshwa.org/](http://www.oshwa.org/)

20 <https://opensource.org/>

21 [https://en.wikipedia.org/wiki/Open\\_Source\\_Initiative](https://en.wikipedia.org/wiki/Open_Source_Initiative)

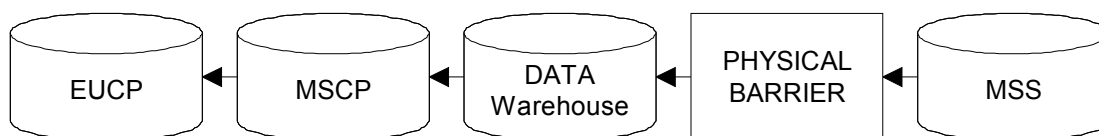
22 <http://opensourcematters.org>

23 [www.osrfoundation.org/](http://www.osrfoundation.org/)

24 <https://php.net/>

25 <https://en.wikipedia.org/wiki/PHP>

325 (MSS) which are consolidated with one central system, ie. member state contact point. Then this  
 326 member state contact point can have cooperation with European Union contact point. In some cases  
 327 there can be need for just one direction (not two directions) and data warehouse solutions can be  
 328 used.  
 329



330  
 331 **MSS = Member State System, MSCP = Member State Contact Point,**  
 332 **EUCP = European Contact Point**  
 333

334 **Proposal: Directions (one direction or two directions) between information systems**  
 335 **could be assessed carefully.**  
 336

337 **Proposal: In some cases data warehouse solutions (just one direction) can be used.**  
 338

339 It can be also noted that there can a physical barrier between a member state system and data  
 340 warehouse solution. All electronic barriers can be compromised based on different weaknesses.  
 341 Physical barriers can not be compromised since they are not directly connected to a member state  
 342 system. One example is naturally physical data tapes which can contain data of an information  
 343 system and data in tapes can transferred between information systems.  
 344

345 **Proposal: There could be assessment for different data warehouse solutions.**  
 346

347 **Information and Privacy Commission New South Wales (IPC) Fact Sheet (Draft):**  
 348 **Identifiability (page 2)**

349 The legislation does not make clear who is supposed to be able to ascertain the subject's  
 350 identity – the holder of the information, the subject themselves, a particular third party  
 351 audience, or the world at large?  
 352

353 **Proposal: Information and Privacy Commission New South Wales could give decisions**  
 354 **when different stakeholders are not sure about de-identification and/or re-identification.**  
 355

356 Naturally this proposal can add some bureaucracy since there can be several questions for  
 357 Information and Privacy Commission New South Wales.  
 358

359 **Office of the Australian Information Commissioner:**

360 Risk point: Where de-identification is not done properly, big data activities may lead to re-  
 361 identification of personal information.  
 362

363 **Proposal: Possibly there could be a central register where information of different**  
 364 **registers (public and/or private) can be added.**  
 365

366 **Proposal: Possibly decisions for different stakeholders could be done on the federal**  
 367 **level (Office of the Australian Information Commissioner, OAIC).**  
 368

369 Naturally this proposal can add some bureaucracy since there are several public and/or private  
 370 registers. On the other hand this central register can just be a simple web page without functions.  
 371

372 **Office of the Australian Information Commissioner:**

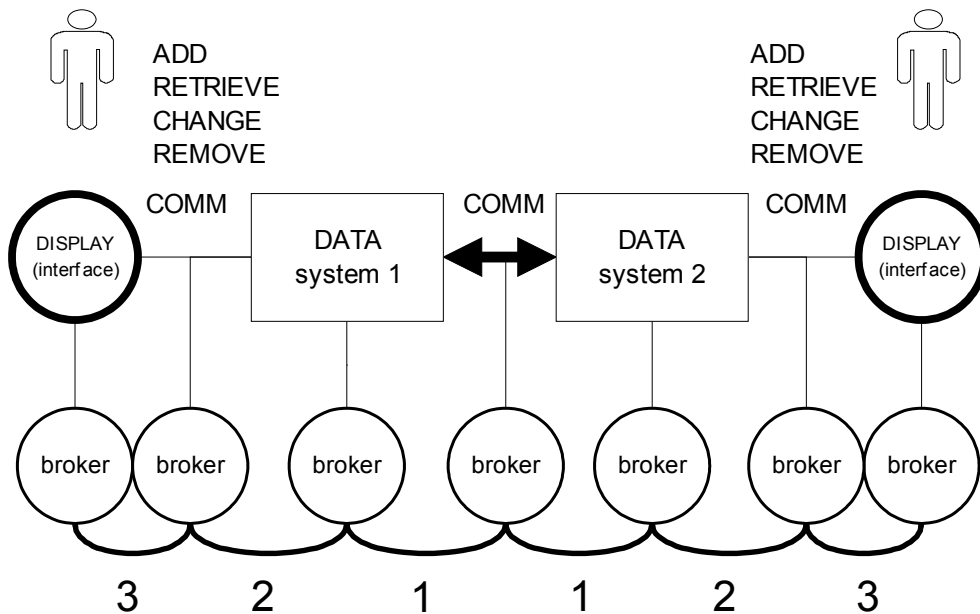
373 Privacy tip: Entities should undertake a privacy impact assessment which addresses whether  
 374 personal information may be collected via creation through big data analytics.  
 375

376 **Proposal: These privacy impact assessments could be added to the proposed central**  
 377 **register.**  
 378

379 Once again – naturally this proposal can add some bureaucracy since there are several public and/or  
 380 private registers.  
 381

382 **Productivity Commission question:**

383 **How could governments use their own data collections more efficiently and effectively?**  
 384



385  
 386  
 387 Previously I mentioned different basic functions: add, retrieve, change, remove. Then there is some  
 388 communication and different displays and interfaces for different stakeholders groups.  
 389

390 **Proposal: Governments should assess number of different identifiers (ID).**

391  
 392 **Proposal: Governments could consolidate different identifiers (ID).**  
 393

394 An example from Finland is <sup>26</sup> Business Information System BIS which consolidated two previous  
 395 identifiers (ID) to just one identifier (ID).

396  
 397 Then there is the question of different brokers which can use different identifiers (ID) for having  
 398 unified services to different stakeholder groups.

399  
 400 **Proposal: Possibly there could be a central register where information of different**  
 401 **identifiers (ID) and combination of different identifiers (ID) could be added.**

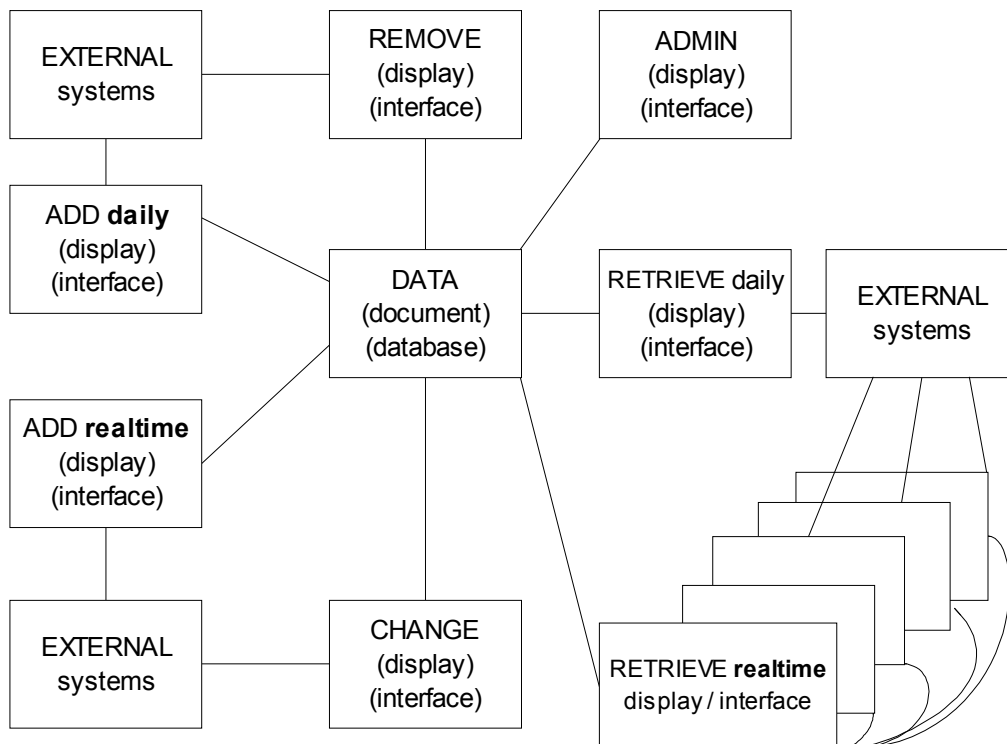
402  
 403 Naturally this proposal can add some bureaucracy since there are several public and/or private  
 404 registers. On the other hand this central register can just be a simple web page without different  
 405 functions.

406  
 407 **Office of the Australian Information Commissioner:**

408 Risk point: Personal information used in big data activities is likely to include information  
 409 collected from third parties.

410  
 411 **Proposal: Possibly there could be a central register where information about different**  
 412 **combinations of third party registers can be added.**

413



414

415

416 Here we can note that big data is also about different timeframes for different systems: there can be  
 417 real-time, daily and hourly timeframes depending on the purpose of a system.

26 <https://www.ytj.fi/en/index.html>, Business Information System BIS ("YTJ" in Finnish)

418

**Proposal: Information about different timeframes could be collected together.**

419

420

421

**Proposal: Information about external private systems could be collected together.**

422

423

**Proposal: Different licences (for big data) could be assessed – e.g. real-time timeframes may mean a specific licence.**

424

425

**Productivity Commission question:**

427

Should the collection, sharing and release of public sector data be standardised? What would be the benefits and costs of standardising? What would standards that are ‘fit for purpose’ look like?

428

429

430

Previously I have advocated creation of horizontal standards for different information systems. Creation of horizontal standards is more feasible since there can be several vertical solutions in different governmental agencies (states and federal).

432

433

434

435

**Proposal: Horizontal standards should be favoured when creating different standards for collection, sharing and release of public sector data**

436

437

For example forthcoming PDF standard (2.0)<sup>27 28 29</sup> can be one horizontal standard when different vertical systems create PDF files for reading. For example<sup>30 31 32</sup> Open Document Format for Office Applications (ODF 1.2) can be one horizontal standard when different vertical systems create ODF files for editing.

440

441

442

443

**Office of the Australian Information Commissioner:**

444

Privacy tip: Entities should use privacy impact assessments to inform what information to include in their notices and then provide it in easy to read, dynamic and user centric ways.

445

446

447

Based on previous consultations I have advocated creation of easy-to-read terms. An example from Finland is<sup>33</sup> “general contract terms for telecom companies” which defines different concepts and general terms. Too often we accept complicated legalese as general terms for different services.

448

449

27 [http://www.iso.org/iso/home/store/catalogue\\_tc/catalogue\\_detail.htm?csnumber=63534](http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=63534), ISO/DIS 32000-2.3 - Document management - Portable document format - Part 2: PDF 2.0

28 [http://www.iso.org/iso/home/store/catalogue\\_tc/catalogue\\_tc\\_browse.htm?commid=53674&published=on&includesc=true](http://www.iso.org/iso/home/store/catalogue_tc/catalogue_tc_browse.htm?commid=53674&published=on&includesc=true), ISO/TC 171/SC 2 - Document file formats, EDMS systems and authenticity of information

29 [https://en.wikipedia.org/wiki/History\\_and\\_Standardization\\_of\\_the\\_Portable\\_Document\\_Format](https://en.wikipedia.org/wiki/History_and_Standardization_of_the_Portable_Document_Format), History and Standardization of the Portable Document Format

30 <https://www.oasis-open.org/standards#opendocumentv1.2>, Open Document Format for Office Applications (OpenDocument) Version 1.2

31 [https://en.wikipedia.org/wiki/OpenDocument\\_standardization](https://en.wikipedia.org/wiki/OpenDocument_standardization), OpenDocument standardization

32 <http://standards.iso.org/ittf/PubliclyAvailableStandards/>, Freely Available Standards → ISO/IEC 26300-1:2015; ISO/IEC 26300-2:2015; ISO/IEC 26300-3:2015

33 <http://www.kkv.fi/en/current-issues/press-releases/2015/28.5.2015-consumer-ombudsman-and-ficom-negotiate-general-contract-terms-for-telecom-companies/>, Consumer Ombudsman and FiCom negotiate general contract terms for telecom companies

450

451

**Proposal: Office of the Australian Information Commissioner could organise project for creating easy-to-read (legal) terms for big and/open data.**

452

453

**Productivity Commission question:**

455

What lessons from overseas jurisdictions can Australia learn from regarding the use of individuals' and businesses' data, particularly in regard to protecting privacy and commercially sensitive or commercially valuable information?

456

457

458

459

**Note: European Union has organised different consultations about different information technology issues.**

460

461

462

**Proposal: Results of the European Union consultations could be assessed very carefully.**

463

464

In Finland Data Protection Ombudsman has published some <sup>34</sup> guidelines in English. On that webpage there are guidelines (dated 24.4.2012) for preparing a data balance sheet.

466

467

468

**Proposal: Finnish data balance sheet could be assessed carefully.**

469

470

**Proposal: Other Finnish guidelines could be assessed carefully – e.g. description file of an information system, notification of an information system and notification of data processing outside of European Union.**

471

472

473

474

There is also <sup>35</sup> European Data Protection Supervisor (European Union).

475

476

**Proposal: Publications and activities of the European Data Protection Ombudsman (European Union) could be assessed carefully.**

477

478

479

**Office of the Australian Information Commissioner:**

480

Privacy tip: Entities should undertake due diligence before disclosing personal information to overseas recipients. This will help them identify risks and take steps to mitigate them.

481

482

483

**Proposal: Information about due diligence of personal information usage could be published – e.g. the proposed central register.**

484

485

486

**Office of the Australian Information Commissioner:**

487

Privacy tip: Entities should use a privacy impact assessment to assess what personal information they need and for what purposes. Entities need to be able to justify why they have retained personal information and for what permitted purposes. Entities can also consider de-identifying personal information so they can keep the data for future uses.

488

489

490

491

492

**Note: Privacy impact assessment methods are not mentioned on consultation**

34 <http://www.tietosuoja.fi/en/index/materiaalia.html>

35 <https://secure.edps.europa.eu/EDPSWEB/edps/EDPS/cache/offonce?lang=en>

493 **document.**

494

495 **Proposal: There could be published guidelines for privacy impact assessment methods.**

496

497 **Proposal: Published guidelines for privacy impact assessment methods should be easy-**  
498 **to-read text.**

499

500 **An example for cooperation: Web feeds (RSS and Atom)**

501



502

503

504 I have advocated usage of web feeds<sup>36</sup> on several previous opinion documents. Actually there are  
505 two standards for web feeds: RSS<sup>37 38</sup> and Atom<sup>39 40 41</sup>.

506

507 **Proposal: Web feeds (RSS and/or Atom) could be advocated when developing different**  
508 **informations systems.**

509

510 **Proposal: Web feeds (RSS and/or Atom) should be used extensively for providing (real-**  
511 **time) information for different stakeholder(s) (communities).**

512

513 **Proposal: There can be different web feeds (RSS and/or Atom) for different**  
514 **stakeholder(s) – having just one web feed (RSS and/or Atom) may not be a feasible**  
515 **solution.**

516

517 **Proposal: Several web feeds (RSS and/or Atom) can be based on different viewpoints.**

518

519 It can be easier to create web feeds in different information systems since web feeds enable  
520 connections without direct system-to-system connections.

521

522 It can be noted, that different back-office systems (with a wide variety of different technologies) can  
523 implement RSS standards, and these RSS feeds can be used in the front-office systems. With this  
524 kind solutions front-office systems dont need direct system-to-system communications with back-  
525 office systems.

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36 [https://en.wikipedia.org/wiki/Web\\_feed](https://en.wikipedia.org/wiki/Web_feed)

37 <http://www.rssboard.org/rss-specification>, RSS 2.0 Specification

38 <https://en.wikipedia.org/wiki/RSS>, Wikipedia / RSS

39 [https://en.wikipedia.org/wiki/Atom\\_\(standard\)](https://en.wikipedia.org/wiki/Atom_(standard)), Wikipedia / Atom (standard)

40 <https://tools.ietf.org/html/rfc4287>, The Atom Syndication Format

41 <https://tools.ietf.org/html/rfc5023>, The Atom Publishing Protocol



526

527

**ANNEX 1**

528

I have constructed different opinions about different issues, and on the following web page are all written (PDF files) opinions:

530

531

<http://www.jukkarannila.fi/lausunnot.html>

532

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

535

**Here is the list of opinions related to information systems.**

537

EN: Opinion 8: European Interoperability Framework, version 2, draft

539

[http://www.jukkarannila.fi/lausunnot.html#nro\\_8](http://www.jukkarannila.fi/lausunnot.html#nro_8)

540

EN: Opinion 9: CAMSS: Common Assessment Method for Standards and Specifications, CAMSS proposal for comments

543

[http://www.jukkarannila.fi/lausunnot.html#nro\\_9](http://www.jukkarannila.fi/lausunnot.html#nro_9)

544

EN:Opinion 13: Final Committee Draft ISO/IEC FCD3 19763-2

546

[http://www.jukkarannila.fi/lausunnot.html#nro\\_13](http://www.jukkarannila.fi/lausunnot.html#nro_13)

547

EN: Opinion 14: SFS discussion paper / SFS:n keskusteluasiakirja

549

[http://www.jukkarannila.fi/lausunnot.html#nro\\_14](http://www.jukkarannila.fi/lausunnot.html#nro_14)

550

EN: Opinion 17: Opinion to Antitrust Case No. COMP/C-3/39.530

552

[http://www.jukkarannila.fi/lausunnot.html#nro\\_17](http://www.jukkarannila.fi/lausunnot.html#nro_17)

553

EN: Opinion 18: Opinion Related to the Public Undertaking by Microsoft

555

[http://www.jukkarannila.fi/lausunnot.html#nro\\_18](http://www.jukkarannila.fi/lausunnot.html#nro_18)

556

EN: Opinion 19: Official Acknowledgement by the Commission

558

[http://www.jukkarannila.fi/lausunnot.html#nro\\_19](http://www.jukkarannila.fi/lausunnot.html#nro_19)

559

EN: Opinion 20: SECOND Opinion Related to the Public Undertaking by Microsoft

561

[http://www.jukkarannila.fi/lausunnot.html#nro\\_20](http://www.jukkarannila.fi/lausunnot.html#nro_20)

562

EN: Opinion 21: Opinion about the European Interoperability Strategy proposal

564

[http://www.jukkarannila.fi/lausunnot.html#nro\\_21](http://www.jukkarannila.fi/lausunnot.html#nro_21)

565

EN: Opinion 23: Public consultation on the review of the European Standardisation System

567

[http://www.jukkarannila.fi/lausunnot.html#nro\\_23](http://www.jukkarannila.fi/lausunnot.html#nro_23)

568

EN: Opinion 24: ISO/IEC JTC 1 / SC 34 / WGs 1, 4 and 5 in Helsinki 14-17 June 2010

569

[http://www.jukkarannila.fi/lausunnot.html#nro\\_24](http://www.jukkarannila.fi/lausunnot.html#nro_24)

570



571 FI: Lausunto 29: Avoimen demokratian avoimen datan avaamisen detaljit (ADADAD)

572 [http://www.jukkarannila.fi/lausunnot.html#nro\\_29](http://www.jukkarannila.fi/lausunnot.html#nro_29)

573

574 EN: Opinion 30: Internet Filtering

575 [http://www.jukkarannila.fi/lausunnot.html#nro\\_30](http://www.jukkarannila.fi/lausunnot.html#nro_30)

576

577 FI: Lausunto 31: Terveystieteiden tietotekniikasta

578 [http://www.jukkarannila.fi/lausunnot.html#nro\\_31](http://www.jukkarannila.fi/lausunnot.html#nro_31)

579

580 EN: Opinion 32: COMP/C-3/39.692/IBM - Maintenance services

581 [http://www.jukkarannila.fi/lausunnot.html#nro\\_32](http://www.jukkarannila.fi/lausunnot.html#nro_32)

582

583 FI: Lausunto 33: Julkishallinnon tietoluovutusten periaatteet ja käytännöt

584 [http://www.jukkarannila.fi/lausunnot.html#nro\\_33](http://www.jukkarannila.fi/lausunnot.html#nro_33)

585

586 EN: Opinion 34: REMIT Registration Format

587 [http://www.jukkarannila.fi/lausunnot.html#nro\\_34](http://www.jukkarannila.fi/lausunnot.html#nro_34)

588

589 EN: Opinion 37: CASE COMP/39.654 - Reuters instrument codes

590 [http://www.jukkarannila.fi/lausunnot.html#nro\\_37](http://www.jukkarannila.fi/lausunnot.html#nro_37)

591

592 FI: Lausunto 38: SADe-ohjelman avoimen lähdekoodin toimintamallin luonnos

593 [http://www.jukkarannila.fi/lausunnot.html#nro\\_38](http://www.jukkarannila.fi/lausunnot.html#nro_38)

594

595 EN: Opinion 39: Registry options to facilitate linking of emissions trading systems

596 [http://www.jukkarannila.fi/lausunnot.html#nro\\_39](http://www.jukkarannila.fi/lausunnot.html#nro_39)

597

598 EN: Opinion 41: AT.39398: observations on the proposed commitments

599 [http://www.jukkarannila.fi/lausunnot.html#nro\\_41](http://www.jukkarannila.fi/lausunnot.html#nro_41)

600

601 EN: Opinion 43: Publication of extracts of the European register of market participants

602 [http://www.jukkarannila.fi/lausunnot.html#nro\\_43](http://www.jukkarannila.fi/lausunnot.html#nro_43)

603

604 EN: Opinion 45: About ICT standardisation

605 [http://www.jukkarannila.fi/lausunnot.html#nro\\_45](http://www.jukkarannila.fi/lausunnot.html#nro_45)

606

607 EN: Opinion 46: Review of the EU copyright rules

608 [http://www.jukkarannila.fi/lausunnot.html#nro\\_46](http://www.jukkarannila.fi/lausunnot.html#nro_46)

609

610 EN: Opinion 47: Sharing or collaborating with government documents

611 [http://www.jukkarannila.fi/lausunnot.html#nro\\_47](http://www.jukkarannila.fi/lausunnot.html#nro_47)

612

613 FI: Lausunto 49: JSH 166 -suosituksen päivitys

614 [http://www.jukkarannila.fi/lausunnot.html#nro\\_49](http://www.jukkarannila.fi/lausunnot.html#nro_49)

615

- 616 EN: Opinion 52: Trusted Cloud Europe Survey  
617 [http://www.jukkarannila.fi/lausunnot.html#nro\\_52](http://www.jukkarannila.fi/lausunnot.html#nro_52)  
618
- 619 EN: Opinion 53: Trade Reporting User Manual (TRUM) (Draft)  
620 [http://www.jukkarannila.fi/lausunnot.html#nro\\_53](http://www.jukkarannila.fi/lausunnot.html#nro_53)  
621
- 622 EN: Opinion 54: Government Content Management System  
623 [http://www.jukkarannila.fi/lausunnot.html#nro\\_54](http://www.jukkarannila.fi/lausunnot.html#nro_54)  
624
- 625 EN: Opinion 55: European Energy Regulation  
626 [http://www.jukkarannila.fi/lausunnot.html#nro\\_55](http://www.jukkarannila.fi/lausunnot.html#nro_55)  
627
- 628 EN: Opinion 56: National Identity Proofing Guidelines  
629 [http://www.jukkarannila.fi/lausunnot.html#nro\\_56](http://www.jukkarannila.fi/lausunnot.html#nro_56)  
630
- 631 FI: Lausunto 58: Puoluekokousaloitteet / 2010 ja 2014  
632 [http://www.jukkarannila.fi/lausunnot.html#nro\\_58](http://www.jukkarannila.fi/lausunnot.html#nro_58)  
633
- 634 EN: Opinion 59: Green paper on mobile Health  
635 [http://www.jukkarannila.fi/lausunnot.html#nro\\_59](http://www.jukkarannila.fi/lausunnot.html#nro_59)  
636
- 637 EN: Opinion 60: Cross-border inheritance tax problems within the EU  
638 [http://www.jukkarannila.fi/lausunnot.html#nro\\_60](http://www.jukkarannila.fi/lausunnot.html#nro_60)  
639
- 640 EN: Opinion 61: European Register of Products Containing Nanomaterials  
641 [http://www.jukkarannila.fi/lausunnot.html#nro\\_61](http://www.jukkarannila.fi/lausunnot.html#nro_61)  
642
- 643 FI: Lausunto 65: Lausuntopyyntö nettiäänestystyöryhmän väliraportista  
644 [http://www.jukkarannila.fi/lausunnot.html#nro\\_65](http://www.jukkarannila.fi/lausunnot.html#nro_65)  
645
- 646 EN: Opinion 66: Net Innovation for the Work Programme 2016-2017  
647 [http://www.jukkarannila.fi/lausunnot.html#nro\\_66](http://www.jukkarannila.fi/lausunnot.html#nro_66)  
648
- 649 FI: Lausunto 67: Valtioneuvoston hanketiedon esiselvityksestä  
650 [http://www.jukkarannila.fi/lausunnot.html#nro\\_67](http://www.jukkarannila.fi/lausunnot.html#nro_67)  
651
- 652 EN: Opinion 68: European Network Code Stakeholder Committees  
653 [http://www.jukkarannila.fi/lausunnot.html#nro\\_68](http://www.jukkarannila.fi/lausunnot.html#nro_68)  
654
- 655 FI: Lausunto 69: Hallituksen esitys (luonnos 16.4.2015) vieraslajeista  
656 [http://www.jukkarannila.fi/lausunnot.html#nro\\_69](http://www.jukkarannila.fi/lausunnot.html#nro_69)  
657
- 658 EN: Opinion 70: Providing better APIs in New Zealand  
659 [http://www.jukkarannila.fi/lausunnot.html#nro\\_70](http://www.jukkarannila.fi/lausunnot.html#nro_70)  
660

- 661 EN: Opinion 71: Common Schema for the Disclosure of Inside Information  
662 [http://www.jukkarannila.fi/lausunnot.html#nro\\_71](http://www.jukkarannila.fi/lausunnot.html#nro_71)  
663
- 664 EN: Opinion 72: Queensland biofuel mandate  
665 [http://www.jukkarannila.fi/lausunnot.html#nro\\_72](http://www.jukkarannila.fi/lausunnot.html#nro_72)  
666
- 667 EN: Opinion 73: Financial / Conceptual Frameworks  
668 [http://www.jukkarannila.fi/lausunnot.html#nro\\_73](http://www.jukkarannila.fi/lausunnot.html#nro_73)  
669
- 670 EN: Opinion 74: Enabling the Internet of Things  
671 [http://www.jukkarannila.fi/lausunnot.html#nro\\_74](http://www.jukkarannila.fi/lausunnot.html#nro_74)  
672
- 673 EN: Opinion 78: Consumer Complaints Register (NSW)  
674 [http://www.jukkarannila.fi/lausunnot.html#nro\\_78](http://www.jukkarannila.fi/lausunnot.html#nro_78)  
675
- 676 EN: Opinion 79: PCEHR (Information Commissioner Enforcement Powers) Guidelines 2015  
677 [http://www.jukkarannila.fi/lausunnot.html#nro\\_79](http://www.jukkarannila.fi/lausunnot.html#nro_79)  
678
- 679 EN: Opinion 80: Mandatory Transparency Register  
680 [http://www.jukkarannila.fi/lausunnot.html#nro\\_80](http://www.jukkarannila.fi/lausunnot.html#nro_80)  
681
- 682 EN: Opinion 81: Records and Information Management Standard  
683 [http://www.jukkarannila.fi/lausunnot.html#nro\\_81](http://www.jukkarannila.fi/lausunnot.html#nro_81)  
684
- 685 FI: Lausunto 83: Vuoden 2016 puoluekokouksen aloitteet  
686 [http://www.jukkarannila.fi/lausunnot.html#nro\\_83](http://www.jukkarannila.fi/lausunnot.html#nro_83)  
687
- 688 EN: Opinion 84: Revision of the European Interoperability Framework  
689 [http://www.jukkarannila.fi/lausunnot.html#nro\\_84](http://www.jukkarannila.fi/lausunnot.html#nro_84)  
690
- 691 EN: Opinion 85: Regulatory options for automated vehicles  
692 [http://www.jukkarannila.fi/lausunnot.html#nro\\_85](http://www.jukkarannila.fi/lausunnot.html#nro_85)  
693
- 694 EN: Opinion 86: 2016 Annual Colloquium on fundamental rights  
695 [http://www.jukkarannila.fi/lausunnot.html#nro\\_86](http://www.jukkarannila.fi/lausunnot.html#nro_86)  
696

697

698 I have constructed different opinions about different issues, and on the following web page  
699 are all written (PDF files) opinions:  
700 <http://www.jukkarannila.fi/lausunnot.html>  
701

702 [Continues on the next page]  
703

704

705

**ANNEX 2**

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707

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714

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719

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745 The English explanation is on the following web page:

746 <http://creativecommons.org/licenses/by-nc-nd/4.0/legalcode>

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748

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42 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.