1
2   TO: Maurits-Jan Prinz
3   CC: Marco Camboni
4   CC: Craig Hawthorne
5
6
7   DG Enterprise and Industry
8   Chemicals industry unit (F.2)
9   European Commission
10   ENTR/F.2, Maurits-Jan Prinz, BREY 11/219
11   B-1049 Brussels
12
13
14   **Opinion / Public consultation on transparency measures for nanomaterials on the market**
15
16   First of all, a lot of thanks to DG Enterprise and Industry (European Commission) for organising
17   this important consultation.
18
19   This opinion represents an opinion of an individual citizen, not any legal entity.
20
21   This opinion does not contain:
22   –   any business secrets
23   –   any trade secrets
24   –   any confidential information.
25
26   This opinion is public.
27   DG Enterprise and Industry can add the PDF file of this opinion to a relevant web page.
28
29   Annex 1 holds information about previously constructed opinions related to different consultations.
30   Annex 2 holds information about disclaimers and copyright.
31
32
33   Best Regards,
34
35
36
37   Jukka S. Rannila
38   citizen of Finland
39
40   signed electronically
41
42
43
44   [Continues on the next page]
45

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46
47 **1. Amount of the background material**
48
49 Consultation [1] web page links to several documents (PDF). I have not read all documents, and
50 therefore this opinion concentrates **_ONLY_** on the possible European Register of Products Containing
51 Nanomaterials.
52
53 **2. European Register of Products Containing Nanomaterials**
54
55 European Register of Products Containing Nanomaterials is an interesting case, and the creation of
56 a register should be assessed carefully.
57
58 **3. Similarity to the previous opinions:**
59   *** Creation of new European registers**
60   *** Cooperation between member state systems**
61
62 Annex 1 contains opinions based on earlier consultations.
63
64 Based on the previous opinions can be concluded, that there are several efforts to create new
65 European-wide register **OR** to create some cooperation between current member state systems.
66
67 Possibly previous opinions could be useful for evaluating some proposals.
68
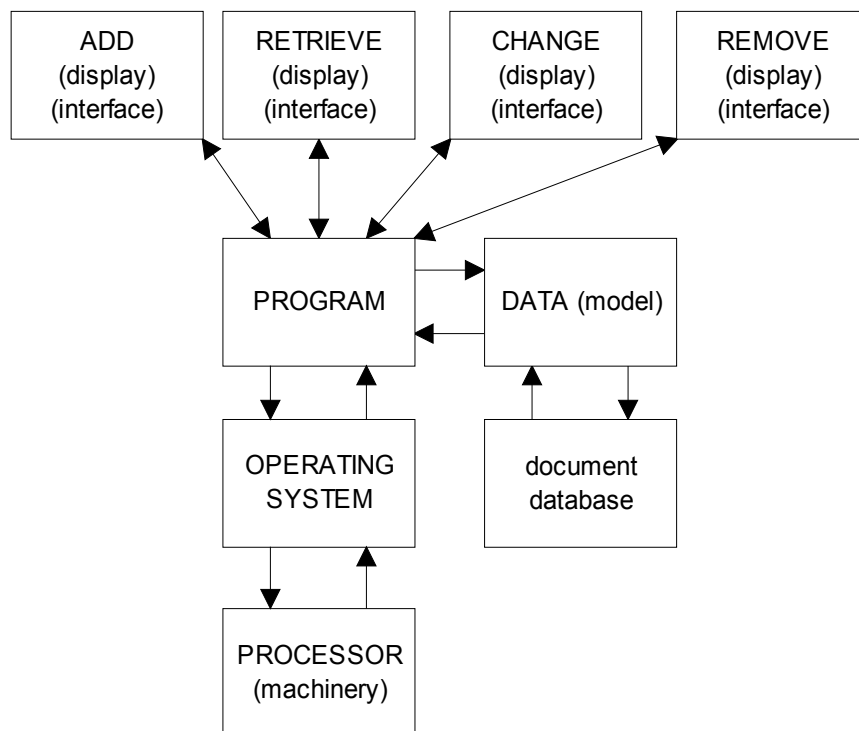69 **4. Some contributions from the previous consultations?**
70
71 One of the main contributions from the previous consultations has been simplified descriptions of
72 information technology. In many consultation documents, there has been quite ambiguous
73 descriptions about information technology in different application fields.
74
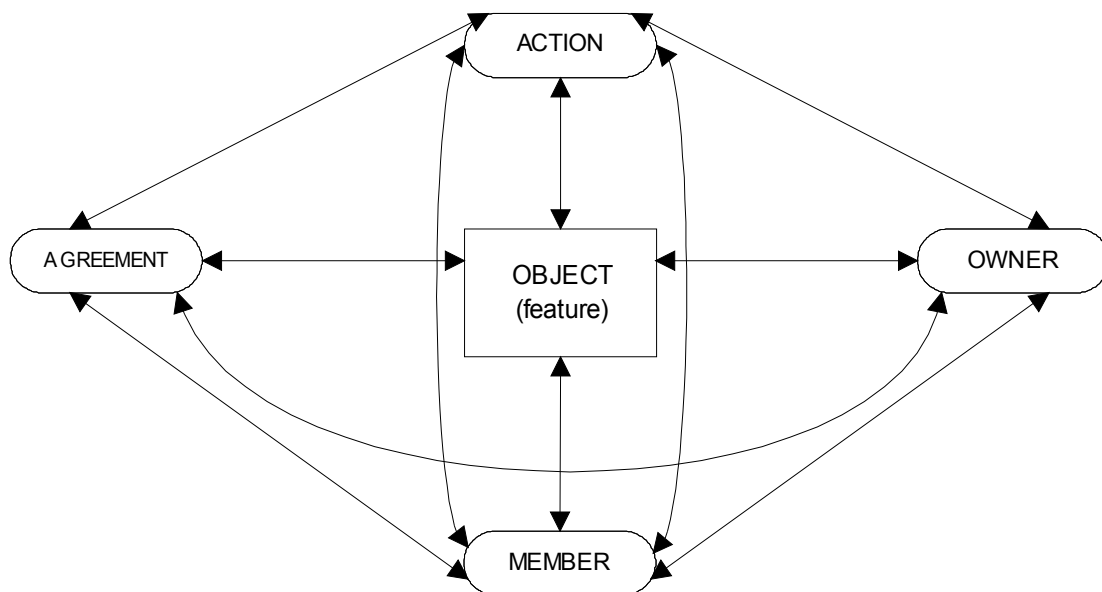75 One simple conception of information technology solutions is the following figure.
76
77 The figure gives us four basic functions: add, retrieve, change and remove. Then there are databases
78 and documents used in different systems. Users use different displays (interfaces). Different
79 systems need administration (also maintenance) for keeping a system functional. Then there is
80 communication (also standards) for direct and indirect usage of an information system.
81
82 [Continues on the next page]
83

---

1   http://ec.europa.eu/enterprise/sectors/chemicals/reach/nanomaterials/public-consultation_en.htm, link worked on 8
    July 2014

84
85
86 The mentioned linkages linkages between ownership, agreements and membership can also be
87 divided to two actions: distribution and usage. There is nothing new on the previous explanations.
88 However, the difference between distribution and usage should be as clear as possibile.
89

90
91
92

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93   In short:
94   * the world is full of different objects (things)
95   * objects can be nowadays be digital in all phases
96   * someone owns some objects
97   * usage can be based on ownership, agreements and membership
98   * the linkages between ownership, agreements and membership can be very complex
99   * the linkages between ownership, agreements and membership can change very often.
100
101 Next table gives us some possibilities for assessing possibilities for open solutions and closed
102 solutions.
103

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

104
105 It can be said, that this consultation is rather general, and there are possibilities for assessing
106 different combinations of different features for nanomaterial register(s).
107
108 In the previous consultations I have advocated following solution as the maximum solution:
109   * public sector institute owns the machinery and processor of the information system
110   * the machinery and processor are based on relevant open standards
111   * the operating system is based on an open-source solution
112   * public sector institute owns the source code of the information system
113   * public sector institute owns the database of the information system
114   * the database is based on open-source solution and on relevant open standards
115   * public sector institute owns all data in the information system.
116

117 Naturally, there can be solutions, which are not based on the maximum solution.
118
119   **Proposal 1: The European Commission (DG Enterprise and Industry) could organise**
120   **more technical consultation(s) about the possible European Register of Products**
121   **Containing Nanomaterials.**
122
123   **Note 1: The relations between different aspects of information systems can result**
124   **rather complicated network(s): i.e. Ownership, Membership, Agreement.**
125
126   **Note 2: e.g. Agency for the Cooperation of Energy Regulators (ACER) has organised**
127   **more (technical) consultations about different identifiers (IDs) and database structures.**
128
129 **5. Actual reality / Different standards and standards versions**
130
131 Previously I have advocated open standards for different information systems.
132
133 It is quite normal situation in the information technology field that there is competing standards for
134 some application field. Therefore there are all the time ongoing "standards wars" or "format wars".
135 The information technology standards tend to be interrelated and one "standards war" or "format
136 war" can lead to another similar situation.
137
138 Therefore, there should be serious vigilance when assessing different standards and "standards" in
139 some application fields.
140
141 In the previous consultations the European Commission (DG Competition) has organised Market
142 Tests based on commitments provided by different companies, e.g. Microsoft, IBM, Reuters and
143 VISA. In some cases there has been a (near) monopoly situation, and in some cases different
144 standards has been (so called) de facto standards. Usage of some de facto standards demand e.g.
145 licence fees or other monetary requests. European Commission (DG Competition) has been active
146 to assess the monopoly/antitrust aspects of some de facto standards.
147
148   **Proposal 2: European Commission (DG Enterprise and Industry) could gather**
149   **information about current standards used in national registers (nanomaterials).**
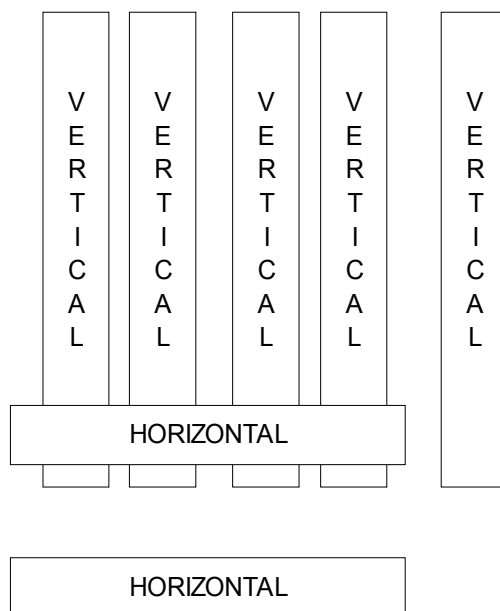150
151 Previously I have advocated open standards, even though in some cases open standards are not de
152 facto standards. In practice public sector has very important role, when some standards are
153 competing in the market place. Because public sector has a considerable buying power due to its
154 purchasing (power), and therefore public sector can sometimes direct markets to certain standards.
155
156 However, creating a new standard means actual both administrative and technical work, and in
157 some cases creating a new standard can last quite long. There are a lot of different standard setting
158 organisations (SDO), and one comprehensive list is provided [2] for us by ConsortiumInfo.org.
159
160

_____

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

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161   **Proposal 3: The European Commission (DG Enterprise and Industry) could assess**
162   **current standardisation efforts of different standard setting organisations (SDOs)**
163   **related to nanomaterial issues.**
164
165 **6. Supporting and/or developing different standard types**
166

167
168
169 One of the main themes can be division standards: horizontal standards and vertical standards. What
170 this means? Generally speaking, different ICT solutions will implement a large collection of
171 different standards: open standards and closed standards. In many cases, different ICT solutions do
172 not work together and this might not constitute a problem. However, in many cases different ICT
173 solutions has to work together seamlessly – possibly without further problems.
174
175   **Proposal 4: There could be separation of horizontal standards and vertical standards.**
176   **Proposal 5: There could be different standardisation efforts to horizontal standards**
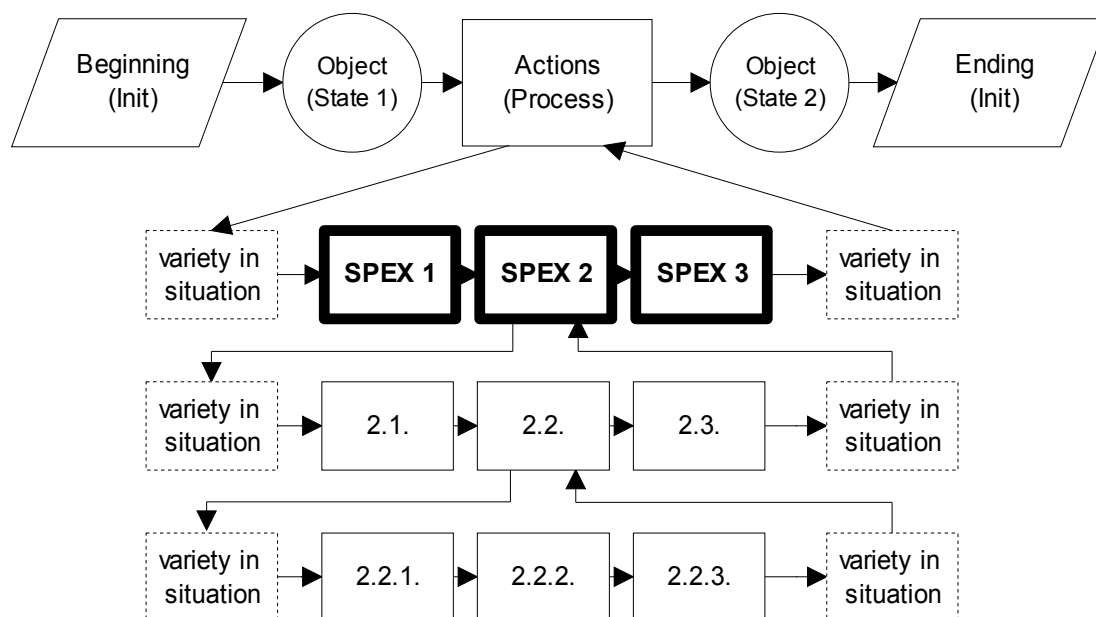177   **and vertical standards.**
178
179   **Proposal 6: Developing (and possible funding of development) horizontal standards**
180   **should favoured in the development of new and/or revised standards.**
181
182 An example can be different email standards. There are numerous email systems developed with
183 numerous technologies (vertical), but the cooperation between numerous email systems is possible
184 with different (horizontal) email standards.
185
186   **Note 3: The number of redundant standardisation efforts should be minimal.**
187
188

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189 **7. Standardisation of interfaces for different stakeholders (companies, customers, etc.)**
190
191 In previous consultations I have advocated standardisation of interfaces. There are different
192 processes (Beginning → Actions → Ending), which can be described in different levels of details.
193

194
195
196 There can be highly detailed points in different processes (SPEX), which could be standardised.
197
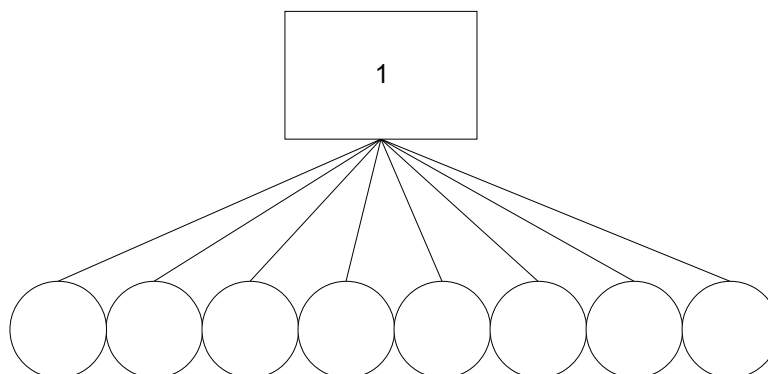198   **Proposal 7: There could be a project for modelling different processes.**
199
200   **Proposal 8: Some parts of the processes could be standardised for interfaces (SPEX)**
201   **for different stakeholders.**
202
203   **Proposal 9: Some standardised customer interfaces (SPEX) could be used for having**
204   **better service processes for different stakeholders.**
205
206 It can be noted, that different actors can naturally have other non-standardised interfaces for
207 different processes, and there is nothing wrong with that approach. Also, we have to assess the need
208 for several interfaces. In other words, different stakeholder groups need different interfaces.
209
210 In the previous consultations documents I have explicated the need for standardisation of some
211 interfaces. In practical reality, there can be different information technology applications for the
212 same operations. It could be feasible to create different standardised interfaces, which can be
213 implemented with different technologies.
214
215 [Continues on the next page]
216

1

217
218
219   **Proposal 10: There could be a project for analysing the quality and the quantity of**
220   **different interfaces for different stakeholder groups.**
221
222   **Proposal 11: European Commission could advocate standardised user interfaces in**
223   **different levels.**
224
225 Naturally, there can be even tens of different user interfaces depending on the nature of different
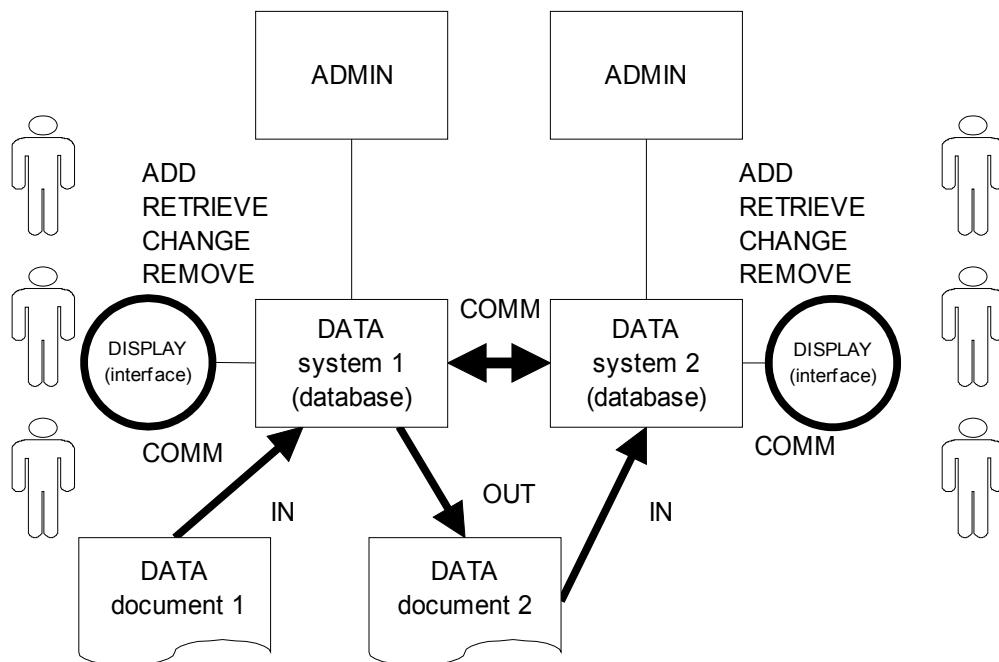226 systems. The actual reality is very complex. In practical terms there are several situations:
227   * systems must communicate directly with each other
228   * there will be several communications methods for direct communication
229   * there are different standards for direct communication
230   * data in the system is added by processing different documents
231   * data from the system is extracted and loaded to different documents
232   * there are different standards for different documents
233   * there will be several types for different documents
234   * there are several displays / interfaces to system(s)
235   * there are several user groups.
236
237 The following figure tries to explicate these features of information systems.
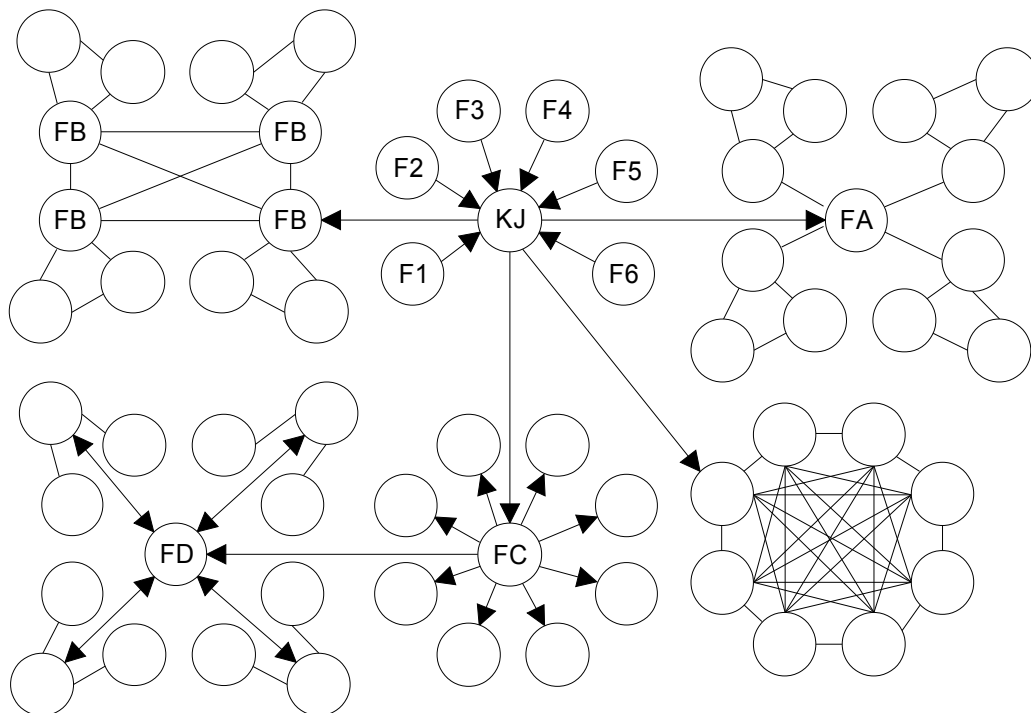238
239 One solution can be standardisation efforts for different interfaces in several systems. The European
240 Commission could work with global and regional partners for creating standardised user interfaces
241 for different stakeholders. These standardised user interfaces could then be implemented by
242 different information systems.
243
244   **Proposal 12: The Commission can could support work, which rigorously develops and**
245   **tests different interfaces for different purposes.**
246
247 In reality there can be some applications (e.g. A, B, C) for the same operations, and there can be
248 different providers for the same solutions. IF every solution has a different interface, there can be a
249 serious hindrance with the needed education for a new interface. When there are some standardised
250 interfaces (SPEX), the efforts for learning of a new interface can be minimised.

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251
252
8. Layered systems
254

255
256
In some previous consultations I have presented the figure above. In practical reality, there are
different systems, which use very different standards/formats for cooperation between different

259 systems.
260
261 **Repetition:** There are a lot of different standard setting organisations (SDO), and one
262 comprehensive list is provided [3] for us by ConsortiumInfo.org. Examples are naturally different
263 XML documents and CSV documents.
264
265 **9. More and more new identifiers (ID)**
266
267 In the previous consultations there has been discussion about different identifiers (ID) in the
268 different systems. It can be noted from the previous opinions, that there will be several and different
269 identifiers (ID) for different levels. In the European Union level, there can be several identifiers
270 (ID), e.g. following:
271
272   * global identifiers (ID)
273   * EU-wide identifiers (ID)
274   * general member state identifiers (ID)
275   * several identifiers (ID) in a member state.
276
277 It can be noted, that some member states (EU) are federations, and different federal states can have
278 their own identifiers (ID).
279
280 More IDs is one of the consequences of digitalisation (of everything). The ID is identifier in an
281 information system. Examples of these identifiers are following:
282
283   1) Facebook ID for an individual person
284   2) Facebook ID for the individual up-dates of individuals
285   3) Data Universal Numbering System (D-U-N-S)
286   4) Reuters instruments codes (RICs)
287   5) Social security code for individual citizens in the European Union member states
288   6) Business identity code for a company in an European Union member state
289   7) Value added tax code for a company in an European Union member state.
290
291 The examples of private IDs (Facebook IDs, Data Universal Numbering System (D-U-N-S),
292 Reuters Instrumens Codes (RICs)) show, that persons and/or communities can use or even demand
293 of using IDs from privately owned information systems.
294
295 Social security codes and tax identifier codes are examples of publicly owned information system,
296 and use of public identifiers have spread to several private systems. E.g. in Finland the social
297 security code is so prevalent, that the private companies can possibly combine information from
298 numerous private information systems. Naturally, these information combination efforts raise
299 serious questions about the rules and regulations of combining information from private
300 information systems.
301
302

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

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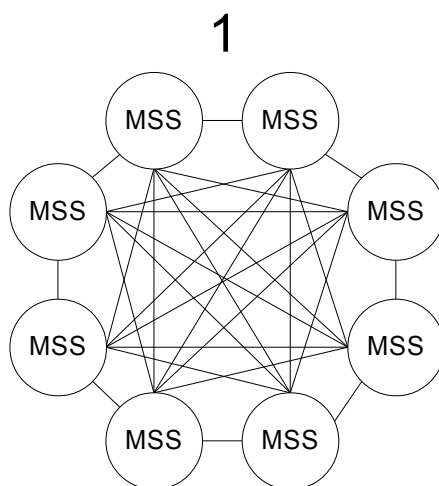
303   **Proposal 13: There could be a systematic project to collect relevant information of**
304   **different identifiers: e.g. global, EU-wide, regional and national.**
305
306   When information about relevant identifiers is collected, there could be a serious assessment of
307   possible (near) monopoly situation of some identifiers. Depending on the nature of an identifier,
308   there may be a need for serious (anti-trust?) negotiations with providers of some identifiers.
309
310   **Proposal 14: The Commission could assess nature of different identifiers.**
311   **Proposal 15: The Commission could start serious negotiations with some providers of**
312   **identifiers.**
313
314   **10. Avoiding redundant work**
315

1

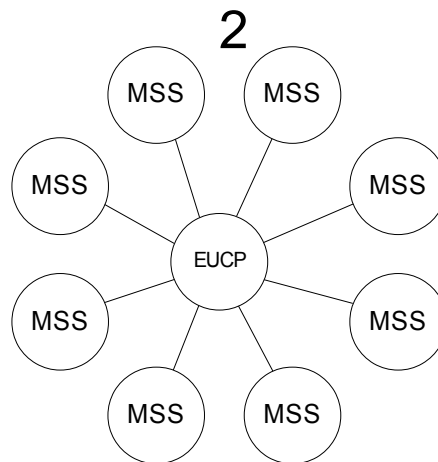316
317   (MSS = a member state information system)
318
319   In member states (EU) there are hundreds of different informations systems (MSS = as member
320   state information system). It can be concluded, that these systems are layered in different ways and
321   implement several standard (technology) generations. Generally speaking, there can be several
322   many-to-many connections, which are very cumbersome to implement and maintain.
323
324   Generally speaking, in different members states (EU) there are unique situations and unique
325   information systems, when creating cooperation between different copyright holder. These
326   information system can be very specialised, and we can call them as Member State Systems (MSS).
327   The other extreme would be, that there would be just only one system (MSS) in a member state
328   system, and it could be connected to just one European contact point (EUCP).
329
330   In the Europan Union level there is need to extract information from different member state
331   systems, and then there is a European contact point (EUCP) for this cooperation between different
332   information systems.
333

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2

334
335   (MSS = a member state information system)
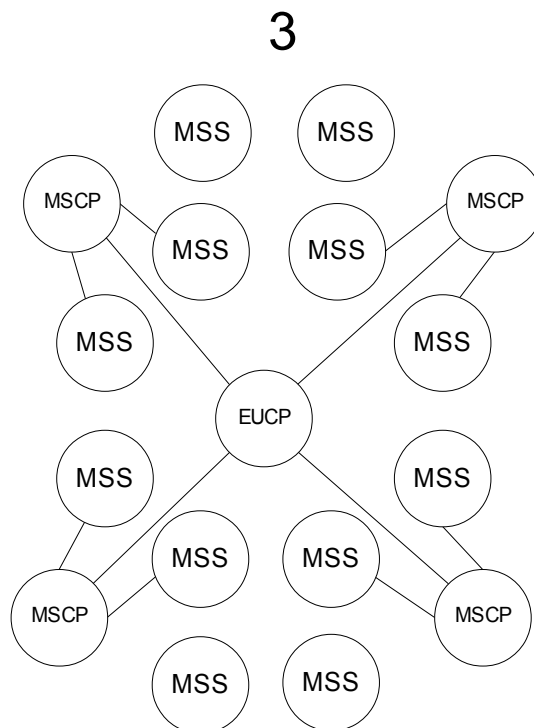336   (EUCP = European Contact point)
337
338   The practical reality is, that there will be several systems (MSS) in different member states.
339   Therefore, there should be Member State Contact Point (MSCP) and the European Contact point
340   (EUCP). Then different member states can consolidate own information systems with the Member
341   State Contact Point (MSCP).

3

342
343   (MSS = a member state information system)
344   (EUCP = European Contact point)
345   (MSCP = Member State Contact Point)

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346
347 In previous consultations I have advocated of creating separate member state contact points
348 (MSCP) and a separate European Union contact point (EUCP). In this way it easier for member
349 state to consolidate different information system with their own timetable.
350
351 There can be Member State Contact Points (MSCP), which integrates member state systems
352 (MSSs), and this Member State Contact Point (MSCP) integrates to the European Contact Point
353 (EUCP). In reality there are a huge collection of different Member State Systems (MSSs), which are
354 constructed with wide variety of technologies.
355
356   **Proposal 16: The Commission should start implementing the proposed standards from**
357   **European Union contact point(s) (EUCP) to member state contact points (MSCP).**
358
359 Therefore, there should be Member State Contact Point (MSCP) and the European Contact point
360 (EUCP). Then different member states can consolidate own information systems with the Member
361 State Contact Point (MSCP).
362
363   **Proposals:**
364   **Proposal 17: There could be one European-wide contact point.**
365   **Proposal 18: There could be one European-wide identifier (ID).**
366   **Proposal 19: The European-wide identifier (ID) could refer to member state identifiers.**
367   **Proposal 20: Member states can consolidate own information systems**
368   **Proposal 21: Member states could have one contact point for European-wide**
369   **cooperation.**
370   **Proposal 22: Global issues could be assessed.**
371
372 Like said before, there can be several non-European identifiers (ID), and cooperation with global
373 IDs is one issue.
374
375 **11. Questionnaires for the members of different stakeholders (associations)**
376
377 One idea is distributing questionnaires for [4] different IT expert associations, and members of those
378 associations could assess different IT standard proposals. Nowadays a lot of questionnaires can be
379 distributed and answered using different electronic measures.
380
381   **Proposal 23: Part of the evaluation could be organising (electronic) questionnaires for**
382   **members of different stakeholder/expert associations based on the application field.**
383
384 The questionnaires can be very structured or very free-form. The advantage of very structured
385 questionnaire is naturally the ease of processing the results of an questionnaire. Answers to free-
386 form questionnaires can result a lot of documents, and their assessment can mean a lot of manual
387 processing.
388
389 **12. Example of standards / Different information feeds**

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4   http://www.ttlry.fi/english, e.g. The Finnish Information Processing Association, FIPA, (Tietotekniikan liitto ry)

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390
391   In the previous consultations I have used RSS feeds as an example.
392

393
394
395   To be precise, there are some standards for RSS feeds: RSS 2.0 [5] standard and Atom [6] [7] standards.
396   There are different systems, which comply with these example standards (RSS and Atom)
397   differently.
398
399   It can be said, that there is need for different information feeds between different systems. Like said
400   before, different actors can assess different existing standards in order to avoid redundant (even
401   useless) standardisation.
402
403   **13. Organising more technical consultations?**
404
405   **Proposal 24: DG Enterprise and Industry could organise more technically oriented**
406   **consultations based on results of this consultations.**
407
408   **Proposal 25: Some possible issues for new consultations could be following:**
409
410   *** identifiers in different levels (Member state, EU-wide, global)**
411   *** exact database structure of the European Register of Products Containing**
412   **Nanomaterials**
413   *** assessment of different standards**
414   *** technical consultation about the usable technologies for the European Register**
415   **of Products Containing Nanomaterials**
416
417
418
419   **14. Good luck !!!**
420
421   This opinion is quite limited. Hopefully, there are other constructive ideas presented in other
422   opinions. This remains to be seen.
423
424
425   [Continues on the next page]
426

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5   http://www.rssboard.org/rss-specification,
6   http://tools.ietf.org/html/rfc4287, The Atom Syndication Format
7   http://tools.ietf.org/html/rfc5023, The Atom Publishing Protocol

427
428   **ANNEX 1**
429
430
431 My opinions to the previous and relevant consultations – there consultations were mostly organised
432 by the Commission of the Europan Union. General page to all consultations – both in English and
433 in Finnish: http://www.jukkarannila.fi/lausunnot.html
434
435
436 EN: Opinion 1: Review of the rules on access to documents
437 http://www.jukkarannila.fi/lausunnot.html#nro_1
438
439 EN: Opinion 2: Schools for the 21st Century
440 http://www.jukkarannila.fi/lausunnot.html#nro_2
441
442 EN: Opinion 3: The future of pharmaceuticals for Human use in Europe- making Europe a Hub for
443 Safe and Innovative medicines
444 http://www.jukkarannila.fi/lausunnot.html#nro_3
445
446 EN: Opinion 5: Consumer Scoreboard, Questionnaire for stakeholders
447 http://www.jukkarannila.fi/lausunnot.html#nro_5
448
449 EN: Opinion 6: Consultation on a Code of Conduct for Interest Representatives
450 http://www.jukkarannila.fi/lausunnot.html#nro_6
451
452 EN: Opinion 8: European Interoperability Framework, version 2, draft
453 http://www.jukkarannila.fi/lausunnot.html#nro_8
454
455 EN: Opinion 9: CAMSS: Common Assessment Method for Standards and Specifications, CAMSS
456 proposal for comments
457 http://www.jukkarannila.fi/lausunnot.html#nro_9
458
459 EN: Opinion 15: Collective Redress
460 http://www.jukkarannila.fi/lausunnot.html#nro_15
461
462 EN: Opinion 17: Opinion to Antitrust Case No. COMP/C-3/39.530
463 http://www.jukkarannila.fi/lausunnot.html#nro_17
464
465 EN: Opinion 18: Opinion Related to the Public Undertaking by Microsoft
466 http://www.jukkarannila.fi/lausunnot.html#nro_18
467
468 EN: Opinion 19: Official Acknowledgement by the Commission
469 http://www.jukkarannila.fi/lausunnot.html#nro_19
470
471

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472 EN: Opinion 20: SECOND Opinion Related to the Public Undertaking by Microsoft
473 http://www.jukkarannila.fi/lausunnot.html#nro_20
474
475 EN: Opinion 21: Opinion about the European Interoperability Strategy proposal
476 http://www.jukkarannila.fi/lausunnot.html#nro_21
477
478 EN: Opinion 23: Public consultation on the review of the European Standardisation System
479 http://www.jukkarannila.fi/lausunnot.html#nro_23
480
481 EN: Opinion 27: Public Consultation on the Modernisation of EU Public Procurement Policy
482 http://www.jukkarannila.fi/lausunnot.html#nro_27
483
484 EN: Opinion 28: Consultation on the Europe 2020 Project Bond Initiative
485 http://www.jukkarannila.fi/lausunnot.html#nro_28
486
487 EN: Opinion 30: Internet Filtering
488 http://www.jukkarannila.fi/lausunnot.html#nro_30
489 NOTE: Organised by the European Committee for Standardization (CEN) [8]
490
491 EN: Opinion 32: COMP/C-3/39.692/IBM – Maintenance services
492 http://www.jukkarannila.fi/lausunnot.html#nro_32
493
494 EN: Opinion 34: REMIT Registration Format
495 http://www.jukkarannila.fi/lausunnot.html#nro_34
496 NOTE: Organised by The Agency for the Cooperation of Energy Regulators (ACER) [9]
497
498 EN: Opinion 35: Exploiting the employment potential of the personal and household services
499 http://www.jukkarannila.fi/lausunnot.html#nro_35
500
501 EN: Opinion 37: CASE COMP/39.654 - Reuters instrument codes
502 http://www.jukkarannila.fi/lausunnot.html#nro_37
503
504 EN: Opinion 39: Registry options to facilitate linking of emissions trading systems
505 http://www.jukkarannila.fi/lausunnot.html#nro_39
506
507 EN: Opinion 40: Media Freedom and Pluralism / audiovisual regulatory bodies
508 http://www.jukkarannila.fi/lausunnot.html#nro_40
509
510 EN: Opinion 41: AT.39398: observations on the proposed commitments
511 http://www.jukkarannila.fi/lausunnot.html#nro_41
512
513 EN: Opinion 42: Opening up Education
514 http://www.jukkarannila.fi/lausunnot.html#nro_42

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8   http://www.cen.eu/ (Accessed 2 July 2012)
9   http://www.acer.europa.eu/ (Accessed 2 July 2012)

515
516   EN: Opinion 43: Publication of extracts of the European register of market participants
517   http://www.jukkarannila.fi/lausunnot.html#nro_43
518   NOTE: Organised by The Agency for the Cooperation of Energy Regulators (ACER)
519
520   EN: Opinion 44: Evaluation policy guidelines
521   http://www.jukkarannila.fi/lausunnot.html#nro_44
522
523   EN: Opinion 45: About ICT standardisation
524   http://www.jukkarannila.fi/lausunnot.html#nro_45
525
526   EN: Opinion 46: Review of the EU copyright rules
527   http://www.jukkarannila.fi/lausunnot.html#nro_46
528
529   EN: Opinion 51: European Area of Skills and Qualifications
530   http://www.jukkarannila.fi/lausunnot.html#nro_51
531
532   EN: Opinion 52: Trusted Cloud Europe Survey
533   http://www.jukkarannila.fi/lausunnot.html#nro_52
534
535   EN: Opinion 53: Trade Reporting User Manual (TRUM) (Draft)
536   http://www.jukkarannila.fi/lausunnot.html#nro_53
537   NOTE: Organised by The Agency for the Cooperation of Energy Regulators (ACER)
538
539   EN: Opinion 55: European Energy Regulation
540   http://www.jukkarannila.fi/lausunnot.html#nro_55
541   NOTE: Organised by The Agency for the Cooperation of Energy Regulators (ACER)
542
543   EN: Opinion 59: Green paper on mobile Health
544   http://www.jukkarannila.fi/lausunnot.html#nro_59
545
546   EN: Opinion 60: Cross-border inheritance tax problems within the EU
547   http://www.jukkarannila.fi/lausunnot.html#nro_60
548
549
550
551   My opinions to the previous and relevant consultations – there consultations were mostly organised
552   by the Commission of the Europan Union. General page to all consultations – both in English and
553   in Finnish: http://www.jukkarannila.fi/lausunnot.html
554
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556   [Continues on the next page]

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10 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.