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TO:  
Department of Home Affairs / Australian Government  
Australian Signals Directorate / Australian Government  
Australian Cyber Security Centre

**Reference: DRAFT Code of Practice Securing the Internet of Things for Consumers**

First of all, a lot of thanks to Department of Home Affairs, Australian Signals Directorate and Australian Cyber Security Centre for organising this important consultation.

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

This opinion does not contain:  
– any business secrets  
– any trade secrets  
– any confidential information.

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

Annex 1 holds information about previous Australian consultations.  
Annex 2 holds information about copyright, licence and disclaimers.

Best Regards,

Jukka S. Rannila  
citizen of Finland  
signed electronically

[Continues on the next page]

38

**39 Principle 2: Implement a vulnerability disclosure policy**

40

41 There are different services for reporting different information technology problems/issues; for  
42 example

43

- 44 • CERT – global and national teams
- 45 • Common Vulnerabilities and Exposures (CVE) <sup>1</sup>
- 46 • Scamdex <sup>2</sup>
- 47 • The Spamhaus Project <sup>3</sup>

48

49 **Note: At the moment there is just not one global system for informing all possible**  
50 **problems related to information technology.**

51

52 **Proposal: There should be just one (Australian?) system for informing all possible**  
53 **problems related to information technology.**

54

55 At the moment there are too many global and local services for informing different information  
56 technology problems.

57

**58 Principle 3: Keep software securely updated**

59

60 Here I note that there can be several standards implemented in different systems when maintaining  
61 different systems.

62

**63 About different standards**

64

65 I have proposed several times usage of *open horizontal standards* when developing different  
66 information system.

67

**68 Favouring open standards / Favouring horizontal standards**

69

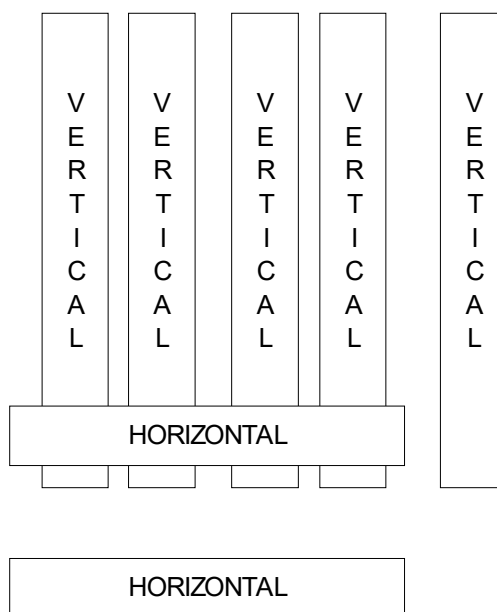
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71 [Continues on the next page]

1 <https://cve.mitre.org/>

2 <http://www.scamdex.com/>

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



72  
73

74 There are differences between horizontal and vertical standards. A simple example is naturally  
75 email solutions. There are several vertical standards when creating technically email solutions. Then  
76 there are horizontal standards which enable sending messages between technically different email  
77 solutions.

78

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

80

81 **Proposal: Using horizontal standards could be favoured when creating different**  
82 **information systems.**

83

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

86

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

88

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

90

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

93

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

96

97 Here we can note some problems:

98

99

- 100 • some systems are based on **de-facto** standards
- 101 • some systems are based on **de-jure** standards
- 102 • there can be confrontations between **de-facto** and **de-jure** standards
- 103 • there can be a monopoly situation in some domain
- 104 • some standards may inhibit possible actions of some stakeholders
- 105 • there can be a standard war on some domains
- 106 • standards have different life-cycles
- 107 • systems have different life-cycles
- 108 • there can be mismatches between different life-cycles
- 109 • there can be failed standards
- 110 • there can be deprecated standards.

111

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

116

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

123

124 There are different standards setting organisations on the information technology field. One list <sup>4</sup> of  
125 these standards setting organisations is provided by ConsortiumInfo.org.

126

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

130

131 **Proposal: Current standardisation (e.g. list provided by ConsortiumInfo.org) efforts by**  
132 **different standard setting organisations could be assessed carefully.**

133

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

136

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

138

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

141

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

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

144

145

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

146

147

148

**Proposal: There could some guidance for using open horizontal standards on different application fields.**

149

150

151

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

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153



154

155

I have advocated usage of web feeds<sup>5</sup> on several previous opinion documents. Actually there are two standards for web feeds: RSS<sup>6 7</sup> and Atom<sup>8 9 10</sup>.

156

157

158

159

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

160

161

162

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

163

164

165

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

166

167

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

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180

**More technical consultations?**

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

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

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

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

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

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

181 Based on answers (this consultation generally) there could be more technically oriented  
182 consultations. Previously mentioned issues (this opinion) could be detailed for new technically  
183 oriented consultations.

184

185 **Proposal: More technically oriented consultations could be organised after this**  
186 **consultation.**

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190 **Good luck !!!!!!!**

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192 This Opinion is quite limited and probably other opinions will result some constructive ideas.

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197 [Continues on the next page]

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## ANNEX 1

### **Information about previous Australian consultations:**

EN: Opinion 54: Government Content Management System

[http://www.jukkarannila.fi/lausunnot.html#nro\\_54](http://www.jukkarannila.fi/lausunnot.html#nro_54)

EN: Opinion 56: National Identity Proofing Guidelines

[http://www.jukkarannila.fi/lausunnot.html#nro\\_56](http://www.jukkarannila.fi/lausunnot.html#nro_56)

EN: Opinion 57: Updating the Commonwealth Procurement Rules

[http://www.jukkarannila.fi/lausunnot.html#nro\\_57](http://www.jukkarannila.fi/lausunnot.html#nro_57)

EN: Opinion 72: Queensland biofuel mandate

[http://www.jukkarannila.fi/lausunnot.html#nro\\_72](http://www.jukkarannila.fi/lausunnot.html#nro_72)

EN: Opinion 73: Financial / Conceptual Frameworks

[http://www.jukkarannila.fi/lausunnot.html#nro\\_73](http://www.jukkarannila.fi/lausunnot.html#nro_73)

EN: Opinion 78: Consumer Complaints Register (NSW)

[http://www.jukkarannila.fi/lausunnot.html#nro\\_78](http://www.jukkarannila.fi/lausunnot.html#nro_78)

EN: Opinion 79: PCEHR (Information Commissioner Enforcement Powers) Guidelines 2015

[http://www.jukkarannila.fi/lausunnot.html#nro\\_79](http://www.jukkarannila.fi/lausunnot.html#nro_79)

EN: Opinion 85: Regulatory options for automated vehicles

[http://www.jukkarannila.fi/lausunnot.html#nro\\_85](http://www.jukkarannila.fi/lausunnot.html#nro_85)

EN: Opinion 87: Assessing privacy and big data on the Internet

[http://www.jukkarannila.fi/lausunnot.html#nro\\_87](http://www.jukkarannila.fi/lausunnot.html#nro_87)

EN: Opinion 90: Consent / Information and Privacy Commission NSW (IPC)

[http://www.jukkarannila.fi/lausunnot.html#nro\\_90](http://www.jukkarannila.fi/lausunnot.html#nro_90)

EN: Opinion 103: About lobbying - New South Wales

[http://www.jukkarannila.fi/lausunnot.html#nro\\_103](http://www.jukkarannila.fi/lausunnot.html#nro_103)

EN: Opinion 115: Framework for Secondary Use of My Health Record Data

[http://www.jukkarannila.fi/lausunnot.html#nro\\_115](http://www.jukkarannila.fi/lausunnot.html#nro_115)

EN: Opinion 117: The Digital Economy: Opening up the conversation

[http://www.jukkarannila.fi/lausunnot.html#nro\\_117](http://www.jukkarannila.fi/lausunnot.html#nro_117)

EN: Opinion 148: Updating Victoria's Open Data Policy

[http://www.jukkarannila.fi/lausunnot.html#nro\\_148](http://www.jukkarannila.fi/lausunnot.html#nro_148)

EN: Opinion 150: Consultation on a new Online Safety Act

[http://www.jukkarannila.fi/lausunnot.html#nro\\_150](http://www.jukkarannila.fi/lausunnot.html#nro_150)

## ANNEX 2

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