Cabinet Office Consultation on Open Standards

The Open Source Consortium is grateful for this opportunity to provide a response to the February 2012 consultation on open standards.

Much of our research and thinking is contained in our recently published report on the importance of royalty free standards in public sector ICT[1] (rather than append it to this response, it may be freely downloaded from our website). The report fleshes out our response to this consultation.

Introduction

There is a need to clarify:

- the effects of the existing policy (the problem identified)
- the intentions of a new policy (the solution proposed)

The absence of a single formal document delineating the scope of policy relating to the specification and implementation of ICT in the public sector cannot be taken to infer that there is not an existing policy as represented by the sum total of procedure, custom and practice (commission or omission).

For example, without any identifiable formal policy decision, the rolling upgrade of software on the desktop has seen the adoption and abandonment of file formats over the years with the associated costs of interoperability, archive and retrieval not obviously appended to any specific ICT implementation project:

- in the early 90s abandoning file formats such as .wps for .doc (text) and .123 for .xls (spreadsheets) or the adoption of X400 for electronic mail
- today, the creeping default adoption of filer formats .docx , .xlsx (etc) as part of the upgrade process of departmental office productivity tools

A need to “level the playing field” implies the identification of a market failure and a defective process of competition. However, if perfect competition does not exist, we cannot know the outcome that would have arisen had it existed.

Accordingly a government cannot easily correct market failure or “level the playing field” however it can remove or minimise barriers that might lead to or be caused by a market failure.

1 http://www.opensourceconsortium.org/content/view/195/91/

Externalities need to identified and then their value to affected parties needs to be assessed.

We are unaware that any such study has been undertaken in preparation for this consultation and government cannot easily second-guess these values.

Further, government should seek to identify the interacting nature of some of its policy choices and account for their effects.

Relevant policy we have identified includes the BIS Economics Paper No 15 Innovation and Research Strategy for Growth that draws attention to the importance of the network effect for ICT[2].

The network effect is important when taken with the externalities that arise with “digital by default” (or, worse, digital by compulsion). We have written extensively on these externalities[3] [4] [5].

At the round-table event on 31 May one attendee, a user of on-line public services, complained about the requirement to use specific software in order to joint file with HMRC and Companies House (as we have already described[6]).

The law suit initiated in Slovakia against the public administration and its software choices for on-line public services is a bellwether[7].

With that context this consultation is inadequate for the following reasons:

- The intention and scope of the policy should be clearly defined.
- The requirement to adhere to the policy should be unambiguous.
- The importance of the network effect for software in delivering wider economic economic benefits should be properly considered before accepting any exceptions to policy. Individual “business requirements” should not be allowed to propagate or sustain individual circumstances at the expense of the wider objectives.
- The question of how existing software should be moved towards compliance should be tackled explicitly.
- Future, unforeseeable circumstances (e.g. with patents or other encumbrances) should be regulated in terms which accord with best legal practice.

2 http://www.opensourceconsortium.org/content/view/194/89/
3 http://www.opensourceconsortium.org/content/view/168/89/
4 http://www.opensourceconsortium.org/content/view/154/89/
5 http://www.opensourceconsortium.org/content/view/192/89/
6 http://www.opensourceconsortium.org/content/view/169/89/
7 http://www.opensourceconsortium.org/content/view/198/89/

1. How does this definition of open standard compare to your view of what makes a standard ‘open’?

The proposed definition begins*:*

> *Government bodies must consider open standards for software interoperability, data and document formats and in procurement specifications should require solutions that comply with open standards, unless there are clear, documented business reasons why this is inappropriate.*

It is not clear what is meant by a “government body”. See for example Section 1(4) Equalities Act 2010[8] for a list of public sector bodies covered by that Act; summarised as public bodies or private bodies exercising public functions[9].

Compliance by a subset of the public sector requiring open standards for software interoperability permits disruption of the network effect in public sector ICT by those bodies not required to comply. Adoption of such a definition does not consider externalities arising from the wider policy to move more public services on-line and make them the preferred or compulsory channel.

The statement is further qualified in two ways: *“consider” “unless* […] *inappropriate”*. Given the second qualification *“unless* […] *inappropriate”* the intent of the scope would be improved by replacing *“consider”* by *“use” rewritten as follows:*

> ***Public bodies or private bodies exercising public functions*** *must* ***use*** *open standards for software interoperability, data* ***or*** *document formats and procurement specifications* ***must*** *require solutions that comply with* ***this definition of an open standard*** *unless there are clear, documented business reasons why* ***such compliance*** *is inappropriate.*

However the scope of the intent of this policy initiative is entirely contained in the second qualification ***“unless* […] *inappropriate”***

The government must provide a definition of what is a ***“clear, documented business reason”*** consistent with a wider policy objective for on-line public services. Moreover this policy must be forward looking and not backward looking. It should account for the externalities associated with wider public sector policy as discussed in the introduction to this response.

8 http://www.legislation.gov.uk/ukpga/2010/15/section/1
9 http://www.idea.gov.uk/idk/core/page.do?pageId=10527774

For example: a “clear, documented business reason” for not using an open standard could arise from not previous decisions to use proprietary standards creating a cost for escaping lock-in being included in the current project. In those circumstances the software “once locked-in is always locked-in” and the policy has no effect.

> *For the purpose of UK Government software interoperability, data and document formats, the definition of open standards is those standards which fulfil the following criteria:*

As above does ***“UK Government”*** include the wider public sector*?* If not why not? How would this affect software used for on-line provision of public services by third parties?

As discussed above it would be better to substitute *“UK Government”* and provide a definition based on the definition in the Equalities Act 2010 and continue as follows

> *For the purposes of* ***public bodies and private bodies exercising public functions*** *an open* ***standard*** *used for software interoperability, data* ***or*** *document formats is a standard which fulfils* ***all of*** *the following criteria:*
> ***is*** *maintained through a collaborative and transparent decision-making process that is independent of any individual supplier and that is accessible to all interested parties;*
> ***is*** *adopted by a specification or standardisation organisation, or a forum or consortium with a feedback and ratification process to ensure quality;*
> *is published, thoroughly documented and publicly available at zero or low cost;*
> ***and***

The following clause creates potential difficulties for development of open standards and the consequences of the network effect and convergence in the software market

> *as a whole have been implemented and shared under different development approaches and on a number of platforms from more than one supplier demonstrating interoperability and platform/vendor independence;*

The policy should promote long-term adoption rather than short-term availability. This can be achieved by substituting “*as a whole have been implemented and shared”:*

> ***has publicly available governance arrangements that*** *permit different development approaches for any platform and from more than one supplier*

While it is important that a standard demonstrably enables interoperability and platform or vendor independence, the test as proposed in this consultation creates a potential barrier to adoption of new standards. It also has the potential for adverse consequences regarding the adoption of an otherwise open standard (e.g., correct governance arrangements but only one implementation.

In new areas market conditions might only provide a single implementation initially but because of supply side "threat of entry" or demand side pressure the implementation of standard remains compliant and eventually multiple implementations arise.

Such an example is XSLT. While for a long time it was dominated by a single implementation, the implementer was pressurised into conformity[10] and now other there are other implementations that can compete with the original on different platforms.

Simplistic rejection of an open standard without consideration of context and market conditions would be a mistake.

> *owners of patents essential to implementation have agreed to **license** these on a royalty free and non-discriminatory basis for implementing the standard and using or interfacing with other implementations which have adopted that same standard. Alternatively, patents may be covered by a non-discriminatory promise of non-assertion. Licences, terms and conditions must be compatible with implementation of the standard in both proprietary and open source software. These rights should be irrevocable unless there is a breach of licence conditions.*

Given the longevity of on-line public services, the importance of them in all sectors of society and that the life time of a patent is twenty years, the use of a standard that requires a patent for its implementation requires careful consideration.

The consultation proposal does not adequately address scope or intention, including:

- whether it ensures that a patent (or other encumbrance) does not cause unintended problems with software implementations now or in the future;
- survives a change of ownership of the patents
- survives the change of ownership of the implementation

A more suitable proposal should draw on the way covenants or easements bind any owner of real estate whether or not the owner was a party to the original agreement.

10 A contra example is ISO 29500 where the dominant implementer feels confident enough in its market position to document the 800+ "normative variations" in its implementation

It should be in the form of a binding covenant intended to cover all software acquired or used in public sector ICT regardless of the value of the transaction.

The Law Commission's proposals for the reform of Easements, Covenants and Profits à Prendre[11] for real estate provides an analogous model to be considered for the public sector IT estate, which:

- make it possible for the benefit and burden of positive obligations to be enforced by and against subsequent owners;
- provide simple clear rules relating to the acquisition of easements by prescription and implication, as well as the termination of easements by abandonment;
- give greater flexibility to developers to establish the webs of rights and obligations that allow modern estates to function;

Factors to be considered in a proposal for public sector IT should include a "non-assertion" clause rather than by a promise to issue a licence. Non-assertion lowers the transaction costs of compliance as rather than negotiate a licence (which might be the source of other problems) an implementer need do nothing specific in order to comply with the conditions. Non-assertion maximises the network effect as transaction costs are minimised.

We propose the following as a draft concept (to be rewritten and adapted to the satisfaction of Parliamentary Counsel or other suitable legal authority) in order to create a suitable binding covenant:

> **Definition: A patent is considered to be essential to the implementation of a standard if the scope of the patent covers one or more feature of the standard whether or not that feature is used in any conformant implementation of the standard.**
>
> ***If a patent is*** *essential to the implementation of a standard then the* ***owner of that patent agrees****:*
>
> *(a) to* ***license*** *the patent on a royalty free and non-discriminatory basis for implementing the standard as implemented and using or interfacing with other implementations which have adopted that same standard;*
> *(b) to issue a non-discriminatory promise of non-assertion of any rights arising as a consequence*
> ***(c) to allow sub-licensing of the patent on identical terms***
> ***(d) to bind subsequent owners of the patent on identical terms***

11 http://lawcommission.justice.gov.uk/areas/easements.htm

*Licences, terms and conditions must be compatible with implementation of the standard **in any software including any software made available under any of the licences approved by the Open Source Initiative.***

*These rights **shall** be irrevocable unless there is a breach of licence conditions and **revocable only until the breach has been remedied.***

The drafting and operation of the clause will need to take into account EU technical measures[12] legislation (98/34) intended to prevent discriminatory barriers to the implementation of the single market and wider WTO issues[13].

A proposal such as we suggest will be able to avoid incompatibility with wider market obligations more easily than would adoption of any particular standard.

This approach informs our response to subsequent questions.

Further, infringement of a patent can arise unknowingly and the policy has to consider how to accommodate so called submarine patents (i.e., those that "surface later on").

2. What will the Government be inhibited from doing if this definition of open standards is adopted for software interoperability, data and document formats across central government?

If the policy is only applicable to central government, it will have a restricted effect and might even fail as a result of interoperability failure with other public functions. . Many on-line services are delivered by Local Authorities and increasingly public services are being delivered on behalf of the public sector by other organisations.

Given the many ways that the public sector interacts, it will have its own interoperability problems if the definition is restricted to central Government.

The scope of the applicability of the definition should be widened to include public bodies and private bodies exercising public functions as discussed in question one above.

The policy need to reflect existing conditions and the possibility that suitable open standards do not yet exist. (A corollary to the lock-in effect discussed in question one above). However, given that no existing software implementation will be affected by the adoption of this policy, no inhibitions will be automatically created by its adoption.

12 http://www.bis.gov.uk/policies/innovation/standardisation/tech-standards-directive/directive-98-34-a-guide
13 http://www.businesslink.gov.uk/bdotg/action/detail?itemId=1084145401&type=RESOURCES

An active stance will accelerate the development of open standards which might be need but which do not yet exist or are not sufficiently mature. Given the cycle times of public sector procurement a clear government policy gives a clear market signal for future requirements.

The definition of an open standard as proposed this consultation, modified, e.g., as we have proposed might create theoretical barriers:

- to software companies that adopt proprietary standards however this would be a market decision as there would be no barrier to choosing the open standard
- to the exchange of information with others choosing to use software that doesn't support open standards however there are **existing** examples of public on-line services that use proprietary standards[14] and which limit the software choices for accessing those services.

All software can be implemented using open standards for interoperability, data or document formats.

In the short term problems already arise from an existing requirement to use proprietary standards

In the medium to long term, consistent with clear signals from government and because of the length of the procurement life-cycle, any software supplier will be able to offer any software into the public sector market.

3. For businesses attempting to break into the government IT market, would this policy make things easier or more difficult – does it help to level the playing field?

As discussed in the introduction to our response the concept of a level playing field creates the illusion of a defined static domain in which there are issues to be rectified with the attendant problems.

Our proposal instead the potential to lower barriers to entry into the public sector market for software.

14 Examples are documented in the appended report on Royalty Free Open Standards reference in the introduction

The policy as currently defined does little to change status quo.

- there is no requirement to use open standards only consider their use (see reply to question one above)
- there are no parameters for what would constitute an unacceptable decision not to use open standards
- there are no sanctions or remedies for failure to implement open standards
- there are no sanctions or remedies for companies that renege on the non-assertion clause (see reply to question seven below)

4. How would mandating open standards for use in government IT for software interoperability, data and document formats affect your organisation?

As discussed in our proposals for the definition in response to question one above, mandation of a particular standard might be perceived as being a discriminatory measure.

There is little that an individual, firm, charity or other organisation can do without interacting with the public sector. Mandating (subject to the definition) a requirement for open standards (subject to the definition of open standards, i.e., the definition proposed in this consultation, modified, e.g., as we have proposed) will provide a wide range of benefits directly and indirectly without creating a discriminatory technical measure.

These benefits accrue to the public sector, the economy and the user of on-line public services.

There might be a short term dis-benefit to suppliers of software choosing to use proprietary standards but (see answers to questions one and two above) that would be a market decision as the definition for an open standard does not create a barrier to entry for existing or new participants, particularly given the life-cycle for public sector procurements.

Such benefits as might be expected, accrue in a number of ways:

- to government reducing the barriers to entry to the market for software in the public sector increases the number of potential or actual participants and increases downward pressure on prices
- to the economy, enabling anyone to use any software to interact with the public sector removes a block on innovation and growth in the knowledge economy, creating potential for new sources of growth, employment and enabling opportunities for localism, digital inclusion and the environment[15]

15 Discussed in the OSC report cited above

- to the user of on-line public services, it widens the choice of software and device so putting downward pressure on prices

To do otherwise would not merely be neutral or without effects as it would remove the market mechanisms for reducing resource misallocation and reducing dead-weight cost in the economy.

5. What effect would this policy have on improving value for money in the provision of government services?

6. Would this policy support innovation, competition and choice in delivery of government services?

The response to these questions broadly overlaps with the response to question four above.

7. In what way do software copyright licences and standards patent licences interact to support or prevent interoperability?

This is too open ended a question to answer completely as the answer depends upon the terms of the software copyright licence and any patent required to implement a standard.

It is difficult to envisage a software licence that imposed a requirement to only use other specific software to interoperate with it though other interoperability issues might arise.

With copyright, the ideas are not protected only the implementation. Accordingly if interoperability were sufficiently important then a novel re-expression of the ideas is sufficient to avoid barriers created by copyright. A high profile illustration of this is the eight year (failed) attempt by “SCO” to find ways in which Linux infringed upon its rights[16].

With patents the effects are more more complicated and so create uncertainty unless properly considered from the outset:

- There is no way of protecting against litigation for infringement because of absolute liability
- There are international jurisdictional issues, e.g., infringement in the UK, might create an enforceable liability in, e.g., the USA, where software patents might be litigated more easily. they are enforceable. Patent law suits are expensive and distracting.

16 The full story has been assiduously documented at www.groklaw.net

Companies settle in circumstances where it is financially prudent, regardless of the actual validity of the patent. For example TomTom a Dutch manufacturer of GPS positioning equipment was sued in the USA by Microsoft for using a file system that infringed on patents contained in the “FAT32” file system. There was a settlement despite widespread belief that the patents were invalid[17]. (For example, the patents have been called into question with the VFAT filesystem[18]).

All of this adds cost: operating costs, licensing costs and/or dead-weight costs that affect the purchasers and users of IT deployed in public sector on-line services (see the response to question four above).

8. How could adopting (Fair) Reasonable and Non Discriminatory ((F)RAND) standards deliver a level playing field for open source and proprietary software solution providers?

Adopting (F)RAND standards cannot deliver a level playing field across providers, because ultimately a requirement for (F)RAND controls not only the standard but the business model of software development and excludes some business models e.g., software development and distribution based on the GNU GPL (under which the majority of open source software is developed and released).

One study has suggested that there are “certified” open source software licences that would be compatible with (F)RAND licensing[19]. However the actual compatibility demonstrated is with a proprietary software business model that creates barriers to entry in the software market and which impedes and controls new entrants[20]. The majority of open source software is produced using a licence that underpins a business model that challenges the market dominance by proprietary software and which does not support (F)RAND, (GNU GPL v2/v3 and GNU LGPL v2/v3)[21].

As discussed in question four above there might be a short term dis-benefit to suppliers of software choosing to use (F)RAND patents. That would be a market decision, as using open standards (subject to the definition of open standards, i.e., the definition proposed in this consultation, modified, e.g., as we have proposed) do not create a barrier to entry for existing or new participants, particularly given the life-cycle for public sector procurements

17 http://arstechnica.com/open-source/news/2009/07/vfat-linux-patch-could-circumvent-microsofts-patent-claims.ars
18 http://www.wired.com/wiredenterprise/2012/03/ms-patent
19 http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1945252
20 http://www.computerweekly.com/opinion/Open-standards-are-about-the-business-model-not-the-technology
21 http://osrc.blackducksoftware.com/data/licenses/

Only royalty-free licensing for standards with non-assertion provide a level playing field across software providers.

9. Does selecting open standards which are compatible with a free or open source software licence exclude certain suppliers or products**?**

The responses to questions two, four, seven and eight above broadly cover our reply.

A requirement for open standards necessarily excludes those products that only use closed standards, and suppliers that only offer those products. In the short term, suppliers who have built their products and business models around closed standards and lock-in will be excluded.

It is important not to forget that the current failure to require open standards of any kind creates a barrier by default (as discussed in our introduction to this response).

10. Does a promise of non-assertion of a patent when used in open source software alleviate concerns relating to patents and royalty charging?

It is impossible to demand and expect good behaviour without conditions. Accordingly It is not only the promise that matters but the sanction if the promise is broken:

- What legal framework would government seek to rely upon and on what evidence?
- What penalty would Government impose and on what basis?
- What remedy would Government seek and within what time scale?
- How will government seek to establish rescission in case of breach of a non-assertion agreement after the passage of time?

By way of **analogy** it has been asserted that such patents as have been alleged to been infringed by Linux[22] were not litigated upon (nor yet directly) until Linux became a sufficient commercial threat[23] (see also the discussion of FAT and VFAT in question seven above).

While these patents have never been part of a non-assertion agreement the analogy is intended to show the problem of the passage of time.

If a patent has become embedded in the public sector IT estate then the effects of a breach of a non-assertion clause would be widespread.

22 http://money.cnn.com/magazines/fortune/fortune_archive/2007/05/28/100033867/
23 http://www.zdnet.com/blog/open-source/idiotic-anti-linux-google-patent-decision/8736

None of this would apply to patents that have not been contributed to the proposed covenant but any such assertion is not without precedent or consequences as any internet search on the term “submarine patent” would identify[24]

A patent, relatively insignificant or low value when first granted, might be seen as an opportunity for assertion if claimed to be integral to on-line public services (the opportunity arising from seeking to assert will be strengthened by the network effect). There have been many examples of prior art gathering exercises[25] to challenge these submarine patents and render them invalid[26] with source material being collated for the purpose[27]:

- What actions would the government be prepared to undertake to ensure that such patents were valid?
- What would the government be prepared to do to protect the policy if such patents were valid?

11. Should a different rationale be applied when purchasing off-the-shelf software solutions than is applied when purchasing bespoke solutions?

If the government has a policy on open standards it should seek to apply the policy to the limit of its intent.

The policy intent appears to be that software should use open standards (subject to the definition of an open standard, i.e., the definition proposed in this consultation, modified, e.g., as we have proposed) to enable interoperability and substitutability.

As discussed in the response to question two above In the clear signals from government together with of the length of the procurement life-cycle, any software supplier will be able to offer software into the public sector market.

As proposed in the response to question one, there should only be one rationale which would be best applied by creating a covenant to cover all software in the public sector.

24 http://moneyterms.co.uk/submarine-patent/
25 http://www.groklaw.net/articlebasic.php?story=2011111122291296
26 http://www.groklaw.net/articlebasic.php?story=20120207110012776
27 http://en.swpat.org/wiki/Software_patents_wiki:_home_page

12. In terms of standards for software interoperability, data and document formats, is there a need for the Government to engage with or provide funding for specific committees/bodies?

Subject to the discussion in question ten above concerning government plans to defend the policy no new engagement or funding initiative is required.

The requirement here is for clear signals that an open standard (subject to the definition of an open standard, i.e., the definition proposed in this consultation, modified, e.g., as we have proposed) is structurally important, then existing mechanisms are sufficient.

If individual public bodies have specialised requirements (e.g., statistics or meteorology) then they should engage appropriately according to their business requirements.

For example HM Revenue & Customs and Companies House are driving the development of XBRL in the UK for online financial reporting[28].

13. Are there any other policy options which would meet the described outcomes more effectively?

The proposal as currently defined does little to change status quo:

- there is no requirement to use open standards only consider their use
- there are no parameters for what would constitute an unacceptable decision not to use open standards
- there are no sanctions or remedies for failure to implement open standards
- there is no implementation plan

The policy as proposed in the consultation has few implications for non-conformance or submarine patents and does not address the challenges of the existing ICT estate. The policy should be informed by existing policy measures designed to induce structural change so to enable effective delivery of the intended outcomes addressing:

- On the demand side the public sector is the customer for ICT in the UK with an annual spend of approximately £20 billion or 15% of the UK market. Increasing encouragement or compulsion means that individuals, firms and other organisations have to plan their IT purchasing decisions to meet public sector on-line requirements

28 http://www2.xbrl.org/uk/frontend.aspx?clk=LK&val=91

- On the supply side the public sector is caught in an oligopoly of suppliers (acknowledged in the government response to the Select Committee Inquiry) and so the public sector will constrain the development of the supply side. ICT procurements continue to breach the EU rules on procurement[29]. Two recent tenders by Local Authorities required products rather than specifications[30] [31] Cabinet Office recently accepted a free gift of software and services and promoted the gifting and the result[32] raising the question of illegal state aid[33].

The government has to consider its role as market regulator. The objective of competition law is to promote competition. Anything that, e.g., promotes the objective of the single European market is likely to prevail over IP considerations[34].

While a requirement for openness is unlikely to breach competition law, requiring a specific standard (open or not) might.

Worse, any attempt to second guess market and technology developments by specifying multiple specific standards could adversely affect the dynamics of the market by seeking to remedy current static market issues.

29 For example the discussion of Article 34 TFEU http://www.nottingham.ac.uk/pprg/documentsarchive/asialinkmaterials/eupublicprocurementlawintroduction.pdf
30 http://www.guardian.co.uk/government-computing-network/2012/mar/22/ipads-workstations-schools-ict-equipment
31 http://ted.europa.eu/udl?uri=TED:NOTICE:108816-2012:TEXT:EN:HTML&tabId=1
32 http://www.opensourceconsortium.org/content/view/192/89/
33 http://www.bis.gov.uk/assets/biscore/business-law/docs/s/11-1040-state-aid-guide.pdf
34 http://ipkitten.blogspot.co.uk/2011/02/breaking-news-competition-trumps-ip-in.html

Open Standards Mandation

1. What criteria should the Government consider when deciding whether it is appropriate to mandate particular standards?

Adopting a requirement for openness (as proposed in our response to question one) can be used in any software there is no requirement for mandation of any particular standard that meets the proposed definition.

2. What effect would mandating particular open standards have on improving value for money in the provision of government services?

The law of unintended consequences is likely to apply to any decision to mandate a particular open standard. Only by chance would the law operate in favour of value for money, particularly in the longer term (see the discussion in our response to question 13 above).

3. Are there any legal or procurement barriers to mandating specific open standards in the UK Government's IT?

Barriers are likely to arise as a consequence of a breach of EC Directive (2004/18/ EC) enacted as:

- the Public Contracts Regulations 2006 (In England, Wales and Northern Ireland
- the Public Contracts (Scotland) Regulations 2006.

A claim might be made that that a specific standard is a product rather than a specification. These problems occur now as discussed in our response to question 13 above.

4. Could mandation of competing open standards for the same function deliver interoperable software and information at reduced cost?

As discussed in our response to question three in this section mandating a particular standard might give rise to a claim that this is a product not a specification. It might also be seen a discriminatory technical measure.

Each standard mandated might assuage an existing market actor but does not automatically avoid discrimination against all market actors. It also does nothing to enable new entrants, possibly creating barriers in the market and to innovation.

Mandation of existing standards makes it more difficult for new, possibly better, standards to emerge.

More generally the research published by the University of Delft this year[35] indicates that competing standards brings multiple dis-benefits. Accordingly mandation of competing standards, at first sight, would appear to be counter productive.

5. Could mandation of open standards promote anti-competitive behaviour in public procurement?

It is unclear that anti-competitive practice is not present in existing public procurement practice. We are aware of at least three studies that point to this problem[36] now and cite our own examples in this response.

As discussed above: mandation of a particular standard might give rise to a claim that the consequences are anti-competitive.

A properly drafted requirement for openness avoids the issue.

6. How would mandation of specific open standards for government IT software interoperability, data and document formats affect your organisation/business?

Mandating specific standards could create as many problems as it solves as it would be in danger of fossilising an approach to interoperability that does not take account of future developments.

7. How should the Government best deal with the issue of change relating to legacy systems or incompatible updates to existing open standards?

Good open standards provide clear statements about forward and backward compatibility. They are developed through open participation and the extent of the changes and the reasons are clear, documented and publicly available (as the definition under discussion in this consultation acknowledges).

Over time the problem with legacy systems could be solved through the acquisition of software in line with the covenant approach suggested in our commentary on the proposed definition.

35 See OSC report cited in the introduction
36 See OSC report cited in the introduction

There should be no requirement for “rip and replace” as it would be difficult to envisage the financial or technical justification for such a procedure.

8. What should trigger the review of an open standard that has already been mandated?

The definition proposed in section one is intended to provide automatic mechanisms to ensure that the policy objective will be met. Mandation of a specific standard brings its own problems as discussed in the above.

9. How should the Government strike a balance between nurturing innovation and conforming to standards?

This is a false dichotomy. Capturing the economic benefits of innovation is contained within broad government economic policy including that relating to IP protection.

If the government considers that choosing this standard over that standard in the public sector ICT estate has a market effect then it also need to consider all the markets that might be affected, directly and indirectly, including parallel markets. This policy must be implemented with regard to the law and policies promoting competition and innovation. The public sector must ensure that its decisions in its role as actor as well as customer minimise those effects.

This is further justification for the approach we propose in our response to question one in the first section rather than specify particular technical requirements.

10. How should the Government confirm that a solution claiming conformity to a standard is interoperable in practice?

Conformance to a standard does not also guarantee interoperability. The question needs to be considered in two parts:

- conformance
- interoperability

Conformance is not a problem unique to software and the procedures to test conformance are well established and publicly available. For example in W3C new standards must have an associated test suite, usually constructed both by the working group who develop the standard and from the test suites created by implementers of the standard.

Interoperability is a different problem. For many years the hardware industry has run plugfests to ensure interoperability. In software the concept is emerging[37] and government could actively participate and promote such events.

11. Are there any are other policy options which would meet the objective more effectively?

A good policy option is one that operates automatically and provides remedies where necessary. The current policy proposals are unclear and so are ineffective.

37 http://www.opendocsociety.org/news/gouda-odf-plugfest

International Alignment

1. Is the proposed UK policy compatible with European policies, directives and regulations (existing or planned) such as the European Interoperability Framework version 2.0 and the reform proposal for European Standardisation?

A communication from the European Commission to the European Parliament and other bodies “Towards interoperability for European public services” states[38]:

> Action on interoperability is essential to maximise the social and economic potential of information and communication technologies (ICT). This need was identified in the Digital Agenda for Europe[39], one of the flagship initiatives of the Europe 2020 Strategy. The Digital Agenda can only take off if interoperability based on standards and open platforms is ensured.
>
> interoperability is recognised as crucial for effective, efficient delivery of European public services fostering and reinforcing the internal market. The successful development and implementation of global and sectoral strategies, legal frameworks, guidelines, services and tools, and the solutions put in place to address the four levels of interoperability are a crucial asset to be taken into account and build upon. For public administrations, interoperability brings benefits such as cooperation. It facilitates the exchange, sharing and reuse of information, thus improving the delivery of European public services to citizens and business, reducing costs and preventing duplication of efforts.

The relevant sections of the Digital Agenda for Europe include:

- Propose legislation on ICT interoperability[40]
- Promote standard-setting rules (“horizontal” guidelines)[41]
- Provide guidance on ICT standardisation and public procurement[42]
- Promote interoperability[43]

38 http://www.epractice.eu/files/Towards%20interoperability%20for%20European%20public%20services%20-%20Commission%20Communication.pdf
39 http://ec.europa.eu/information_society/digital-agenda/index_en.htm
40 http://ec.europa.eu/information_society/newsroom/cf/fiche-dae.cfm?action_id=179&pillar_id=44&action=Action%2021%3A%20Propose%20legislation%20on%20ICT%20interoperability
41 http://ec.europa.eu/information_society/newsroom/cf/fiche-dae.cfm?action_id=180&pillar_id=44&action=Action%2022%3A%20Promote%20standard-setting%20rules
42 http://ec.europa.eu/information_society/newsroom/cf/fiche-dae.cfm?action_id=181&pillar_id=44&action=Action%2023%3A%20Provide%20guidance%20on%20ICT%20standardisation%20and%20public%20procurement
43 http://ec.europa.eu/information_society/newsroom/cf/fiche-dae.cfm?action_id=182&pillar_id=44&action=Action%2024%3A%20Adopt%20a%20European%20Interoperability%20Strategy%20and%20Framework

- Identify and assess means of requesting significant market players to licence information about their products or services[44]
- Member States should apply the European Interoperability Framework[45]
- Member States to implement the Malmö (open standards) and Granada (efficient interoperable public services) declarations[46]

Any policy that the UK Government introduces must be compliant with EU law. We believe that competent legal authorities in the public sector will be able to ensure the intent in our proposals will meet that requirement.

It is difficult to envisage, unless viewed in a looking-glass world, how any proposal to ensure that policies seeking to maximise the intentions of the Digital Agenda can be considered incompatible, especially if the challenge is a comparison with any partial implementation of the intentions.

2. Will the open standards policy be beneficial or detrimental for innovation and competition in the UK and Europe?

3. Are there any are other policy options which would meet the objectives described in this consultation paper more effectively?

These appear to be a restatement of questions nine and eleven in section two above and our answer to those questions are applicable here.

Gerry Gavigan
chair
Open Source Consortium
2 June 2012

44 http://ec.europa.eu/information_society/newsroom/cf/fiche-dae.cfm?action_id=183&pillar_id=44&action=Action%2025%3A%20Analyse%20the%20consequences%20of%20requesting%20significant%20market%20players%20to%20licence%20information

45 http://ec.europa.eu/information_society/newsroom/cf/fiche-dae.cfm?action_id=184&pillar_id=44&action=Action%2026%3A%20Member%20States%20to%20implement%20European%20Interoperability%20Framework

46 http://ec.europa.eu/information_society/newsroom/cf/fiche-dae.cfm?action_id=185&pillar_id=44&action=Action%2027%3A%20Member%20States%20to%20implement%20Malm%C3%B6%20and%20Granada%20declarations