Open Standards: Open Opportunities

Flexibility and efficiency in government IT
<table>
<thead>
<tr>
<th>Title</th>
<th>Open Standards: Open Opportunities Flexibility and efficiency in government IT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topic</td>
<td>Formal public consultation on the definition and mandation of open standards for software interoperability, data and document formats in government IT</td>
</tr>
<tr>
<td>Applicability</td>
<td>Central government departments, their agencies, non-departmental public bodies (NDPBs) and any other bodies for which they are responsible</td>
</tr>
</tbody>
</table>
Information technology across the government estate is expensive and the way that government departments previously purchased IT has resulted in hundreds of small, separate platforms operating across a landscape of disconnected, self-contained departments.

Our approach will enable the Government to work collectively together but effective open standards for software and systems are required to ensure interoperability between software systems, applications and data. Within the Government Digital Service we are already demonstrating how collaboration between departments, along with a clear focus on the user, delivers better public services for less. Open standards are crucial for sharing information across government boundaries and to deliver a common platform and systems that more easily interconnect.

Open standards are vital for progressing this work and I encourage you to share your views in this consultation.

FRANCIS MAUDE
Minister for the Cabinet Office
CONSULTATION SCOPE

The Government ICT Strategy, published on 30 March 2011, has already committed the Government to creating a common and secure IT infrastructure based on a suite of compulsory open standards, adopting appropriate open standards wherever possible.

However, there is no single, universally accepted definition of the term open standard, therefore the Government must be clear about what it considers are the key components of an open standard and describe the circumstances in which it will consider mandating particular open standards.

This formal public consultation focuses on open standards for software interoperability, data and document formats in government IT requirements and is seeking evidence to inform:

- the definition of open standard in the context of government IT;
- the meaning of mandation and the effects compulsory standards may have on government departments, delivery partners and supply chains;
- international alignment and cross-border interoperability.

Stakeholders

The policy resulting from this consultation will apply to all central government departments, their agencies, non-departmental public bodies (NDPBs) and any other bodies for which they are responsible. Local government and wider public sector bodies will be encouraged to adopt the policy to deliver wider interoperability benefits.

Responses from consumers of government IT and information services, including delivery partners from charities, voluntary and community groups are welcomed. These organisations, their current and potential IT software and information services providers, including trade bodies, are considered key stakeholders for this consultation.

Responses from academics, technical experts, economists and lawyers would be useful in helping to develop the evidence base. We would also welcome views or case studies from comparable organisations, international governments and standards bodies.

Please note that due to the complexity of this topic, not all questions will be relevant to all stakeholders.

Economic impact

An impact assessment has not been completed prior to this consultation exercise. Whilst the adoption of open standards is the
foundation for delivering more flexible and cost-effective IT in government, they are building blocks upon which interoperable IT is delivered. Costs and benefits are realised by the products and services that build upon them. The proposed policy is therefore intentionally flexible to allow officials to select the most economically beneficial solution.

No regulatory changes are envisaged and no big bang change to existing IT infrastructure in the Government is planned. Standards are implemented as part of the lifecycle of a technology refresh and included in procurement specifications – the move to open standards will be a gradual migration. As the resultant policy is likely to lead to redistribution of spend within the market, and savings in the Government's IT procurement, we invite further evidence relating to the economic impact of the proposed policy to be submitted as part of the response to questions in this consultation exercise.


**Duration**

The ICT Futures team in Cabinet Office is responsible for this consultation, which opens for comments on 9 February 2012 and closes on 3 May 2012.

**Enquiries**

For further information on the content or scope of the consultation, requests for alternate formats or information about events relating to the consultation, please contact: ServiceDesk on 0845 000 4999 or via servicedesk@cabinet-office.gsi.gov.uk

**How to respond**

**Website** – send your response via the online consultation at: http://consultation.cabinetoffice.gov.uk/openstandards/

**Email** – send your response, preferably on the template provided in Annex A, via email to: openstandards@digital.cabinet-office.gov.uk

**Post** – send a written response, preferably on the template provided in Annex A, to: Open Standards Consultation Cabinet Office, 4th Floor 1 Horse Guards Road London SW1A 2HQ

**Additional ways to become involved**

Open standards in government IT is a technically complex issue with a potentially large number of stakeholders from legal, business and IT backgrounds, therefore a series of events may be scheduled to promote discussion on specific topics. All
responses to the consultation must be submitted either on the online consultation site or via email or post, preferably using the template provided. To hear about any planned discussions, contact the service desk or follow @ICT_Futures on Twitter (http://www.twitter.com).

After the consultation closes

The information you send may need to be passed to colleagues within, or working on behalf of, the Cabinet Office or other government departments and may be published in full or in a summary of responses. Comments made online will be visible to anyone visiting the open standards consultation site but will be subject to moderation before they are published.

All information in responses, including personal information, may also be subject to publication or disclosure in accordance with the access to information regimes (these are primarily the Freedom of Information Act 2000, the Data Protection Act 1998 and the Environmental Information Regulations 2004). If you want your response to remain private, you should explain why confidentiality is necessary and your request will be acceded to only if it is appropriate in the circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on the department. Contributions to the consultation will be anonymised if they are quoted. Individual contributions will not be acknowledged unless specifically requested.

A Government response will be published on the consultations page of the Cabinet Office website http://www.cabinetoffice.gov.uk/content/cabinet-office-consultations – it is anticipated that this will be in summer 2012. A new policy on open standards for software interoperability, data and document formats in government IT procurement will be published following publication of the response.

This consultation complies with the Government's code of practice on consultation.

Background

This section outlines previous strategy and policy activity relating to open standards in government IT.

The e-Government Interoperability Framework (e-GIF), last updated in March 2005, contained the Government's policies and specifications for achieving interoperability. e-GIF policies mandated adherence to its Technical Standards Catalogue throughout the public sector. The Technical Standards Catalogue was last updated in September 2005.

The Government ICT Strategy (March 2011) committed the Government to creating a common and secure IT infrastructure based on a suite of agreed, open standards to deliver:

- a diverse, competitive market for government IT that delivers a level playing field for open source and proprietary software providers;
- economic efficiency in the delivery of government IT;
- better connectivity and reuse across government and with delivery partners.

To help address these challenges, the Government will impose compulsory open standards. The mandation of specific open standards will:

- make IT solutions fully interoperable to allow for reuse, sharing and scalability across organisational boundaries and delivery chains;
- help the Government to avoid lengthy vendor lock-in, allowing transfer of services or suppliers without excessive transition costs, loss of data or functionality.

The Strategic Implementation Plan, published in October 2011, describes the milestones and objectives that will deliver the strategy, including a reference architecture and a suite of open technical and data standards.

The Cabinet Office published a consultation on open data, Making Open Data Real, on August 4, 2011. The consultation was focused on making the Government more open using open data and transparency. The Cabinet Office will be publishing its response to the consultation in a white paper, due for publication in the spring. It will outline the Government’s strategic approach to open data and transparency across the lifetime of this Parliament.

In January 2011, the Government first set out its full definition of an open standard in the context of government IT procurement, in Procurement Policy Note (03/11), Use of open standards when specifying ICT requirements. Following the outcome of the UK Government Open Standards Survey, published in November 2011, Cabinet Office has since replaced PPN 03/11 with PPN 09/11, which highlights that this consultation will take place.

The open standards consultation is a technically complex area with active debate in industry and between national governments on how to define the term open standard and the impact that different definitions might have on the efficiency of government IT and on the supply chain.

Through this formal consultation, the Cabinet Office is seeking to refine and clarify the policy relating to open standards for software interoperability, data and document formats in the Government’s IT specifications and to investigate additional issues which were highlighted in the feedback to the 2011 Open
Standards Survey, including the impact that mandation of open standards might have on competition. The consultation does not cover the specification of broader information and communications technology standards, such as hardware or telecommunications. Additionally, the Government's support for standards in the wider economy, beyond their use in government procurement, is outside of the scope of this consultation.

All relevant information gathered to date, including data from the survey and written contributions sent to the Cabinet Office, will be part of the material that will be considered in making the decision. During and since the informal consultation, key stakeholders have been consulted to discuss the issues that need to be considered, including HM Treasury, the Department for Business, Innovation and Skills, industry bodies and suppliers.
INTRODUCTION

The cost of the Government's IT is currently too high and needs to be reduced. There is a lack of market diversity in existing government contracts. A more diverse market and level-playing field for access to government IT contracts is needed to improve competition, reduce cost and improve public service outcomes.

From a user perspective, it is difficult to transfer information and data across government boundaries and systems due to a lack of interoperability between products and services.

Citizens, businesses and delivery partners must be able to interact with the Government, exchanging information/data across in the software package of their choice and not have access costs imposed upon them by the IT choices which the Government makes.

A lack of interoperability also makes it difficult for the Government to reuse components, switch between vendors and products or to deliver efficient public services that leverage the value of government information, for instance through the provision of interfaces that allow delivery partners to build on government information services, delivering more innovative solutions.

The Government is therefore seeking to:

- give citizens and businesses a choice in the software they use when accessing government information and services;
- reduce lock-in to a particular vendor or product;
- reduce the cost of IT through a more competitive and diverse market and sustained commercial leverage; and
- improve software interoperability and sharing of data and documents across government boundaries.

The proposed open standards policy is seeking to deliver these outcomes and is outlined in the following three chapters.
CHAPTER 1: CRITERIA FOR OPEN STANDARDS

Policy background

Standards can play a key role in innovation and provide an infrastructure to compete and innovate upon (Swann 2010). Open standards aim to support 'full competition in the marketplace for suppliers of a technology and related products and services' (Ghosh 2005).

To improve access to government IT procurement for a more diverse market, for organisations of all sizes, and to give the public sector the flexibility to switch between suppliers and products, IT specifications must be based on open standards – standards which can be implemented by all. However, there is no universally accepted definition of this term. The Government needs to describe the criteria that constitute an open standard in the context of specifications for UK government IT procurement. In 2011, the UK Government Open Standards Survey included a definition on which the Cabinet Office sought feedback (see Open Standards Survey Outcome, Cabinet Office, 2011).

The European Commission previously consulted on the definition of open standard as part of the European Interoperability Framework (EIF) version 1.0. The definition included in the UK Government Open Standards Survey was based on the definition in EIF 1.0. The definition proposed in this consultation has been subsequently revised based on feedback from the Cabinet Office survey and discussions with stakeholders.

The European Commission's EIF version 2.0 does not provide a definition of open standard, but instead describes 'openness', in terms of the following criteria in relation to specifications: "All stakeholders have the same possibility of contributing to the development of the specification and public review is part of the decision-making process; the specification is available for everybody to study; intellectual property rights related to the specification are licensed on FRAND [(Fair) Reasonable and Non-Discriminatory] terms or on a royalty-free basis in a way that allows implementation in both proprietary an open source software."

There is, however, no universally agreed definition of FRAND and in practice some of the terms adopted may present difficulties for the open source software development model in relation to patents and royalty payments. Software that is open source must be provided under one of a range of recognised open source licences (www.opensource.org/licenses). Some suggest that the most commonly used of these licences do not allow the development
of software that requires royalty payments (Valimaki and Oksanen, 2005). In relation to software, standards must be compatible with free and open source software licensing terms to enable all suppliers to have fair access to competition for government contracts (Ghosh 2005), therefore the potential issue with patents and royalty payments must be considered.

Suitable open standards are not always available. Therefore, the Government must engage, as a key stakeholder, in the development of relevant open standards and must take a pragmatic approach to the selection of appropriate standards that help to reduce cost, meet service delivery needs and the needs of those who consume government services.

**Proposed open standards specification policy**

1. 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.

2. 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:
   - are maintained through a collaborative and transparent decision-making process that is independent of any individual supplier and that is accessible to all interested parties;
   - are adopted by a specification or standardisation organisation, or a forum or consortium with a feedback and ratification process to ensure quality;
   - are published, thoroughly documented and publicly available at zero or low cost;
   - 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;
   - owners of patents essential to implementation have agreed to licence 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.
3. When specifying IT requirements for software interoperability, data and document formats, government departments should request that open standards adhering to the UK Government definition are adopted, unless there are clear business reasons why this is inappropriate, in order to:

- support a level playing field for open source and proprietary software providers;
- avoid lock-in to a particular technology or supplier;
- provide interoperability within and between government systems.

4. Standards for software interoperability, data and document formats that do not comply with the UK Government definition of an open standard may be considered for use in government IT procurement specifications if:

- the selected standard is outside the scope of this policy; or
- they are required to fulfil an international obligation/regulation; or
- an appropriate open standard does not exist and is not imminent; or
- there is a demonstrable economic benefit for the Government in using an alternative standard; and
- the selected standard supports software interoperability, information/data portability, is non-discriminatory and implemented on a number of platforms from more than one supplier.

5. Any standard specified that is not an open standard must be selected as a result of a pragmatic and informed decision, taking the consequences into account. The reasons should be fully documented and published, in line with the Government's transparency agenda.

6. The Government will participate in the committees of standardisation bodies to reflect government requirements when relevant open standards are being developed.

**Potential benefits**

Adopting this policy enables:

- an open standards-based infrastructure for government IT which reduces the need for bespoke integration between non-standardised solutions;
- sharing of information and data across and beyond government boundaries;
- opportunities for third parties to build on government information and service delivery;
- fairer competition that allows a diverse
range of suppliers with different delivery models to deliver government IT solutions;

• greater choice for the Government to reuse solutions and switch between standardised products and components;

• reduced risk of lock-in to a particular vendor.

Your views

The Government welcomes comments on the following:

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

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?

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?

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

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?

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

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?

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

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

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

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?

13. Are there any are other policy options which would meet the described outcomes more effectively?
CHAPTER 2: OPEN STANDARDS MANDATION

Policy background

The Government is creating an infrastructure based on a suite of agreed, open standards and adopting compulsory open standards. The Cabinet Office will mandate particular open standards and profiles to be used within common government contexts to ensure that open interfaces and interoperability are achieved across central government. (Profiles define subsets or combinations of standards that have a specific scope and deliver a defined function whilst conforming to the related standards.) An Open Standards Board is being set up to govern this process.

This section of the consultation document focuses on the policy for mandation of standards and considers the following issues:

- The meaning of mandation in this context
- The circumstances when open standards or profiles built on open standards should be mandated
- The selection of a single standard or multiple standards where competing standards exist
- The governance associated with the adoption and lifecycle of standards and how to handle new versions
- Legacy systems and their compatibility with compulsory open standards

Government may consider weighting the importance of each of the criteria defining an open standard when considering open standards for mandation.

Standards, particularly standards that are consensus driven, increase market transparency, reduce transaction costs, increase competition and reduce variety – building economies of scale and positive network effects for suppliers and consumers. Competing standards (including competing standards versions), which deliver the same functions, diminish these effects by creating complexity in IT solutions. This may increase costs, for example due to the need to support both standards in a single implementation, or having to utilise converters and plug-ins (Egyedi, 2012). The increased complexity may also have an impact on vulnerability and performance (Shapiro and Varian, 1999). To reduce complexity and cost the Government may therefore need to choose between competing standards.

The Government must agree on the circumstances when particular open standards and profiles should be compulsory for departments to adopt, avoiding the
creation of solutions based on open standards that operate at a local level but which do not interoperate across government boundaries. This activity will recognise the need to allow for equivalence in accordance with European procurement rules.

The lifecycle of mandated standards must also be considered, taking into account changes to existing standards or development of new standards in response to technology innovation.

During the UK Government Open Standards Survey (2011), feedback supporting the approach that the UK Government is taking on open standards compared the strategy to that of the Dutch Government, which uses a system of “comply or explain” in relation to supporting the wider adoption of open standards. In the Netherlands, government organisations are obliged to explain in their annual reports when relevant open standards have not been adopted. The process is supplemented by a procedure for evaluating standards which focuses upon including those standards that matter within the marketplace and which deliver against defined policy aims.

The UK Government currently investigates the uptake of open standards in government IT systems as part of the Major Projects Authority spend approvals process. Departments must provide information on whether specifications are compliant with open standards prior to proceeding with new procurements above a value set as the threshold for spend approvals. Whilst sunk costs are a consideration, longer term transaction costs and alignment with the Government ICT Strategy are key factors in the review process.

Note that the selection of particular standards for specific interoperability or security challenges will be covered on an ongoing basis through informal consultations, available publicly through an online Standards Hub. Selection of specific standards is not covered by the Open Standards: Open Opportunities consultation.

**Proposed open standards mandation policy**

1. The Government will mandate particular open standards, or profiles built on open standards, which support the following policy objectives:

   - providing and enabling informed choice to consumers of government information and services;
   - delivering secure, efficient, interoperable solutions;
   - supporting a diverse, competitive market for government IT contracts;
   - reducing the potential for lock-in to a particular vendor or product;
   - reducing bespoke integration, adapters or converters required between interfaces across common
government systems i.e. stimulating standardisation and reuse across government IT.

2. In this context, mandation means that all specifications within scope must comply with this policy or explain the reason for divergence. The reasons should be published, in line with the Government's transparency agenda.

3. For all IT spend approval applications submitted to the Cabinet Office, government bodies must demonstrate compliance with open standards and compulsory open standards for software interoperability, data and document formats or provide evidence of the need for divergence with an analysis of the impact.

4. Where competing standards exist which support the same function, the Government may choose to mandate a single open standard.

5. Open standards which have been mandated will be reviewed as part of the lifecycle of the Government's agreed standards. Migration to a new open standard or newer versions of mandated standards will be considered on a case by case basis, taking into account the impact of migration on existing systems.

6. For all new government IT contracts, specifications must comply with compulsory open standards, which have been mandated by the Cabinet Office. For legacy systems, migration to newly agreed or updated versions of compulsory open standards should be part of the technology refresh lifecycle. Any mandated standards will recognise the need to allow for equivalence in accordance with European procurement rules.

7. For extensions to contracts and legacy systems, departments should consider preparing an exit management strategy describing the transition to open standards, particularly compulsory open standards.

Potential benefits

Adopting this open standards mandation policy enables:

- opportunities for citizens and businesses to interact with government services in a format of their choice;
- less complex government IT, which is more secure and costs less;
- greater standardisation, sharing and reuse of solutions and components across government organisations.

Your views

The Government welcomes views on the following questions:

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

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

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

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

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

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

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

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

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

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

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

Case study: open standards and their effect on business

A 1999 study by the Organization for Economic Cooperation and Development (OECD), noted how openness had encouraged the growth of electronic commerce; the internet is used “as a platform for business” because it is built on non-proprietary standards and is open.

The internet is recognised as one of the biggest drivers of global economic growth and has already created job opportunities on a massive scale, currently accounting for around 6% of UK GDP (McKinsey, 2011).

“The open platform enabled software companies to profit by selling new products with powerful features; enabled e-commerce companies to profit from services that built on this foundation; and brought social benefits in the non-commercial realm beyond simple economic valuation.”

- Sir Tim Berners-Lee
CHAPTER 3: INTERNATIONAL ALIGNMENT

Policy background

Europe-wide standardisation can help to deliver interoperable services for citizens and businesses across borders and boost competitiveness of European businesses. The UK Government and the European Commission recognise that standards produce significant positive effects which benefit economies as a whole.

The Government is continuing to work with the European Union to ensure that its IT meets legal obligations and, where applicable, aligns with frameworks and strategies agreed at a European level, such as the European Interoperability Strategy and European Interoperability Framework, which improve the way Member States work across borders. The UK policy on open standards for software interoperability, data and document formats is therefore intended to complement the European Interoperability Framework and supports its principle of openness to enable fair competition between open source and proprietary software.

The UK Government also works with other countries and standards setting bodies within and outside Europe to learn from, share and reuse the best solutions and standards. For instance, in the fields of health and defence, the Government must be able to interconnect and share data with international organisations.

The European CAMMS project (Common Assessment Method Standards and Specifications) is identifying criteria for assessing selection of standards for public procurement. The UK Government is involved in this project, which will conclude in 2012. CAMMS has identified a list of questions relating to business needs, standardisation and market criteria. The intention is to make assessments available between Member States, helping to reduce duplication and share learning (see http://ec.europa.eu/idabc/en/document/7407.html).

European procurement law requires that technical specifications must also allow solutions to meet the required functionality by other means and allow equal access to suppliers, while not creating unjustifiable obstacles for opening up public procurement to competition.

The European Commission has tabled a proposal for reform of European Standardisation, which puts forward a change to recognise ICT standards developed by global ICT standards development organisations (such as W3C and OASIS) in public procurement, EU policies and legislation, to encourage interoperability, stimulate innovation and exploit European competitiveness. The proposal requires that "public authorities
should make best use of the full range of relevant standards when procuring hardware, software and information technology services, for example by selecting standards which can be implemented by all interested suppliers, allowing for more competition and reduced risk of lock-in." There are also measures to improve the transparency of standards setting bodies and to ensure that stakeholders, particularly Small and Medium Enterprises (SMEs), have appropriate representation.

Annex II of the proposal sets out the Requirements for Specifications in the Field of ICT, which incorporates telecommunications, covers the criteria for processes including openness, consensus and transparency. It also proposes terms for requirements that standards should meet relating to maintenance, availability, quality, relevance, neutrality, stability and intellectual property, including a requirement that: "intellectual property rights essential to the implementation of specifications are licensed to applicants on a (fair) reasonable and non discriminatory basis ((F)RAND), which includes, at the discretion of the intellectual property rightholder, licensing essential intellectual property without compensation".

As part of the Commission's Digital Agenda, it is also developing guidance on IT standards and public procurement to improve efficiency and reduce lock-in. The guidelines are available under consultation until 14 February 2012 (http://cordis.europa.eu/fp7/ict/ssai/study-action23_en.html).

**Proposed international alignment policy**

1. Preference should be given to open standards with the broadest remit; international standards are preferred over local standards.


3. The Government will consider the Requirements for the Recognition of Technical Specifications in the Field of ICT and the CAMMS selection criteria when considering the adoption or mandation of open standards.

4. The Government will fulfil international obligations and regulations relating to agreed standards for cross-border interoperability.

**Potential benefits**

- Interoperability and shared solutions across Member States and international agencies
- An open, competitive and innovative European market
- A diverse market with fair access to government IT procurement opportunities
Your views

The Government would like to hear your views on the following questions:

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?

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

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

Criteria for open standards

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

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?

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?

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

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?

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

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?

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

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

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

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?

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

Open standards mandation

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

2. What effect would mandating particular open standards have on improving value for money in the provision of government services?
3. Are there any legal or procurement barriers to mandating specific open standards in the UK Government's IT?

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

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

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

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

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

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

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

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

**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?

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

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

The following criteria appear in the Government's code of practice:

**Criterion 1 – When to consult**

Formal consultation should take place at a stage when there is scope to influence the policy outcome.

**Criterion 2 – Duration of consultation exercises**

Consultations should normally last for at least 12 weeks with consideration given to longer timescales where feasible and sensible.

**Criterion 3 – Clarity of scope and impact**

Consultation documents should be clear about the consultation process, what is being proposed, the scope to influence and the expected costs and benefits of the proposals.

**Criterion 4 – Accessibility of consultation exercises**

Consultation exercises should be designed to be accessible to, and clearly targeted at, those people the exercise is intended to reach.

**Criterion 5 – The burden of consultation**

Keeping the burden of consultation to a minimum is essential if consultations are to be effective and if consultees’ buy-in to the process is to be obtained.

**Criterion 6 – Responsiveness of consultation exercises**

Consultation responses should be analysed carefully and clear feedback should be provided to participants following the consultation.

**Criterion 7 – Capacity to consult**

Officials running consultations should seek guidance in how to run an effective consultation exercise and share what they have learned from the experience.

If you have a complaint or comments on the consultation process itself, please contact:

Karen West  
Cabinet Office  
Better Regulation Unit  
Rosebery Court  
Norwich  
NR7 0HS

Email: karen.west@cabinet-office.gsi.gov.uk
GLOSSARY

For the purposes of this document:

**Open source software** - software which guarantees the right to access and modify the source code, and to use, reuse and redistribute the software, with no royalty or other costs. In some cases, there can be an obligation to share code improvements with the wider community.

**Reference architecture** – a framework that describes the organisation and components of business, information and technology systems and how they relate.

**Software interoperability** – coherent exchange of data between programs and IT systems using standard formats and protocols and the ability to replace any component used with another of a similar specification while maintaining functionality.

**Standard** - codified knowledge providing specifications for interfaces between software, systems or the documents and data that pass between them.
REFERENCES

http://www.cabinetoffice.gov.uk/content/government-ict-strategy

http://www.cabinetoffice.gov.uk/content/government-ict-strategy-strategic-implementation-plan

Open Standards Survey Outcome, Cabinet Office, November 2011.  
http://www.cabinetoffice.gov.uk/sites/default/files/resources/20111124_OpenStandardsSurveyOutcome_FINAL.pdf

An Economic Basis for Open Standards, Rishab A. Ghosh, University of Maastricht, December 2005.  
http://www.intgovforum.org/Substantive_1st_IGF/openstandards-IGF.pdf


To Select or Not? Dealing with Competing Standards in Public IT Procurement, T. Egyedi, Delft University of Technology, January 2012.  


ANNEX A: OPEN STANDARDS CONSULTATION – YOUR VIEWS

Please leave blank any questions that you do not wish to answer.

Completed forms should be returned to:

Open Standards Consultation, Cabinet Office, 4th Floor, 1 Horse Guards Road, London SW1A 2HQ or via email to: openstandards@digital.cabinet-office.gov.uk

<table>
<thead>
<tr>
<th>Personal details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
</tr>
<tr>
<td>Organisation</td>
</tr>
<tr>
<td>Email address</td>
</tr>
<tr>
<td>Phone</td>
</tr>
</tbody>
</table>

**Chapter 1: Proposed open standards specification policy**

<table>
<thead>
<tr>
<th>Qu</th>
<th>Your views</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>
Chapter 2: Proposed open standards mandation policy
Chapter 3: Proposed international alignment policy