OFE Full Response to UK Government Standards Hub Challenges

- Sharing or Collaborating with Government Documents
- Viewing Government Documents

15.01.2014

SUMMARY OF RECOMMENDATIONS

Viewing Government Documents

- For On-Line, read only use, then HTML is recommended
- For Off-Line, read only use, then PDF is recommended. We suggest to first use PDF/A (ISO 19005) and take PDF1.7 (ISO 32000-1:2008) as a fall-back if exceptionally 'rich functionality' is needed.

Sharing or Collaborating with Government Documents

- The UK government should adopt the most up to date version of ODF as the default option for all new editable government documents.

Notes:
  ○ Existing repositories should be maintained as is and new versions use the default option for new documents.
  ○ Translation is only required in truly exceptional circumstances or for non compliant incoming documents.
  ○ Normally existing documents will be archived and accessed in read only modes or for use of fragment text.
  ○ Existing application support suffices for this purpose.

- Non document based sharing and collaboration processes (eg wikis) are normally presented in HTML formatting and should be allowed where appropriate (eg ephemeral content, where appropriate curation is in place etc).

Notes:
  ○ It is expected that standardization will move to harmonise online collaboration methods with document based perspectives as per OASIS work on the next versions of ODF.

1. Introduction

OFE is pleased to provide input to these two Challenges. In doing so it has drawn both on its consolidation of pan European market experiences and the widest possible input from its members, partners and OpenForum Academy Fellows, representing some of the most influential industry players alongside community partners from across Europe. OFE has responded on-line via the UK Government Standards Hub to each Challenge but has provided this Full Response to provide greater input and explanation. Our focus in this Full Response is one of pragmatism and longevity of solution, and avoidance of lock-in.
We note the need to clearly differentiate between the choice of standard as opposed to any criteria that affects procurement of a specific application. Any true open standard is adoptable by any vendor and most applications already support the key candidate standards to a sufficient level.

The UK Government is right to place user need at the core of these challenges, as it did in the selection of its Open Standards Principles. It is also right in these Challenges to differentiate between the need to separately consider the requirements relating to the 'sharing and collaborating with government documents' versus the simply 'viewing' of such documents. Nevertheless we would conclude that there are many common considerations, and this has resulted in OFE making a joint submission, albeit with separate Final Recommendations.

As part of our Response we have based all considerations on the Open Standards Principles adopted by UK Government. It would serve no useful purpose to challenge or seek to redefine these – merely to provide our observations on both the relevance and status of possible competing standards in respect of their completeness. **Document Formats present potentially the single most challenging area for adoption of Open Standards and it is vital that UKG 'stand up to be counted' in its implementation of the Open Standards Principles.**

In coming to its Conclusions, rather than just provide dialogue against each Principle, OFE seeks to provide input in six areas which it suggests are most relevant:

1. The difference in 'user' demand against the two Challenges
2. The transition reflecting the differing needs of legacy systems, and future technologies
3. Whether competing standards are viable or sensible
4. Meeting the Definition
5. Support within applicable application solutions
6. Experience elsewhere, both in selection processes and market usage.

2. Differences in User Demand

The two Challenges reflect an understanding of today's approach to Documents – seeing them as a standalone document with the need to maintain or otherwise the integrity of the original copy. This has substantial potential legal implications as well as ones of user access. Equally there needs to be high cognisance of changes inevitable as a result of the Government's 'Digital by Default' strategy where a document may be just a transient 'page' within an online transaction. Finally the role of different stakeholders within a solution may need to be refined as a result of Cloud based services, where providers may 'transparently' offer a layer of protection between document formats supported.

**Viewing Government Documents**

Citizens, businesses and government officials need to be able to access and read government documents on their own devices. Users must not have costs imposed upon them, or be digitally excluded, due to the document format in which government documents are provided

The implication given is that such documents are non editable, and indeed for legal reasons this may be a pre-requisite. However, as introduced above, in a Digital world where the access is through a browser based device, of any description, then this may not be required and indeed non essential. We would therefore suggest a further refinement – Non-Editable, and Editable. Key will be whether the document is actually integrated within a Digital solution or a stand alone document which is to be downloaded. The citizen will have little interest in which document format is being used, simply that their systems can access, read and if appropriate manipulate it. In the context of 'Viewing' the assumption it is a single document and the focus moves to their choice of application for reading/manipulation. This may well be a factor of legacy choice and/or lock-in to the past, but can not be ignored in any decision making. However, the balance is equally true where Government has a key role in protecting all users against future lock-in, by judicious use of Open standards now. A major decision therefore should be that Government does not prolong that lock-in by perpetuating the use of proprietary legacy formats, or formats which are claimed to be open but actually contain proprietary extensions and completely avoiding application specific approaches. In practice all major
application systems available are able to read currently competing standards. So the decision is one of Government leading, with minimal implication on end users.

Sharing or Collaborating with Government Documents

Citizens, businesses and delivery partners, such as charities and voluntary groups, need to be able to interact with government officials, sharing editable documents. Officials within government departments also need to work efficiently, sharing and collaborating with documents.

Users must not have costs imposed upon them due to the document format in which editable government documents are shared or requested.

The implication given in the wording is that there is a two-way dialogue, either with the user responding to Government, or in some way it being part of a transaction with one or more other parties. Key to this Challenge is the role of third party solution providers, rather than just the end user. In the past, both within the UK, we have seen direct evidence of public sector organisations not being able to implement their chosen path because of the intransigence of a current solution (normally application) provider in maintaining lock-in through support for only one proprietary document format. Breaking this stranglehold is a major milestone in UK Government's approach to the use of Open Standards.

However, a healthy degree of pragmatism is required in recognising the need for a transition plan, moving users and solution providers from legacy based approaches to a fully open solution using only Open Standards.

Office applications are likely to prove the easiest to encourage, with most already handling a variety of formats including those tagged as non-proprietary (but see below). A key decision – for product procurement – will be the provision of default formats.

Fundamental to changing market behaviour will be Government procurement action, where an Open Standard is a pre-requisite for consideration. This is an underrated incentive for change.

3. A Transition Between Legacy and New Technology Solutions

OFE can not identify any reason why the introduction of new technologies, new business models, or an increased focus on 'Digital by Default' should change the Open Standards Principles policy – indeed Open Standards are a fundamental driver and enabler that allow such changes to protect the end user from interminable lock-in.

Browser-based/cloud editors can be understood with the same principles. Although the user does not see the document -- it is stored on the server and you never need to download it to read it -- the document is still stored in a file format of some sort, and the same concerns of interoperability, vendor lock-in, cost to exist, etc., still apply.

One way in which it is different is that cloud editors enable a new way of sharing documents: I send you a link, and if you open that link, then it loads the document, in the original cloud editor, on your machine. To the extent the cloud editor is based on open web standards -- XML, HTML5, CSS, Javascript, etc., the experience is portable. But this is not the same as a portable, interoperable document. We need to avoid that confusion. In particular, the vendor owns the application and the code, even if portable across browsers and operating systems and devices, is still theirs to control and license as they see fit. But the document, the data, that is still owned by the user. One needs to consider uploading documents in the first place, off-line usage and retrieval/migration when you want to move document between providers and the Open Standards principles should be applied for each such scenario.
In the read-only case the primary solution should be web based HTML content. In some cases, for example long term content requiring remote use and rarely updated, off-line usage may be required. However, User agents vary in their capability to save or store web pages or specific parts of them for offline reading. Therefore PDF would appear the choice if you want almost exact fidelity. By preference we would advise to first use PDF/A (ISO 19005) and take PDF1.7 (ISO 32000-1:2008) as a fall back in case exceptionally 'rich functionality' is needed. PDF/A is the favourable format because of archivability and authenticity ('self-contained').

In summary: how we share and collaborate on documents changes in the cloud. It is easier, since we're not shuffling file attachments around via email. But formats are still relevant, though less visible, and the lock-in concerns are unchanged.

What OFE can recognise is the potential validity of a transition plan that progressively moves users and solutions from 'proprietary' to 'open', protecting users from unnecessary change. But this should not be used as an excuse to 'protect the past' or bluntly to 'duck the big decisions'.

Application providers may well seek to protect past investment, either in technological developments in a proprietary format or stack, or with a commercial marketing arrangement with a global partner. They will inevitably use the argument of cost of transfer in order to seek to block such Government decision which might affect their ability to compete. But Government has already decided on its wish for a level playing field for all competitors, and have recognised the essential role of Open standards in achieving that position.

Equally in any transition plan Cost of change will be a major factor. As identified 'Exit Costs' need to be computed at time of initial purchase, so for a supplier such factors will prove increasingly to be a major factor in their own development planning – particularly if Government evidences its determination by procurement decisions.

4. Competing Standards

Unlike other areas of Open Standards where the opportunity for competing standards results from a development in technology or market functionality, no such reason exists for Document Formats. OFE has in the past commented on the irrationality of such decisions and the involvement of differing standards bodies in such unnecessary behaviour. The ODF/OOXML debate continues, but before a government can consider the merits of one over another the bigger decision is over the economic and innovative impact of directly competing standards. The UK Open Standards Consultation Government Response reported that “38.6% [of the respondents] replied that mandation of competing open standards would not deliver interoperable software at reduced costs. This would suggest that competing standards would not deliver the anticipated benefits and suggests a preference for a single standard.”

In OFE’s submission to the Consultation we recalled the research paper¹ published by Delft University (funded by the Dutch Standardisation Forum and supported by OpenForum Academy) that took up the question of of whether selecting competing standards or not has impact both on the market and, in especially (given the context of this consultation) on public procurement. Most important to this consultation, the Delft study recognised the specific issue related to standards for interoperability and the network effect used.

The conclusion from Delft, which is relevant to the Government’s consultation is that in general competing standards that interfere with interoperability should be avoided since they will lead to:

- reduced market transparency
- decreased overall interoperability, decreased network externalities and decreased ease of use
- a fragmented market, possibly leading to submarket lock-in and – in case of insufficient competition per submarket – to vendor lock-in and monopolies (i.e. welfare loses, higher costs and less technology diffusion) and
- increased transaction costs (e.g. including the costs of converters and converting barriers to exit/switching costs)

¹ http://www.openforumacademy.org/library/ofa-research/Competing_Standards_Report_Final_3-1-12.pdf
Long term TCO including exit costs should be one way that Government assesses the cost of competing standards within its supported portfolio. Equally if competing standards for any of the reasons above are to be considered, then there should be a planned development/transition route towards a position where a fully conformant standard can be adopted and mandated if appropriate.

Key to success is that Government should not second guess the market by premature endorsement by mandating a standard which has not reached credibility or acceptance. This latter point is reinforced by The Government's own conclusion, “However the Government has a responsibility to balance choice against ensuring delivery and more importantly cannot risk “cherry picking” standards that later turn out to be inappropriate”.

There are no clear signs that either ODF or OOXML has a decisive market advantage that is convincing to users and vendors alike. The development community is weary of slow uptake and progress. A long term vision for document management needs to be restated and reinvigorated. Decisions made under Public Procurement choices will, we believe, prove long term to be the market changer.

The office market is currently fragmented because there is no clear ubiquitous open document format that is universally accepted in the market. OpenDocument Format has a good number of implementations and wide moral support, but faces a continuing battle as proprietary environments continue to be hostile.

The OOXML format, although championed by market leader Microsoft since Office 2007, has not been able to gain full market share because of lack of support elsewhere, user inertia, use of application specific non standardised extensions and inclusions and the controversies around ISO standardisation.

There are no clear signs that either standard has a decisive advantage that will make it win, and so a long and tiring path lies before us. While this competition is undecided the market is not phasing out even the legacy binary formats. That means a triple burden for every implementer (harming the smaller ones the most), and significant inconvenience and loss of information for users. A 'choice' between two standards really means no standard. The user community is tired and exhausted - there is no clear vision on the horizon.

In order to provide some semblance of interoperability, suppliers and users are using document format converters to handle the plethora of different historical formats and new, generally proprietary, formats being developed in the cloud. This is a deeply unsatisfactory position for developer and user alike.

So the questions to be asked are whether in the context of the directly competing document formats,

- Are they conformant to the UKG Definition of an Open Standard?
- Have they reached critical mass in terms of adoption?
- Is a transition plan necessary?

5. Meeting the Definition

On the basis that alternative directly competing standards are to be considered only in exceptional circumstances, the conformancy against definition becomes highly significant. The following is our appraisal of the situation.

In this case it is important to distinguish between maintenance of the existing version and the creation of future versions. New versions are crucial for understanding future control of upgrades and the related financial implications.

**HTML** - W3C handle both maintenance and version control. HTML is going through the process of transition from HTML 4.01 to 5. Although membership is subject to fees ([http://www.w3.org/Consortium/fees?countryCode=GB&quarter=01-01&year=2014#results?United Kingdom](http://www.w3.org/Consortium/fees?countryCode=GB&quarter=01-01&year=2014#results?United Kingdom)) all versions including editors drafts are publicly available and open for comment.
**ODF** - OASIS handles both maintenance and new version. A new version will be announced as a committee draft, subject to the OASIS ballot process, approved and announced as an OASIS standard which includes clear vendor implementation and then submitted to the ISO/IEC JTC1 organisation for final approval as an international standard. Transparency is high and remaining issues could be resolved by joining OASIS ([https://www.oasis-open.org/join/categories-dues](https://www.oasis-open.org/join/categories-dues)). Current progress on ODF 1.2 clearly demonstrates this with ongoing work on the draft ODF 1.3 available to OASIS members.

**OOXML** - Although maintenance of the existing version has been delegated to ISO/IEC JTC1 SC34 following its submission via ECMA, and is relatively open, its effect is currently marginalised by the presence of a dominant vendor. Microsoft currently publish ‘normative variations’ ([http://msdn.microsoft.com/en-us/library/ff535095(v=office.12).aspx](http://msdn.microsoft.com/en-us/library/ff535095(v=office.12).aspx)) leaving less dominant players to choose between the formal approved standard and interoperability with the preferred choices made by the dominant vendor. Further this varies by application version and new versions, if they are standardised at all, completely depend on Microsoft’s future product roadmap whilst it retains its dominant position. Therefore knowledge of future versions is opaque to other implementors and stakeholders.

<table>
<thead>
<tr>
<th>UK Definition Criteria (See Annex 1)</th>
<th>HTML Maintenance</th>
<th>HTML Versions</th>
<th>ODF * Maintenance</th>
<th>ODF Versions</th>
<th>OOXML Maintenance</th>
<th>OOXML Versions</th>
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</thead>
<tbody>
<tr>
<td>‘Collaboration’</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes****</td>
<td>No</td>
</tr>
<tr>
<td>‘Transparency’</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes****</td>
<td>No</td>
</tr>
<tr>
<td>‘Due process’</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td>‘Fair access’</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes****</td>
<td>Private</td>
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<tr>
<td>‘Market support’</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes**</td>
<td>No****</td>
<td>Private</td>
</tr>
<tr>
<td>‘Rights’</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes***</td>
<td>No*****</td>
<td>Private</td>
</tr>
</tbody>
</table>

* Note there is an additional agreement between ISO / IEC JTC1 SC34 and OASIS that allows JTC1 delegates and thus national delegates including BSI to comment.

** Implementation is a required part of the OASIS approval process

*** OASIS Open Document TC requires Royalty Free and may not change without reconstitution.

**** As in the above text the existence of normative variations means that although the ISO/IEC processes pass examination against the open standards principles with the exception of ‘rights’ the practical situation does not reflect this and the vendor independence required by ‘market support’ is judged not met.

***** Although the current version is not known to fail the ‘Rights’ criteria the ISO/IEC processes of JTC1 that manage maintenance and any future standardisation effort via ECMA or JTC1 would be subject to RAND conditions that may fail the ‘Rights’ test.

Private means that this is subject to a future private commercial decision.

Notes:
There is a danger that every implementation of every standard offers extended functionality beyond the current standard. In the case of ODF this is a setting that can be changed in both OpenOffice and LibreOffice.
There is an agreement in place that the current version of ODF will always be submitted to ISO/IEC JTC1 by OASIS but implementations follow the latest OASIS standard as multiple implementations are a requirement of the OASIS process. In general, ODF 1.0, 1.1 and 1.2 can be read by current versions of OpenOffice, LibreOffice and Microsoft Office. OpenOffice and LibreOffice write out ODF 1.2 by default. MS Office 2013 also writes out ODF 1.2, though Office 2010 and 2007 write out ODF 1.1

‘OOXML’ is being used to describe the continuing development of the standard, initially introduced by Microsoft in Office 2007. The specification for this format was submitted to Ecma, standardized there and the sent to JTC1 via Fast Track procedure. It was modified in the Ballot Resolution Meeting and published. It then underwent revision in JTC1 to revert some of the changes made at the BRM, we understand to align it more closely with Microsoft Office. OOXML is reported as remaining highly dependant on proprietary technology (OLE, BMP, ..). It is necessary to differentiate between the standard approved by ISO and that implemented by Microsoft within Microsoft Office.

The ISO OOXML is not very relevant to achieving practical interoperability for the following three main reasons:

1) Microsoft Office does not strictly follow the OOXML standard. There are reported to be thousand pages of discrepancies that Microsoft documents outside of the standard, in their Implementation Notes.

2) As mentioned above, the enhancements made in Office 2010 and Office 2013 are not included in the OOXML standard.

3) OOXML uses less existing standards compared to ODF (ODF uses SVG, SMIL, XML, MathML, XLINK for example). Thus components of OOXML document are less portable to other software tools and the output of other software tools is less predictable when used in OOXML.

6. Support within Application Solutions

There is substantial potential for ambiguity between versions of a supposed common standard, depending on the strictness of the specific version quoted rather than a generic ‘title’ given to allow for transitions, rather than the formal final version.

In making this analysis OFE has looked at four formats in widespread use across five 'office' application solutions. In all cases we have tried to identify which is the preferred default.

<table>
<thead>
<tr>
<th>Application</th>
<th>Platforms</th>
<th>Default format</th>
<th>Extensively supported formats*</th>
<th>Partially supported formats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft Office</td>
<td>Windows, OS X</td>
<td>OOXML</td>
<td>OOXML**, ODF****, PDF, RTF, TXT, HTML</td>
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</tr>
<tr>
<td>LibreOffice</td>
<td>Windows, OS X, Linux</td>
<td>ODF</td>
<td>ODF, PDF, RTF, TXT, HTML</td>
<td>OOXML***</td>
</tr>
<tr>
<td>Apache OpenOffice</td>
<td>Windows, OS X, Linux</td>
<td>ODF</td>
<td>ODF, PDF, RTF, TXT, HTML</td>
<td>OOXML***</td>
</tr>
<tr>
<td>Google Apps</td>
<td>Cloud-based</td>
<td>OOXML (for local download)</td>
<td>OOXML, ODF, PDF, RTF, TXT, HTML</td>
<td></td>
</tr>
<tr>
<td>Microsoft Office 365</td>
<td>Cloud-based</td>
<td>OOXML (for local download)</td>
<td>?</td>
<td></td>
</tr>
</tbody>
</table>
Notes:

* No fully complete implementation apparent, so differentiation made based on decision making possible and/or implementation importance

** Only since Microsoft Office 2013 subject to documented deviations

*** A project to improve OOOXML support in LibreOffice and Apache OpenOffice is currently in progress with the support of local European administrations

**** Not for OS X

***** RTF and TXT only relevant for document fragments

In general, ODF 1.0, 1.1 and 1.2 can be read by current versions of OpenOffice, LibreOffice and Microsoft Office. OpenOffice and LibreOffice write out ODF 1.2 by default. MS Office 2013 also writes out ODF 1.2, though Office 2010 and 2007 write out ODF 1.1.

OOXML is less clear. The strict/transitional differentiation has lost much clarity since Microsoft has amended ISO/IEC 29500 in JTC1 to reduce the difference between the two, undoing some of the improvements made at the BRM. Also, Office 2013 claims to support both. The enhancements Microsoft made to their applications in Office 2010 and Office 2013, although they lead to changes to the file format, have not lead to a revision of the OOXML standard. So Microsoft has evolved Office with proprietary extensions to OOXML. The ISO OOXML has been left behind, reflecting Office 2007 functionality. Although Microsoft does provide documentation on their website for the enhancements made in Office 2010 and Office 2013, this is done outside of the standardization process, without consultation, without a consensus standards approval process.

The other issue is that of extensions to the standard with application specific elements - in particular macros. Interoperability by standardisation cannot be completely achieved if such extensions are used. However the practice is questionable - binding programmatic elements to the data is such a way is poor practice. A document led solution with embedded programs should be questioned as to whether it is the most appropriate approach not least as it often avoid change controls, access controls and consistency checking easily available with alternative solutions. In the ultimate analysis dependency on such extension means lock in to the application and the platform that supports it and interoperability becomes synonymous with a homogeneous solution.

7. Experience and Decisions Taken Elsewhere

In this section we both analyse the wider European implications and experience, and, where available, global experiences in use of document formats, recording decisions taken at a national level, and our perception of the current implementation of that usage.

European Institutions

1. The European Commission published in 2013 its Guidelines ‘Against lock-in: building open ICT systems by making better use of standards in public procurement’. Included within it was a reference to potential deficiencies within three formally approved document formats. “Furthermore, while standards set by formal standard-setting organisations go through a formal development process, they may not contain all information needed for general implementation. Example: ISO/IEC 29500, ISO/IEC 26300 and ISO 32000 for document formats reference information that is not accessible by all parties (references to proprietary technology and brand names, incomplete scope or dead web links). This can have an effect on the interoperability of products implementing the standard, if the missing information cannot be found outside of the standard.”

The need for completeness to ensure transparency, independence, and successful avoidance of lock-in is well made. However, OFE who alongside other organisations had seen immediate prior versions and presentation of the document, were surprised at the late inclusion of ISO 26300 within this list. OFE was among a number, including we understand OASIS themselves, who asked for clarification of the comment. The Commission’s analysis on ISO 26300 appears to be either incorrect, or at worst has been superseded by later updates from OASIS of ODF.
2. Very recently in response to a set of questions placed by MEP Amelia Andersdotter, Vice President Maroš Šefčovič, the Commissioner responsible responded confirming support for both OOpenXML and ODF in their external exchanges. The questions and responses are notable because of the change in attitudes over the last three years as awareness of openness and transparency. MEP Andersdotter questioned:

In 2010 the Inter-Institutional Committee for Informatics held a meeting about the current situation of, and the future strategies for, the office automation platforms used by the institutions. This led to a report, published in 2011\(^2\), in which it was made clear that the preferred document exchange format among the European institutions was OXML, a document format developed by Microsoft and adopted as a formal standard by the International Standards Organisation in 2008.

1. How does the Commission reconcile its endeavour to counteract vendor lock-in with its explicit preference for a standard which is only fully implemented in the software of one dominant software vendor\(^3\)?

2. What policies has or will the Commission put in place to ensure effective interoperability in the exchange of editable documents with other public administrations that choose to use a standard other than OOpenXML?

Vice President Šefčovič replied:

The report of the Inter-Institutional Committee for Informatics (IICI) to which the Honourable Member refers sets out a common approach on document formats around two axes:

1. internal (i.e. interinstitutional) / external exchanges; and

2. non-revisable / revisable documents

The recommendation mentioned in the question is limited specifically to internal exchanges of revisable documents. It is aimed at controlling expenditure by identifying the most cost-effective solution. However, as stated explicitly in the report, for exchanges with the external world (including citizens and other public administrations) the approach is clearly open. While non-revisable formats\(^4\) should be preferred as a general rule, whenever revisable documents have to be used, the IICI recommended the EU institutions to support:

— as a minimum requirement, the two existing ISO standards (i.e. ODF\(^2\) and OOpenXML\(^9\)); and

— on a best effort basis, other widely used formats.

The Commission can confirm that it has implemented all of the recommendations issued by the IICI. Hence, it can already support ODF, OOpenXML and other widely used document formats in its exchanges with citizens and national administrations. There is therefore no lock-in effect whatsoever, and indeed no contradiction with the Commission's strategy on interoperability.

In response to press enquiries OFE has commented “it is a missed opportunity for the EU to lead by example. Generally, selecting a single, open standard is the best way to achieve interoperability and unrestricted re-use of public documents. In our experience, ODF is not always fully supported by the European institutions in their external exchanges. For instance, EC public consultations are sometimes only released and/or answerable in PDF and Microsoft's version of OOpenXML. In such cases, ODF is supported only upon request and the documents may contain formatting errors. This is a problem for citizens and public administrations that choose to use an open standard for document editing.” It draws attention to inherent problems on working internally in one format and relying on translators for external communication.

National Government Adoption

Elsewhere there have been substantial discussion and action at member state level. Care, however, needs to be taken in differentiating between Policy decisions taken and the degree of take up at an implementation level. The following is a short extract from EU countries who, to our knowledge, have made strategic decisions in respect of Document Formats.

**Belgium**: A memorandum on the use of open standards for creating and exchanging office documents was approved by Belgium's federal Council of Ministers in June 2006. ODF was proposed as the standard for
exchanging office documents such as texts, spreadsheets, presentations between federal public services (but not internally). Since September 2007, every federal government department has to be able to accept and read ODF documents. This choice is non-exclusive; the use of other standards is possible as long as they are recognised by ISO, multiple implementations exist and they are compatible with previous standard(s).

**Croatia :** Government agencies are required to make each government form posted on a public website “accessible in a way that makes it legible in accessible freeware applications”; Options for meeting this requirement include ODF, PDF, HTML.

**Denmark :** The Danish Parliament decided on a set of rules to which open document formats must adhere if they are to be used by state authorities from April 2011. Government entities are required to accept ODF and OOXML “data-processing documents” created by the public, businesses, and other governmental units. Government entities are permitted to refrain from implementing the new OOXML and ODF standard if doing so would incur “additional costs or inconveniences” or raise “IT security concerns”.

**France :** Government agencies are required to:
- Use and accept documents submitted in XML formats: both ODF and OOXML are listed as options;
- Use PDF/A to preserve text documents.

**Germany :** In December 2008 the German Information Technology Council (Rat der IT-Beauftragten), announced that from 2010, all state departments would be required to support ODF (non-exclusively) in order to communicate with the growing number of individuals and organisations that use it. However, a study conducted in 2010 showed that these rules were not followed by most departments.

**Italy :** Both OOXML and ODF 1.0 are recognised by the Italian standardization organization UNI.

**Netherlands :** Since 2008 ODF is included in the 'comply or explain'-list with open standards from the Dutch Standardisation Forum/Board for the scope of “editable documents”. In 2012 ODF 1.0 was updated with version 1.2. On the list are also some other open document formats like PDF/A for non-editable documents, i.e. publications.

“Comply and explain” is defined as follows:
1. When an ICT service or ICT product is acquired for an area of application included in the list published on the website www.forumstandaardisatie.nl, an ICT service or ICT product that uses an open standard listed for the area of application in question shall be chosen.
2. Paragraph 1 may be deviated from if such a service or product is not expected to be available to a sufficient extent or to operate sufficiently securely or reliably, or for other pressing reasons.
3. Deviations from paragraph 1 shall be noted and justified in the departmental records, except in cases where ICT services or ICT products are purchased for operational military use.”

In addition to the update to version 1.2 the Dutch Standardisation Forum/Board reaffirmed that citizens and corporations may demand from a government organisation to use ODF when delivering an Office-file and that they have the right to use ODF themselves when delivering an Office-file to a government organisation. So, government organisations are obliged to be able to read and write ODF, but they are not obliged to exclusively use ODF.

**Poland :** From 2005, public administrations are required to support all formats referenced in Poland's National Interoperability Framework. ODF was initially set as the default read-write format to be used by the administration (Microsoft's old binary formats allowable only to read). Under the new Framework released in 2012 both ODF and OOXML are accepted.

**Portugal :** In 2008, the Portuguese Parliament discussed a bill proposed by the Communist Party determining that the adoption of open standard formats – namely ODF for editable documents – shall be mandatory within all public administration agencies. On 21 June 2011, the government published a law on Open Standards mandating support for ODF 1.1 in all public administrations. OOXML is not mentioned in the law. On 8 November 2012, the list of mandatory standards was published: ODF is the chosen open standard for editable documents and will become mandatory from July 2014.
**Slovakia**: Since [October 2008](#), public authorities have to support PDF, RTF, ODF.

**Slovenia**: Since [December 2013](#), public administrations have to use either ODF 1.2, RTF or Microsoft Office Binary File Format (versions compatible with MS office collections XP/2003 or older) for revisable documents. However as long as the documents are internally circulated, these can be in any format as long as all parties involved agree on it. The document also states that there is currently no consensus at EU level on a single format but that the more popular ones are ODF (“candidate for the standard format”), PDF and formats compatible with MS office collections XP/2003.

**Spain**: Under [Spanish law](#), documents from public administration provided to citizens or other public administrations must be “at least provided under open standards”. Exclusive use of proprietary standards is only possible if “no open standard can fulfil a functionality”. An open standard is defined by Spanish law as “public, available for free or in a way it doesn't constitute a difficulty for access. Its use and implementation is not dependent on royalty fees.” Following [law 11/2007](#), a [catalogue of standards](#) was published, stating that both ODF versions 1.0 through 1.2 should be supported by public administrations, along with Strict Open XML.

**Sweden**: A [Directive of the Swedish Government](#) from 2009 states that “administrative e-services should, as far as possible, be based on open standards and use software based on open source software and solutions that progressively frees management from reliance on individual platforms and solutions”.

### 8. Conclusions

- Document Formats present potentially the single most challenging area for adoption of Open Standards and it is vital that UKG 'stand up to be counted' in its implementation of the Open Standards Principles.
- Breaking the stranglehold held by proprietary based application providers is a major milestone in UK Government's approach to the use of Open Standards.
- There is a need to clearly differentiate between the choice of standard as opposed to any criteria that affects procurement of a specific application. Any true open standard is adoptable by any vendor and most applications already support the key candidate standards to a sufficient level.
- OFE can not identify any reason why the introduction of new technologies, new business models (e.g. Cloud services), or an increased focus on 'Digital by Default' should change the Open Standards Principles policy.
- In general competing standards that interfere with interoperability should be avoided.
- There are no clear signs that either ODF or OOXML has a decisive market advantage that is convincing to users and vendors alike. The development community is weary of slow uptake and progress. A long term vision for document management needs to be restated and reinvigorated.
- Decisions made under Public Procurement choices will, we believe, prove long term to be the market changer.
- Compared to OOXML, ODF has clear superiority in terms of independence from proprietary influence or dependency on proprietary technology.
- Microsoft Office supports "Microsoft OOXML" which bears a complex but not very useful relationship to the ISO standard.
- There is a clear forward plan to the next version of ODF that stakeholders can obtain and influence, there is no such transparency to the future of OOXML.
ANNEX 1  UKG Definition of an Open Standard - Annex 2 of the Open Standards Principles

Open Standard - definition

Open standards for software interoperability, data and document formats, which exhibit all of the following criteria, are considered consistent with this policy:

Collaboration - the standard is maintained through a collaborative decision-making process that is consensus based and independent of any individual supplier. Involvement in the development and maintenance of the standard is accessible to all interested parties.

Transparency - the decision-making process is transparent and a publicly accessible review by subject matter experts is part of the process.

Due process - the standard is adopted by a specification or standardisation organisation, or a forum or consortium with a feedback and ratification process to ensure quality.

Fair access - the standard is published, thoroughly documented and publicly available at zero or low cost.

Market support - other than in the context of creating innovative solutions, the standard is mature, supported by the market and demonstrates platform, application and vendor independence.

Rights - rights essential to implementation of the standard, and for interfacing with other implementations which have adopted that same standard, are licensed on a royalty free basis that is compatible with both open source and proprietary licensed solutions. These rights should be irrevocable unless there is a breach of licence conditions

ANNEX 2  OFE DISCLAIMER

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