

At its meeting of 6 December 2006, the PEGSCO (Pan-European eGovernment Services Committee)

- recognising the special responsibility of the European public sector to ensure the accessibility of its information,
- with a view to rationalising and facilitating the interactions with business and citizens,
- with the intention to unlock the information contained in public sector documents,
- taking into account the importance of the public sector as buyer of IT services and products,

endorsed the following recommendations supported by the IDABC Expert Group on Interoperability and by the PEGSCO Technical Working Group (TWG).

Conclusions and recommendations on Open Document Formats

1. BACKGROUND: OPEN DOCUMENT EXCHANGE FORMATS FOR PUBLIC ADMINISTRATIONS

Communications between the public sector and citizens, businesses and other administrations are frequently document-based. Being able to exchange documents electronically between independent communication partners is therefore of paramount importance for European public administrations. Because of its special role in society the public sector must avoid to impose upon its communication partners the use of specific products, thus allowing these partners the freedom of choice.

As public administrations also have an obligation to maintain archives for future use, access to the information contained in documents must be ensured over long periods of time.

Therefore, there is a common understanding among public administrations in Europe that electronic document exchange and storage should rely on open document formats. Such formats are to be defined in a process open to all interested parties and to be available for all interested and competent actors to implement without restrictions. Using such formats provides public administrations, businesses and citizens with a wide range of products capable of reading, writing and manipulating documents while stimulating competition and innovation in the area of document handling.

Preferably, these open document exchange and storage formats would be subject to formal standardisation via international standardisation procedures.

2. OBJECTIVE: UPDATING THE TAC RECOMMENDATIONS FROM 2004

The IDABC¹ programme is a European Community programme the objective of which is to identify, support and promote the development and establishment of pan-European eGovernment services and the underlying networks supporting the Member States and the Community in the implementation, within their respective areas of competence, of Community policies and activities, achieving substantial benefits for public administrations, businesses and citizens. The IDABC programme is the successor of the IDA² and IDA II programmes.

In its meeting of 25 May 2004, the IDA II management committee, composed of representatives of the Member States and advising the Commission on the implementation of the programme³, endorsed a set of "Conclusions and Recommendations on Open Document Formats"⁴, further referred to as "the TAC Recommendations"

The TAC Recommendations advised the public sector to avoid imposing specific products on its communication partners and recommended the use of open document exchange formats. For revisable documents XML-based formats were recommended as they allow the separation of content, structure, semantics and presentation and as they can be handled by a wide range of applications.

The TAC Recommendations called upon industry to provide applications based on open document exchange formats that would allow electronic documents to be exchanged without restrictions among authorities, and between authorities, citizens and businesses. They welcomed the work of OASIS⁵ on the standardisation of the Open Office document formats and invited industry to join the initiative. The TAC recommendations also pleaded for the submission of the emerging OASIS Open Document Format to an official standardisation organisation such as the International Organization for Standardization (ISO). In addition, the TAC urged Microsoft to publish and provide non-discriminatory access to future versions of its Office document specifications and to consider submitting these specifications to an international standards body of its choice.

Finally, the recommendations encouraged the public sector to provide its information using several formats. Where by choice or circumstance only a single revisable document format can be used, this should be a format on which there is industry consensus, as demonstrated by the format's adoption as a standard.

¹ Interactive delivery of pan-European eGovernment services to public administrations, business and citizens

² Interchange of data between administrations

³ the TAC – Telematics between Administrations Committee

⁴ <http://ec.europa.eu/idabc/en/document/2592/5588>

⁵ Organization for the Advancement of Structured Information Standards

3. PROGRESS MADE: ACHIEVEMENTS IN STANDARDISATION

Recent developments are encouraging as industry has undertaken great efforts to address the requirements stated in the TAC Recommendations (and taken over by many other public sector organisations).

- 3.1. In May 2005 OASIS adopted an XML-based open document specification⁶. OASIS offered this specification for international standardisation via the ISO "fast track" procedure in November 2005. On 30 November 2006, the ISO/IEC standard for an "Open Document Format for Office Applications" (ISO/IEC 26300) has been published⁷. A growing number of products supporting the standard are becoming available⁸.
- 3.2. Microsoft has adopted a "pure" XML format to be used with the Office 12 product suite and submitted its OpenXML specification to ECMA⁹ in December 2005¹⁰. Work in the relevant technical workgroup has finished¹¹ and the ECMA International General Assembly has approved the result of its work. ECMA will offer the specification for international standardisation via the ISO "fast track" procedure. This standardisation effort gives competitors of Microsoft the possibility to include support of the OpenXML document format in their products.
- 3.3. Both the ODF (OASIS) and the OpenXML (ECMA) specifications are freely available on the web and the main contributors to both specifications (respectively Sun and Microsoft) have assured that the specifications can be implemented by any interested party, including open-source developers, without additional obligations and/or costs.
- 3.4. Both the ODF and the OpenXML document format specifications are XML based, promising great opportunities to explore the information contained in documents via tools other than traditional office suites. Examples of such exploration include indexing of document collections, automatic extraction of metadata from documents, search-engines, extraction of specific information for re-use, etc.
- 3.5. Various teams, including a team supported by Microsoft, have announced that they are developing open source plug-ins for the Microsoft Office suite,

⁶ ODF: Open Document Format

⁷ See <http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=43485&scopelist=PROGRAMME>

⁸ See <http://opendocumentfellowship.org/applications>

⁹ Ecma International, see <http://www.ecma-international.org/default.htm>

¹⁰ See <http://www.microsoft.com/presspass/press/2005/nov05/11-21EcmaPR.mspx>, <http://www.microsoft.com/office/xml/ecmaletter.mspx> and <http://www.microsoft.com/office/xml/covenant.mspx> for more information

¹¹ See http://www.ecma-international.org/news/TC45_current_work/TC45-2006-50_final_draft.htm

facilitating interoperability between the OpenXML and ODF document formats.

- 3.6. Another development is the adoption, by ISO/TC171-SC2 (Document management applications –Application issues) of ISO 19005: "Document management – Electronic document file format for long term conservation – Part 1, Use of PDF 1.4 (PDF/A1)"¹². PDF/A is a non-revisable document format that can be used for documents that need no further processing or edition. While there are plenty of products capable of displaying PDF/A products, there are only few products that can generate documents in PDF/A format on the market today.

4. PROGRESS MADE: ACTIVITIES IN PUBLIC ADMINISTRATIONS

- 4.1. Document formats continue to be high on the policy agenda of the public sector. Following the publication of the TAC Recommendations, the directors general responsible for public administration of the EU stated in their November 2004 recommendations that "The Directors General in particular welcome the Commission's initiative with regard to the open document format and agree to stimulate the use of the open document format within the member states, once it has been further developed."¹³
- 4.2. A 2005 report of the United Nations' Joint Inspection Unit proposed as principle that "All Member States and other stakeholders should have the right to access public information made available in electronic format by organizations and no one should be obliged to acquire a particular software in order to exercise such a right."¹⁴
- 4.3. Several Member States have enshrined the use of open document exchange format standards in their national IT strategies or interoperability frameworks.¹⁵

¹² See <http://www.iso.org/iso/en/commcentre/pressreleases/2005/Ref974.html>

¹³ See <http://www.eupan.org/index.asp?option=documents§ion=details&id=35>

¹⁴ See <http://www.unjiu.org/en/reports.htm>

¹⁵ In Italy, the committee set up by the ministerial decree recommended that public administrations use at least one open document format:

http://www.cnipa.gov.it/site/it-IT/Aree_operative/Infrastrutture_nazionali_condivise/Utilizzo_Open_Source/

In France the strategic plan for eGovernment states that "*open document format standards must be available to ensure that a document can be processed from creation to archiving without loss of format.*" http://www.adae.gouv.fr/IMG/pdf/Le_plan_strategique-GB.pdf

In Spain, a national interoperability framework established public sector requirements on document formats: "Se deben utilizar normas y estándares, disponibles públicamente, de derecho y especificaciones públicas libres de royalties y patentes."

<http://www.csi.map.es/csi/criterios/pdf/criterios.pdf>

- 4.4. Some administrations went one step further, reacting to the completion of the OASIS standardization process by mandating the use of the OASIS ODF format. Belgium's Federal Council of Ministers approved a memorandum in June 2006 indicating that from September 2008 on, all document exchanges within the services of the Belgian federal administrations will have to be in an open standard format. ODF – preferably ISO 26300 – is so far the only accepted standard in the proposal.¹⁶ The government of the Region of Extremadura announced the migration of all desktops in its administration to the ODF standard in August 2006.¹⁷ In Denmark, the Parliament adopted on June 2 2006 a resolution on the use of open standards in which "Parliament asks the government to ensure that the use of information technology, including software, within public authorities be based upon open standards, starting January 1 2008 or when it is technologically feasible". A report with a detailed interpretation of the parliament resolution was published in August 2006¹⁸.
- 4.5. The worldwide broadest attention attracted the decision (in September 2005) of the Commonwealth of Massachusetts (USA) to make OASIS ODF and PDF mandatory for its public administration.¹⁹
- 4.6. The existence of international standards²⁰ will clearly facilitate the procurement of products and the use of open document exchange and storage formats. Some Member States have already announced their intention to implement the ISO 26300 standard once it would become available.²¹

5. PROBLEMS TO BE SOLVED

Despite these favourable developments the situation remains worrying from the viewpoint of European public administrations.

Member State experts have identified the perceived compatibility problems between ISO 26300 (ODF) based products and the commercial applications that dominate the offices of today's administrations as the main barrier for the use open document

Also in Spain, the Council of the Government of the Region of Extremadura has adopted the mandatory use of ODF for administrative documents.

http://www.linex.org/mocion_consejo_gobierno.pdf

¹⁶ See <http://presscenter.org/archive/other/2648eda677208241081d4d8e02c22975/?lang=en>

¹⁷ See <http://www.techworld.com/applications/news/index.cfm?newsID=6558>

¹⁸ See <http://itst.dk/static/Publikationer/rapporter/interoperabilitet/>. An English version is available on http://itst.dk/static/Publikationer/rapporter/interoperabilitet_EN%20.pdf

¹⁹ See http://www.mass.gov/?pageID=itdmodulechunk&&L=3&L0=Home&L1=Open+Initiatives&L2=OpenDocument&sid=Aitd&b=terminalcontent&f=accessibility_odf_accessibility_midyear_itr&csid=Aitd

²⁰ as defined in Directive 98/34

²¹ See <http://presscenter.org/archive/other/2648eda677208241081d4d8e02c22975/?lang=en>

exchange and storage formats. The potential arrival of a second international standard for revisable documents may mean that administrations will be required to support multiple formats leading to more complexity and increased costs. Although filters, translators and plug-ins may theoretically enable interoperability, experience shows that multiple transformations of formats may lead to problems, especially as there is no complete mapping between all features of each of the different standards.

Technical experts that are familiar with both standards also indicate that there remain, for each of the two standards, a number of technical problems to be solved.

6. RECOMMENDATIONS

In view of the present situation, public administrations are invited:

- 6.1. To make maximal use of internationally standardized open document exchange and storage formats for internal and external communication;
- 6.2. To use only formats that can be handled by a variety of products, avoiding in this way to force the use of specific products on their correspondents. When the usage of proprietary formats is unavoidable, alternative, internationally standardized open formats shall be provided in addition to proprietary formats;
- 6.3. To adapt, where appropriate, national guidelines and regulations, taking into account the arrival of international standards in this area;
- 6.4. To consider the definition of minimum requirements in regard to the functionalities of open document exchange formats in view of pursuing the compatibility of applications;
- 6.5. To create guidelines for the use of revisable and non-revisable document exchange and storage formats for different purposes.

Industry, industry consortia and international standardisation bodies are invited:

- 6.6. To work together towards one international open document standard, acceptable to all, for revisable and non-revisable documents respectively;
- 6.7. To develop, applications that can handle all relevant international standards, leaving the choice to their customers as to what format will be used "by default";
- 6.8. To avoid invalidating the purpose of open document exchange and storage formats by offering extensions to the relevant international standards as default formats.
- 6.9. To make proposals for conformance testing and to develop adequate tools in order to safeguard interoperability between applications;
- 6.10. To continue to improve the existing standards, also taking into account additional needs such as electronically signed documents.