

## CASE STUDY: OASIS

### Draft 2009-05-05 (Mattias Ganslandt, Jonas Andreasson and Martin Sutinen)

*Work in progress, comments most welcome!*

#### Brief facts about OASIS

*Webpage*

[www.oasis-open.org](http://www.oasis-open.org)

*Organization tagline*

OASIS is a vendor-driven SSO with the goal to create open standards

*Main standardization areas*

Mainly web-related standards

*Best known standards*

[Various XML extensions](#), [ODF](#)

*Classification*

Non-formal with an open process

*Does the SSO have any explicit or implicit policy relating to interoperability?*

OASIS goal is to create open standards. This will be difficult to achieve without interoperability. OASIS does not state interoperability as a specific goal but based on its mission this should have to be important. Interoperability is often specifically recognized for specific standards like XML and ODF.

*Is there an explicit strategy to facilitate or contribute to interoperability?*

OASIS provides interoperability demonstrations at trade shows. For the XML standard and others there are several additional practices in place to encourage interoperability which are provided by the [OASIS Cover Pages](#).

*Procedures for testing of a proposed/developed standard with respect to interoperability and backward compatibility?*

OASIS does not provide tests, nor does it take upon itself to ensure backwards compatibility. The open process of the OASIS development however might facilitate interoperability since it allows for many stakeholders to participate.

*What are the procedures (internal or external) for implementation?*

OASIS issues Conformance Clauses that guides implementation, inspired from [W3C](#) and [IETF](#).

*How is compliance enforced and what are the consequences of defections and deviations from the standard?*

OASIS does not enforce compliance to standards. It is not certain that there would be any consequences from not complying with standards.

*Did the SSO develop competing standards for the same or similar type of technical problem?*  
The ODF standard is a direct competitor to the Microsoft originated [ECMA](#) standard [OOXML](#).

*What is the value of interoperability in the specific area in which the SSO is active?*  
Interoperability is somewhat less since OASIS standards builds upon baseline standards and does not define them.

*What is the value of selection and conformity in the specific area in which the SSO is active?*  
With the possibilities of translations between different standards there is less value in selection. The fact that there are competing standards from different organizations and companies means that conformance will not be a core value.

## Standardization Process

- Organization for the Advancement of Structured Information Standards (OASIS) has been active in standardization since 1993 and has 5000 participants from 600 organizations.
- The focus of OASIS covers several areas, for example SOA, Web services and e-commerce. OASIS has so far published 65 standards.
- Any organization and individual is welcomed as a member.
- There are three levels of membership which relate to the level of recognition and beneficial services the members receive. There are also associate and individual membership classes. The dues range from 1 100 to 50 000 USD depending on the number of employees and the desired level of recognition. Associate and individual membership has a flat rate of 300 USD.
- Any member may participate in working groups but individual and associate members have no voting rights. Approval of a standard in the General Assembly requires that there are no more than 25 percent negative votes and that at least 15 percent of the voting base provides a positive vote. Decisions can be appealed based on procedural, but not technical, grounds.
- All documentation, standards, minutes and votes on standards are publicly available free of charge.
- A group of at least five members, of which at least two are voting, can submit a request for initiating a new Technical Committee. The submission will be reviewed by the TC Administrator and evaluated against set requirements. The submission might be disavowed or approved. In case of disavowal the members have a right to resubmit their application with changes as pointed out by the TC Administrator. In the application the TC sets its IPR mode, which is binding.

## Improvement activities

- OASIS have taken steps to make the Technical Advisory Board more involved by allowing them to provide feedback to Committees prior to Committee drafts and by making them more

approachable by third parties for general questions. OASIS also recently reduced the fees of members with few employees.

- Public review is required for advancing a standard from a Committee draft to a Committee specification.
- OASIS mission is to further the adoption, development and convergence of open standards.
- OASIS recognizes several goals which are necessary to achieve the overall purpose of the organization. First, there is call for adaption and alignment of the OASIS structure to the organizational needs. Second, OASIS strives to increase its global presence and participation. Third, there is need to improve the support for the standard lifecycle. Finally, OASIS shall increase collaboration with policy makers to increase acceptance of OASIS standards and work processes.

## Interoperability

- OASIS allows each working group to choose from one out of three different IPR strategies. These three are RAND, RF and RF with limited terms. The choice of the working group is binding on all technologies used in the standard. Copyright is retained by OASIS, who in turn gives rights to freely copy and distribute material provided that the copyright notice is included.
- All members participating in a technical committee is requested to disclose all known patents and patent applications owned or claimed by them. Participants are also encouraged to disclose known third party IPR in case they are legally entitled to do so.
- Testing, validation and certification is no longer offered as of June 2008. Cases studies of implementations and showcase implementations at fairs and conferences are available. OASIS also requires that conformance clauses, which stipulate requirements to be fulfilled for conformance to specifications, are incorporated into standards.
- Interoperability is one of the foci of OASIS and several of the organizations activities are focused on helping implementers to achieve interoperability.

## Case study

Organization for the Advancement of Structured Information Standards (OASIS) was formed in 1993 under the name of SGML Open to function as a trade organization of vendors for promoting the Standard Generalized Markup Language.

The organization as well as its area of activities has grown considerably and the change of names in 1998 reflected the expanded and changed focus, primarily to XML (eXtensible Markup Language). The activities have also shifted from promotion to development of technical specifications and open standards for web services. Today, OASIS is a not-for-profit consortium with more than 5000 participants from more than 600 organizations, setting standards within a range of areas such as security, e-business and other application-specific markets.

The membership structure in OASIS builds upon the notion that anyone who is affected by open standards shall have the opportunity to participate in the development of them. Three different levels of

membership status exist, but the status of a member mainly affects the level of recognition given to the member, for example by representation in fairs and press releases. The annual membership fee ranges from 1 100 USD up to 50 000 USD depending on the membership level as well as the size of the organization. Individual and associate-level memberships are also available at a fee of 300 USD, but these do not grant the right to vote on the approval of a standard or the election of the board. These membership levels exist to allow the participation of self-employed consultants or unaffiliated researchers in the development process. The OASIS board of directors and the technical advisory board are both elected in a democratic process, with the members serving as individuals on two-year terms.

The development of standards is conducted in technical committees, which can be formed by a group of members and in which every member is entitled to participate. Within a committee, a simple majority vote is needed for the advancement of a draft. However, the advancement of a Committee Draft to a Committee Specification requires public review. Once the review period has passed the committee may propose the further advancement of a specification to an OASIS Standard. This is approved in a ballot with all eligible OASIS members. If more than 25 percent of the members lay negative votes or if less than 15 percent of the member base provides a positive vote the vote is deemed to have failed. The result of all ballots, with the vote of each member specified, is published on the OASIS web page. Once a submission has passed members cannot appeal based on technical specifications. However, appeals concerning the procedures in a technical committee can be submitted to a committee administrator, and the board of directors may in turn remedy complaints about the actions of an administrator.

A technical committee may continue to develop an existing standard after it has been passed as an OASIS Standard, something which usually is done. An overview of the standards reveals that within a few years a new version of a standard is typically approved. This is expected considering the quick technological advancements in the relevant industries. However, OASIS does not have any governance over standards once they are approved, regarding for example support of the standard like many other standards development organizations do. OASIS offer validation and certification of implementations though through OASIS Adoption Services as a third party service. Additionally, various case studies of implementations are published online and the interoperability of implementations are demonstrated at fairs and conferences.

All documentation, not only the standard specifications, from the technical committees and steering groups is published online. Anyone participating in a technical committee transfers the intellectual property rights of their contributions to OASIS under irrevocable, non-exclusive, royalty-free and worldwide terms. OASIS in turn grants anyone permission to freely copy and distribute all such documents as long as OASIS' copyright notice is included.

Everyone participating in the work of a technical committee is requested to in writing disclose to OASIS all patents or patent applications owned or claimed by them. Each committee, in its charter, has to pick one of three IPR models which it will operate under and which will govern how licensing terms must be offered for disclosed patents. The first model is worldwide, non-exclusive licenses on Reasonable and Non-Discriminatory (RAND) terms. The second model is royalty-free RAND terms, and the third model is

royalty-free on Limited Terms. Hence OASIS Standards might be approved where the implementation of the standard requires something protected by third party IPR, making implementation impossible in open source applications.

OASIS produces more standards for Web services than any other organization and among its members are several of the world's most influential ICT corporations. The highest level of members includes for example [IBM](#), [Microsoft](#), [Oracle](#) and [Sun](#), and the board contains members from for example [Fujitsu](#), [Hitachi](#), [Nokia](#), [Nortel](#) and [SAP](#). OASIS also actively cooperates with several other standards development organizations. For example, OASIS produced five specifications for [Electronic Business using eXtensible Markup Language \(ebXML\)](#) in cooperation with the [United Nations](#), which were later adopted as the ISO 15 000 standard. The ebXML is a family of standards based upon XML which enables global electronic business.

Another important standard developed by OASIS, and still under further development, is the OpenDocument format (ODF), a standard for electronic documents which builds upon XML and was first approved by OASIS in 2005 and later adopted as an ISO standard. The standard is based on work done by [OpenOffice.org](#), which in turn is based upon development by Sun Microsystems. This standard is competing with the Office Open XML standard from Ecma International, which is based on a format developed by Microsoft for their Microsoft Office 2007 suite. However, in 2008 Microsoft joined the OASIS technical committee for further development of the ODF standard and Microsoft will offer full support of the ODF standard in service pack 2 for Microsoft Office 2007.

### Key success factors

- The somewhat unorthodox practice of not supporting standards once they are passed creates incentives to submit preferred standards to other SDOs for a formal support. This drives the adoption of standards as well as giving incentives to participants to remain at vigil in the development process and makes swift changes due to technological progress more applicable.
- While not officially supporting approved standards OASIS provide several services related to passed standards. The mixture of allowing for openness in the development as well as regular services of approved standards puts a focus on implementation of standards which in turn will help to build adoption.
- The possibility of producing standards under three different IPR disclosure agreements provides flexibility in the development process which many other SDOs lack.
- OASIS is backed by almost all of the top tier ICT companies in the world a therefore receives a widespread recognition.
- In March 2009, OASIS decreased the membership dues for small organizational members. This is a step towards lowering the entry barriers for small sponsors to the organization. OASIS has also made minor changes to the duties of the Technical Advisory Board. These changes are supposed to increase TAB participation by allowing it to provide feedback to TCs prior to Committee drafts and by providing a new channel called "Ask The TAB" for questions regarding the technical work of TCs.