**UNIT 2**

## Introduction to Governance

### *What is IT Governance?*

Governance is the set of organizational regulations and standards exercised by management to provide strategic direction and ensure that objectives are achieved, risks are managed appropriately, and resources are used responsibly” **--Department of Justice**

Simply to say, it’s a defining structure around how organizations align IT strategy with business strategy, ensuring that companies stay on track to achieve their strategies and goals, and implementing good ways to measure IT’s performance. It makes sure that all stakeholders’ interests are taken into account and that processes provide measurable results.

An IT governance framework should answer some key questions, such as how the IT department is functioning overall, what key metrics management needs and what return IT is giving back to the business from the investment it’s making

For example, if something is free, it doesn’t mean that it has no cost. “Companies must have a policy for procuring Open Source Software, choosing which applications will be supported by Open Source Software, and isolating the intellectual property risk or supportability risk related to using Open Source Software. When the policy is in place, then there must be a governance process to enforce it.”

### Open Source Governance

Open source governance is the way an organization controls the use of Open Source Software within their products and services, supply chains and business management activities, and the associated business and legal processes. This system of management is used to ensure compliance, and is a closed-loop process that monitors the state of a system and reports if it’s meeting its goals.

Open source governance is part of the broader category of IT governance which, according to the IT Governance Institute, helps ensure that IT supports business goals, maximizes business investment in IT, and appropriately manages IT-related risks and opportunities.

For most IT organizations, the acquisition of open source software, external code that is acquired and integrated with internal and other code, has been mostly uncontrolled. Developers enjoy the freedom and creativity of searching the abundance of open source code available on the Internet and using it without a formal acquisition process. But as organizations increasingly rely on external code and open source has grown into a more substantive portion of deployed code, the need for management has grown.

### Need for Open Source Governance & its importance

"Planning complex IT projects involves an array of political, organizational, legal, technical, cultural, and personnel issues best dealt with by a team charged with the responsibility for the successful outcome of those projects” **-- National Archives & Records Administration**

As the use of open source software has grown and matured, the need for open source governance has become an integral part of typical IT development.

There are many frameworks and regulations related to IT, and hence open source governance. COBIT (control objectives for information and related technologies) is one of the well know IT frameworks from ISACA (Information Systems Audit and Control Association). One more framework is ITIL (IT Infrastructure Library), developed on behalf of the British government for best practices with IT service management. Both are useful in designing, planning and implementing open source governance.

Today it may be difficult to find an enterprise that does not use open source software. Open source acceptance and adoption is widespread across many industries, including commercial software development, and it is expanding rapidly. Such a broad adoption is clear, since enterprises want to save money, and want to enjoy the savings while leveraging high quality and flexibility in their IT infrastructure.

Worldwide peer review and open access to source code are seen as major contributors to meeting these objectives. Analysts predict that, over the next few years, the majority of Global 2000 organizations will have formal open source acquisition and management strategies. To many, the “free” availability of open source software would seem like a jackpot. Because the code is available at no cost, developers can select software on an individual basis. Also, the ease with which open source software can be picked up and integrated into products is a big factor in its extensive use. But this “free and easy” world of open source software can rapidly lead to turmoil and an unsustainable situation from both technical as well as legal perspectives. Hence, proper open source software governance is becoming vital to ensure long-term feasibility of open source projects across the enterprise.

## Why open standards?

Open standards are the subject of much discussion, but:

* why are they important?
* what constitutes an ‘open’ standard?
* how can the transition be made to use in practice?
* how open standards are governed ?

### The importance of standards

For organizations, having the means to exchange information efficiently with other organizations is becoming increasingly important. We can refer to this as interoperability, the ability of organizations to Cooperate, in particular by means of electronic information interchange.

In order for interoperability to be achieved, agreements are needed, agreements about the content of the exchanged information, its meaning and the techniques to be used. In some cases, these are specific agreements between two organizations, but more frequently an agreement will apply to a whole industry or a specific general application. In the latter case, the agreement is a standard.

***A standard:***

1. ***is a document, electronic or otherwise, which sets the specifications/ criteria for a product, service or method***
2. ***is created in an organization, consortium or through a recognized standardization organization such as ISO or BIS***
3. ***is generally a process upon which the standard is developed and managed.***

In the context of IT, standards are very important in connecting diverse organizations and their systems with each other:

* When all the organizations work according to the same standard, this has an important network-effect, since a single standard enables communication with a larger group of organizations. As an outcome, the overall value of the network increases considerably.
* This leads to economies of scale for developers and innovative applications for users. By using standards, the developers have direct access to a huge user base, which in turn, decreases the costs for users.

The internet is indeed the most common example. Because there exists standards for web pages and information interchange through internet Protocols, millions of users worldwide are able to communicate and exchange information with one another without any blockades.

### What are open standards?

The use of standards can also lead to adverse effects. For example, if a user uses a supplier-specific standard, they run the risk of becoming dependent on that particular vendor, which will eventually make switching to another vendor difficult, or decrease the number of users with whom they can interchange information. Standards of this kind are also referred to as ‘closed standards’.

While open standards are not affected by these problems,

* The standard must be adopted and maintained by a not-for-profit organization. Additionally, it must be constantly developed on the basis of open decision making available to all interested parties by consensus or majority decision.
* The standard must be published and the standard specification document must be available free of charge or at a nominal fee. Copying, distributionand use of the specifications must be permitted free of charge or at a nominal fee to all parties.
* The IP rights and patents on the standards or parts thereof, must be granted permanently and free of charge
* There should not be any restrictions with respect to reuse of the standard.

Subsequently, open standards have lot of inherent benefits:

* There are no restrictions on the standard’s implementation in new systems, as the specifications are freely available and may be used without restriction. But, in case of closed standard, the user is dependent on the owner of the standard when it comes to making the specifications available and permitting reuse in systems belonging to third parties.
* Although occasionally extra initial implementation costs need to be incurred due to the learning curve. When compared with existing closed standards, the usage costs for an open standard are low, since there are no royalties or license fees.
* There is lot of opportunity for innovation and improvements, as everybody involved can propose changes to the standard. These proposed changes are examined in an transparent way and, after approval, are made available to everyone. Since there are less obstacles concerning use of the standard, it can be adopted more easily in a large number of organizations. This creates a robust network between organizations that are able to exchange information.

As a consequence, a level playing field will be created for everyone who wants to use the standard, preventing any undesired dependency on suppliers (lock-in), and encouraging innovation.

## Governance of Open Standards

Standards and standard setting are universal mechanisms of international governance. States and private entities create standards across a wide range of environments to promote their collective welfare by coordinating and limiting individual behavior. However, international standards play very different roles in different circumstances.

The dictionary meaning of standard is “something that is established by authority, custom, or general consent as a model or example to be followed” (Webster’s). This definition implies more specific meanings, like an authoritative “rule for the measure of quantity, weight, extent, value, or quality,” but there is no clarity on technical behavior.

Here we want to understand the ways in which open standards are created and used. Certainly, very diverse institutional processes are involved in creating, administering and enforcing standards for areas as disparate as software, hardware, mobile phones, pollution and employment practices.

A broad definition of governance could be, “The formal and informal bundles of rules, roles and relationships that define and regulate the social practices of state and non-state actors in international affairs”. The standards and the institutions which create them, administer and enforce are part of governance.

Many international standards emerge and operate within wholly private, market-based governance systems. Other standard setting processes involve formal institutions rather than market forces, but are still coordinated by private actors. Still in many cases, governments ratify and enforce privately created standards and in some scenarios, governments play a central role in setting and maintaining standards. This shows complex flavors of private and public governance. These different ways of governance arises because of the interactions of states, enterprises and other international actors seeking to resolve diverse international issues.

### Standards and Externalities

Externalities are dealt with standards by actors. An *externality*occurs whenever one *actor’s conduct affects the well-being of another*. Familiar examples could be a manufacturing firm that dumps pollutants in a river, decreasing water quality downstream, or factory smoke that fouls residential air that affects others. A technological externality may be a situation where the production function of one firm is favorably or unfavorably affected by the production function of other firms.

In network externality situations, standards are typically produced by the (often private) actors who benefit from interconnectivity (Zacher 1996). Particularly, product standards are formulated by the companies that produce the relevant products and to some extent with contribution by firms that use them. This holds good for products extending from industrial fasteners to telecommunications switches, software, and for services, such as internet communications.

### Governance processes

Two types of governance processes are prevalent in generation of standards.

The first is dispersed and market-based, where individual firms create their own standards, by including/expressing them in their products, and sometimes by publishing specifications, where other firms respond by adopting those standards, modifying them or creating competing standards. This typically leads to coordination on a single standard or a few competing standards. However the process often remains dynamic, for example, we know about the proprietary Windows standard, which appeared to have captured the computer operating system market, but a rejuvenated Apple and Linux (Open standards) have injected new uncertainty.

In the second process, formal organizations are involved, exclusively private and mixed public & private, where firms develop common standards for products and services. The best example is the International Organization for Standardization (whose very acronym is standardized in all languages as “ISO”). ISO is made up of standard setting organizations from over 100 member countries and it is most representative. A majority of these are either government agencies or publicly chartered bodies, but private organizations form the mainstay of ISO.

For example, US representative is the American National Standards Institute (ANSI), a private federation of standard setting organizations. ISO promulgates voluntary standards on thousands of products and services; these are widely observed because of the need for market coordination. Similar organizations, such as the European Committee for Standardization (CEN) and Bureau of Indian standards (BIS) operate regionally.

Normally market standard setting favors large, influential producers. Since, those firms who own key technologies like the Windows operating system, because market strategies maximize their control. Also, the market approach favors those firms that are innovative, as it eliminates the need to obtain institutional approval for new technologies. On the other hand, the institutional approach benefits weak players, like firms that are small or lack in innovation.

The difference between public and private standard setting can be hazy. Since, private producers often dominate public standard setting organizations.

On the other hand, private standards organizations mimic public bodies in their structures and procedures, apparently to increase institutional legitimacy. ISO, for example, prescribes the representative character of national delegations, and its rule-making procedures combine expert committees with plenary approval processes. Like many standards organizations, ISO operates almost exclusively by consensus; other bodies utilize majority or super-majority voting rules.

Governments support and utilize private standard setting in many ways. As regulators, they incorporate private standards into building codes, telecommunication protocols and other rules as a low-cost way of ensuring interconnectivity. As consumers, governments incorporate private product standards into procurement specifications. As promoters of efficient international markets, they support transnational private standard setting. For example, the EU has relied on CEN standards in its program of internal market harmonization. The EU also helped create the producer-dominated European Telecommunications Standards Institute (ETSI) to facilitate harmonization on digital mobile telecom standards.

Private enterprises and governments as well, prefer private standard setting in network externality settings for numerous reasons. The main advantage private actors have is better information regarding production processes, the effects and costs of particular standards, etc. Public bodies can normally have this information only by involving industry representatives. Another advantage is flexibility, when technology is dynamic. Private producers continuously monitor technological and market trends since they have every incentive to modify product standards rapidly in response to change. Also private firms are less hindered by political and procedural constraints. Finally, private producers are best able to ensure that agreed standards are implemented.

Sometimes public and private actors both find exclusive private governance inappropriate and seek public intervention, typically to redress institutional problems.

Sometimes, private actors may be unable to create connectivity and interoperability standards because of conflicting interests, concerns of secrecy or negotiating problems. This type of failure in coordination retards innovation if firms are unwilling to introduce new products without a prevailing standard. Instead, private producers and their governments might be locked into their own technologies that they cling to multiple standards, limiting network economies. At such conditions, intervention by an international private or public organization may ease the deadlock and promote coordination among contending groups.

Secondly, when there exist irregularities within an industry, private standard setting may lead to inferior outcomes. The biggest problem is the dominance of a private monopoly based on a proprietary standard. Case against Microsoft by the US Justice Department’s case is well known. Big players and first movers benefit when standards are set through market actions or competing private standards organizations.

### The choice among governance types

We have seen that no single form of governance can handle all problems effectively, neither no single blend of governance forms is best for all situations. The best combination will vary with each issue that needs to be addressed.

Private governance is effective when network externalities create a need for uniform technology or transaction standards. Since private actors are best positioned to develop and adapt such standards over time and, if standards are open, the network structure works for all. Nonconformities to the pure network externality may necessitate public intervention.

For example, powerful actors may control standard setting, with undesirable effects. In such situations it is necessary to strengthen the position of less developed countries bargaining with multinational firms under privately-created standards. Public monitoring may be needed to safeguard broader representation when standards have significances beyond the immediate network.

### Choosing levels of governance

National, regional or global level governance, which is best?

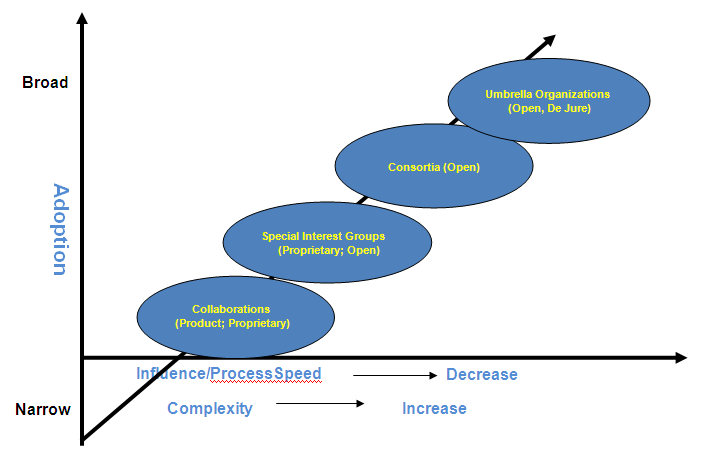
The answer could be found by looking into the European Union principle of “subsidiarity.” In current context, standards should be set and implemented at the lowest level, able to address them effectively, mainly because of concerns for representativeness. But the subsidiarity principle finds that action at higher levels is often applicable, depending on the scope or outcome of the problem or the proposed action. Further that subsidiarity should be interpreted broadly to focus on governance, including private governance and to recognize that effective governance may require the involvement of multiple levels.

International governance can discipline national governance, without replacing it, by applying rules and procedures that serve as checks against the capture of national decision-making by narrow or provincial interests. International forums could provide an opportunity to scrutinize national policies in a setting insulated from national politics, and often governed by rules or norms.

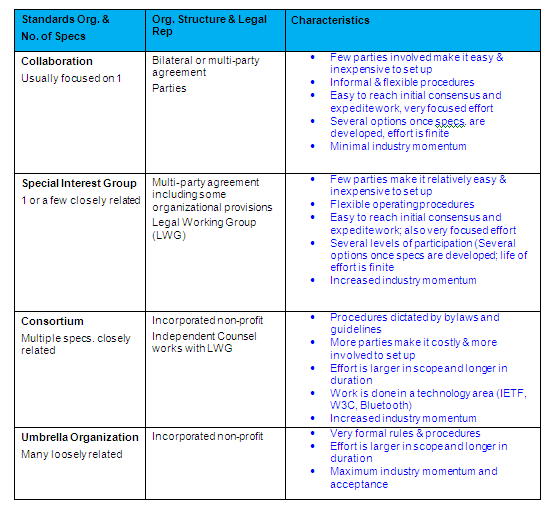
Mixture of international and national governance will be the optimal choice. National institutions have better local knowledge and usually better capacities for combining preferences. International governance institutions bring together transnational expertise and interests, and can force states to face their policy externalities. Each can serve as a check on the other, safeguarding that neither private nor national interests improperly frustrate public and global purposes.

International governance, even as a supplement to national governance is not an easy choice since the underlying issues are often highly distributive and contentious. But standards are one of the important ways by which we organize our society, and that society increasingly transcends national boundaries. Some role for international governance is both inevitable and desirable. That role, however, is best filled by careful combinations of actors and institutions, public and private, national, regional and international, depending on the problem at hand.

The below figure illustrates the types of standard organizations in relation to adoption of standards, their influence & process speed and complexity of technologies handled.



Characteristics of different standard setting organizations:



### Governance Structure of ISO

The three primary governance groups of ISO are:

* **The ISO General Assembly,** which is the annual meeting of all ISO members, and its agenda typically, includes actions relating to the review of the ISO annual report, approval of ISO’s multi-year strategic plan, and ISO’s finances.
* **The ISO Council,** which meets twice a year and is responsible for the development of ISO’s multi-year strategic plan, the development of the ISO annual budget, ISO’s relations with other external organizations, and other political/strategic decisions and the general operations of ISO. The ISO Council consists of the principal officers of ISO and eighteen elected member bodies, including ANSI for the USA. ANSI is one of five permanent members to the ISO Council.
* **The ISO Technical Management Board (ISO/TMB),** which meets three times each year and reports to and advises the ISO Council on all matters concerning the organization, coordination, strategic planning, and programming of the technical work of ISO. The ISO/TMB consists of the ISO Vice President for Technical Management and twelve elected member bodies, including ANSI for the USA. ANSI is one of four permanent members of the ISO TMB.

**ISO Technical Committees and Subcommittees.** ISO standards are developed by technical committees comprising experts from the industrial, technical and business sectors which have asked for the standards, and which subsequently put them to use. These experts may be joined by others with relevant knowledge, such as representatives of government agencies, testing laboratories, consumer associations, environmentalists, academic circles and so on. The experts participate as national delegations, chosen by the ISO national member institute for the country concerned. These delegations are required to represent not just the views of the organizations in which their participating experts work, but of other stakeholders too. According to ISO rules, the member institute is expected to take account of the views of the range of parties interested in the standard under development and to present a consolidated, national consensus position to the technical committee.

### Governance of technical work at ISO

The technical work is carried out under the overall management of the Technical Management Board (TMB). The Technical Management Board reports to the ISO Council and its role is defined in the statutes of the organization.

ISO TMB’s duties could be summarized as follows:

* To report to and, when relevant, advise Council on all matters concerning the organization, coordination, strategic planning, and programming of the technical work of ISO.
* To examine proposals for new fields of ISO technical activity, and to decide on all matters concerning the establishment and dissolution of technical committees.
* On behalf of ISO, to keep the ISO/IEC Directives for the technical work under review, to examine and coordinate all proposals for amendments and to approve appropriate revisions.
* To act, within the framework of established policies relating to the technical work, on the following matters:
  + monitoring of the work of technical committees and project management requirements;
  + approval of titles, scopes and programs of work of individual technical committees;
  + allocation or reallocation of secretariats of technical committees and, in the case of there being more than one candidate, allocation or reallocation of secretariats of subcommittees;
  + appointment of chairmen of technical committees;
  + appeals against technical committee and subcommittee action or inaction;
  + resolution of technical coordination issues between ISO technical committees, and vis-à-vis IEC, other international organizations, and regional organizations;
  + advising the Secretary-General on technical interface questions between ISO and IEC, and with respect to technical collaboration with other international standardizing bodies.
* To appoint registration authorities and maintenance agencies for the implementation of International Standards.
* To establish (and dissolve) Technical Advisory Groups (TAG) in order to obtain expert advice, and to appoint their members and chairmen.
* To establish (and dissolve) committees on general standardization principles and to appoint their chairmen.

Specifically, ISO TMB is responsible for tasks such as setting up the various technical committees (TC), appointing TC chairs and monitoring the progress of the technical work. It is also responsible for the Directives, which are essentially the rules for the development of International Standards, and it deals with all matters of strategic planning, coordination, performance and monitoring of technical committee activities.

ISO/IEC Information Technology Task Force (ITTF) is responsible for the day-to-day planning and coordination of the technical work of JTC 1 relative to IEC and ISO, and supervises the application of the ISO and IEC Statutes and Rules of procedure.

The primary duty of a technical committee or subcommittee is the development and maintenance of International Standards, one such committee related to information & communication technologies is ISO/IEC JTC 1.

ISO/IEC JTC 1 (JTC 1) is the standards development environment where experts come together to develop worldwide ICT standards for business and consumer applications. Additionally, JTC 1 provides the standards approval environment for integrating diverse and complex ICT technologies. These standards rely upon the core infrastructure technologies developed by JTC 1 centers oexpertise complemented by specifications developed in other organizations. As a joint technical committee of ISO and IEC, JTC 1 has the qualities and strengths of ISO and IEC standardization.

JTC 1’s scope is “International standardization in the field of Information Technology”. Information Technology includes the specification, design and development of systems and tools dealing with the capture, representation, processing, security, transfer, interchange, presentation, management, organization, storage and retrieval of information.

JTC 1's current strength lies in core technologies, providing the foundation for ICT applications and services: coded character sets, cultural and linguistic adaptability, biometrics, IC cards, security, multimedia, databases interface, etc. The work of JTC 1 in these fields also includes proper maintenance of its previous existing standards to secure the investment in products, processes and applications implementing those specifications.

In addition to this well-established focus of work, JTC 1 positions itself as a system integrator to complement its current program of work, especially in areas of standardization where many consortia/fora are active. JTC 1 recognizes and appreciates the diversity and range of standards setting organizations in the ICT sector.

Also, JTC 1 acts as system integrator:

* Reach out to other standards setting organizations, including referencing of relevant standards
* Share information with relevant standards setting organizations, for example about market requirements and inventories of relevant standards.
* Establish relationships that facilitate collaboration with external organizations.
* Encourage development of international standards that respond to market needs.
* Provide a mechanism for standards developed outside JTC 1 to be quickly approved as international standards
* Develop profiles as appropriate to cope with the needs of specific applications

JTC 1 work is organized in a democratic way to develop voluntary, market-driven and globally relevant standards which reflect an agreed consensus of all contributing parties. JTC 1 has developed and successfully implemented additional processes and methodologies to address the specific needs of the ICT community.

JTC 1 comprises of subcommittees/working groups like, JTC 1/SWG 1 which deals with accessibility standards, JTC 1/SC 25 Interconnection of information technology equipment, JTC 1/SC 6 Telecommunications and information exchange between systems, JTC 1/SC 7 Software and systems engineering, JTC 1/SC 27 IT Security techniques, etc.

JTC1 also takes care of any patents involved in the development of standards; there are guidelines for implementation of the Common Patent Policy for ITU-T/ITU-R/ISO/IEC. The Patent Policy encourages the early disclosure and identification of Patents that may relate to Recommendations | Deliverables under development. In doing so, greater efficiency in standards development is possible and potential patent rights problems can be avoided. But it is not involved in evaluating patent relevance or essentiality with regards to Recommendations/Deliverables, interfere with licensing negotiations, or engage in settling disputes on Patents; this should be left to the parties concerned. As mandated by the Patent Policy, any party participating in the work of the Organizations should, from the outset (as early as possible during the development of the recommendation/deliverable), draw their attention to any known Patent or to any known pending Patent application, either its own or that of other organizations. The holder of the patent right has to assure the ISO [and/or] IEC that he/she is willing to negotiate licenses under reasonable and non-discriminatory terms and conditions (with or without monetary compensation) with applicants throughout the world.

### Governance of Open standards by Consortia

While standard setting has been an important aspect of industrial society for over a hundred years, the formation of unofficial, fast-acting standard setting and promotional consortia (less formal, SSO’s) is a more recent phenomenon. Most of the standards were developed by the formal standards developing organizations (SDOs) such as ANSI, IEEE, and ISO. SSO’s range from small working groups representing a few market-leading companies cooperating to develop a specification to highly inclusive, process oriented consortia that resemble the formal SDOs. Their aims include developing voluntary standards that get to market quickly and provide the basis for interoperability among products in emerging technology markets.

While various aspects of the economic and antitrust impact have provoked academic and regulatory interest, but there has been no systematic effort to formalize the structuring of consortia, or to standardize vital aspects of their operation, such as their systems of governance and the establishment of intellectual property policies and procedures.

A consortium is formed typically with a small group of founding companies as members, with no office location, and no network infrastructure. At the beginning, a consortium may be not much except its corporate documents, the founding members aspirations, and perhaps some contributed intellectual property.

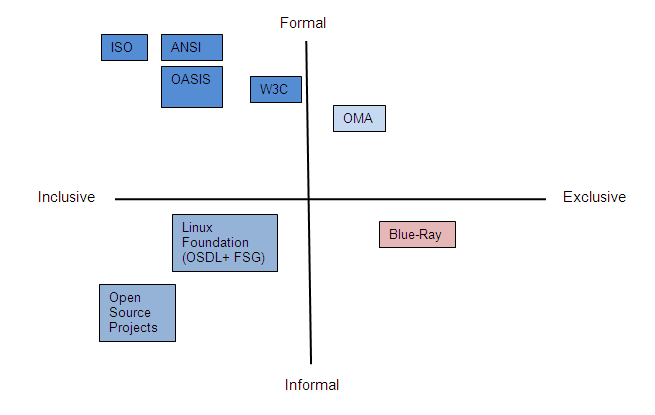
For potential members, standards consortia represent both an opportunity and a risk. On the positive side, they have an opportunity to help develop or accelerate an entire industry and maximize their ability to capitalize on it. However, participation has it risks and costs including:

* Consumption of key resources
* Potential loss of control over IP or trade secrets Implementation issues with evolving specifications and
* Possible antitrust liabilities

To overcome the prospective members' concerns, consortia must present more than just an attractive market opportunity and business case for the standard. They need to show prospects that they have a structure in place that encourages participation and productivity while minimizing the risks and costs. Meeting this challenge requires organizational discipline, strong governance, and a supporting infrastructure that encodes and helps enforce the consortium’s bylaws, IPR policies and operating policies and procedures.

Consortia founders spend most of their energy to the creation and negotiation of consortium bylaws and IPR policies. However, the process by which the SSO intends to actually produce a standard often gets less attention. Without well-considered and consistently applied policies and procedures, a consortium has only a small chance of successfully developing a specification or achieving the creation of a globally accepted standard.

The figure below helps in understanding where existing standards organizations fit along the dual axes - formal vs. informal and exclusive vs. inclusive.



Formal – operates under strict, detailed, well-documented policies and procedures

Informal – operates loosely without explicitly policies or guidelines

Exclusive – Limits participation either explicitly (by invitation only) or implicitly (e.g. high membership fees )

Inclusive – operates transparently with membership or participation open to all. Seeks global input.

We shall look at **OASIS** (Organization for the Advancement of Structured Information Standards), which is a not-for-profit consortium that drives the development, convergence and adoption of open standards for the global information society. The consortium produces more Web services standards than any other organization along with standards for security, e-business, and standardization efforts in the public sector and for application-specific markets. Founded in 1993, OASIS has more than 5,000 participants representing over 600 organizations and individual members in 100 countries.

OASIS was founded under the name SGML Open as a consortium of vendors and users devoted to developing guidelines for interoperability among products that support the Standard Generalized Markup Language (SGML). OASIS changed its name in 1998 to reflect an expanded scope of technical work, including the Extensible Markup Language (XML) and other related standards.

OASIS is distinguished by its transparent governance and operating procedures. Members themselves set the OASIS technical agenda, using a lightweight process expressly designed to promote industry consensus and unite disparate efforts. Completed work is ratified by open ballot. Governance is accountable and unrestricted. Officers of both the OASIS Board of Directors and Technical Advisory Board are chosen by democratic election to serve two-year terms. Consortium leadership is based on individual merit and is not tied to financial contribution, corporate standing, or special appointment

#### The structure of OASIS governance

**The OASIS Board of Directors** is comprised of executive-level officers, experienced in managing organizational growth, defining policies and dedicated to advancing open standards for interoperability. By serving on the OASIS Board, directors exercise a major impact on the strategic direction of the consortium. The OASIS Board is comprised of 11 elected directors, each serving two-year terms. The terms are staggered annually to preserve management continuity. Elected directors serve as individuals; however, to be nominated for and serve on the Board of Directors, a person must be a member of the Corporation or an employee, designee or representative of a member of the Corporation.

**The OASIS Technical Advisory Board (TAB)** advises the OASIS Board of Directors, staff, and membership on matters related to the technical agenda of OASIS. The TAB focuses on improving the standards development process, improving the quality of OASIS Standards through the production of guidelines and educational materials, and advising on improvements to community and collaboration processes and technologies. TAB members are nominated in an open election process by the Sponsors and Contributors of the Consortium. Each TAB member serves a two-year term.

The technical work related to standard’s creation is carried out by the **Technical Committees (TC)**. OASIS board of directors approves the request for creation of new TC on the request of members through majority voting on the advice of TAB. Also TC may create a sub-committee by resolution.

Standards work products progress as follows:

* Committee Specification Draft,
* Committee Specification Public Review Draft,
* Committee Specification,
* Candidate OASIS Standard,
* OASIS Standard,
* Approved Errata.

Approval of an OASIS Standard is a three-step process:

* Submission of a Candidate OASIS Standard to the TC Administrator,
* Completion of a public review lasting a minimum of 60 days, and
* A membership-wide ballot.

#### OASIS policy on Intellectual Property Rights (IPR)

At the time a TC is chartered, the proposal to form the TC must specify the IPR Mode under which the Technical Committee will operate. This Policy describes the following IPR Modes:

* RAND - requires all Obligated Parties to license their Essential Claims using the RAND licensing elements
* RF on RAND Terms - requires all Obligated Parties to license their Essential Claims using the RF licensing elements
* RF on Limited Terms - requires all Obligated Parties to license their Essential Claims using the RF licensing elements
* Non-Assertion - requires all Obligated Parties to provide an OASIS Non-Assertion Covenant

A TC may not change its IPR Mode without closing and submitting a new charter.

OASIS currently supports more than 60 Committees advancing standards. Few of them are in the areas of XML processing, Web Services, Document-Centric Applications, Service Oriented Architecture (SOA), Security, etc. one of them is OASIS Open Document Format for Office Applications (OpenDocument) TC.

**OASIS Open Document Format for Office Applications (Open Document) Technical Committee**

The purpose of this TC is to create an open, XML-based file format specification for office applications. This TC was chartered in 2002 and first draft was released in 2004. **Open Document Format v1.0** was approved as an OASIS Standard on 1 May 2005 and has been approved by ISO/IEC JTC1 as an International Standard ISO/IEC 26300:2006.

ISO has just launched a new database that will make the benefits of using standards easier to achieve, provide users with new possibilities for achieving such benefits and cut the time necessary to develop and revise standards.

**ISO Concept Database**

However, until now, no platform was available to bring together *in a single source* the content from more than 18 000 ISO standards developed to provide benefits to users in business, government and society.

To tackle this challenge, the ISO Central Secretariat in Geneva, Switzerland, has developed a new application, the ISO Concept Database (ISO/CDB), which provides a harmonized platform for search, development and maintenance of concept content throughout the ISO standards portfolio.

Most of the content of the ISO/CDB is publicly accessible at [http://cdb.iso.org](http://cdb.iso.org/) or from ISO's Web site [www.iso.org](http://www.iso.org/) . An online tour of the CDB is available under <http://www.iso.org/iso/demo_ISO-CDB.html>

The ISO/CDB will allow standards users in companies and other organizations to easily access standardized reference data, with the possibility of re-using them in their own applications.

**World Standards Services Network (WSSN)**

The most reliable sources of information on standards are the organizations which developed these standards. The **World Standards Services Network (WSSN)** is the most comprehensive portal of links to the Web sites of international, regional and national standards developing organizations including ISO and IEC Web sites.<http://www.wssn.net/WSSN/index.html>

**Open Group Standards Information Base**

The Open Group is a global consortium that enables the achievement of business objectives through IT standards. With more than 400 member organizations, we have a diverse membership that spans all sectors of the IT community — customers, systems and solutions suppliers, tool vendors, integrators and consultants, as well as academics and researchers to:

* Capture, understand and address current and emerging requirements, and establish policies and share best practices
* Facilitate interoperability, develop consensus, and evolve and integrate specifications and open source technologies
* Offer a comprehensive set of services to enhance the operational efficiency of consortia Operate the industry’s premier certification service
* Operate the industry's premier certification service

The database entries in the Standards Information Base are linked either to other Open Group databases and resources, in particular those relating to Product Standards and Registered Products, or, where relevant, to the web sites of other de facto and de jure standards organizations.

In this way, the SIB provides the architect with a gateway to a uniquely powerful set of tools for defining the standards that architecture is to mandate, and for checking the availability in the market place of products guaranteed to conform to those standards. The database could be accessed at: <http://www.opengroup.org/sib.htm>

**NSSN**

Another database for standards maintained by ANSI is, the NSSN, a National Resource for Global Standards is a search engine that provides users with standards related information from a wide range of developers, including organizations accredited by ANSI, other U.S. private sector standards bodies, government agencies and international organizations. Provides easy links to obtain standards and related technical documents and contact information forstandards-setting organizations and is a tool for standards users as well. <http://www.nssn.org/>

## Using Open Standards

Though open standards are widely used in practice, more pervasive use is necessary. Open standards could be embraced more effectively in organizations.

But many practical issues could impede the transition to open standards. Ensuring the use of open standards in practice is easier said than done, and requires more than a choice of policy alone. The consideration of such a step will give rise to many questions:

* Closed or other standards are already in use for an application, when and how should the transition be made?
* There are sometimes multiple open standards for a particular application; which should we choose?
* A technology or other supplier will propose a standard; will adoption of such a standard result in a dependency on the supplier?
* What if no open standard is available for a certain application? Is it advisable to personally develop a new open standard?
* In a new project which open standard could be applied?

Use of open standards in practice can be divided into a number of phases. Foremost people must be convinced of the importance of embracing open standards. The three phases are as follows:

* Adoption: Involves investigation, research, consideration and decision making for the selection of one or more open standards for use. At the end of this phase, the organization would have fully embedded open standards in its policy and procedures.
* Implementation: Involves the implementation of the decision regarding adoption, and giving direction to the users.
* Use: Practical deployment of the standard by the organization.

## Governing open standards via IT governance in organizations

By now we have understood governance as a stepwise process of working towards more efficient adoption, implementation and use of open standards.

The guidelines/policies concerning open standards is in place and the benefits of its use are already evident in actual practice, namely enhanced interoperability and reduced dependencies on suppliers. Many organizations are therefore keen to adopt open standards.

Adopting open standards means including them in the selection and decision-making processes for IT needs. This means that the IT governance processes take into account the importance of open standards and need to contain mechanisms which promote their adoption. IT governance processes give direction to IT activities and projects. If these processes promote the application of open standards, their implementation and actual use in those activities and projects will increase. Embedding open standards in IT governance processes is therefore crucial.

In this section we shall discuss the relationship between IT governance and open standards

### Governance Process

IT governance is the leadership and the organizational structures and processes necessary in order to develop information technology which is in line with the needs and objectives of the organizations.

#### Compliance management

Compliance management for open standards comprises of periodic checking of requirements relating to open standards, such as the list of open standards and standards in legislation and regulations. Assessments are then performed to establish how these requirements can and must be fulfilled.

#### IT Policy

The IT policy includes the

* strategic orientation of IT in relation to operations (e.g. ‘By 2015 we need to be able to conduct 80% of our customer contact over the internet’),
* Principles concerning information sharing (e.g. ‘Our data is publicly available’ or, conversely, ‘Our information is crucial for our organization and must be kept strictly secure’).
* Principles concerning utilized technology (e.g. ‘We utilize shared service centers owned by our parent company’ or ‘We use only standard products’).
* Policy concerning suppliers (e.g. ‘We design our own software, but outsource building and administration’).
* IT project funding.

Open standards can be embedded through inclusion in the general policy principles of the IT policy.

However, policy itself is relatively weak mechanism; the fact that policy has been well-defined does not automatically mean that it will be implemented in the same manner. The policy must lead to specific actions and projects.

#### Architecture management

Architecture management transforms the IT policy into specific structural and organizational principles.

The strategy for information management and systems and standards which are to be used is determined by means of architecture.

In architecture, specific decisions are made concerning the open standards to be used in an organization.

#### Procurement and supplier management

The final governance process is procurement, which involves the actual acquisition of IT resources and support, as well as the control of suppliers.

Procurement involves hardware and software, both standard and customized, and the insourcing of consultancy and expertise.

The governance process of procurement also focuses on the supplier market, the strategic position of the organization in relation to suppliers, the operational side of procurement (specification documents, tenders, etc.) and the assessment of suppliers. Requirements for suppliers are highly specified. In this way, the governance process ensures continuously improving cooperation with suppliers as partners in the value chain.

In the process, the products and suppliers utilizing open standards can be given priority. Furthermore, in a number of cases, use of open standards can be specified as a requirement.

The widespread adoption of open Standards means that suppliers can base the development of their products and services on specifications that have wide acceptance in their sectors. This, in turn, means that businesses using open Standards are increasingly free to compete in many markets around the world.