ISO/IEC 38500 – BiSL – ASL

A comparison

ISO/IEC 38500, BiSL and ASL can play a major role in the professionalization of the information provisioning, each model from its own goal and strength. They may well be used in parallel. This is actually what each organization should be aiming to do.

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In 2008, a new ISO standard was published, ISO/IEC 38500:2008. It is a standard for Corporate Governance of Information Technology. The standard positions itself both in the demand and the supply side of information services. This lies in contrast to standards such as ISO/IEC 20000-1:2005, NEN 3434:2007 and ISO/IEC 12207:2008, which focus on internal and external suppliers of IT services only.
BiSL (Business information Services Library) is a framework that is explicitly designed for the demand side and provides guidelines for governance, management as well as operations of information provisioning. Therefore, at first glance, BiSL seems to have much in common with the ISO standard. Therefore, it is interesting to understand what the standard and this framework have in common and where they are mutually complementary.
ASL (Application Services Library) addresses the steering of an organization that provides application management services and thus looks at governance from the perspective of the provider of information services, the supplier.
Because ASL and BiSL are very well attuned and are both linked with governance, they are both included in the comparison.
The ISO/IEC 38500 standard is less known in the Netherlands than ASL and BiSL. Therefore in this paper we have given more attention to the content of the standard than to the content of BiSL and ASL. The outline of these frameworks will be made available as an Annex.

ISO/IEC 38500:2008

The ISO/IEC 38500:2008 standard is based on a number of sources, in particular the Australian AS 8015:2005 standard. The standard is primarily aimed at directors of organizations using information (and also on those who advise, inform and support them in this) with the aim of assisting them with effective, efficient and acceptable use of information technology (IT) in their organizations. 'Use of IT' means planning, development, management, administration and use of IT, focused on the needs of the business.

The standard consists of three parts: Scope, Framework and Guidance. In these three parts, some basic principles are described in increasing detail. The standard is applicable in all sorts of private and public and not-for-profit organizations independent of their size and form and regardless of the extent of their use of IT.

ISO 38500 covers governance (but not management and execution) of both demand and supply of IT services (internal and external). Essential is the distinction between governance and management. Management includes the actions and processes necessary to achieve the strategic goals of the organization. These goals and related policy preconditions are set by the Board, which then monitors the compliance. Next to steering and monitoring of the management, governance also includes evaluation of these goals and preconditions. Although the standard is not directly focused on management, it is focused on governance, it should be noted that managers play an important role because they accept the targets and preconditions laid down by the Board and report back.

In the context of governance, managers do the following:
- they advise and support the Board of executives;
- they provide Boards of directors with information and implement their objectives;
- they often come up with policy recommendations;
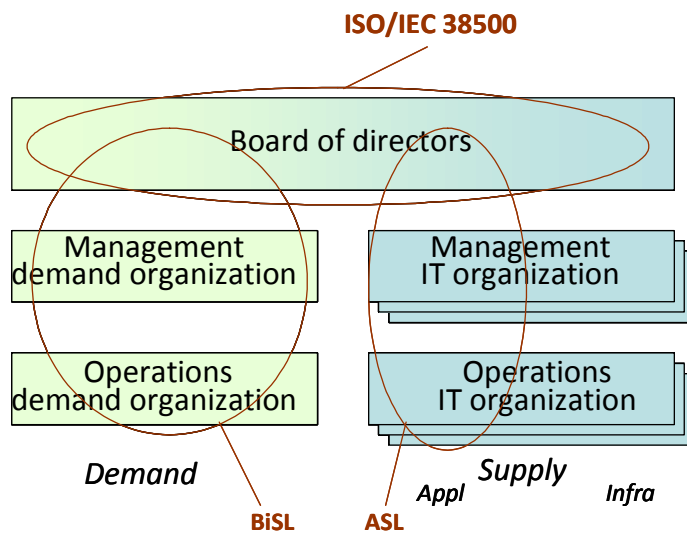- they perform certain governance functions on behalf of the Board.

Figure 1. Scope of the three models

Scope of the standard

The title page of the ISO 38500 states that it is a standard intended for Corporate Governance of Information Technology. Despite the apparently obvious nature of its title, two key points merit consideration:
- Corporate: which company?
- Information Technology: What does this include?

Corporate

In more than 80 percent of the text of the standard, corporate stands for the company or organization that needs information. In our terms this is the business, the demand side of IT, or in brief, demand. This is concluded from the fact that the standard deals with the IT the organization (the business) needs to agree its key objectives. The organization can be any company, public or private, large or small. The supply side of IT may be performed by the same organization or the IT may be outsourced.

Information Technology

IT is described as "Resources required to acquire, process, store and disseminate information" and includes both information and communication technology. It is not clear whether the non-automated information provisioning is also (wholly or partly) covered. There are no examples mentioned on this subject. Experience shows that the distinction between information, information provisioning (IP) and IT (automated IP), which is customary in the Netherlands, is not used everywhere. Therefore, it is possible that part of the non-automated IP is covered by the term IT.
The standard seems to be about how an organization ensures that the support by (automated) IP is appropriate and also anchored to the top of the organization. Paired with this, the standard also makes demands on IT and these requirements are extensive, especially if the IT department is not an internal part of the organization. Some requirements are so specific to the managers of IT, that they cannot be imposed on the managers of the company if their IT is outsourced. In cases such as these, requirements will need to be secured in the contract with the supplier of IT services. Maybe the accountability will remain to be with the business, IT itself is responsible for the compliance.

Six principles

The standard indicates that there are six basic principles necessary to ensure that the IT support of an organization is adequate. These principles, which should be used by the Board of directors of a company, describe the criteria that an organization should aim to satisfy. They do not describe how to act. According to the authors of the standard, ISO/IEC 38500 is mainly about the behaviour of people within an organization which is required for successful use of IT.

The principles are:
- Responsibility - Employees know their responsibilities both in terms of demand and supply of IT and have the authority to meet them.
- Strategy - Business strategies should be aligned with IT possibilities, and all IT within an organization should support the business strategies.
- Acquisition - all IT investments must be made on the basis of a business case with regular monitoring in place to assess whether the assumptions still hold.
- Performance - the performance of IT systems should lead to business benefits and therefore it is necessary that IT supports the business properly.
- Conformance - IT systems should help to ensure that business processes comply with legislation and regulations; IT itself must also comply with legal requirements and agreed internal rules.
- Human behaviour - IT policies, practices and decisions respects human behaviour and acknowledges the needs of all the people in the process.

In the standard, these principles are dealt with briefly at first, and then singularly in more detail thereafter. In this description, requirements to business and to IT are somewhat interlinked. Furthermore, the deepening of an issue is, at first sight, not always in line with the parent principle.
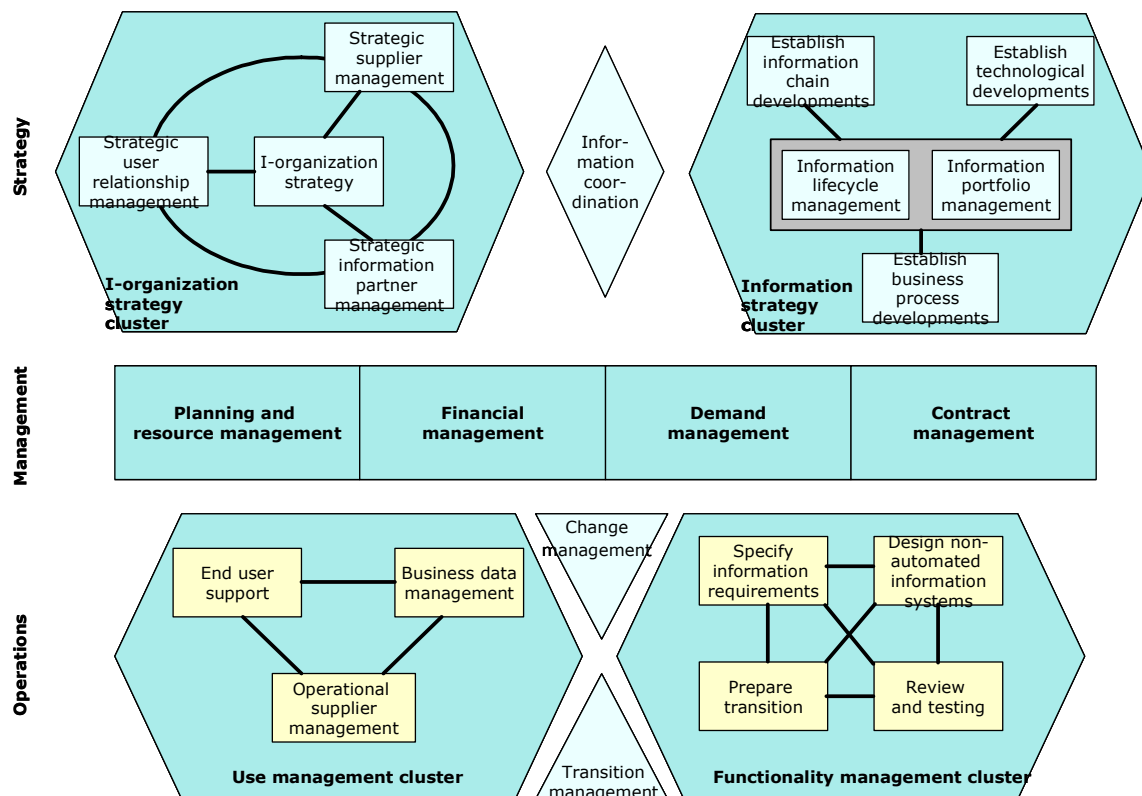

Figure 2. BISL, framework for business information management

BiSL

BiSL is a public standard for business information management. BiSL describes processes and activities required for managing the information provisioning from the user and business perspective. It is a coherent framework with attention paid to both executive (operational),

steering (management) and governance (strategic) processes and their interrelationships (see Figure 2).
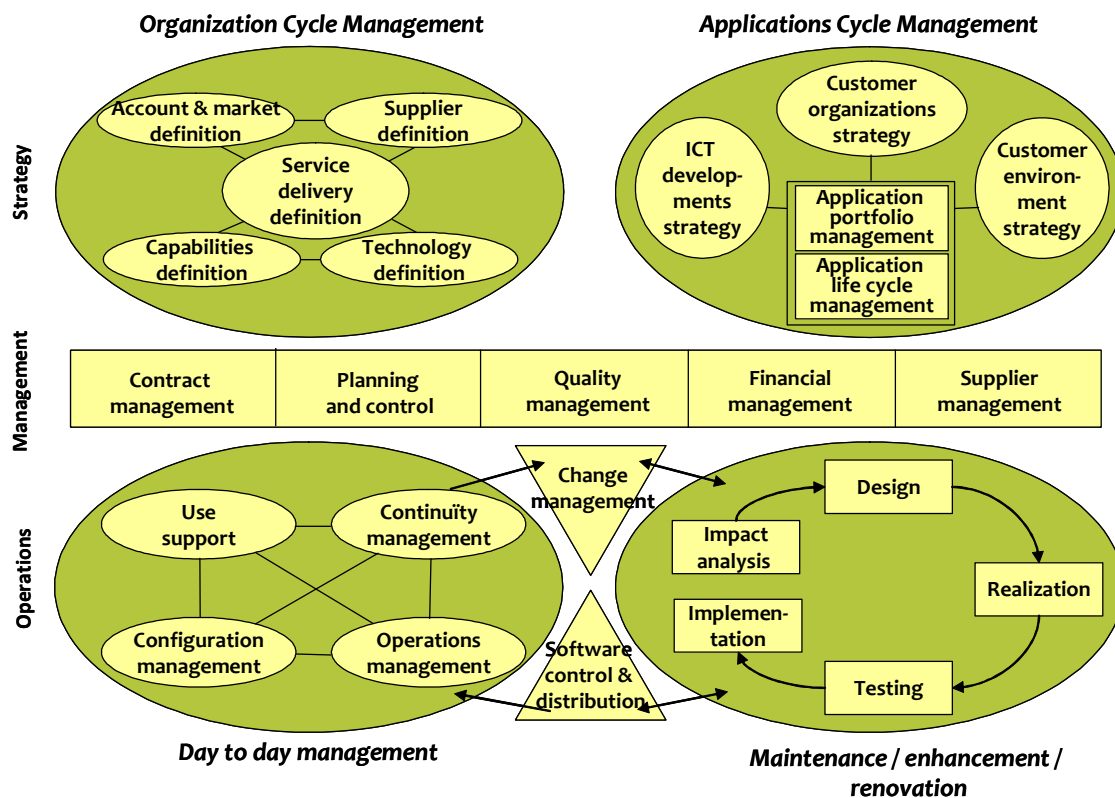

Figure 3. ASL, framework for application management

ASL

ASL is a public standard for application management. ASL describes processes and activities required to properly manage, maintain and enhance applications, not only today but also for the foreseeable future. Like BiSL ASL is a coherent framework with attention to both operational, management and strategic processes and their interrelationships (see Figure 3). This article refers to ASL 2, the new version of the framework.

Mapping of BiSL and ASL on ISO 38500
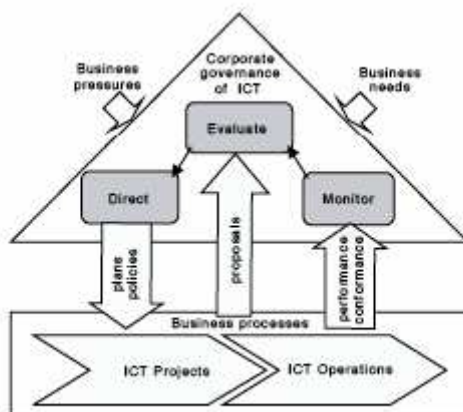
Figure 4. Model for corporate governance of IT

The ISO 38500 standard states that directors of an organization should govern IT through three main tasks (see Figure 4):
a) evaluate the current and future use of IT;
b) direct preparation and implementation of plans and policies to ensure that use of IT meets business objectives;

c) monitor conformance to policies, and performance against the plans.

In Figure 5, these three management tasks are compared with the subjects of the processes of BiSL and ASL. In the standard, the three tasks of the directors are further translated into a number of guidelines based on the six principles discussed above. In this article the tasks of the directors (see Figure 5) and these guidelines (see Figure 6) are related to BiSL and ASL processes that can support giving substance to these tasks and guidelines.

BiSL, ASL and ISO 38500 all describe what an organization should or could do, not how things should be done. BiSL describes it from the point of view of an organization that uses information as an asset, ASL from the perspective of an internal or external IT service provider and ISO 38500 mainly from the first point of view but it also takes from the second. Hence this comparison encompasses both BiSL as ASL.

The two middle columns of Figures 5 and 6 state which BiSL and ASL processes address the same 'what elements' as ISO 38500 does in its guidelines. The comparison clearly shows that most of the principles and guidelines in the standard are addressed at the strategic level of BiSL and ASL. This is not unexpected, because the Board of directors of an organization operates mainly at the strategic level.

Within a number of BiSL and ASL processes on the management and the operational level of these frameworks, activities are performed that should be governed by the executive Board. The two right hand columns of both figures provide an overview of the processes and activities, which should be managed especially, as a part of governance. These activities are not among the items the standard describes in the guidelines, because they are too much about management. The guidelines are just about governance at Board level.

The principles and guidelines of the standard frequently deal with human behaviour. They focus more on 'do people know the policy?' than on 'what is the policy?' or 'there should be a policy'. Actually BiSL and ASL pay little attention to how policy and strategy are deployed to employees. There is a sizeable difference in the perspective from which governance is approached as regards ISO 38500 on the one hand and BiSL and ASL on the other.

Similarities and differences

The ISO 38500 standard provides a neat overview of issues that directors and managers of a demand organization should pay attention to when using IT. Some guidelines also describe what IT management should do. Clearly, in these areas the standard is less suitable for organizations where IT is outsourced because the responsibility for the IT policy lies not with the demand organization. On these points, the standard is useful for IT companies and managers of IT departments. Here then, the responsibilities of IT management become more obvious.

BiSL and ISO 38500
When BiSL processes are implemented at capability level 2-3, there are enough tools available to give substance to many of the guidelines of ISO 38500. In practice however, organizations typically begin applying BiSL at the operational level. And the activities on the management and the strategic level support most of the guidelines from the ISO standard. Moreover, the standard is more focussed on the approach and the responsibility, and the frameworks are more focussed on the content of the activities.

Tasks ISO 38500	Related BiSL processes	Related ASL processes	Support from BiSL processes	Support from ASL processes

Evaluate the current and future use of IT	Evaluation of the use of IT by the directors of the demand organization
	• at strategic level:
	  o information portfolio management
	  o information lifecycle management
	• at management level:
	  o demand management
		Evaluation by the directors of the IT organization
		• at strategic level:
		  o service delivery definition
			Input for the evaluations by the directors of the demand organization comes from the processes
			• at strategic level (future use):
			  o all processes within the information strategy cluster
			• at management level:
			  o demand management
			• at operational level (current use):
			  o operational supplier management
			  o end user support
				Input for the evaluations by the directors of the demand and supply organizations comes from the processes
				• at strategic level:
				  o application portfolio management
				  o application lifecycle management
				  o ICT developments strategy
				  o the processes within organization cycle management
				• at management level:
				  o quality management

Direct preparation and implementation of plans and policies to ensure that use of IT meets business objectives	Directing preparation of plans and policies by the directors of the demand organization
	• at strategic level:
	  o information portfolio management
	  o information lifecycle management
	  o I-organization strategy
		Making a policy that is aimed to let IT deliver those services that the demand organization needs
		• at strategic level:
		  o service delivery definition
		
		Making sure applications continue to have added value
		• at strategic level:
		  o application portfolio management
		  o application lifecycle management
			Making plans and policies also takes place in
			• at management level:
			  o demand management
			  o financial management
			  o planning and resource management (provide timely information)
			  o contract management
			• at operational level (shorter term plans):
			  o prepare transition
			  o transition management (both in connection with transition of projects)
			  o change management
			  o specify information requirements (both in connection with impact analyses)
			Whether directing preparation of these tactical plans is part of ISO 38500 is not clear
				Input for plans and policies mainly comes from the management processes

Monitor conformance to policies, and performance against the plans	Monitoring IT-performance takes place
	• at management level:
	  o contract management
		The responsibility for the delivery is in practice and according to ASL laid down by others than the business directors (this is not allowed by the standard)
		Conformance of IT to external obligations is also the responsibility of IT and is monitored in
		• at management level:
		  o contract management
			Input comes from
			• at operational level:
			  o operational supplier management
			  o end user support
				Input comes from
				• at management level:
				  o quality management
				  o planning and control
				  o financial management
				• these management processes get their input from all operational processes

Figure 5. Tasks of the directors and BiSL/ASL

MAISE

Principle ISO 38500	Related BiSL processes	Related ASL processes	Support from BiSL processes	Support from ASL processes
1 Responsibility Individuals and groups within the organization understand and accept their responsibilities in respect of both supply of, and demand for IT. Those with responsibility for actions also have the authority to perform those actions.	• Making the policy knowable to the organization is not a subject in BiSL, however setting down responsibilities is: ○ I-organization strategy cluster	Making the policy knowable to the organization is not a subject in ASL.	• Responsibilities are decided on in: ○ strategic user relationship management ○ strategic supplier management (separation of responsibilities with IT) ○ contract management ○ demand management	• Responsibilities regarding supply of IT are defined in: ○ contract management ○ quality management
2 Strategy The organization's business strategy takes into account the current and future capabilities of IT; the strategic plans for IT satisfy the current and ongoing needs of the organization's business strategy.	• Setting out a business strategy is not part of business information management and therefore not part of BiSL • Information policy and strategy are defined in: ○ I-organization strategy (e.g. supplier selection) ○ information portfolio management ○ information lifecycle management ○ information coordination • Starting point of BiSL is that the (automated and non-automated) IP/IT aligns with the wishes and requirements of the business. Influencing the business strategy by taking into account the IT possibilities is hardly addressed.	• The business strategy of the organization is only used as input for the IT plans. • Strategic plans within IT are made up for IT support and the IT organization: ○ application portfolio management ○ application lifecycle management ○ account & market definition ○ service delivery definition	• The link between business strategy and IT Capabilities is a subject in: ○ strategic supplier management ○ contract management • Next to that, plans are developed in: ○ demand management ○ planning and resource management (annual plans regarding to the information provision) • Monitoring (§ 3.3) also takes place in: ○ change management ○ financial management	• Support comes from: ○ the other ACM processes ○ contract management ○ quality management ○ use support
3 Acquisition IT acquisitions are made for valid reasons, on the basis of appropriate and ongoing analysis, with clear and transparent decision making. There is appropriate balance between benefits, opportunities, costs, and risks, in both the short term and the long term.	• Decision making on IT investments takes place in (a.o.t.): ○ financial management (base don solid business cases) • Decision making on the future of the IP is also an issue in: ○ information portfolio management ○ information lifecycle management	• Application management does not decide on IT-investments of the business, therefore it is not addressed in ASL.	• Issues are: ○ which suppliers, services, contracts, projects ○ business case ○ performance monitoring • Processes involved: ○ information portfolio management ○ information lifecycle management ○ strategic supplier management ○ demand management ○ contract management ○ financial management	• the processes in applications cycle management provide the demand organization with information regarding the quality of existing IT and possibilities for new IT

Principle ISO 38500	Related BiSL processes	Related ASL processes	Support from BiSL processes	Support from ASL processes
4 Performance IT is fit for purpose in supporting the organization, providing the services, levels of service and service quality required to meet current and future business requirements.	• The standard does not mention any concrete guidelines at the strategic level of BiSL. • Processes involved at the other levels: o contract management o planning and resource management As well as: o demand management o financial management	• The IT domain itself also has a responsibility in delivering the right services. Relevant ASL processes that need to be in place are: o planning and control o contract management o quality management o impact analysis o continuity management	• Processes involved at the operational level: o business data management (regarding data accuracy) o operational supplier management o change management (define the risks of changes by means of thorough impact analyses)	• All processes provide a contribution, under the auspices of the management processes
5 Conformance IT complies with all mandatory legislation and regulations. Policies and practices are clearly defined, implemented and enforced. .	• A number of guidelines are not covered by BiSL, such as checking to see whether the IT is ethical. Furthermore IT is not managed directly by the Board of the business but by the management of IT. • The role of the user organization is particularly supervisory. Therefore it is important to define and lay down the right requirements. • Relevant processes: o demand management o contract management o operational supplier management • The strategic supplier management process has to establish whether IT suppliers are able to comply.	• Generally, IT itself is responsible for compliance with mandatory legislation and regulations. ASL (and ITIL) can ensure that the IT organization meets these requirements: o quality management as well as: o contract management o continuity management • IT also has to manage the compliance.	• No specific processes.	• No specific processes.
6 Human behaviour IT policies, practices and decisions demonstrate respect for human behaviour, including the current and evolving needs of all the 'people in the process'.	• Requirements for behaviour and welfare of users and IT staff are intended here. BiSL does not mention the necessity for a strategy on this.	• Relevant are the requirements for the behaviour and welfare of the IT staff involved. The ASL framework does not mention the necessity of Board involvement regarding this.	• The following processes can make a contribution: o demand management (requirements are defined for the quality of the organization, including the staff) o end user support (communication towards end users) o design non-automated information systems (clear procedures) o prepare transition (training) o review and testing • The process 'specify information requirements' might cover these requirements as well. However they are not clearly indicated in BiSL.	• Within ASL, potential processes involved could be : o capabilities definition o quality management o implementation

Figure 6. Principles of ISO 38500 and BiSL/ASL

What ISO 38500 adds to BiSL :
- The ISO standard focuses on one topic, governance, and the guidelines for this topic are neatly listed. In BiSL these topics are spread across the entire model and described from a different perspective.
- Complying with requirements of governance is increasingly important, therefore such a list clearly has an added value.
- BiSL does not really pay attention to the responsibilities and accountabilities of directors, but this is the core of ISO 38500.
- ISO 38500 focuses more on the soft factors that are also important in implementing governance than ASL and BiSL do.

What BiSL adds to ISO 38500:
- BiSL provides an overview of the activities (not just governance but also management and operational activities) the business side needs to do in order to establish a good information provisioning.
- It is not limited to IT, but also takes on the non-automated IP.
- There is a clearer division in responsibilities of supply and demand.

ASL and ISO 38500

Also for the IT-oriented guidelines accounts: if ASL processes are implemented at capability level 2-3, many of the things the IT management should monitor can be given substance. In this case, most of the guidelines in the standard are reduced to only a few ASL processes: the processes in the cluster Applications Cycle Management, a number of Organization Cycle Management processes, quality management and contract management.

From our Dutch point of view, where we like to make a clear distinction between supply and demand, it is unfortunate that in this standard (as in ITIL) the responsibilities of the management of the demand organization and the supply organization (internal or external) intermingle.

The Board and the management of an organization that has outsourced its IT has little control over the policies of the IT supplier it hires. Their managers can not be managed and controlled directly, only indirectly through contracts, but these are generally not about the way the management of a supplier acts. Therefore, an organization that has outsourced its IT can never fully meet the standard. Since the standard is not intended for certification, this is not an insurmountable problem, however.

Conclusions

The objectives of the ISO standard and of the two frameworks are so dissimilar that they are not really comparable. All three have their added value. ISO 38500 indicates what a Board of directors should be considering and how they should act to govern the (automated) information provisioning. BiSL and ASL offer a comprehensive overview of activities to be undertaken to achieve proper information provisioning and to maintain this, with an emphasis on managing it.

ISO 38500 is intended for the Board of directors and BiSL and ASL are not aimed exclusively at the Board and the CIO, but also, significantly, at the managers (and staff). Also, the separation of supply and demand is clearly made in ASL and BiSL, while this is not the case in the ISO 38500 standard. All three can play an important role in the professionalization of the information provisioning, based on their own purpose, strength and position. They may well be used in parallel. This is actually what each organization should be aiming to do.

Literature

- ISO/IEC (2008). ISO/IEC 38500:2008, Corporate Governance of Information Technology.
- Pols, R. van der (2009). ASL 2: a framework for application management. Zaltbommel: Van Haren Publishing. (in Dutch)
- Pols, R. van der, R. Donatz & F. van Outvorst (2007). BiSL, a framework for business information management. Zaltbommel: Van Haren Publishing.

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Annex
ASL and BiSL summaries are available on request.