

## ***ASL, a source of inspiration for quality improvement***

### **Certification for application management**

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**Until recently only individuals could achieve an ASL certificate, by sitting an examination at EXIN. This has changed with the arrival of the ASL Certification Standards of the ASL Foundation. Application management teams can have themselves tested against this standards framework, to verify whether they are eligible for a certificate based on ASL.**

Quality improvement is an actual matter within the work field of ICT management. Both on the demand and the supply side management organizations strive for further development of organization and process maturity, with the purpose to further continue to optimize the support of the 'business' and the manage the costs better increasingly.

The ASL Foundation ([www.aslbisfoundation.org](http://www.aslbisfoundation.org)), founded in 2002 by a number of participants who are active in the area of application management, contributes to this development by promoting quality improvement within the specific management domains application management and information management / business information management. Most of the large suppliers of application services in The Netherlands are participants or knowledge partners of the foundation.

The Work Group Certification, in which seven participants and knowledge partners are represented, has been active for some years in the foundation. The work group has developed a certification standard with corresponding assessment method, especially customized for organizations which are engaged in application management. This certification standard makes it possible to perform an independent, comparable and unequivocal assessment of the process maturity of application management organizations.

The standard document is called 'ASL-Certification Standards'<sup>1</sup>, because ASL has been an important source of inspiration in the development of the standard. However, in addition to this there the added value of growth models such as CMM(I) and INK has also been identified and used, because it is not only important to execute the application management processes well, but also to manage and safeguard them well in the organization.

In this overview article we will discuss briefly ASL itself, assuming that in the meantime the model is known as *de facto* standard for application management. Next we will give an explanation of different aspects of the certification products, their added value and their further development. We will also pay attention to the considerations which play a role in the implementation of process improvements based on ASL – after all it is about improving our service provision to our clients!

#### **ASL: a framework for application management**

ASL, Application Services library, is a tool to set up and professionalize the activities which are necessary to be able to manage, maintain and renew applications in a good manner [Van der Pols 2001]. These activities are arranged in the form of processes. The main features of ASL are included in the frame.

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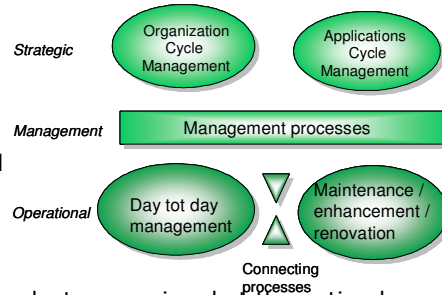
<sup>1</sup> In 2007 this ASL standard was translated into a NEN standard (NEN 3434), accompanied by an Audit method; the ASL documents are withdrawn since the beginning of 2008

## Background ASL

ASL, the Application Services Library, has the objective to professionalize application management. Not only within an organization, but also as unifying factor between different organizations. Among others, the framework corresponds to ITIL, which focuses itself on the set up of service management processes in IT management organizations (especially infrastructure management) and on BiSL, the framework for business information management. ASL consists of a framework and a library of best practices in the area of application management. Application management is the management domain in which the functionality and operation of applications (software, database and management documentation) is maintained. Implementation of ASL aims to support business processes optimally with information systems, during the whole life cycle of those business processes.

### Features of the ASL Framework

The framework describes the processes of application management, divided over the directional, managerial and operational levels. The bulbs and the block in the centre each stand for a process cluster. These process clusters are elaborated on below.



**Day to day management.** The processes in this cluster are aimed at the optimal use of applications. The activities ensure an optimal deployment of the activities currently in use as support for the business process, with a minimum of resources and distortion in the operation.

**Maintenanc, enhancement and renovation.** Because information systems have close relationships with the continuously changing business processes (and their environment), applications will have change as well. This cluster of processes ensures the necessary application adjustments to the new wishes and requirements and based on the distortions reported. In the data models, the software and the documentation the necessary amendments are applied.

**Management processes.** The management processes Planning & Control, Cost Management, Quality Management and Service Level Management provide the integral addressing of the management and maintenance activities. The management processes are 'managed' by the directional processes, which provide the input as per policy. In this way the management level ensures the translation of the policy into actions. Then again the management processes are fed by the operational processes, which are again translated into input for the directional processes.

**Applications Cycle Management.** From the awareness that 80% of the current applications will still exist in 5 years, the development and also the application of future scenarios becomes essential. Due to this cluster of processes application management proactively arrives at a long term strategy for the applications and the whole of the information provisions of a user/client organization, in relation to the long term policy of this organization.

**Organization Cycle Management.** Nowadays the pressure increases on application management organizations to deliver better services at ever lower prices. Internal suppliers of application services have to deal with competition by outsourcing parties. Application management organizations must think pro-actively about the parties that they want to serve and the services which they want to deliver in the future. This cluster of processes is aimed at the development of a future vision and the translation of that vision to a policy for the innovation of the own service provision.

## **The certification products**

From the start it was clear that the Work Group Certification would use the ASL processes and the ASL terminology as basis for the development of the certification products for the same reason as why ASL is necessary in addition to other process models: Application management organizations have mainly a need for a concrete, recognizable 'hat stand' and 'yard stick' with which they can directly compare their own activities and work method, without multiple further interpretations and supplements being necessary. Client organizations in turn have a need for an objective criterion which they can take into consideration during the selection of their suppliers.

In addition an important quality requirement was that the products had to contribute to a stable and continuously developing quality improvement of application management. Therefore we have not limited ourselves to the 'operational' side of the processes, but have also paid attention to management, control, guarantees and improvement of the processes and using CMM(I) and INK as source of inspiration.

Two main products have been created, which correspond with the above assumptions:

1. ASL Certification Standards: formulation of the standards requirements for application management, supplemented with a short explanation on the maturity levels used (see below) and the certification possibilities;
2. ASL Assessment Method: description of the method, which must be followed by the assessment of organizations or organization parts which want to have the maturity of their application management processes assessed. With a strict application of the method, in case of sequential evaluations at the same organization, the realized improvements become visible and the results of assessments at different organizations become mutually objectively comparable.

In addition there is an explanation on the ASL Certification Standards, in which the five maturity levels are further detailed, frequently appearing concepts are described and per process a number of specific standards requirements are explained, for example in relation to required documents or other 'evidence'.

To test these products in practice, a pilot certification is executed at a large application management organization, of which the results have served for the improvement of the standardization and of the assessment process. A second pilot is being prepared, of which the results, together with the feedback of other users, will be used for further development and improvement of these products.

## **What does it deliver – and for whom?**

Going through of a certification trajectory delivers in the first place insight in the quality of the own processes to an application management organization: how far has the team progressed in the control of the daily work? Is the quality of the work still dependent on the presence of some individuals, or can team members replace each other mutually and does the delivered quality then remain the same? After all, clients do require a constant level of quality, expenses, speed, accessibility etc. of the application service provision.

A certification trajectory is a tool to get and keep the processes in order as part of the development of the organization, but can also serve more purposes. If other organizations also use this same instrument, it can be used as mutual benchmark. And on the market suppliers will always use a certificate as distinguishing assessment characteristic, especially now that client organizations are diligently in search of objective assessment criteria to mutually compare potential suppliers and outsourcing partners.

## Assumptions and set up

An organization can have defined very good processes, but if they are not 'institutionalized' they will die a soft, unnoticed death. In other words: it is important not only to look at the executing aspect ('Do') of processes, but at the total 'Plan-Do-Check-Act' cycle. We have always expressed the elements of this cycle in the structure of the standards requirements.

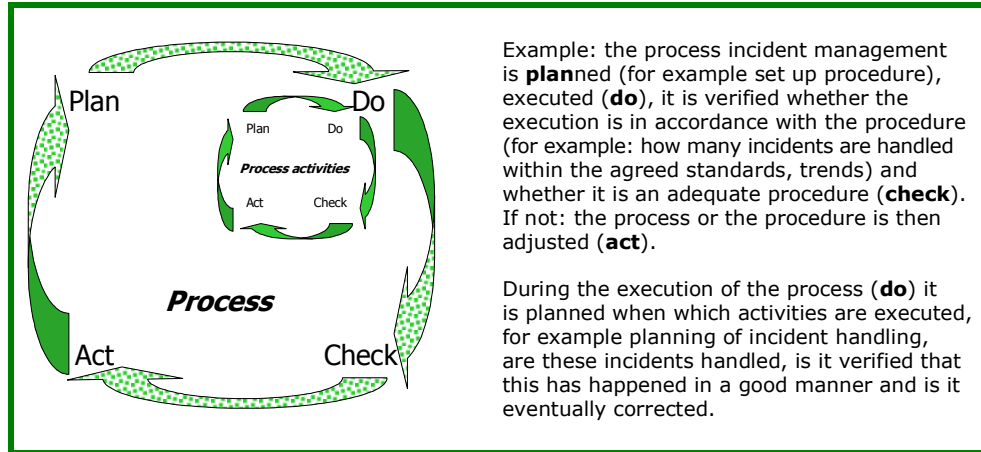


Figure 1: 'Plan-Do-Check-Act' cycle at two levels

Continuing to build on this, for each of the ASL processes five maturity levels can be distinguished, which correspond with the 'process strength' of the organization. The higher the process strength, the better the organization is able to manage and improve its processes.

At the highest level also the total 'chain' in which the organization operates, is taken into consideration.

Maturity level	Typing
0 (ASL-incomplete)	some loose activities
1 (ASL-initial)	basis activities ('Do') occur ad hoc
2 (ASL-structured)	basis activities occur in a structured and demonstrable manner ('Plan - Do')
3 (ASL-standardized)	all activities occur in a structured manner, are demonstrable, documented and standardized for the organization to be assessed ('Plan - Do - Check - Act')
4 (ASL-optimizing)	the process is continuously improved ('Plan - Do - Check - Act') based on qualitative and quantitative key figures
5 (ASL-supply chain)	process is set up, executed and improved ('Plan - Do - Check - Act') in consultation with chain partners

Table 1. Summary of maturity levels

The lowest level on which certification can take place is at level 2. In addition a complete certification can only be obtained for all ASL processes jointly.

Modular certificates can also be obtained for the following ASL process clusters:

1. the cluster Day to day Management;
2. the joint clusters Connecting Processes and Maintenance/Enhancement/Renovation;
3. the joint clusters Operational Processes and Management Processes;
4. the joint Strategic clusters.

The combination possibilities are determined by the factual dependencies between the different process clusters.

### **The assessment trajectory**

An assessment trajectory requires a significant effort. Assuming that the ambition level does not differ too much from the starting situation, the organization must count on a period of half a year, in which the following steps must be walked through in broad lines.

1. **Preparation:** scope and objective of the assessment are determined. The scope is formulated in terms of the 'organizational unit' to which the assessment relates (for example one management team, some management teams jointly or the whole application management organization) and in terms of the ASL process clusters to be assessed.
2. **Self evaluation:** the organization performs an own evaluation based on the standards framework. Thereby evidence is gathered and a file is prepared.
3. **1<sup>st</sup> measurement by assessors:** based on the build up file and in-depth interviews a first assessment of the processes takes place. This delivers a list with questions and improvement issues.
4. **Improvements, supplements:** based on the list with questions and improvement items the organization takes action to gather additional information and make improvements. If necessary, the scope can be adjusted, for example by aiming the further trajectory at one of the modular certificates or by placing certain teams or projects outside the scope.
5. **Final measurement:** in this 2<sup>nd</sup> measurement the assessors determine the maturity levels of the assessed ASL processes. The assessment results are fed back to the assessed organization.

An organization seldom achieves the (modular) certificate immediately after the first measurement. In each assessment trajectory critical and non-critical improvement items are found. These are presented to the organization, which can subsequently provide additional information to disprove the improvement issues. If this is not possible, improvements will have to be implemented to comply with the requirements. Usually they get a couple of months for this.

If they succeed in solving the critical improvement items within the stated time, then the reward is within arm's reach: an ASL (modular) certificate as proof of constant quality in application service provision!

### **Improvement scenarios**

There are several ways in which improvements can be realized with support of ASL. In a small ICT department not all ASL processes will be extensively implemented, but ASL will be mainly seen as thought framework. In larger departments the emphasis will first be on the improvement of the client related processes and then on the internal processes.

It is always important to first think about the objectives of the improvement trajectory. For that it is useful to take an inventory of the process quality in the own organization, based on the ASL processes. That is possible in different ways. The most simple one is to perform an ASL self evaluation under guidance of an experienced application management consultant. Based on this within two days a good impression is obtained of the largest bottlenecks in the application management processes (from executing to strategic) and the maturity level of the application management organization. Concerning the bottlenecks improvement actions can be stated: not too many at the same time (a maximum of five) and based on a mutual prioritizing.

If it would appear that most of the processes (or most of the processes which fall under a modular certificate) are almost at maturity level 2 or 3, then it becomes interesting to try to obtain an ASL (modular) certificate.

If the gap is too large (most of the processes at level 1, some at level 2 with a lot of bottlenecks to be solved) only a large integral project could lead to a certificate within a reasonable period. But frequently a turnaround time of one and a half to three years should be taken into account, with a significant project effort. With high risk situations such as demotivation, alternate staffing, changing client environments etc. Sometimes it is commercially extremely desirable to obtain a certificate (no certificate: no business); it is important to be aware the required change trajectory for a reasonably immature application management organization is not a sinecure.

In general it is wise to always aim for achievable improvements which can be realized within a short period. Even if a certificate is not yet within arm's reach, the ASL standardization can still offer a good source of inspiration for improvement activities with lasting result.

### **NEN standard**

As a consequence of the initiative to set up a standard *specifically* for application management NEN (the Dutch [Nederlands] Normalization Institute) has started a trajectory to convert the ASL standards framework into a Dutch standard for application management. In August 2006 a standard commission was incorporated, consisting of representatives from GetronicsPinkRoccade, Nuon and Ordina, with the assignment to edit the ASL standards framework in accordance with the requirements of NEN within one year. In this editorial change the standards commission pays attention to, among other things, the positioning of the standard for application management compared to other standards which are applied work field service management, so that the user gets a clear picture of the applicability of and the specific added value of the standard.

### **Conclusion**

The standards framework has become a factual measuring instrument, with a minimum in formalistic requirements and a maximum in recognition for application management teams. It contains requirements such as 'The future of the important applications are thought about in a periodical and plan-based manner' but also 'Centrally there is a description of the application portfolio (..)' etc.

Due to this factuality the standards framework distinguishes itself from general quality standards such as ISO-9000. With this it is a source of inspiration for any team which wants to improve the quality of its trade!

### **Literature**

'ASL Certification standards', ASL Foundation, Bilthoven, 2006

'ASL Assessment method', ASL Foundation, Bilthoven, 2006

Pols, R. van der, "ASL: a framework for application management"; ten Hagen & Stam, 2001.

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