

TickIT and IT Service Management

By Paul Breslin

INTRODUCTION

The launch of the BS 15000 certification scheme in July 2003 was the culmination of much hard work in both standards-making and scheme development. The publication of an auditable specification for IT Service Management^[1], backed by a code of practice^[2] and a certification scheme, is a major advance for the sector. But what is this standard and this new certification? What is the relationship to the tried and trusted ISO 9001 TickIT Scheme? This paper explores these questions by highlighting key features of the BS 15000 standard and scheme and by comparing and contrasting these to the TickIT equivalents.

Note: in the article the use of *italics* indicate processes or requirements from BS 15000. Use of names in normal case are from ISO 9001 or the TickIT Guide.

IT SERVICE MANAGEMENT AND STANDARDIZATION

Much effort and attention has been traditionally focused on the development side of IT but typically “80% of the cost is incurred during the operational life of any IT solution”^[3]. As all of the value of an IT system is derived from its use, it is important for organizations to grasp the nettle of Service Management and get a firm understanding of how to achieve quality in services. This requires a context switch from technology delivery to service delivery, and it is this underlying change of emphasis that is probably the key differentiator between TickIT and BS 15000.

A set of publications defining best practice in the area of IT Service Management has been around since the late 1980s. The IT Infrastructure Library, or ITIL^[4], is now managed and published by the Office

of Government Commerce (OGC). It comprises some seven core titles embracing all aspects of IT service management to provide a ‘cohesive set of best practice, drawn from the public and private sectors internationally’. Nevertheless, this remains non-prescriptive guidance only and deploying ITIL-based processes requires common sense tailoring and tuning to suit the particular needs of the service provider. Although there is an online self-assessment questionnaire (<http://www.itsmf.com/bestpractice/selfassessment.asp>) which allows organizations to score themselves against ITIL practices, there is no mechanism to objectively assess compliance. Indeed, as the ITIL represents best practice rather than a formal specification it is not meaningful to claim ‘compliance’, due to the wide interpretation that this could possibly mean.

It was against this background that the first release of BS 15000 occurred in 2000. This was the first formal standard for IT Service Management and, although firmly based on the ITIL process model, provided an assessable specification that was separate and distinct. The standard and an associated work book was then used by a set of ‘early adopters’ – organizations from a range of industry segments and at different stages of maturity in implementing Service Management. They put this first release of the standard through its paces, and their feedback was invaluable in refining and revising the material for the current release.

BS 15000 STANDARDS: A MATCHED PAIR

The standard was revised and released as a complementary matched pair^{[1][2]}. It defines a comprehensive and closely related set of service management processes. Part 1 specifies a set of 13 processes [Figure 1] and is the basis for implementing and certifying a manage-

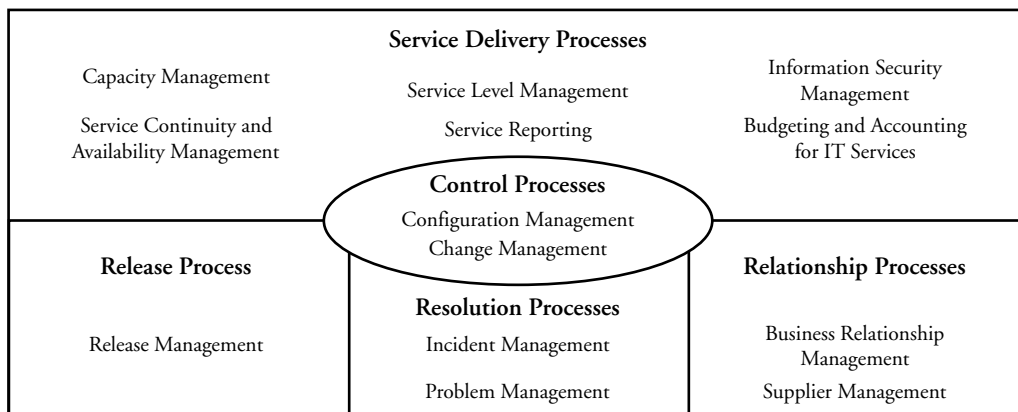


Figure 1 – The BS 15000 Processes

ment system to deliver IT services. The Part 2 Code of Practice contains guidance that amplifies the terse requirements in the Part 1 Specification. Together, they provide a comprehensive tool for enterprises to 'understand how to enhance the quality of service delivered to their customers' page1.

Part 1 of BS 15000, the management system specification, is quite brief, with only 12 pages of normative requirements. It is structured according to the BSI rules for specifications but can be usefully viewed as having three main sections.:

1. The Introduction and clause 4 describe the Plan-Do-Check-Act method that is now at the heart of management systems standards.
2. Clauses 1 to 3 define requirements on the management system itself in terms of scope, responsibilities, documentation and competence.
3. The remaining clauses, 5 to 9, define the service management processes themselves. These are grouped into subsets of closely coupled processes, with different numbers in each group [Figure 1]. For example, the Service Delivery grouping contains six processes whilst the Release grouping consists of but one. However, each process is defined in a consistent way so that each has a defined objective to be achieved and a series of specific requirements which contribute to meeting that objective.

For example, the Capacity Management process objective is 'To ensure that the organization has, at all times, sufficient capacity to meet current and future agreed demands of the business'. This is supported by approximately seven requirements, including the specific need to define and document a Capacity Plan and the prediction of the impact of external changes such as legislation.

Part 2 of BS 15000 is more free-form as it amplifies and expands on each of the defined processes. It provides practical guidance on what should be considered, what should be documented, what should be performed, and what should be monitored to make the process really effective in practice. Careful structuring to match the Part 1 format, and use of a common vocabulary, means the two parts really do make a matched pair that can be effectively used by all stakeholders. There is good precedent for this approach in the standards world; one need only point to the successful BS 7799 standards for information security management to demonstrate the two part approach is already tried and tested.

What further supports the BS 15000 standards is the 'pyramid' structure of the entire IT Service Management body of knowledge [Figure 2]. The two BSI Published Documents provide an extra dimension in terms of considerations for managers^[5] and a handy self-assessment workbook^[6] for organizations to identify and analyze gaps as they implement their systems. Under this sits the ITIL as described above, providing a rich source of even more detailed practical guidance.

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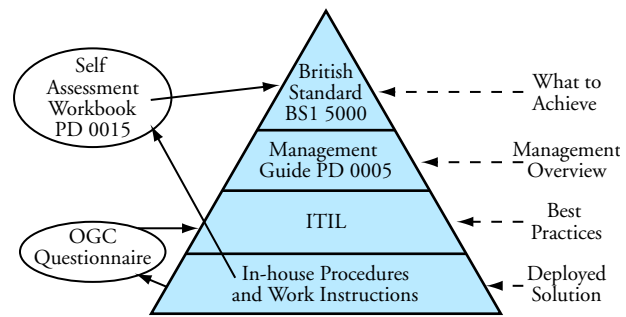


Figure 2 – BS 15000 Pyramid

One key aspect of the 'pyramid' is that the documentation is all planned to be consistent. There are harmonization arrangements in place between the itSMF, BSI Standards and the OGC to ensure this remains the case; this comes through, for instance, in the common vocabulary and the positioning of the subject matter of the various publications.

THE BS 15000 CERTIFICATION SCHEME

A scheme to certify organizations against the standard was launched by the IT Service Management Forum (itSMF) in July 2003, following a development period in committee. It is based directly on the standard and provides certification of an organization's IT service management system.

The scheme was established by the itSMF following some initial work in this area by the BS committee BDD/3 that had revised and published the new standard. It was clear from the industry liaison that there was a market need to demonstrate clearly compliance with the standard and a certification scheme for this would also assist with take-up of the standard itself. The range of stakeholders that the itSMF could marshal in support of their committee was key in bringing the scheme to fruition. This involved representation of end user organizations, service providers, certification bodies, standards experts and IT Service Management expertise [see Figure 3]

The scheme is described in a couple of key documents^{[7][8]} but the overall framework is familiar territory to anyone involved with management system certification. The itSMF manages the scheme and 'registers' certification bodies to assess and certify organizations under the scheme rules. At the time of writing, four Registered Certification Bodies (RCBs) are listed [Figure 4] and further applications are being processed. Future plans are to bring the scheme under national accreditation arrangements with UKAS, much as for TickIT; but this initial position – with the itSMF acting as the accreditation authority – is a pragmatic solution to get the scheme established in a cost-effective way.

Accenture
 Bishops Beech Ltd
 BSI Management Systems
 BSI Standards Committee BDD/3
 CEC Europe Ltd
 DNV Certification Ltd
 Fox IT
 Hewlett Packard
 ITEMS Ltd
 itSMF
 KPMG Audit Ltd
 LRQA Ltd
 Parity
 Pilkington
 PinkRocade
 Siemens Business Services
 Sysop
 TUV Secure IT

Figure 3 – BS 15000 Committee List (partial)

DNV Certification Ltd
 DQS GmbH
 KPMG Audit plc
 LRQA Ltd

Figure 4 – Registered Certification Bodies

Organizations going for certification apply to one of the RCBs directly, and follow a similar process for ISO 9001 TickIT certification. This involves documentation reviews and implementation audits for initial certification. Once certified, this status lasts for three years, subject to continuing satisfactory interim assessments, after which a further audit is needed to retain the certificate. BS 15000-certified organizations can use the registered logo for the scheme, which also appears on the certificate.

One issue of particular interest is that of scope. The standard and the scheme are concerned with IT Service Management and are designed for organizations providing such services. That is still a fairly broad net, as managed service supply chains can be quite long and complex – especially for fully outsourced IT Service Delivery. Even where the IT continues to be supported by an internal department, the standard can be applicable, as the IT Group of an organization may want to demonstrate it is following best practice and delivering a quality service. The key test is that the certified organization can define a credible service management scope in terms of the services being provided, and that this involves the management or use of all the processes defined in the standard. Much as for ISO 9001, the requirement is for compliance with all of the requirements. This does not necessarily prevent further outsourcing by the Service Provider to its own suppliers, but where this occurs the management and control of the outsourced process must be demonstrated and, in such cases, the robustness of the *Supplier Management* process becomes critical.

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There is good leverage from existing accreditation arrangements in the scheme rules to ensure the scheme has credibility and soundness. For example, the scheme gives credit to Registered Certification Bodies (RCBs) who are already accredited to EN 45012:1998. This standard covers requirements for “bodies operating the assessment and certification of quality systems”; compliance with it means the key processes necessary to offer and sustain third party certification are already in place. Companies offering other Service Management services, such as consultancy or implementation advice, cannot register; this is to ensure the BS 15000 audits are performed by truly independent organizations and auditors are not involved with the development of the system they are assessing. The itSMF monitors the scheme closely – including the RCBs, the audits and the auditors – to ensure it is correctly applied and operated.

Three key points need to be stressed:

- The BS 15000 scheme is not accredited by UKAS but by the itSMF.
- BS 15000 certificates are separate and distinct from ISO 9001 TickIT certificates, as the accreditation arrangements are different. The explicit use of different logos makes it simple for users to identify this; the itSMF BS 15000 logo is simply not capable of being confused with the UKAS ‘Tick and Crown’ mark.
- BS 15000 certification is separate and distinct from the well-established personnel qualification schemes operated by the Information Systems Examination Board (ISEB)^[9] and the Examinations Institute for Information Science (EXIN)^[10]. The discipline Service Delivery within the ISEB qualifications framework is expressly modelled on the ITIL practices, as are the ITIL certificates issued by EXIN. It is clear that these certification schemes apply to individuals’ competence rather than an organizations management system.

Further information on the BS 15000 scheme is available from the itSMF offices at Reading^[11] or from the following web links:

www.itsmf.com

www.bs15000certification.com

TICKIT AND IT SERVICE MANAGEMENT

So, how and where does TickIT intersect with BS 15000? Well, ISO 9001 certification under the TickIT scheme is concerned with requirements to provide and control an effective software quality management system. As such, the focus is on software development, maintenance and support. The overlap occurs because software is delivered as a service but, even so, the process sets will not be identical. There are some activities within the scope of BS 15000 and IT Service Management but not within the TickIT scheme. For example, TickIT excludes installation of software on personal computers but this would be a key service for

an organization providing desktop support to a client. The TickIT Guide^[12] Part A section 3 goes into some detail on the scope of the scheme to make such exclusions clear, and is definitely worth revisiting by users of the Guide. Many TickIT-registered organizations do however undertake service management functions and may, therefore, already be fulfilling some BS 15000 requirements.

SOME SIMILARITIES

BS 15000 was expressly revised from its 2000 release to align with existing management standards such as ISO 9001:2000. To that end, the Plan-Do-Check-Act (PDCA) method is promulgated to establish control, provide efficiency and drive improvement [Figure 5]. This method is core to modern management system standards, and is described in similar ways in the Introductions to BS 15000 and ISO 9001. The fundamental emphasis is on managing a set of processes within a cycle designed to achieve a systematic approach to improvement. Management system requirements are also covered in a similar way, with clause 3 of BS 15000 distilling out some essentials regarding management responsibility, documentation and competence management. Furthermore, clause 4 of BS 15000 provides specific requirements to the PDCA method in the context of service management; the structuring here mirrors that of BS 7799-2:2002 for information security management showing again the drive to align with other management system standards.

Most of BS 15000 is concerned with defining service management processes and these can be compared to those called up in the TickIT Guide^[12] Part F. The most relevant TickIT processes are shown in Figure 6

with their BS 15000 counterparts; despite some clear overlaps there are still differences. For example, the TickIT Configuration Management process contains change control requirements, whereas BS 15000 places such issues in Change Management. Nevertheless, the overlaps are considerable, and also occur with processes not listed in the table. A TickIT-certified organization focused on software system maintenance and support would clearly recognise and understand key elements of BS 15000 processes such as *Service Continuity*, *Incident Management* and *Supplier Management*.

SOME DIFFERENCES

The differences are really based around the different emphases between TickIT and IT Service Management. So BS 15000, understandably, has little to say about Development as defined in Part F of the TickIT Guide. There is no ‘Defining System Requirements’ or ‘Software Design’ process in BS 15000. These core TickIT activities and tasks would be picked up by interface controls in the *Supplier Management*, *Change Management* and *Release Management* processes.

The BS 15000 process *Budgeting and Accounting for IT Services* is one that is definitely not in either ISO 9001 or the TickIT Guide. This process requires clear policies and procedures for:

- budgeting and accounting,
- apportioning indirect costs, and
- effective financial control.

It does not actually require charging for services, as this is optional depending upon the circumstances. Bringing the hitherto excluded area of finance into the quality arena is one well overdue step taken by BS 15000.

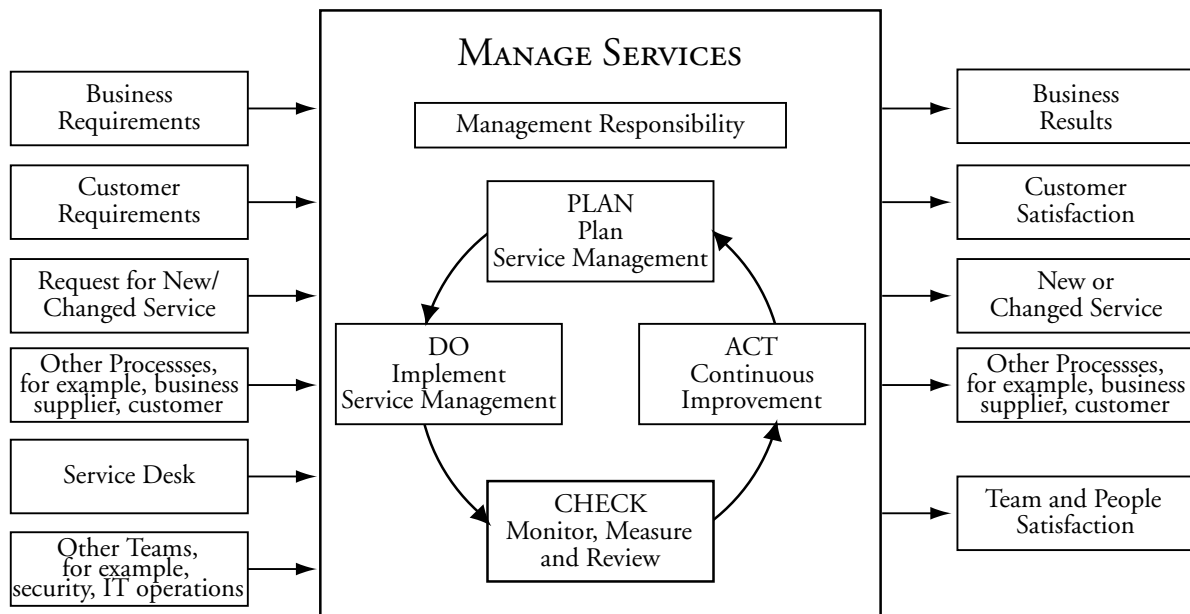


Figure 5 – The PDCA Method

TickIT Processes Part F	BS 15000 Clause/Process
5.2 Supply	5 Planning and implementing new or changed services
5.3.6 Delivery/installation/acceptance	10.1 Release management
5.6 Maintenance	9.2 Change management
6.1 Documentation	3.2 Documentation requirements
6.2 Configuration management	9.1 Configuration management
6.8 Problem resolution	8.2 Problem management
7.4 Human resource management	3.3 Competence, awareness and training

Figure 6 – Comparable TickIT and BS 15000 Processes ^[14]

The *Information Security Management* process in BS 15000 does not have a corresponding TickIT process but data security is described in Part C of the Guide for Suppliers. The BS 15000 process is, in fact, a sterling attempt to distil the essentials of BS 7799-2^[13]. Under the objective of managing information security effectively, the organization is required to:

- establish an information security policy,
- implement security controls,
- provide a risk evaluation,
- cover security in contracts with third parties, and
- manage security incidents.

In fact, the notes to the process state that a BS 7799 certified organization will, by definition, satisfy the BS 15000 process, so such organizations will be able to show direct leverage of their BS 7799 investment.

TWO SCHEMES WORKING TOGETHER

In what ways do the TickIT scheme and the new BS 15000 certification scheme work together? Well, I believe the key link is through ISO 9001:2000. The overarching nature of the quality standard provides a versatile and flexible framework within which software development and IT service management can be managed in a way that best suits the organization. There are a number of management system standards in operation, and the need to take an integrated view of them is now driving the use of integrated or 'one stop' certification.

A managed service provider who does no actual development or maintenance of software can clearly look to BS 15000 certification, but should probably do this within an overall quality framework – and so also seek ISO 9001 registration. This would result in two complementary certificates, one underlining the IT Service Management specialization and the other providing clear evidence of the well-established and respected 9001 practices.

Existing TickIT organizations, where service management is part or all of the certified ISO 9001 scope, can benefit from the added clarity and detail that the BS 15000 processes bring. The best practice requirements in Part 1, and the detailed guidance in Part 2

of BS 15000, provide a robust framework against which to review their existing policies, practices and procedures. A BS 15000 certification audit would take account of an established management system that is already delivering IT Services, so the marginal cost of the certification would typically be less than for a new management system. Where compliance with BS 15000 is important, it should be possible for most certification agencies to include a BS 15000 registration as part of their normal TickIT auditing. The audit would focus on those parts of the organization responsible for IT Service Delivery, and be driven by the BS 15000 requirements applicable to those parts. Again, two complementary certificates would result showing the integrated nature of the QMS.

Although it is early days for the IT Service Management sector, some future developments are already in hand: BS 15000 is being adopted as an Australian national standard, and a project to establish BS 15000 as an international standard has been launched in ISO. The long-term plan remains to bring the current certification scheme under national accreditation arrangements as soon as this is feasible.

The itSMF also has established collaboration contacts with Carnegie Mellon University regarding the recently-released eSourcing Capability Model for IT service providers. All of these initiatives, and the concomitant interest in the standard, are good indicators of an industry need in this area.

CONCLUSIONS

Overall, the two certification schemes – 9001/TickIT and BS 15000 – should be seen as complementary. This article has highlighted key features of the BS 15000 standard and the certification scheme defined against it. A review of the similarities and differences between the schemes shows some common areas, but also some clear differences of emphasis. For example, BS 15000 applies to IT facilities management in general, whereas TickIT applies only where software development/maintenance is part of the management contract. Organizations already 9001/TickIT-certified should look seriously at

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the extra clarity and definition that a BS 15000 certificate can bring to their managed service activities, whilst organizations without the benefits of a management system should seek integrated certificates covering their scope of operation. In short, two schemes with a common goal: quality in products and services.

REFERENCES

- [1] BS 15000-1:2002 IT service management – Part 1: Specification for service management.
- [2] BS 15000-2:2003 IT service management – Part 2: Code of practice for service management.
- [3] TickIT International 1Q02, Jan 2002, page 10
- [4] IT infrastructure library ITIL(reg.) published by The Stationery Office, visit www.itil.co.uk
- [5] DISC PD 0005:2003 A Management Guide to IT Service Management
- [6] DISC PD 0015:2002 IT Service Management – Self Assessment Workbook
- [7] Scheme for bodies operating the certification/registration of IT Service Management Systems, itSMF15/015. Visit www.bs15000certification.com
- [8] itSMF BS 15000 Certification Scheme – Notes for guidance – RCB applicants. Visit www.bs15000certification.com
- [9] www.iseb.org.uk
- [10] www.exin-exams.com
- [11] itSMF, Webbs Court, 8 Holmes Road, Earley, Reading, RG6 7BH
- [12] Using ISO9001:2000 for Software Quality Management System Construction, Certification and Continual Improvement, Issue 5.0 ('The TickIT Guide').
- [13] BS 7799-2:2002 Information security management systems – Specification with guidance for use
- [14] Grateful acknowledgement to Shirley Lacy, Connectsphere for access to 'BDD/3 BS 15000 Initial Comparison with other best practices and standards', unpublished paper, 2004

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