



TickIT^{plus} Implementation Note

Title	Assessment Coverage Index (ACI)		
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The Assessment Coverage Index, (ACI), is a method within the TickIT^{plus} scheme aimed at ensuring or gaining consistency in assessments, and in particular, that the sampling is appropriate regardless of the size of the organisation.

Customers of certification schemes need to know that sufficient sampling of an organisation has been included in the assessment to provide confidence that the management system is truly being used to deliver the products and services being offered under the scope of the certification.

While tables based on the number of staff within the certification scope go some way to identifying the level of effort required, they do not specifically drive the decision as to what should actually be sampled as part of the assessment. Furthermore, they don't evenly handle different types and sizes of organisations and this can lead to some irregular results. Because of the approach taken, which by necessity isn't linear, smaller organisations are proportionally more exhaustively sampled. Yet in practice it is the bigger, often more complex, organisations, with more diverse processes and operating in more areas with greater degrees of variance that should require the more extensive sampling. Interestingly, in a maturity based system such as TickIT^{plus} it is the smaller organisations that would tend to achieve the Silver level of maturity quicker. The Silver level requires organisationally standard ways of working, with, of course, defined tailoring, but in a smaller organisation it is much more common to see things done in a consistent way for purely practical reasons.

While it would never be possible to create, or introduce, a purely linear scale of the effort required based on organisation size, there must be some attempt to drive appropriate sampling of the processes operated across the scope of the assessment, especially if the scheme claims to provide a benchmark result. This is what the ACI method aims to provide through calculations based on the organisational scope size, sample size and level of assessment effort.

The approach works as follows: The scope of the assessment must be clearly identified and its implications fully understood. If the scope of the assessment is only one single small group within a larger organisation this will directly contribute to the amount of sampling required and hence effort needed, as would the case be if an entire organisation, covering multiple groups, functions and locations was included.

So, there needs to be a starting point and as good a point as any is the number of people involved in the certification scope. However, this doesn't take into account things like shift working, how many people are doing similar jobs or, most importantly, the complexity of the activities. However, simply trying to manipulate the number of people to accommodate for these aspects can lead to greater degrees of variation and inconsistencies. Take for example a small 40 person organisation, one designing, building and supporting safety related systems, and compare them with an organisation with 1000 staff providing help-desk support services or providing computer break/fix maintenance services. Simply using the number of people would clearly result in the wrong effort requirements. However, for TickIT^{plus} it is still a reasonably good place to start, but more input is obviously needed.

In TickIT^{plus} the next step is to decide on what sample of the organisation is necessary to provide evidence that the management system is truly deployed and fully used. This involves selecting work groups to provide that evidence – much as would be done currently during the planning of activities for the



TickIT^{plus} Implementation Note

assessment. A work group is any part of the organisation that can provide evidence of implementing the defined processes, e.g. a project, function, support group, department, team, location etc. The collection of all work groups chosen to be involved in the assessment is known as the Implemented Process Sample (IPS)¹. However in TickIT^{plus}, the IPS is also sized and then related to the certification scope size discussed above. This does require the lead assessor and the organisational representative (typically the TickIT^{plus} Practitioner) to work together to identify the most appropriate work groups and therefore the effort required to conduct the assessment, taking into account the complexities, tailoring, locations and other factors affecting the required coverage. This will result in two further numbers, the number of people covered by the IPS and the effort required to conduct the assessment. Note, the assessment effort could also include Practitioner time if they are actively participating on the assessment, which is allowed in TickIT^{plus} scheme, but not the time spent by Practitioners preparing for the assessment or helping it progress.

The reason for selecting a sample is gain an appreciation of how well the processes have been deployed and, more importantly, how well they have been adopted in practice. This level of adoption will often be significantly influenced by people in charge, e.g. senior, project, programme, support or functional group managers. This should be taken into account when selecting the work groups to be included in the IPS. In the simplest case the IPS might include one work group, say a project of 20 people and manager, where the influence on process compliance would typically be driven by the project manager. So, in this easy case the number of people included in the IPS would be all 21 people. Note, this doesn't mean that all 21 people will be interviewed or even actively involved in the assessment, but just that they can be accounted for in the IPS coverage number. In another, slightly more complicated case, where there are maybe 5 teams of varying size (say 10, 12, 15, 9 and 19 people) all being managed by a programme manager, it might be reasonable to suggest that the approach, and hence influence on process adoption and compliance, would be through the programme manager. So in this case, the IPS coverage would account for all 66 people, even if just 1 or 2 people from 1 or 2 teams were actually involved during the assessment. The actual number of teams and people to be involved in the assessment would involve mutual discussion between the Lead Assessor and the Practitioner. Clearly, this would also affect the assessment effort and time required.

Given that we now have three parameters, the organisational certification scope size, the IPS coverage size and the level of effort needed, we can calculate the ACI. The equation for calculating the ACI is given in the Core Scheme Requirements but in summary will result in a value (the ACI) that decreases when the certification scope size goes down or when the IPS coverage size or required effort goes up, therefore the lower the ACI value the more coverage of the certification scope there is.

However, what is the optimum ACI value? This is difficult, if not impossible, to state in the scheme documentation and so the TickIT^{plus} scheme has chosen to use some statistical techniques to identify an acceptable mean and range of the ACI value based on real assessments being conducted over a period of time. For an initial period, which depends on the number of assessments being conducted, the Certification Bodies will submit the relevant data and calculated ACI value from assessments to Joint TickIT Industry Steering Committee (JTISC). This information will be collated and used to form a model of the ACI which will then become the method by which JTISC will monitor the on-going level of sampling being used during

¹ In TickIT^{plus} the processes documented in the Base Process Library are known as generic processes because they can be used by any organisation working in the IT sector. The processes selected by an organisation are known as Defined Process as they are those from the Base Process Library needed by the organisation. These come about by selecting the appropriate Scope Profile(s) and identifying where the organisational Integrated Management System satisfies them – there could be one to one or one to many mappings. The Defined Processes that are actually used in practice by work groups are known as Implemented Process or, in other words, where the Defined Processes can be seen operating in practice.



TickIT^{plus} Implementation Note

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The ACI calculation is only required at an initial assessments and renewal assessments but not at other forms of assessment, such as at a transitional assessment where there are reduced sampling requirements.

For further details please refer to the Core Scheme Requirements.