Model Specification of Service Component Subject to Assessment

Ref. tSd 0320
Version 1.02
2018-10-24

Executive summary

This document serves as a model for the production of a Specification of a Service Component Subject to Assessment (C3A) by any Trust Service Provider wishing to achieve tScheme Registered Applicant status and/or apply for tScheme-Ready Status.

Individual copies of this document may be downloaded from http://www.tScheme.org/.

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Please report errors and address comments to Editors@tScheme.org.

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# DOCUMENT HISTORY

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<th>Date</th>
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1. **INTRODUCTION**

Introductory note:

_In this model Specification of a Service Component Subject to Assessment (hereafter simply the 'C3A') the sub-sections of the Introduction refer explicitly to this document._

_In preparing their own specific instantiation of the model C3A, the applicant's own text to explain their reasons for preparing the document and seeking tScheme Registered Applicant status and/or tScheme-Ready Status, as required, should be placed in the Introduction. They should also add any other introductory material they feel they require and the following tScheme text within this section should be deleted in its entirety._

1.1 **Purpose**

This document serves as a model for the production of a Specification of a Service Component Subject to Assessment (C3A) by any Trust Service Provider (TSP) wishing to achieve Registered Applicant status and/or apply for tScheme-Ready Status.

This document is intended to be used by TSPs who are preparing a C3A, as the model for their own documents defining their own specific Components and the basis on which they intend having them assessed.

Conformance with this document is mandatory.

1.2 **Readership**

This document is required reading for the following parties, whose awareness of it is a requirement of the Required Assessment Procedures:

- **Accreditation bodies** that have established an agreement with tScheme, in order to understand the specific tScheme requirements upon the tScheme-recognised Assessors that the Accreditation Body is responsible for accrediting;
- **tScheme-recognised Assessors** who will be performing the Assessment of an Electronic Trust Service Component and its Provider, as specified by a C3A;
- **TSPs** who wish to have a Service submitted for an Assessment as the basis for seeking a Grant of tScheme-Ready Status;
- **tScheme's representatives** who are available to offer guidance during the Assessment and tScheme-Ready Status processes.
This document is intended for use as a template by Providers of Electronic Trust Service Components when preparing a C3A as a prerequisite to making an application for Registered Applicant status and who will use the C3A as the basis for contracting with a tScheme-recognised Assessor for the conduct of an Assessment with the intention of applying to have their Component accepted for tScheme-Ready status.

1.3 Overview & preparation

The document provides a framework of sections and sub-headings together with proposed standardised text. Authors of specific C3As are invited to adopt the style, phrasing and terminology of this model to the fullest extent practical within the context of their own organisations. This will assist readers who have to deal with C3As from a number of different sources.

As stated above, tScheme's Required Assessment Procedures is required prior reading for C3A authors (amongst others). It sets out explicit requirements across the overall process of the tScheme-Ready Status procedures and points to other detailed sources. A further document, Preparing for an Assessment includes guidance on how to select a tScheme-recognised Assessor.

Text intended to offer narrative or guidance is in italicised dark red (brown) text framed within a dark red border (as per this paragraph).

Within the suggested text there are a number of placeholders where authors should substitute the details of their own organisations and Components. These are indicated using «chevrons» as indicated in this sentence.

Throughout this document a distinction is made between an Outline C3A associated with a request for Registered Applicant status, and a Full C3A, which will become the focus of the Assessment itself.

Only the Outline C3A should be submitted to tScheme. The Full C3A is likely to be designated ‘Commercial In Confidence’, its confidentiality protected within the context of an independent agreement signed with the chosen Assessor. However, certain parts of the Full C3A will be taken directly and used in preparing the Assessment Report and ultimately in the Grant of tScheme-Ready Status.

In order to alert the TSP as to which parts of their C3A will be taken directly when preparing their Assessment Report those parts of this model document are framed in green without background shading (as per this paragraph). tScheme will then copy such text from the Assessment Report and use it when preparing their Grant of tScheme-Ready Status.
It is recommended that the C3A be agreed with the chosen Assessor prior to the Assessment. This will assist the Assessor in understanding the Component to be assessed and will ensure a sufficient and mutually acceptable level of detail is documented. It is further a requirement that the C3A be revised as necessary to accurately define the Component as actually assessed.

It is recognised that individual companies will have their own house styles and possibly specific Component-related requirements that will dictate the final appearance of their own C3A, and hence it is understood that the tScheme styling of this model document may be substituted by the owner’s own style. It is assumed therefore that any specific instantiation of this model will be subject to the owner’s own configuration management practices, and hence none of these are explicitly suggested within this model.

Improvements, enhancements and the provision of additional information to support the explanation of the CSA are fully encouraged within the constraint of following the model format as much as possible.

Definitions of terms and acronyms that are not defined in this document may be found in the tScheme Glossary of Terms.

Within the following Sections, an indication is given as to whether the heading and related text is applicable to either an Outline C3A, a Full C3A or both.
2. **PURPOSE & READERSHIP**

*The following text is suggested for those seeking tScheme Registered Applicant status, i.e. preparing an Outline C3A.*

This document is the primary reference governing «company»’s application for tScheme Registered Applicant status in respect of their «name of component» Component.

It provides the necessary high-level description, target customer market, and outline technical specification required by tScheme.

The document is intended to give:
- «company»’s management an understanding of what it is they are committing to;
- the chosen Assessor, «assessor», an understanding of the scope of Assessment that «company» requires to have conducted, and;
- the tScheme Approvals Committee the basis for considering and accepting «company»’s application for tScheme Registered Applicant status.

*The following text is suggested for those wishing to have their Component assessed and submitted for tScheme-Ready Status, i.e. a Full C3A.*

This document is the primary reference governing the Assessment and submission for tScheme-Ready Status of «company»’s «name of component» Component.

The document is intended to:
- give «company»’s management an understanding of what it is they are committing to;
- define the full scope of the Assessment to be undertaken;
- define what evidence is to be provided and how it demonstrates compliance of the Component as a whole;
- form the central technical scoping of the contract between «company» and its chosen Assessor, «assessor»;
- support «company»’s submission to the tScheme Approvals Committee for a Grant of tScheme-Ready Status for its Component.
3. **COMPONENT DESCRIPTION**

3.1 Component Provider

*The following text is required in all C3As*

This document relates to «company», registered in «place of registration» under «registration reference / details» whose registered office is at «registered address». «company» is «status, e.g. independent corporation / wholly owned subsidiary of etc.».

«company»’s additional contact details are as follows:

**Contact person for the purposes of this Assessment:**

**Primary contact:**
«name, title»
«address»
«telephone»
«email»

**Secondary contact:**
«name, title»
«address»
«telephone»
«email»

*The following additional text is suggested for those wishing to have their Component assessed and submitted for tScheme-Ready status (i.e. Full C3A).*

**Contact points with regard to the Component (e.g. Customer Support etc):**

**Contact 1:**
«functional title»
«address»
«telephone»
«email»
«url»

**Contact 2:**
«functional title»
«address»
«telephone»
3.2 Public Component Description

The following text is required in all C3As

This C3A relates to «company»’s Component known as «name of component».

«name of Component» is a «Public Component Description of component».

The Public Component Description will be preserved throughout the Assessment process, will be included in the Assessment Report and used subsequently by tScheme when preparing the Grant of tScheme-Ready Status.

The Public Component Description should describe the principal features of the Component by setting out the purpose of the Component followed by additional detail, including, inter alia:

- features and functions incorporated;
- intended class(es) of usage / application;
- checks performed on supplied data;
- applicable restrictions;
- assumed usage / application community characteristics;
- nature of application / integration into user Services;
- etc.
  (the author should include here information in whatever category is required to adequately describe their Component)

This description must be a concise and accurate description of the scope and content of the CSA. It must be:
- suitable for unlimited public release;
- free of any jargon and marketing-hype;
- understandable to the non-specialist, within reason;
- suitable for prospective and actual customers of the Component and for parties relying on the Component;
Before an Assessment can commence the Full C3A must be extended to provide an Assessor's Component Definition. This is addressed in Section 3.5.

3.3 Component topology

In an Outline C3A a system-level diagram (or diagrams) should be provided showing the constituent parts and internal functions that make up the Component. This should include their relationship to each other. Brief supporting narrative should be provided to describe the elements of the diagrams.

In a Full C3A, a system-level diagram (or diagrams) should be provided showing the constituent parts and internal functions that make up the Component. This should include their relationship to each other. Supporting narrative should be provided to describe the elements of the diagrams to a further level of detail, such that the way in which the Component is packaged and made available is explained, plus indications of levels of redundancy and resilience that are built into the architecture.

3.4 Component environment

In an Outline C3A, the level of detail provided under this heading need only be a generalised description.

In a Full C3A, the level of detail provided should include specific descriptions of physical, operational and procedural requirements for the Component to function as specified.

\[1\] Inclusion of a reference to the specification in this description does not automatically require that it be fully public – the TSP may impose access controls over it. However, its inclusion does demonstrate that it exists (because the Assessor will validate this).
hardware installations and software versions and configurations, such that the intended Assessor can plan the Assessment required of them.

3.5 Assessor’s Component Definition

This section is only required in a Full C3A. It must give a comprehensive, precise definition of the Component, its constituent parts and its internal functions, suitable for tScheme-recognised Assessors to identify and scope the Component for the purpose of the Assessment. It must provide information beyond the extent of that which would be found in the Public Component Description, and which an Assessor would need to know about the CSA in order to effectively conduct the Assessment. The Assessor’s Component Definition is not aimed at customers and is not primarily intended for public dissemination.

This definition may be in a separate document but it is catered for in this Model C3A, and should consist of an extension to the detail given in the Outline C3A, in §3.2 to §3.4 inclusive.
4. **APPROVAL PROFILES, RECOGNISED STANDARDS, GUIDELINES AND EVIDENCE**

4.1 Applicable Approval Profiles

The following table includes all existing Approval Profiles at their latest published status. All authors should delete those that are not applicable.

In an Outline C3A the columns headed ‘Issue’ and ‘Abbrvn’ should be deleted (since the actual versions used will be determined according to those current at the time the Assessment is undertaken).

In a Full C3A, in the column headed ‘Issue’, replace the term ‘<latest>’ with the actual version number that is current at the time the Assessment is undertaken.

This table must be used for PKI-based Trust Services.

<table>
<thead>
<tr>
<th>Title</th>
<th>Identity</th>
<th>Issue</th>
<th>Abbrvn</th>
</tr>
</thead>
<tbody>
<tr>
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<td>3-00</td>
<td>Base</td>
</tr>
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<td>tSd0102</td>
<td>3-00</td>
<td>CA</td>
</tr>
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<td>Approval Profile for Signing Key Pair Management</td>
<td>tSd0103</td>
<td>3-00</td>
<td>SKPM</td>
</tr>
<tr>
<td>Approval Profile for Certificate Generation</td>
<td>tSd0104</td>
<td>3-00</td>
<td>CGen</td>
</tr>
<tr>
<td>Approval Profile for Certificate Dissemination</td>
<td>tSd0105</td>
<td>3-00</td>
<td>CDis</td>
</tr>
<tr>
<td>Approval Profile for Certificate Status Management</td>
<td>tSd0106</td>
<td>3-00</td>
<td>CSM</td>
</tr>
<tr>
<td>Approval Profile for Certificate Status Validation</td>
<td>tSd0107</td>
<td>3-00</td>
<td>CSV</td>
</tr>
<tr>
<td>Approval Profile for Registration</td>
<td>tSd0042</td>
<td>3-00</td>
<td>Regn</td>
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</table>
This table must be used for Trust Services that are not PKI-based (otherwise referred to in tScheme documentation as IDP Services).

<table>
<thead>
<tr>
<th>Title</th>
<th>Identity</th>
<th>Issue</th>
<th>Abbrvn</th>
</tr>
</thead>
<tbody>
<tr>
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<td>tSd0111</td>
<td>&lt;latest&gt;</td>
<td>Base</td>
</tr>
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<td>Approval Profile for Identity Registration Services</td>
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<td>IdReg</td>
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<tr>
<td>Approval Profile for Credential Validation Services</td>
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<td>&lt;latest&gt;</td>
<td>CVS</td>
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<td>Approval Profile for Attribute Registration Services</td>
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<td>&lt;latest&gt;</td>
<td>Attr</td>
</tr>
<tr>
<td>Approval Profile for Credential Management Services</td>
<td>tSd0112</td>
<td>&lt;latest&gt;</td>
<td>CrdM</td>
</tr>
</tbody>
</table>

NB – in the above tables, the column headed ‘Abbrvn’ will not be included within the Grant of tScheme-Ready Status and hence does not appear within the green border.
4.2 Recognised standards and guidelines

Both forms of C3A should specify here to which recognised standards and guidelines the author wishes tScheme to endorse conformance, within its Grant of tScheme-Ready Status. Such external standards or guidelines must have been recognised by tScheme for this purpose and listed on the tScheme website.

A table in the same format as that for the Approval Profiles should be used.

The following table may be used to list the standards or guidelines against which conformance is claimed. NB. This does not need to refer to either ISO 9000 or ISO 27001 (or equivalents), which are implicit in the tScheme Base Profile.

In an Outline C3A, the columns headed ‘Issue’ and ‘Abbrvn’ should be deleted (since the actual versions used will be determined according to those current at the time the Assessment is undertaken).

The applicable tScheme-recognised standards and guidelines are:

<table>
<thead>
<tr>
<th>Title</th>
<th>Identity</th>
<th>Issue</th>
<th>Abbrvn</th>
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</table>
The information in the remainder of this section need only be provided in a Full C3A.

4.3 Component and Approval Profiles mapping

The high-level mapping between the Component’s functional elements and the selected Approval Profiles is as follows:

In the following table the document owner should enter in the left-hand column the identifiable functional elements of their Component, deleting the columns for those Approval Profiles they have not selected.

In each entry where there is a correspondence between the Component and the selected Approval Profiles there should be a reference or linkage to a following sub-section that describes the nature of the relationship and identifies the evidence that will be offered to demonstrate compliance with the Approval Profiles’ criteria. This reference should be to §4.4, §4.5, §4.6, or additional sub-sections if required.

This table must be used for PKI-based Trust Services.

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<th>CA</th>
<th>SKPM</th>
<th>CGen</th>
<th>CDis</th>
<th>CSM</th>
<th>CSV</th>
<th>Reg</th>
<th>Other</th>
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</tbody>
</table>

This table must be used for Trust Services that are not PKI-based (otherwise referred to in tScheme documentation as IDP Services).

<table>
<thead>
<tr>
<th>Service functional element/Site</th>
<th>Base</th>
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<th>IdReg</th>
<th>CVS</th>
<th>Attr</th>
<th>CrdM</th>
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</table>
4.4 Evidence

A general description of the available evidence and documents, covering:

- Formal status of «company»;
- Formal quality certifications held;
- The procedures and standards that govern the management and operation of the Component;

Documents in the above category could include, inter alia:
Where appropriate: High-level specifications;
Where appropriate: Corporate Security Policies and procedures, Approval Policies, template Service Practice Statements, SPDS;
Legal compliance, Insurance policies.

Technical standards and specifications, other supporting material (both de facto and de jure);

Documents in the above category could include, inter alia:
Component, System and Web design documentation; Test & Integration plans, schedules, scripts, results;
Contractual arrangements for support and outsourcing, together with any risk analysis and contractual arrangements for Assessment;
Pre-existing assessments, certifications, technical reports, industry-scheme recognition, other tScheme Assessments, site inspections.

The format and source of these documents should be indicated (paper, electronic).

4.5 Document hierarchy

Include a graphic or other effective means of identifying the documents being provided as evidence and their relationship to one another (including title and formal reference or identity).
4.6 Evidence and Approval Profile criteria mapping

In this section the document owner should insert, or provide reference to a further document giving, the identity/title of documents intended to be offered as evidence in relation to the chosen Approval Profiles and their respective criteria. tScheme recommends the following method for accomplishing this, although document owners are free to accomplish this by other means so long as the requirements are satisfied and the Assessor finds it to be a workable solution. The recommended approach is:

From each of the chosen Approval Profiles, insert or cut & paste §3 and Annex I into this section of the C3A (or into the alternative document if preferred). This will bring in the explicit criteria (§3) and the Clause Compliance List (Annex I) - the intervening §4 should be deleted – it serves little purpose here. It would be sufficient for the purposes of this section of the present document to just import the Clause Compliance List, but by also importing the criteria themselves a convenient feature of the Approval profiles, the ability to follow bi-directional linking between criteria clauses and their corresponding compliance list entries, is preserved. This will facilitate the Assessment later on.

Then, in the compliance lists, for each criterion in each Approval Profile, the document owner should insert a reference to the form of evidence that will show compliance with that criterion. This process may be facilitated by allocating convenient abbreviations to specific evidential documents when describing them in either of the preceding sections of the present document.

The document owner will need to attend to imported headings to structure and contain the imported text within this section of the present document which, since they will have a good degree of competence in using MS Word, need not be spelled out for them.
5. **ADDITIONAL INFORMATION**

The owner may provide here whatever additional information is felt necessary or useful to support the C3A, whether being used for an application for tScheme Registered Applicant status (Outline C3A) or for formal tScheme-Ready Status (i.e. Full C3A).

The owner may, furthermore, express additional requirements for the Assessors to address that take the Assessment beyond the scope of the selected Approval Profiles. It is recommended that the necessary additional parts of the document be placed in the most appropriate section (e.g. additional criteria against which to be assessed might go under §4.1, with the proposed evidence under §4.4).

Annexes may also be added where required, and may be an alternative holding place for the table entries required in the ‘Applicable Approval Profiles’, ‘Recognised standards and guidelines’ and ‘Evidence’ sections if, for example, a landscape presentation is more suitable.