SCM QA Plan Template

*OFFICIAL*

Should Cost Modelling



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Version 1.0

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# Introduction

## A Quality Assurance Plan (QA Plan) should be developed as part of initial model planning (i.e. during model scoping). When preparing a QA Plan it is important that included QA and testing activities are proportionate to both the criticality of the decision or issue that the Should Cost Model (SCM) supports and the risk presented by the SCM (see SCM Development Guidance for information on different types of QA and testing activities). Models that are more complex or sophisticated generally have a higher likelihood of error and present a higher risk. Models that support critical decisions and/or models that are more sophisticated should be subject to more rigorous QA and testing. The Initial Model Assessment Tool (IMA Tool) can be used to inform the selection of appropriate QA and testing activities.

## When considering the types of tests for inclusion it is important to note that QA is more than checking the analysis for errors and alignment with its specification (verification). It must also include checks that the analysis is appropriate, i.e. fit for the purpose for which it is being used (validation). See Aqua Book and the Review of Quality Assurance of Government Models for more information).

## The performance of each of the tests set out in the SCM QA Plan should be undertaken by personnel who are suitably qualified and experienced to do so. The time allocated to undertake the tests should be sufficient for them do be performed adequately and should include an allowance for multiple ‘review cycles. These may be required to address any issues identified by quality assurers that require correction by the developer, followed by re-review. Notably, given the prevalence of errors within models, allowing for a single cycle is unlikely to be sufficient.

## Responsibility for preparing a QA Plan would typically sit with the Model Developer, with input from other stakeholders. However, this may vary on a case by case basis.

## Through the sign-off process the QA Plan can be used as a means of formalising agreement with the Model Senior Responsible Owner (Model SRO) and other key stakeholders that the planned QA and testing activities are considered by them to be appropriate.

## Producing a QA Plan can also help to ensure that enough time and appropriate resources are available to undertake QA and testing.

## Once prepared, the QA Plan set out within this QA Plan Template should be revisited periodically, and especially following any changes to the model’s scope or intended use, to help ensure that it remains appropriate.

## Further details on QA and testing can be found in the SCM Development Guidance and the SCM Testing Procedures.

## The use of this Template is not mandated, although it is recommended where there is nothing similar in use within the contracting authority. It should be applied in a manner that is proportional to the risks associated with a specific SCM and its use.

## You should consult the Cabinet Office Sourcing Programme for further information or before planning an SCM for complex services, projects or programmes via sourcing.programme@cabinetoffice.gov.uk.

# How to use this Template

## This QA Plan Template (“this Template”) is an example of how an SCM QA Plan can be set out and what areas to cover.

## This Template is intended to add structure to an SCM QA Plan. It should be tailored as appropriate, which may include adding, removing or amending sections within this Template when populating it.

## This Template includes example sections that may be relevant to the SCM QA Plan being developed. ‘[*Square Brackets*]’ are included where either:

1. further information should be populated; and/or
2. information in the Template should be checked and confirmed that it is correct for the SCM being developed; and/or
3. illustrative examples are provided.

## Prior to completing this Template, it is recommended that the SCM Scoping Template is completed first.

## References to the sections in the SCM Scoping Template that may help to inform completion of this Template are detailed in ‘{*Curly Brackets*}’ within the body of the Template.

## It is recommended that this section of the Template (‘How to use this Template’), the ‘Introduction’ section and the Contents page are deleted once the Template is populated.

## This Template uses GCF branding for illustrative purposes. Please remove GCF branding and update to reflect the branding of your contracting authority prior to populating it.

## Consider the need to add a Protective Marking to this Template ahead of populating it.

# SCM QA Plan Template

# Document Control

**Document Name:**

**Document Version:**

**Prepared by: [Insert Name & Title] Date: [Insert Date]**

**Reviewed by: [Insert Name & Title] Date: [Insert Date]**

**Approved by: [Insert Name – [Model SRO]] Date: [Insert Date]**

**Document Edit History:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Version** | **Date** | **Comment** | **Updated By** | **Approved by** |
|  |  |  |  |  |

# SCM QA Plan for [Project/Model]

|  |
| --- |
| **Project Background** |
| [Insert Project Background][e.g. In line with the proposed changes to XYZ Legislation by XYZ the XYZ Project has commenced to look at the redesign of the XXX service offering.The new service offering is expected to go live in 202X and it is anticipated will cost in the region of £Xm per annum.]{May be informed by Questions 3.1, 4.1 – 4.6 of the SCM Scoping Template} |

|  |
| --- |
| **Model Background** |
| [Insert Model Background][e.g. As part of XYZ Project and to support the DMA and Business Case Process an SCM will need to be prepared.The model is required to be completed by dd/mm/yy and shows the expected cost of the service under x scenarios.A new Model will need to be built to meet the requirements]{May be informed by Questions 4.4, 4.7, 4.8 and 14.1 of the SCM Scoping Template} |

|  |
| --- |
| **IMA** |
| [Insert IMA Score][Insert details of QA and Testing measures suggested by the IMA] {May be informed by Question 3.4 of the SCM Scoping Template} |

**Key Stakeholders**

Key stakeholders and decision makers for the SCM are:

* [Insert Name – Insert Role]
* [Insert Name – Insert Role]
* [Insert Name – Insert Role]
* [Insert as many names and roles as required]

{May be informed by Section 11 and 12 of the SCM Scoping Template}

**Model SRO**

* The Model SRO taking overall responsibility for a model and its use, including the QA and testing process is [Insert Name]

**Planned Development Team**

The Development Team is anticipated to be comprised of:

* [Insert Name] – Model Developer
* [Insert Name] – Model Architect
* [Insert Name] – Quality Assurer
* [Insert Name] – Quality Assurer

[Insert additional/tailor the above roles as required considering the model/project]

{May be informed by Section 12 of the SCM Scoping Template}

**Model Development Process**

[Include details of QA and governance activities that will be performed over the Model Development Lifecyle]

[e.g.

Will the development of the SCM follow a structured process that starts with detailed up-front planning?

Will the model be scoped, specified and designed and the outputs of these activities documented?

Will the documents produced during the model planning and design phases be signed off and approved by the Model SRO prior to the model build phase commencing?

Will the model be built in line with good practice guidance?

Will the model developer undertake self-testing of the model prior to sharing the model and its associated documentation for formal QA and testing?

Will QA Reports document any known limitations?

Will QA Reports be signed-off by the Model SRO?

Will the model be approved by the Model SRO for use?

Will appropriate measures (e.g. Model Operator training, version and change control and planned periodic QA and testing) be put in place to help ensure that the model remains fit for purpose over its life ahead of implementation?]

**Modelling risks and mitigations**

[Insert details of specific risks associated with this modelling project and how they will be mitigated. (e.g. timeline risks, data risks, resourcing risks etc.)]

**Planned Test Procedures**

The following table sets out the planned test procedures to be performed, along with the associated model risk(s) they intend to mitigate and resource requirements:

|  |  |  |  |
| --- | --- | --- | --- |
| **#** | **Risk(s)** | **Test Procedure** | **Resource Requirements** |
| 1 | [e.g. formulaic or arithmetic errors are included in the model] | [e.g. Review of unique formulae on a cell-by-cell basis will be performed covering all unique formulae in the model. This test will:* check unique formulae in the model are operating correctly and in line with the model Specification
* include a review of in-built error checks/error check network within the model.
 | [e.g. 2-3 days, Joe Bloggs] |
| 2 | [e.g. the modelling outputs are not a realistic reflection of the project] | [e.g. a Commercial Review of the outputs will be performed] | [e.g. 1-2 days, Sue Bloggs] |
| 3 |  |  |  |

[Insert additional rows as required considering the model specific risk and associated test procedures required to help mitigate these risks]

**QA Limitations**

[Insert details of any known QA Limitations (e.g. Validation of a subset of data only)]

**QA Documentation**

[Following the performance of the tests set out in this SCM QA Plan they will be documented, together with the associated results, within a QA Report for sign-off by the Model SRO ([Insert Model SRO Name]). Accompanying Test Memos will be prepared, as appropriate, with enough detail to enable each of the tests to be reperformed. Copies of the reviewed SCM; any subsequent versions as a result of additional ‘review cycles’; all formal correspondence between the SCM developer and SCM quality assurers; all supporting artefacts, such as the model Scope, Specification and User Guide; together with details of all the tests performed and the associated results will be stored under [Insert File Location].]



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