# TMMi

# Data Submission Requirements (DSR)

## Version 1.2

## Produced by the TMMi Foundation

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# Revisions

This section summarizes the key revisions between different versions of this document.
This section is provided for information only.

| Version | Description of changes |
| --- | --- |
| V1.0 | Sections have been combined and cover all assessment data submission requirements, revised requirement to provide data about evidence gathered in support of findings or ratings, new requirement to provide data used to determine the assessment sample size, sections have been combined to cover all assessor data submission requirements and removed numeric scale for assessor performance ratings |
| V1.1 | SDLC added as an attribute being part of the data submission form, full lists of industry sector codes and country code have been removed, references have been updated, non-used glossary items have been removed, section added on web-site presence (including how expired certifications are handled) and readability has been increased. |
| V1.2 | The industry categories have been updated with a more standard list (this list is also being used with the TMMi world-wide user survey).<br>Waterfall has been removed as an option for SDLC, V-model is now used to represent the sequential lifecycles.<br>Terms not used in this document, deleted from the list of terms in glossary<br>References updated to the latest versions. |

# Contents

# 1  Executive Summary

## 1.1  Overview

### 1.1.1  Synopsis

The TMMi Data Submission Requirements (DSR) provides specific requirements for the submission of assessment results data and assessor activity data to the TMMi Foundation for:

- Submission of sanitized data each time a Formal Assessment is undertaken by an accredited assessment provider

- Assessor and Lead Assessor participation and performance during assessments

Assessment teams are required to maintain data on assessment activities, performance evaluations etc as part of the ongoing record to attain/retain accreditation status.

Assessment teams are required to notify the TMMi Foundation of proposed formal assessments and submit data for Formal Assessments to the TMMi Foundation.

These requirements stipulate the specific data to be submitted enabling the TMMi Foundation to

- Verify the consistency and completeness of the data submitted

- Accredit assessors

- Accredit assessed organizations and organization units

- Improve its products and services, including the TMMi reference model, TAMAR etc

- Complete analysis and research in line with its objectives and goals

- Publish anonymous information (including market trends) of interest to the testing community and those purchasing test services

This document should read in conjunction with the:

- Test Maturity Model Integration [TMMi]

- TMMi Assessment Method Application Requirements [TAMAR]

- TMMi Assessor Accreditation Criteria [AAC]

This document assumes that an accredited or recognized TMMi assessment method is being used by the accredited lead assessors and/or assessors.

### 1.1.2  Ownership

The Foundation asserts its ownership of the Test Maturity Model integration (TMMi), TMMi Assessment Method Application Requirements (TAMAR), TMMi Assessor Accreditation Criteria and Data Submission Requirements (in this document).

## 1.2  Scope

### 1.2.1  Items in scope

Data gathered for Formal and Informal Assessments

Data gathered for individual Assessors

### 1.2.2  Items out of scope

The TMMi reference model, which describes the test practices expected of compliant organizations.

TAMAR, which describes the requirements for Assessment Methods and completion of assessments.

Discussion of accredited methods and the accreditation process for assessment methods and assessors.

## 1.3 Confidentiality

### 1.3.1 Assessment and Assessor Information

All data submitted to the TMMi Foundation will be treated confidentially.

All data published or otherwise provided for use external by the TMMi Foundation will be anonymous and will be summarized such that the sources of the data cannot be identified or inferred.

### 1.3.2 Background Organizational Information

The TMMi Foundation requires certain background information to ensure that data may be analyzed anonymously and summarized meaningfully without identifying the source of the data.

### 1.3.3 Accreditation Information

The TMMi Foundation requires certain data items for the purposes of completing its accreditation procedures and validating data submitted.

This information will be treated as strictly confidential and will not be used for any other purpose.

## 1.4 Utilization of this Document

### 1.4.1 Data Gathering Guidance

Formal and Informal Assessment data should be recorded and archived in accordance with TMMi and TAMAR.

It is the responsibility of individual assessors to gather the data for submission to the TMMi Foundation, as required.

Assessment data is required to enable the TMMi Foundation to:

- Verify the consistency and completeness of the data submitted

- Accredit assessed organizations and organization units

- Improve its products and services, including the TMMi reference model, TAMAR etc

- Complete analysis and research in line with its objectives and goals

- Publish anonymous information (including market trends) of interest to the testing community and those purchasing test services

Assessor performance data is required to enable the TMMi Foundation to:

- Verify the consistency and completeness of the data submitted

- Accredit assessors

- Complete analysis and research in line with its objectives and goals

- Publish anonymous information (including market trends) of interest to the testing community and those purchasing test services

### 1.4.2 How to use DSR

Chapter 2 details the requirements for submission of assessment data gathered during the assessment

Chapter 3 details the requirement for submission of assessor data based in their participation during the assessment

Data submitted must comply with each of these respective requirements in order for it to be accepted by the TMMi Foundation.

# 2 Assessment Data Submission Requirements

## 2.1 Overview

This section details the data recording and submission requirements for assessments. In accordance with TMMi Assessment Method Application Requirements [TAMAR] it is a requirement to record assessment data and to provide a written report to the Sponsor.

The data submission requirements differ depending on the type of assessment completed.

- The assessment data for all Formal Assessments must be recorded and submitted to the TMMi Foundation

- The TMMI Foundation does not require informal assessment data to be submitted.
  However, in order for assessor participation data informal assessments to be accepted (and the assessment hours to be credited for the purposes of assessor re-accreditation) the Informal Assessment data should be submitted to the TMMi Foundation

Where assessment data is submitted, the following data is required depending on the type of assessment:

| Requirement | Formal Assessments | Informal Assessments |
|---|---|---|
| Assessment Date | Required | Required |
| Assessment Service Provider | Required | Required |
| Assessment Method & Version | Required | Required |
| Assessment Type | Required | Required |
| Organization (and Organization Unit(s)) | Required | Required |
| Organization Industry | Required | Required |
| Organization Location | Required | Required |
| Assessment Sponsor | Required | Required |
| SDLC | Required | Required |
| Additional Organizational Information | Optional | Optional |
| Assessment Team Leader | Required | Required |
| Assessment Team | Required | Required |
| Assessment Scope | Required | Required |
| Organizational Scope | Required | Optional |
| Assessment Effort | Required | Required |
| Assessment Sample | Required | Required |
| Assessment Results | Formal Ratings | Findings Summary |
| Accreditation Certification | Optional | Not applicable |

## 2.2 Assessment Data Requirements

The specific information which is required to be recorded and to be submitted to the TMMi Foundation is detailed below.

### 2.2.1 Assessment Summary Information

**Assessment Date**: The actual start and actual end date of the assessment.

**Assessment Duration**: The duration of the assessment in calendar days from the actual start to the actual end date of the assessment.

**Assessment Service Provider**: The name of the assessment Service Provider.

*Guidance: If an internal self-assessment has been completed, please state that the assessment provider as "Internal Self-Assessment"*

**Assessment Method**: The name and version of the accredited Assessment Method.

**Assessment Type**: The assessment may be either "Formal" or "Informal".

**Assessment Identity Number**: The unique number identifying the assessment by the assessment team lead assessor identity number and the date the assessment was completed.

**Organization**: The name of the Organization and all Organizational Unit(s) included in the assessment scope.

> *Guidance: At least one organizational unit must be identified*

**Organization Industry**: An organizational industry category which best describes the primary business of the organization is selected from the following list of industry categories:

- IT software delivery
- Financial services/Banking
- Insurance
- Professional services
- Government
- Healthcare & Pharmaceuticals
- Automotive
- Semiconductors
- Industrial/Manufacturing
- Telecommunications/Mobile
- Energy
- Education
- Retail
- Transportation
- Media/Entertainment
- Non-profit

**Country**: location where the assessment is completed. A list of countries is available in a dropdown list.

> *Guidance: Where the organization units in the assessment scope are located in multiple countries, reference the country of the primary location in the assessment scope.*
>
> *This may reflect the location of the organization unit where the Sponsor is usually based, the location where the majority of the organization units are based or the location of the "main" or "head" office amongst the organization units.*
>
> *The assessment team lead should use the discretion to select the most appropriate country.*

**Assessment Sponsor**: The name and primary contact details for the assessment Sponsor, to include a valid e-mail address, address and telephone number.

**SDLC**: The Software development Life Cycle (SDLC) that is being applied in the organization under assessment is indicated. At least one option should be selected, multiple options can be selected. Options to choose from are: V-model, Agile and DevOPS.

**Additional Organizational Information**: Where possible details of the Organization size (including turn-over and the number of all employees) and the basic details of Information Technology function (including the IT sourcing model and number of IT employees) should be provided.

## 2.2.2  Assessment Plan

**Assessment Team Leader**: The name and assessor identity number of the assessment team leader.

**Assessment Team**: The names and assessor identity numbers of the accredited assessors and provisional assessors taking part in the assessment.

> *Guidance: All members of the assessment team should be registered with the TMMi Foundation including all accredited and provisional assessors.*

*Note: Where additional assessors have been trained for the purposes of completing an assessment, separate applications for provisional assessor registration should be submitted to the TMMi Foundation prior to commencing the assessment to avoid delays processing the assessment results.*

**Assessment Scope**: The list of TMMi Process Areas in the scope of the assessment and the list of TMMi Processes Area excluded from the scope of the assessment, supported by the assessment team lead's justification for each excluded Process Area.

*Guidance: TAMAR provides detailed guidance on how to determine the assessment scope and manage any exceptions.*

*Overall, no more than two (2) Process Areas that may be rated as "Not Applicable" within the scope of the assessment (except where the scope of the assessment is restricted to  Maturity Level 2 where only one (1) Process Area may be rated as "Not Applicable").*

*Note: All exceptions must be justified by the assessment team leader for the assessment results to be accepted by the TMMi Foundation.  The assessment team leader should detail the reasons why the exclusion is justified with reference to the organizational context, the sponsor's objectives and assessment constraints, where applicable.*

**Assessment Effort**: The effort to complete the assessment detailing the time spent by each assessor to complete: Assessment Planning, Evidence Gathering, Evidence Review, Assessment Reporting and Assessor Reporting.

**Assessment Sample**:

-   The number of projects included in the assessment

-   The number of interviews completed for each organization unit

-   The number of artifacts gathered for each organization unit

## 2.2.3   Formal Assessment Data Requirements

Note: This section applies to Formal Assessments only. Informal assessments do not provide assessment ratings.

**Organizational Scope**:

-   The list of domains, development methods and project sizes considered for each organization unit

-   The list of additional criteria significant for assessment sampling, if any, for each organization unit

-   The number of distinct geographic sites for each organization unit

-   The number of projects delivered in the last 12 months for each organization unit

    *Guidance: TAMAR provides detailed guidance on how to determine the organizational scope and provides a formula for determining the minimum assessment sample size.*

**Maturity Level Rating**: The rating for each Maturity Level in the assessment scope

**Process Area Rating**: The rating for each Process Area in the assessment scope

**Goal Ratings**: The rating for each Specific Goal and Generic Goal for all Process Areas in the assessment scope

**Public Certification**: Confirm whether or not the Sponsor requires the TMMi Foundation to issue an accreditation certificate.

*Guidance: Service Providers and Lead Assessors must ensure that their customers' are aware that the TMMi Foundation will publish the details of the certificate and the assessment results publically, for each accreditation certificate issued.*

*The TMMi Foundation shall issue an accreditation certificate to the Lead Assessor, provided that it is possible based on the assessment maturity level ratings.*

## 2.2.4   Informal Assessment Data Requirements

Note: This section applies to Informal Assessments only.  Informal Assessments provide assessment findings which provide an indication of test process strengths and weaknesses.

The assessment data for Informal Assessments may be *optionally* submitted to the TMMi Foundation.

-   Process Area: List each Process Area reviewed in the assessment scope

-   Findings: Confirm whether or not assessment findings were documented

## 2.2.5  Assessment Results Acceptance

The TMMi Foundation will verify that the assessment results are consistent and complete before accepting the results.

*Guidance: Service Providers and Lead Assessors should ensure that their customers' are aware that the TMMi Foundation shall review the assessment results and raise queries, if necessary, prior to accepting the results and issuing any certification, if required.*

# 3 Assessor Data Submission Requirements

## 3.1 Overview

This section details the data recording and submission requirements for assessors.

The data submission requirements differ depending on the type of assessment completed.

- The assessor data for all Formal Assessments must be recorded and submitted to the TMMi Foundation

- The TMMI Foundation does not require assessor data for Informal Assessments to be submitted. However, in order for assessor participation data informal assessments to be accepted (and the assessment hours to be credited for the purposes of assessor re-accreditation) the Informal Assessment data should be submitted to the TMMi Foundation

## 3.2 Assessor Data Requirements

This section describes the data to be submitted for all assessors participating in the assessment regardless of the level of experience or their role during the assessment.

### 3.2.1 Assessor Identification

**Assessor Name**: The assessor's full name

**Assessor Type**: The current assessor qualification: Lead Assessor, Assessor or Observer.

**Assessor Identity Number**: The assessor's unique identity number provided by the TMMi Foundation

### 3.2.2 Assessment Identification

**Assessment Identity Number**: The unique number identifying the assessment by the assessment team leads assessor identity number and the date the assessment was completed

**Assessment Date**: The actual start and actual end date of the assessment

**Assessment Duration**: The duration of the assessment in calendar days from the actual start to the actual end date of the assessment

**Assessment Service Provider**: The name of the assessment Service Provider

*Guidance: If an internal self-assessment has been completed, please state that the assessment provider as "Internal Self-Assessment"*

**Assessment Method**: The name and version of the accredited Assessment Method

**Assessment Type**: The assessment may be either "Formal" or "Informal"

### 3.2.3 Assessor Activity Log

**Assessment Effort**: The effort to complete the assessment detailing the time spent by each assessor to complete: Planning, Evidence Gathering, Evidence Review, Assessment Reporting and Assessor Reporting

**Assessment Planning**: The number of hours participation in Assessment Planning activities, including all preparatory activities to define the assessment scope, establish a schedule to gather evidence and prepare a documented plan for submission to the Sponsor

**Evidence Gathering**: The number of hours participation in Evidence Gathering activities, including interviews and identifying and obtaining copies of artifacts

**Evidence Review**: The number of hours participation in Evidence Review activities, including determining provisional ratings by consensus for practices and goals based on interview and artifact data.

**Assessment Reporting**: The number of hours participation in Assessment Reporting activities, including verification and validation of assessment findings, determining assessment ratings for process areas and preparing a documented report for submission to the Sponsor

**Assessor Reporting**: The number of hours participation in Assessor Reporting activities, including producing assessor activity logs, reviewing performance and identifying further development requirements.

# 4   Publication on TMMi website

## 4.1   Certified Organization

Organizations that comply with the requirement will be certified. TMMi certified organisations are listed on the showing on the TMMi website grouped by TMMi level achieving

The following data is shows on the website per listing:

-   Organization

-   Organizational Unit

-   Country

-   Assessment Service Provider

-   Certificate number

-   Expiration date of certificate

-   SDLC being applied.

## 4.2   Expired Certifications

Around three months before the expiration date of the certificate an email will be sent by the TMMi accreditation officer to both the contact person of the certified organization and the contact person of assessment service provider to inform them that the certificate will expire and that if no actions is taken for re-certification they will be removed 6 months after expiration from the list of certified certification.

In case of no response or no concrete plans for re-accreditation their listing on the page certified organizations will be removed. However, they will remain to be listed on the website but now on the TMMi website page "previously certified organizations".

The following data is shows on the website on the page previously certified organization:

-   Organization

-   Organizational Unit

-   Country

-   Assessment Service Provider

-   Certificate number

-   SDLC being applied.

# 5  Glossary

| | |
|---|---|
| **assessment** | The process by which an Organization is Assessed by an Assessment Team |
| **assessment method** | See Method |
| **assessment sponsor** | This is a person who is internal to the organization being assessed who is providing resources and impetus for the Assessment to take place |
| **assessment team** | The team of people conducting an Assessment, made up of Assessment Team Members |
| **assessment team leader** | The person who leads an Assessment.  For a Formal Assessment, this must be an accredited and trained Lead Assessor |
| **assessment team member(s)** | One or more people who are part of the team conducting an Assessment.  The Assessment Team Leader is also an Assessment Team Member.  People who are Assessment Team Members are also known as Assessors |
| **assessment type** | Level of assessment rigor; either Formal or Informal |
| **assessor(s)** | One or more people who are carrying out an Assessment against an organization or a business unit or area within an organization.  The title of Assessor refers to any member of the Assessment Team, whether they are a Lead Assessor or an Assessment Team Member. |
| **formal assessment** | This is the more rigorous of the two Types of Assessment, leading to a fully verifiable benchmark rating.  Each process attribute must be corroborated by interview and artifact reviews, with the option to collect additional evidence |
| **informal assessment** | This is the less rigorous of the two Types of Assessment.  Each process attribute is supported by one source only, which may not validated |
| **lead assessor** | A person who is accredited by the TMMi Foundation as competent to lead and participate in any Type of Assessment |
| **method** | A prescribed Process, Procedures and Tools for undertaking TMMi Assessments |
| **model** | A defined reference model of Maturity Levels, Process Areas and Specific and Generic Goals and Practices – referenced by Methods when assessing Processes |
| **organization** | This refers to either the entire business, or a distinct self-contained independently managed element within a wider corporate entity |
| **organizational scope** | The collection of projects and support functions that provides institutionalization of practices used within, and representative of, an organizational unit |
| **organizational unit** | The part of an organization that is the subject of an assessment. An organizational unit deploys one or more processes that have a coherent process context and operates within a coherent set of business objectives. An organizational unit is typically part of a larger organization, although in a small organization, the organizational unit may be the whole organization. |
| **sponsor** | See Assessment Sponsor |
| **TAMAR** | This is an acronym, which stands for TMMi Assessment Model Application Requirements |
| **Test Maturity Model integration (TMMi)** | The Test Maturity Model Integration published by the TMMi Foundation |

# 6 References

[TAMAR] TMMi Assessment Method Application Requirements (2014), *TMMi Assessment Method Application Requirements Release 1.0*, TMMi Foundation

[TMMi] Test Maturity Model Integration (2022), *Test Maturity Model Integration (TMMi) Release 1.3*, TMMi Foundation

[AAC] TMMi Assessor Accreditation Criteria (2022), *TMMi Assessor Accreditation Criteria Version 3.0a*, TMMi Foundation