Quality Software (QS) Product Certification
Scheme

©Malaysian Software Testing Board (MSTB) (822609-W)
All rights reserved
Version 3.0.0, 2019

Copyright notice:

The content of this QS Product Certification Scheme ("the Scheme") document ("the Document"), and all results and reports produced by or on behalf of MSTB in relation to/pursuant to the Document ("Resulting Document") are the property of MSTB and are protected under the relevant laws (including but not limited to copyright laws of Malaysia) and under applicable international treaties and conventions.

Any reproduction, retransmission, or republication of all or part of the Document, the Resulting Document or any materials belonging to MSTB in whatever manner and form is expressly prohibited. Use of the information and materials contained in the Document is for the sole purpose of obtaining information about the Scheme only.

MSTB may permit the reproduction of the Document and/or the Resulting Document, provided that such reproduction is made in full and is not to be used for advertising purposes by any means or form, subject to prior written approval from the President of MSTB.
General Disclaimer

The nature and terms of services as contained in the Document are subject to change as and when it becomes necessary, as determined solely by MSTB without prior notice. Please go to www.mstb.org to access the latest version of the Scheme document.

Certification by MSTB indicates that a particular software product and documentation related thereto have met the specific requirements of the certification process as outlined in the Document. For the avoidance of doubt:

(a) the issuance of a certification by MSTB in respect of a particular software product and documentation related thereto is not a guarantee or warranty by MSTB of the competency, performance or capabilities of such particular product and documentation; and

(b) in no event that MSTB shall be liable for any action brought by any party against MSTB or its related entity in respect of the issuance of the certification;

(c) the applicant of the Scheme shall indemnify MSTB for any action brought by any party against MSTB or its related entity in respect of the issuance of the certification;

The applicant of the Scheme is required to execute an agreement with MSTB to govern the rights and obligations of the parties with regards to the provision of the certification services by MSTB as contained in the Document ("the Relevant Agreement") prior to the provision of the certification services by MSTB. In the event there is any inconsistency between the terms and conditions in the Document and the terms and conditions in the Relevant Agreement, the terms and conditions in the Relevant Agreement shall prevail.

Intentionally left blank
## Table of Contents

General Disclaimer ........................................................................................................................................... ii
Table of Contents .............................................................................................................................................. iii
References .......................................................................................................................................................... v

1.0 Background .................................................................................................................................................. 1
  1.1 Introduction .............................................................................................................................................. 1
  1.2 Scope of QS Product Certification .......................................................................................................... 1
  1.3 MSTB QS Scheme options ....................................................................................................................... 1

2.0 Purpose of Quality Software (QS) Product Certification ........................................................................ 4
  2.1 What is Quality Software (QS) Product Certification ............................................................................. 4
  2.2 The objectives of QS Product Certification ............................................................................................ 4
  2.3 Benefits of QS Product Certification ....................................................................................................... 4
    2.3.1 Benefits for Software Developers and Vendors ............................................................................... 4
    2.3.2 Benefits for Buyers and Users ......................................................................................................... 5

3.0 Software Products That Can Be Certified ................................................................................................. 5
  3.1 Software Products That Are Excluded From Being Certified Under the Scheme ........................................ 5

4.0 Quality Model ............................................................................................................................................. 6
  4.1 Conforming to ISO Standards .................................................................................................................. 6
    4.1.1 QS 9126 and QS 9126 Elite Quality Model .................................................................................... 6
    4.1.2 QS 25023 and QS 25023 Elite Quality Model ................................................................................ 7
  4.2 Software Product Quality Evaluation ....................................................................................................... 8
    4.2.1 QS 9126 Quality Evaluation ............................................................................................................. 8
    4.2.2 QS 9126 Elite Quality Evaluation .................................................................................................... 9
    4.2.3 QS 25023 Quality Evaluation ........................................................................................................ 11
    4.2.4 QS 25023 Elite Quality Evaluation .................................................................................................. 12
  4.3 Document Evaluation ................................................................................................................................. 14
    4.3.1 QS 9126 and QS 9126 Elite Document Evaluation ........................................................................... 14
    4.3.2 QS 25023 and QS 25023 Elite Document Evaluation ..................................................................... 15

5.0 Evaluation Criteria ..................................................................................................................................... 16
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.0</td>
<td>Governance</td>
<td>17</td>
</tr>
<tr>
<td>7.0</td>
<td>Process of Software Product Certification</td>
<td>18</td>
</tr>
<tr>
<td>8.0</td>
<td>What QS Certification Means</td>
<td>19</td>
</tr>
<tr>
<td>Legal Notices</td>
<td></td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Certification Disclaimer</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Trade Marks</td>
<td>21</td>
</tr>
</tbody>
</table>
References

1.2 ISO/IEC 17065: 2012 – Conformity assessment – Requirements for bodies certifying products, processes and services
1.3 MS ISO/IEC 17025: 2005 General requirements for the competence of testing and calibration laboratories
1.4 Specific Technical Requirements 1.13 (STR 1.13) Specific Technical Requirements For Accreditation Of Software Testing Laboratories
1.9 ISO/IEC 25051:2006 - Software engineering -- Software product Quality Requirements and Evaluation (SQuaRE) - Requirements for quality of Commercial Off-The-Shelf (COTS) software product and instructions for testing
1.10 ISO/IEC 25010:2011 Systems and software engineering -- Systems and software Quality Requirements and Evaluation (SQuaRE) -- System and software quality models
1.11 ISO/IEC 25023:2016 Systems and software engineering -- Systems and software Quality Requirements and Evaluation (SQuaRE) -- Measurement of system and software product quality
1.12 ISO/IEC 25051:2014 Software engineering -- Systems and software Quality Requirements and Evaluation (SQuaRE) -- Requirements for quality of Ready to Use Software Product (RUSP) and instructions for testing
1.13 OWASP – Open Web Application Security Project
1.0 Background

1.1 Introduction

The Malaysian Software Testing Board ("MSTB") is a national body promoting software product quality assurance and software product testing as core competencies in the development of IT-dependent quality products and services.

MSTB is a member of the International Software Testing Qualifications Board ("ISTQB") that regulates the accreditation and certification processes of software product testing certification in member countries.

MSTB is also a member of the Asia Software Quality Network ("ASQN"). ASQN promotes software quality throughout the region. The other members of ASQN are Korea, Japan, China, Vietnam, Philippines, Thailand and Singapore. Japan is the leader of ASQN.

MSTB started a ‘Quality Software (QS) Product Certification Scheme’ in 2011 to provide an independent, third-party certification of software products assessed against international standards.

1.2 Scope of QS Product Certification

MSTB as the owner of the QS Scheme and the certifying body in Malaysia will be responsible for providing and managing the Scheme which includes:

- Provision of certification activities such as software product quality evaluation and document evaluation;
- Granting, maintaining, suspending and withdrawing certification;
- Issuing certificates for certified software products; and
- Revoking certification under specific conditions such as misuse or abuse of certificates; and
- Maintaining records of certified software products and clients.

1.3 MSTB QS Scheme Options

The Scheme involves four (4) options as described below:

- QS 9126
- QS 25023
- QS 9126 Elite
- QS 25023 Elite
• QS 9126

For this level, in general, software product will be evaluated based on international standard of ISO/IEC TR 9126-2:2003 quality requirements* and ISO/IEC 25051:2006 documentation requirements*. Proven conformance to the quality and documentation requirements will qualify the software product for the QS 9126 certification.

*Note 1:
(a) Quality requirements here refers to metrics defined in ISO/IEC TR 9126-2:2003 as further clarified in MSTB’s Specific Technical Requirements for Quality Evaluation of Software Product (Version 2.1.0, 15 January 2015); and
(b) MS 1883:Part 2:2005 is technically identical Malaysian Standard (MS) to the ISO/IEC TR 9126-2:2003

*Note 2:

• QS 9126 Elite

There is software that is designed with additional attributes and operational specialities which goes beyond the basic ISO/IEC TR 9126-2:2003 quality requirements. Software product owner whose software product is of such attributes and operational specialities could choose to send software product for QS 9126 Elite certification.
• **QS 25023**

For this level, software product will be evaluated based on international standard of ISO/IEC 25023:2016 quality requirements* and ISO/IEC 25051:2014 documentation requirements*. Proven conformance to the quality and documentation requirements will qualify the software product for the QS 25023 certification.

*Note 1:*
Quality requirements here refer to the quality measures defined in clause 8 of ISO/IEC 25023:2016 as further clarified in MSTB’s Specific Technical Requirements for Quality Evaluation of Software Product (Supplementary to ISO/IEC 25023:2016), Version 1.1.0, 31 July 2018.

*Note 2:*

• **QS 25023 Elite**

Again, there is software product that is designed with additional attributes and operational specialities which goes beyond the ISO/IEC 25023:2016 quality requirements. Software product owner whose software product is of such attributes and operational specialities could as well opt to send software product for **QS 25023 Elite** certification.

Details of the requirements of the above are available in:
- **Section 4.2.1** (QS 9126 Quality Evaluation)
- **Section 4.2.2** (QS 9126 Elite Quality Evaluation)
- **Section 4.2.3** (QS 25023 Quality Evaluation)
- **Section 4.2.4** (QS 25023 Elite Quality Evaluation)
- **Section 4.3** (Document Evaluation)
2.0 Purpose of Quality Software (QS) Product Certification

2.1 What is Quality Software (QS) Product Certification

Quality Software (QS) Product Certification is a written assurance from MSTB as the certification body (CB) that a software product performs as stated in the product documents and the requirements of the QS Product Certification scheme.

2.2 The objectives of QS Product Certification

The overall objectives of certifying a software product are:

- to benchmark the software product quality characteristics against International Standards applicable to it;
- to provide an impartial, independent and third-party evaluation of the software product; and
- to increase confidence in the software product and to improve market acceptance, locally and internationally.

2.3 Benefits of QS Product Certification

The creation and verification of quality software products has become a necessity because businesses depend on the reliability, availability and integrity of software product and systems. The QS certificate benefits the software product developers or vendors as much as the software product buyers and users, going beyond acknowledgement of a correct implementation of specific requirements.

2.3.1 Benefits for Software Developers and Vendors

For software developers and vendors, getting QS Product Certification means that their software product has gain an internationally recognized Certificate of Quality. Other benefits include:

- gain customer confidence;
- improve marketability domestically and internationally;
- strengthen position in the marketplace; and
- enjoy tax incentives where applicable.
2.3.2 Benefits for Buyers and Users

For buyers and users, buying a QS Product Certification certified software product means that they are getting an **assurance of software product quality** prior to their purchase. Other benefits include:

- increased confidence in software purchases;
- mitigate software product risks by leveraging on expert validation by independent and accredited organization; and
- protection against substandard software product.

3.0 Software Products That Can Be Certified

In general, all software products of different technologies and level of complexity hosted
- on premise,
- on cloud, or
- on combination of premise and cloud (hybrid)
are certifiable, except for those falling under the category as explained in clause 3.1

3.1 Software Products That Are Excluded From Being Certified Under the Scheme

Software products which are not eligible to apply for certification under the QS Scheme, such as:

i. Software product with simple function whose technical or economic value is minimal.
ii. Software product that lacks universality as it is only operated in an isolated environment.
iii. Gambling software product.
iv. Harmful software product that may interfere with sound business activities.
4.0 Quality Model

4.1 Conforming to ISO Standards

4.1.1 QS 9126 and QS 9126 Elite Quality Model

The quality model for **QS 9126** and **QS 9126 Elite** certification conforms to Malaysian standard of MS 1883: Part 1:2005*, which defines six (6) external quality characteristics and how these characteristics are broken down into sub-characteristics.

*Note:
Malaysian standard of MS 1883: Part 1:2005 is identical (IDT) to international standard of ISO/IEC 9126-1: 2001 as both share the same quality model, characteristics and sub characteristics.

Software product quality evaluation conforms to MS 1883: Part 2:2005 (Refer to **Section 5.2** of the Document: Software Product Quality Evaluation). This is a technical report that provides external metrics for measuring attributes of the six (6) external quality characteristics defined in MS1883: Part 1:2005.

On the same note, document evaluation of software product conforms to ISO/IEC 25051: 2006, a standard used to evaluate documents for COTS software product.

Proven conformance to the MS 1883: Part 2:2005 quality requirements (through quality evaluation) and ISO/IEC 25051: 2006 documentation requirements will qualify the software product for the **QS 9126** certification.

MSTB will only conduct the relevant testing and/or certification according to the declaration made by the client or customer to MSTB in respect of the specifications of the software product required to be tested and/or certified i.e. in the event that it claims the documentation in respect of the software product conforms to ISO/IEC 25051: 2006 but was not expressly declared by such client/customer to MSTB, MSTB will not conduct the testing and/or certification to determine the conformity towards such standards.

*Intentionally left blank*
4.1.2 QS 25023 and QS 25023 Elite Quality Model

The quality model for QS 25023 and QS 25023 Elite on the other hand conforms to quality model of the ISO/IEC 25010:2011, an international standard that defines eight (8) quality characteristics for software product and how these characteristics are broken down into sub-characteristics.

Software product quality evaluation conforms to ISO/IEC 25023:2016 (Refer to Section 5.2 of the Document: Software Product Quality Evaluation). This is an international standard that provides quality measures for measuring attributes of the eight (8) external quality characteristics defined in ISO/IEC 25010:2011.


Proven conformance to the ISO/IEC 25023:2016 quality requirements (through quality evaluation) and ISO/IEC 25051:2014 documentation requirements will qualify the software product for the QS 25023 certification.

MSTB will only conduct the relevant testing and/or certification according to the declaration made by the client or customer to MSTB in respect of the specifications of the software product required to be tested and/or certified i.e. in the event that it claims the documentation in respect of the software product conforms to ISO/IEC 25051: 2014 but was not expressly declared by such client/customer to MSTB, MSTB will not conduct the testing and/or certification to determine the conformity towards such standards.

Software product evaluation under the QS Scheme (for QS 9126 & 9126 Elite and QS 25023 & QS 25023 Elite) is divided into two (2) parts:

1. Software Product Quality Evaluation
2. Document Evaluation

Intentionally left blank
4.2 Software Product Quality Evaluation

4.2.1 QS 9126 Quality Evaluation

The software product quality evaluation is performed by an accredited independent testing lab and measures the six (6) external quality characteristics from MS 1883: Part 2:2005 which are summarized below:

The characteristics can have one (1) or more metrics that are used to measure the behavior of the quality item in question. Each metric has a defined measurement method and a measurement scale. The external metrics involve measurements of a software product derived from its behavior through testing, operating and observing based on the applicable executable item. For QS 9126 certification, the total quality evaluation spectrum involves testing of one hundred and twelve (112) external metrics derived from the MS 1883: Part 2:2005. Metrics are selected and tested based on the applicable features of the software product being evaluated.

Intentionally left blank
4.2.2 QS 9126 Elite Quality Evaluation

For QS 9126 Elite quality certification, software product will be tested against additional quality requirements which are included below:

- requirements derived from the industry (for example OWASP) imposed by MSTB (where applicable);
- some additional requirements which may be related to personal data protection and unique attributes of the software (where applicable),

as detailed out in the Supplementary Agreement.

These additional quality requirements reflect the need for high quality software that match prevailing consumer demands and improve marketability.

The additional measurements are listed as below:

<table>
<thead>
<tr>
<th>Applicable to</th>
<th>Requirements</th>
</tr>
</thead>
</table>
| Software with the following **critical functionality** and whose modules are linked via **network** connection:  
  a) **Information security critical product. E.g. National/defense secret**  
  b) **Safety critical products related to human life**  
  c) **Products processing personal information to produce something. (E.g. Passport/ID issuance, diagnostic report for hospital)** | Health check between components, encrypted communication between modules and user screen protection (screen blackout) |
| Software that claims **conformance** to any law/regulation or that provides functionalities (as declared in product document) for commercial transactions involving collecting and storing of **personal image information** | Encrypted transmission of personal image information, protected stored personal image information, access log of personal image information with backup of the log |
| Software that claims **conformance** to any law/regulation or that provides functionalities (as declared in product document) for commercial transactions involving collecting and storing of **personal information** | Minimum collection of personal information, access control to personal information, encrypted unique personal information, access log of personal information |
| **Web-based software** that is processing **financial transaction** directly (e.g. financial institution/banking application) such as cash transaction, credit card, account transfer, stock trading, etc | Health check between components, encrypted communication between modules and user screen protection (screen blackout), cross site scripting resistant, session expiration (timeout), direct access (through url) resistant |
Continued,

<table>
<thead>
<tr>
<th>Applicable to</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web-based software that enables the user to input, modify, delete the data.</td>
<td>Cross site scripting resistant, direct access (through url) resistant</td>
</tr>
<tr>
<td>Software that has <strong>login</strong> function.</td>
<td>Conformance to QS credential rules, SQL injection resistant</td>
</tr>
<tr>
<td>Software that claims conformance to certain <strong>functional industry standards/guidelines</strong></td>
<td>Conformance to claimed functionality compliance</td>
</tr>
<tr>
<td>Software that has an <strong>automatic recovery log.</strong></td>
<td>Automatic recovery log is available</td>
</tr>
<tr>
<td>Software that has unique <strong>performance criteria.</strong></td>
<td>Meeting the performance benchmark as claimed</td>
</tr>
<tr>
<td>Software that supports multiple <strong>connection sessions</strong> or <strong>concurrency.</strong></td>
<td>Able to fulfil the claimed concurrency</td>
</tr>
</tbody>
</table>

*Intentionally left blank*
4.2.3 QS 25023 Quality Evaluation

The software product quality evaluation is performed by an accredited independent testing lab and measures the eight (8) quality characteristics from ISO/IEC 25010:2011. The 8 quality characteristics are composed of thirty one (31) sub-characteristics, which are summarized below:

The sub-characteristics have one (1) or more quality measures that are used to measure the behavior of the quality item in question. Each quality measure has a defined measurement method and a measurement scale. These quality measures are used to measure external behavior of software product under certification (mainly evaluation of behavior of the software through testing and observing based on the applicable executable item).

For QS 25023 certification, the total quality evaluation spectrum involves testing of eighty six (86) quality measures derived from the ISO/IEC 25023:2016. Quality measures are selected and tested based on the applicable features of the software product being evaluated.
4.2.4 QS 25023 Elite Quality Evaluation

Similar to QS 9126 Elite, for QS 25023 Elite quality certification, software product will be tested against additional quality requirements (CB requirements) which are included below:

- requirements derived from the industry (for example OWASP) imposed by MSTB (where applicable);
- some additional requirements which may be related to personal data protection and unique attributes of the software (where applicable);
- additional performance efficiency requirements,

as detailed out in the Supplementary Agreement.

These additional quality requirements reflect the need for high quality software that match prevailing consumer demands and improve marketability.

The additional measurements are listed as below:

<table>
<thead>
<tr>
<th>Applicable to</th>
<th>Requirements</th>
</tr>
</thead>
</table>
| Software with the following critical functionality and whose modules are linked via network connection:  
  a) Information security critical product. E.g. National/defense secret  
  b) Safety critical products related to human life  
  c) Products processing personal information to produce something. (E.g. Passport/ID issuance, diagnostic report for hospital) | Encrypted communication path for data transmission |
| Software (including web based) that provides functionalities (as declared in product document) for commercial transactions involving collecting and storing of personal image information | Encrypted transmission of personal image information, protected (stored) personal image information and immutable processing log of personal image information (create, edit, delete) |
| Software (including web based) that provides functionalities (as declared in product document) for commercial transactions involving collecting and storing of personal information (e.g. ID no, fingerprint) | Encrypted (stored) personal information, encrypted transmission of personal information and immutable processing log of personal information (create, edit, delete) and management of access control & user account |
| Web-based or web service software | Cross site scripting resistant |
| Software (including web based) that has or uses database | SQL injection resistant |
Continued,

<table>
<thead>
<tr>
<th>Applicable to</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software (including web based) that has <strong>access control</strong> function.</td>
<td>SQL injection resistant, encrypted storage of password and encrypted transmission of password, log of user account management activities (create, edit, delete) with backup of the log, non-indicative login failed message, password validity expiry and management of repeated (and continuous) failed login attempt, prevention of multiple logins</td>
</tr>
<tr>
<td>Software that has unique <strong>performance criteria.</strong></td>
<td>Meeting the performance benchmark as claimed</td>
</tr>
</tbody>
</table>

*Intentionally left blank*
4.3 Document Evaluation

4.3.1 QS 9126 and QS 9126 Elite Document Evaluation

The document quality evaluation for QS 9126 and QS 9126 Elite needs to conform to clause 5.1 and 5.2 of ISO/IEC 25051: 2006 as summarized in the following table:

<table>
<thead>
<tr>
<th>Product Description</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documentation stating the properties of software product, with the main purpose of</td>
<td>Availability</td>
</tr>
<tr>
<td>helping potential acquirers in the evaluation of the suitability for themselves of</td>
<td>Contents</td>
</tr>
<tr>
<td>the software product before purchasing it.</td>
<td>Identification and indications</td>
</tr>
<tr>
<td></td>
<td>Statements about:</td>
</tr>
<tr>
<td></td>
<td>functionality, reliability</td>
</tr>
<tr>
<td></td>
<td>usability, efficiency</td>
</tr>
<tr>
<td></td>
<td>maintainability, portability</td>
</tr>
<tr>
<td></td>
<td>quality in use</td>
</tr>
<tr>
<td>User Documentation</td>
<td>Requirements</td>
</tr>
<tr>
<td>Information that is supplied with the software product to help the user in their</td>
<td>Completeness</td>
</tr>
<tr>
<td>use of that software product.</td>
<td>Correctness</td>
</tr>
<tr>
<td></td>
<td>Consistency</td>
</tr>
<tr>
<td></td>
<td>Understandability</td>
</tr>
<tr>
<td></td>
<td>Learnability</td>
</tr>
<tr>
<td></td>
<td>Operability</td>
</tr>
</tbody>
</table>

This document quality evaluation is applicable for both QS 9126 and QS 9126 Elite.
4.3.2 QS 25023 and QS 25023 Elite Document Evaluation

The document quality evaluation for QS 25023 and QS 25023 Elite on the other hand conforms to clause 5.1 and 5.2 of the ISO/IEC 25051:2014. The international standard requirements on software product documents are summarized in the following table:

<table>
<thead>
<tr>
<th>Product Description</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documentation stating the properties of software product, with the main purpose of helping potential acquirers in the evaluation of the suitability for themselves of the software product before purchasing it.</td>
<td>Availability</td>
</tr>
<tr>
<td>Contents</td>
<td>Identification and indications</td>
</tr>
<tr>
<td>Mapping</td>
<td>Product quality statements on:</td>
</tr>
<tr>
<td></td>
<td>functional suitability</td>
</tr>
<tr>
<td></td>
<td>performance efficiency</td>
</tr>
<tr>
<td></td>
<td>compatibility</td>
</tr>
<tr>
<td></td>
<td>usability</td>
</tr>
<tr>
<td></td>
<td>reliability</td>
</tr>
<tr>
<td></td>
<td>security</td>
</tr>
<tr>
<td></td>
<td>maintainability</td>
</tr>
<tr>
<td></td>
<td>portability</td>
</tr>
<tr>
<td></td>
<td>Freedom from risk</td>
</tr>
<tr>
<td></td>
<td>Context coverage</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>User Documentation</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information that is supplied with the software product to help the user in their use of that software product.</td>
<td>Availability</td>
</tr>
<tr>
<td>Contents</td>
<td>Identification and indications</td>
</tr>
<tr>
<td>Completeness</td>
<td>Correctness</td>
</tr>
<tr>
<td>Consistency</td>
<td>Understandability</td>
</tr>
<tr>
<td>Learnability</td>
<td>Operability</td>
</tr>
</tbody>
</table>

This document quality evaluation is applicable for both QS 25023 and QS 25023 Elite options.

Intentionally left blank
5.0 Evaluation Criteria

A software product being evaluated needs to fulfil a set of criteria to qualify for certification.

For software product quality evaluation, some external metrics in the six (6) quality characteristics (in the case of QS 9126 and QS 9126 Elite) or quality measures (QM) in the eight (8) quality characteristics (for QS 25023 and QS 25023 Elite) are mandatory for the software product to pass (or obtain the score of 1) for certification, which is to be decided by MSTB (based on the applicable attribute of the software product).

These metrics or QM are made mandatory by MSTB to pass because the software product must meet or conform to its own unique (and critical) functional and non-functional requirements, such as functional accuracy/correctness (for Functionality/Functional suitability), response time (Efficiency/Performance efficiency), interoperability (Compatibility) etc. Quality evaluation will also check whether all functions described in user document are implemented according to their objectives and usage in the software product. The other non-mandatory metrics or QM in the evaluation will be given a score based on the test and evaluation performed.

All metrics in document evaluation on the other hand are mandatory to pass (or obtain the score of 1) for certification.

The following are the evaluation criteria for a software product to qualify for certification:

- Pass all mandatory metrics or QM that are applied to the software product quality evaluation as decided by MSTB
- All non-conformance related to Functionality shall be fixed
- Score 100% in Documents Evaluation

Non-conformance reports will be given to applicant for their onwards non-conformance fixing within a specific period as notified by MSTB. As a certifying body, MSTB is not allowed to provide any advisory/consultancy services such as providing advice, recommendation, suggestions and/or guidance to fix any non-conformance revealed in the non-conformance report.

Evaluation results and scores will be given to an independent Certification Decision Committee for recommendation on certification decision.
6.0 Governance


To ensure impartiality and integrity of the Scheme, MSTB has three (3) committees to specifically address the requirements of the certification. These committees consist of specifically selected members made up of practitioners and professionals from various sectors covering industry, academia and government agencies.

- **Certification Decision Committee**: The primary responsibilities of this committee are to recommend a decision to certify (or otherwise) a software product based on the results completed by an accredited testing laboratory.

- **Impartial Committee**: The primary responsibilities of this committee are to advise on matters affecting confidence in certification, including openness and public perception and to counteract any tendency by MSTB, as the certifying body, to allow commercial or other considerations to interfere with the consistent objective provision of certification activities.

- **Complaints and Appeals Committee**: The key responsibilities of this committee are to receive, decide and record appeals complaints and any actions taken in response to them. This committee gathers and evaluates all necessary information to assess the nature and validity of an appeal or complaint, investigates motives of the appeal or complaint and decides the actions to be taken in response to the appeal or complaint. This committee also ensures that the investigation and operation of the Complaints and Appeals procedure complies with applicable ISO/IEC 17065 requirements.

The quality evaluation of the software product will be performed by an accredited independent lab (MSTB or any other third (3rd) party appointed by MSTB) which meet applicable requirements of MS ISO/IEC 17025:2005, which is a standard used by testing and calibration laboratories.
7.0 Process of Software Product Certification

The Scheme that MSTB operates follows ISO/IEC 17067:2013 which describes the activities involved in product certification.

The Scheme is based on Type 1B, which involve the following elements in the evaluation of the software product:

a) Software product(s) and documentation related thereto provided by applicant;
b) Quality determination of characteristics by testing and assessment;
c) Evaluation of the software product(s) and documentation;
d) Decision on granting the certification; and

The MSTB process for certifying a software product is shown in the following diagram:
8.0 What QS Certification Means

When a certificate is awarded by MSTB:

- it can be displayed;
- it can be used in advertising and promotion;
- it can be used to promote the integrity of the software product and product information (as contained in the documentation related thereto); and
- it can only be used for the specific version and the platform(s) that had been submitted, evaluated and certified by MSTB.

Certification of a software product is only valid for a specified list of functions. Please note that the certification issued by MSTB shall be limited to the particular version of the software product at the time submitted, tested and certified and does not cover any other version of the software product. Any new version will require a fresh certification of such new software product.

In the event that the software product is available in multiple languages, the certification services conducted by MSTB will only be made towards the English language version of the software product. Pursuant to the same, the Software Product Certificate issued by MSTB shall only be valid for the English language version of the software product and shall not extend to any other language versions of the software product.

With regards to public notification, MSTB may:

i. publish the particulars of the certificate granted into the online Certification Register and made available to the public via www.mstb.org

ii. in the case of revocation of the certificate, information of the same will be removed from the online Certification Register
Legal Notices

Certification Disclaimer

1. The Quality Software Product Certificate is issued in respect of the functionality of a particular version of the software product submitted by the applicant, evaluated and certified by MSTB. The results of any test or evaluation shall not be used to indicate or imply that certification is applicable to other similar items or other versions and/or any variation thereof. In addition, such results shall not be used and/or relied upon in any manner whatsoever by any third party to indicate or imply that MSTB approves, recommends or endorses the manufacturer, supplier or user of software product application or product, or that MSTB in any way gives and/or issues any form of guarantee or warranty in respect of the performance or capabilities of the software product/equipment;

2. In issuing the Quality Software Product Certificate, MSTB in no way warrants or guarantees the commercial viability and/or commercial effectiveness of the software product which has been certified, and the end user shall utilize its own analyses and resources available to ascertain such commercial viability and/or effectiveness, as the Quality Software Product Certificate shall only be issued in relation to the due functionality of the software product only.

3. In issuing the Quality Software Product Certificate, MSTB in no way warrants or certifies the legality of the software product in the specific jurisdiction of concern. Although MSTB will work closely with authorities on a needs basis or if queried by relevant authorities, the end user must perform their own due diligence on the software product before use and shall not rely wholly or partly on the Quality Software Product Certificate to ascertain the legality of said software product, as the Quality Software Product Certificate shall only be issued in relation to the due functionality of the software product only.

4. All warranties of any kind, implied, statutory or otherwise, including without limitation the implied warranties of merchantability, fitness for purpose, non-infringement are hereby expressly excluded by MSTB, to the extent permitted by applicable law; and

5. In respect of the limitations of liability:
   a) To the maximum extent permitted by applicable law, neither MSTB nor its subsidiaries, affiliates, officers and/or agents will be liable to the software owner, the end user and any and all third parties for any direct or indirect damages (including without limitation, consequential, special, or incidental damages, damages for loss of profits or revenues, business interruption, or loss of business information), arising from and/or in connection with the Scheme and/or the certification services provided by MSTB in respect of the same; and
   b) The limitations on and exclusions of liability for damages in respect of the Scheme and/or the certification services provided by MSTB in respect of the same shall apply regardless of whether the liability is based on breach of contract, tort, strict liability, breach of warranties or any other legal theory and whether MSTB was or should have been aware of the possibility that such damage or loss could occur.

6. The above disclaimers shall continue throughout the term of the Quality Software Product Certificate, and shall survive the termination, expiry and/or revocation of such Quality Software Product Certificate.

7. End users and third parties are advised to contact MSTB via the contact details in this website should there arise any potential doubts on a specific Quality Software Product Certificate for verification, subject always and bearing in mind the above disclaimers which shall continue to remain in force.
Trade Marks

“MSTB”, “QS Product Certification Scheme” and “QS Product Certification Scheme” are trade marks of Malaysian Software Testing Board, which have been registered/registrations have been applied for with the Intellectual Property Corporation of Malaysia (collectively hereinafter referred to as “the Marks”) and may not be used in any advertising, publicity or otherwise to indicate MSTB certification or affiliation or for any other purposes, without MSTB’s prior express written permission or unless such use is expressly authorized in writing by MSTB. The applicants/clients are only authorized to use the “mark (“the Certification Mark”) as the certification mark in respect of the software product certified by MSTB in the manner and for the purposes set forth in this Document and the Relevant Agreement, which may be amended by MSTB from time to time without prior notice (“Term of Use of the Certification Mark”). Use of the Certification Mark in a manner not consistent with the Document and/or the Term of Use of the Certification Mark may result in suspension or revocation of certificate issued in respect of the certified software product and the loss by the applicants/clients of the rights to use the Certification Mark in respect of the certified software product. Use of the Marks (or any of them) without MSTB’s authorization or against the Term of Use of the Certification Mark (in respect of the Certification Mark) also may result in an action for passing off and/or trade mark infringement action to be brought by MSTB against the applicants/clients.

Intentionally left blank