TENAGA NASIONAL

QUALITY ASSURANCE HANDBOOK:

PRODUCT CERTIFICATION

Third Edition 2021
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Endorsed by:

Quality Certification Committee (QCC)
Tenaga Nasional Berhad

Quality Assurance Handbook: Product Certification

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September 2021

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FOREWORD BY
CHIEF DISTRIBUTION NETWORK OFFICER
DISTRIBUTION NETWORK DIVISION
TENAGA NASIONAL BERHAD

Tenaga Nasional Berhad values quality of our products and services. We realize that quality assurance has become an increasingly demanding field due to continuous advancement of technology and rapid change in manufacturing process. Today, quality is not merely meeting product requirements but also building superior products.

We believe that quality should always be benchmarked with the best practices. TNB, through the Quality Certification Committee, ensures that the quality assurance processes, including Product Certification, serve as an important mechanism to ensure products used in TNB system are fit for use, reliable and continuously complying with TNB specifications and standards.

The Third Edition QA Handbook for Product Certification was revised in line with 'Dasar dan Prosedur Jaminan Kualiti Produk TNB 2019'. *This handbook outlines the latest requirements, processes and timelines needed for the various phases of the certification. The rigorous mechanism of technical evaluations, field trial, factory audit and supported by product quality records are amongst the essential checkpoints that must be observed and followed.*

This handbook explains the processes and requirements of the certification scheme for greater transparency and smoother implementation. I strongly believe the Product Certification scheme will contribute towards an efficient procurement process, allowing only products 'fit for use in the TNB system' are procured and used. I hope this book can ease the process for everyone, be it TNB or applicant, to acquire SGP.

I take this opportunity to thank all those involved in the publication of this handbook.

WAN NAZMY WAN MAHMOOD
Chief Distribution Network Officer

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1. INTRODUCTION

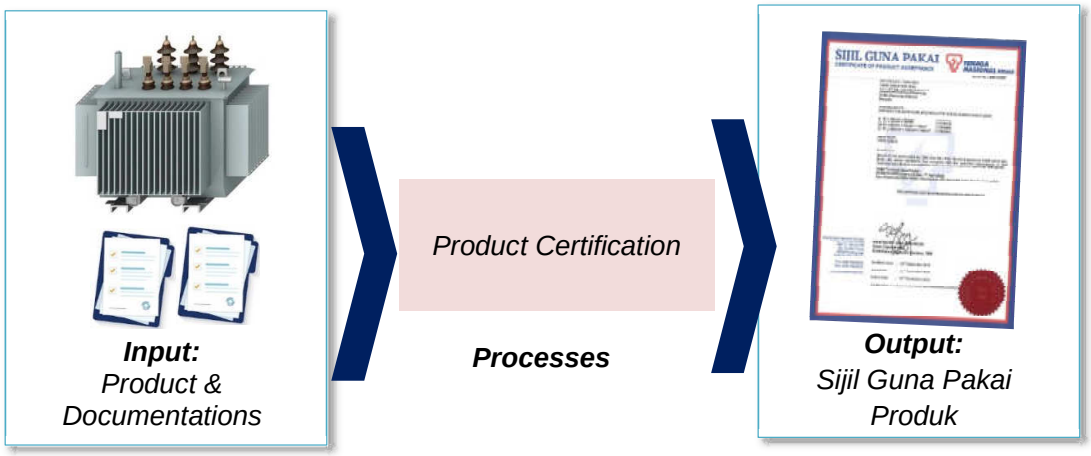
1.1 Overview of Product Certification Scheme

Product Certification (PC) Scheme is a series of thorough evaluations on products to be supplied to TNB to ensure product conformance to TNB specifications and standards. The certified product will be issued with *Sijil Guna Pakai Produk (SGP)*, or "Certificate of Product Acceptance" in English.

The PC Scheme was initiated in the year 1997 by the Engineering Services Department of TNB Distribution Division. In the year 2002, the scheme was transferred to the Quality Assurance Unit of TNB Research. After the formation of TNBR QATS in the year 2012, all QA functions, including PC Scheme, were transferred to TNBR QATS. In the year 2015, the TNB Board Tender Committee (BTC) instructed the Engineering Department of TNB Distribution Division to take the ownership of the PC Scheme, while maintaining TNBR QATS as the operator and secretariat of the scheme. TNBR QATS was rebranded to TNB Labs in year 2019 to prepare the company for a greater role in lab testing, inspection and quality assurance activities.

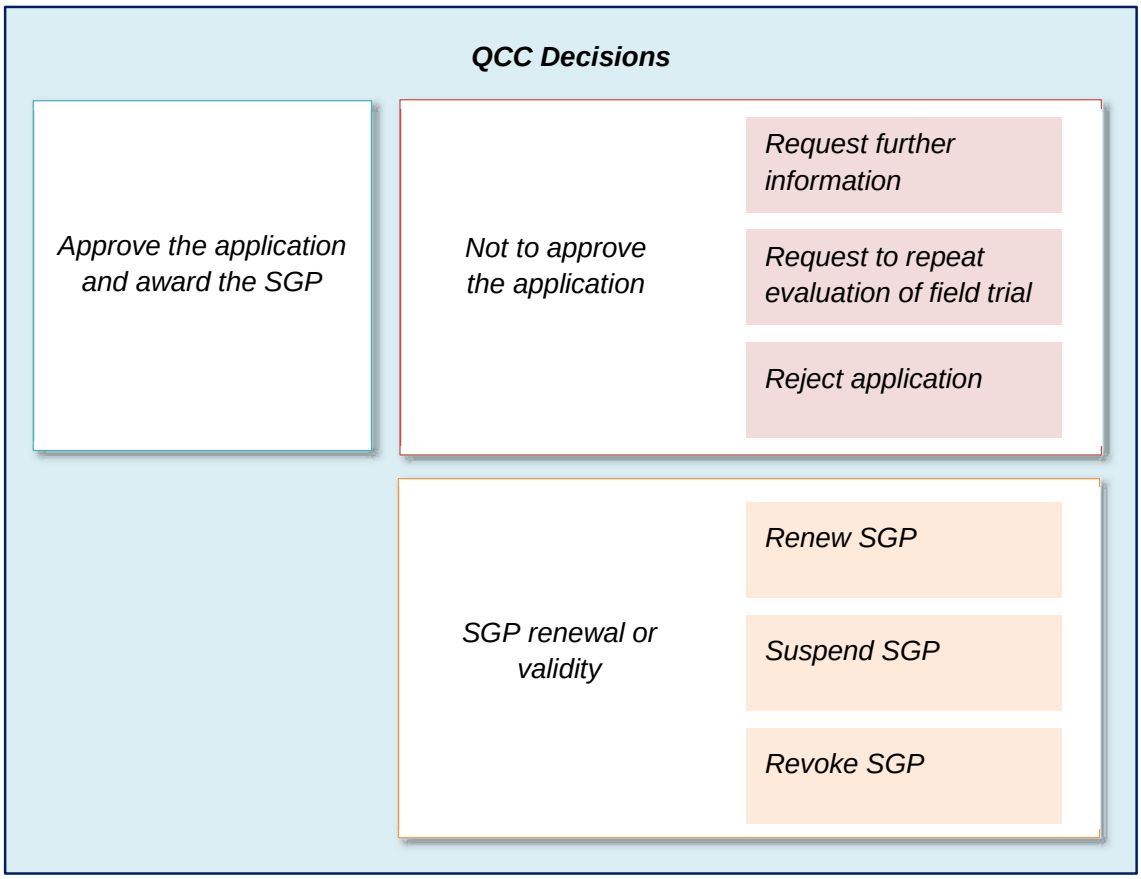
According to the current policy, the *'Dasar Jaminan Kualiti Produk 2019'* endorsed by the Asset Management Council, SGP can only be issued to local or overseas manufacturers, local assemblers or design houses. SGP certificate has a validity of 3 years, with mandatory annual surveillance audit and recertification audit before the end of the validity period. Within that period, SGP holders are required to maintain the certification standard by not making any unauthorised change to the raw materials, suppliers, manufacturing location and techniques and product design. At the same time, SGP holders are required to maintain their quality standards and ensure that no product defect is due to manufacturing process. Failing to ensure these, the SGP will be suspended and if the issue still persists after a certain period of time, the SGP can be revoked.

This handbook describes PC scheme implementation for Distribution Network Division TNB. This handbook will provide information to all the relevant parties involved in Product Certification, including the applicants. It guides the applicants on the process of getting the SGP and maintaining the certification.



1.2 Quality Certification Committee (QCC)

Quality Certification Committee (QCC) is the committee responsible to govern, make decision and set the direction related to certification and quality for product to be supplied to DN Division.



QCC members comprise of officers from the Distribution Network Division, TNB Labs, the Procurement & Supply Chain (P&SC) Division and ILSAS.

QCC Members * Subject to the latest organization structure

- ☑ Head (Asset Management), DN - Chairman
- ☑ CE (ES), DN – Alternate Chairman
- ☑ Technical Experts, DN
- ☑ Head (SBU Asset Development), DN
- ☑ Head (Operations), DN
- ☑ Head (SBU Metering), DN
- ☑ Head (Category Excellence), P&SC
- ☑ Head (Substation), Head (Underground Cable), P&SC
- ☑ Head (Plan to Deliver), P&SC
- ☑ GM, TNB Labs
- ☑ MD, ILSAS

QCC Mandatory Quorum

- ☑ Chairman or his/her alternate
- ☑ One member from P&SC
- ☑ GM TNB Labs or his/her alternative

The QCC Chairman is responsible to lead the Quality Certification Committee in:

- ☑ Reviewing the compiled report prepared by TNB Labs/technical evaluator based on terms and conditions for PC scheme.
- ☑ Reviewing issues related to complaints, appeals and cases of certificate misuse or abuse.
- ☑ Ensuring the implementation of the certification policies, terms and conditions
- ☑ Monitoring the overall effectiveness of the processes and management of the PC Scheme
- ☑ Promoting continuous improvement in PC scheme and its processes and maintaining integrity, confidentiality and impartiality

The Chairman is responsible for signing the SGP after the application is approved by QCC. The QCC members are responsible to assist the Chairman in meeting the above objectives.

1.3 Roles and Responsibilities of Parties Involved in Product Certification

Roles & Responsibilities

Distribution Network Division

1. *Conduct preliminary evaluation*
2. *Approve product drawing*
3. *Prepare site(s) for Field Trial*
4. *Review evaluation report prepared by TNB Labs*
5. *Review issues related to complaints, appeals, misuse etc.*
6. *Ensure implementation of certification policies are adhered*

TNB Labs

1. *Conduct technical evaluation, inclusive of documentation check and physical evaluation*
2. *Conduct factory audit*
3. *Prepare technical evaluation report and present to QCC*
4. *Assist in Field Trial matters*
5. *Propose improvement on SGP process*
6. *QCC secretariat*

Procurement & Supply Chain Division

1. *Upkeep of product performance record & its reporting*
2. *Advise QCC on matters related to procurement and contract management*

ILSAS

1. *Manage training program for new products*
2. *Improve training syllabus for existing products*

1.4 Key Personnel involved in SGP Application

The followings are key division/department involved in SGP application:

DN	Distribution Network Division, TNB
DN-ES	Engineering Services Department of Distribution Network Division
TNB Labs	TNB Labs Sdn. Bhd. (a wholly owned subsidiary of TNB Research Sdn. Bhd.
QA-PC	Product Certification Section, Quality Assurance Unit, TNB Labs
P&SC	Procurement & Supply Chain Division, TNB
PTD	Plan to Deliver, Procurement & Supply Chain Division, TNB

The followings are key personnel involved in SGP application:

DN-HA	Head (Asset Management), Distribution Network Division, TNB as the Chairman of QCC
DN-TE	Technical Expert of DN-ES
PC Admin	Product Certification Administrator at QA-PC
TE	Technical Evaluator within QA-PC
Auditor	Quality Auditor within TNB Labs
SGP Applicant	Company or person who applies for SGP
SGP Holder	Company or person who already has SGP

1.5 Product Certification Terms and Conditions

Below are the terms and conditions of the Product Certification Scheme. The terms and conditions are also stated on the back page of the SGP certificate:

- *By applying the Sijil Guna Pakai ("SGP") or in English, the Certificate of Product Acceptance (hereinafter referred to as "Certificate"), the applicant agrees to abide by the Product Certification Terms and Conditions.*
- *This Certificate is issued based on Product Certification Scheme ("PC Scheme") by the Distribution Network Division of Tenaga Nasional Berhad ("TNB"). The PC Scheme operated by TNB Labs Sdn. Bhd. ("TNB Labs") and is exclusively for products used within the TNB's business operation system.*
- *During the period of certification, the certificate holder shall not vary the product design, material, component, construction and manufacturing process or plant under which this Certificate is issued.*
- *Any change to any of the characteristics stated above, including change due to change of TNB technical specification shall be made in writing to TNB Labs and shall be subject to the appropriate procedures imposed by the PC Scheme.*

- *This Certificate is the document of approval of the specified item or equipment stating the acceptance of its usage in TNB only, without any obligation to purchase the item or equipment from the certificate holder.*

- *TNB reserves the right to suspend / revoke this Certificate, with or without any notification, if there is any deviation or omission from the sample item or equipment evaluated.*

- *TNB has the right to suspend / revoke this Certificate if the equipment is no longer used in the TNB's system.*

- *The certificate holder is required to comply with the current procurement procedures and regulations of TNB should they intend to market this item or equipment to TNB or any of its subsidiaries.*

- *This Certificate does not exempt the item or equipment from any further tests and inspections as required by TNB.*

- *TNB reserves the right to request for further tests to be carried out by the certificate holder whenever the specification of the item / equipment is reviewed or changed.*

- *This Certificate is subject to periodic reviews based on the field performance of the item or equipment in the TNB system.*

- *TNB has the right to suspend / revoke this Certificate and reject the usage of the equipment / item, if it is found to be defective or deficient in terms of design, quality, performance, safety or compliance to the regulations, during its usage in the TNB system.*

- *This Certificate is only valid for the period stated in the Certificate. If so desired, the certificate holder needs to apply for a re-certification. TNB and/or TNB labs shall review the performance of the equipment / item and may subject it to other test requirements, if necessary, before renewing the validity period of the said Certificate.*

- *While TNB and/or TNB Labs will undertake steps to ensure the whole PC Scheme process is conducted with due diligence, it maintains the right to suspend / revoke the Certificate without prejudice.*

1.6 Reference Documents

The following are policy and or documents referred in developing this handbook

1. Dasar Jaminan Kualiti Produk TNB, 2019
2. TNB JEK Approved Restructuring of QA governance, 2016
3. TNB JEK Approved SGP Costing structure & Product categorisation, 2017
4. ISO/IEC 17065:2012: Conformity assessment — Requirements for bodies certifying products, processes and services

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2. GENERAL REQUIREMENTS

The following are general requirements for Product Certification:

2.1 Applicant Status

There are four types companies that are allowed to apply for SGP:

i. **Local Manufacturer**
The applicant needs to at least perform production process on one key product component, assemble the product until completion, conduct test and provide warranty on the product, and execute all these activities in the country.

ii. **Local Assembler**
The applicant needs to assemble the product until completion, conduct test and provide warranty, and execute the activities in the country.

iii. **Overseas Manufacturer**
The applicant needs to at least undergo production process on one key product component, assemble the product until completion, conduct test and provide warranty on the product, and execute all these activities overseas.

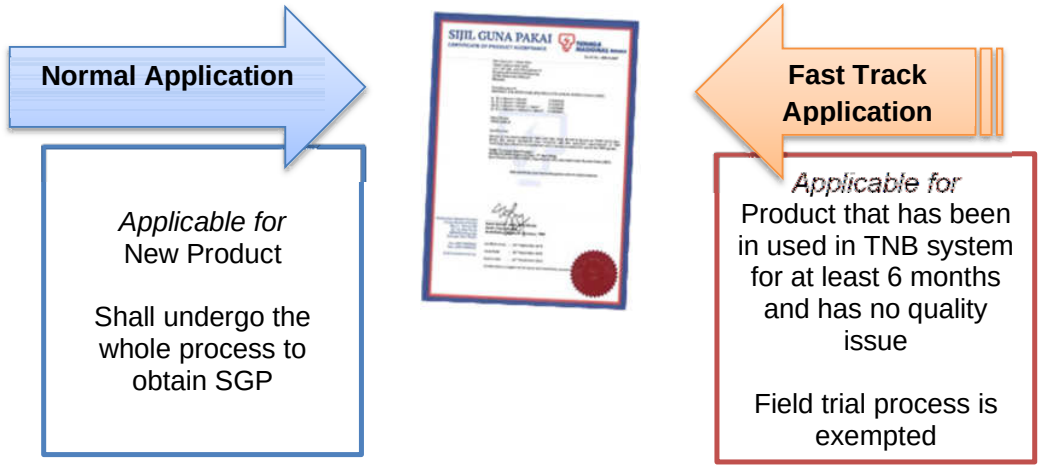
iv. **Design House**
The applicant owns the rights to the design of the product, conducts type test and provides warranty on the product.
The production process, assembly or routine test can be conducted by factories appointed by the design house.

Company registration and company profile shall be submitted with SGP application.

A trading company is not allowed to apply for SGP for itself / under its name, but is allowed to apply for SGP on behalf of overseas manufacturer. Only one SGP can be issued per product. In case of an overseas manufacturer having multiple local trading companies, only one trader can apply for SGP on behalf of the overseas manufacturer. The trader's name will not be printed on the SGP.

2.2 New SGP Application

There are two (2) types of the new SGP application:



2.3 Document Submission

SGP Applicant shall provide complete and accurate documentation before the product can be evaluated. The documents are:

i. Compliance to TNB specification self-declaration form
ii. Equipment characteristics form
iii. Type test report/certificate as stated in TNB specification
iv. Product drawing
v. Materials and components test report
vi. Product brochure
vii. Company profile
viii. ISO 9001 certificate
ix. Product Quality Plan (PQP)
x. Evidence of purchase by TNB (if any)

The Technical Evaluation may only start after all the documents have been submitted.

SGP Applicant is also required to declare that product sample(s) is ready to be evaluated by TNB. To prove this, SGP Applicant is required to provide proof in terms of documentation i.e. photos of product available at the applicant's premises.

2.4 TNB Specification

Product Certification is applicable for Critical Products[1] used by Distribution Network. The product shall have a valid TNB specification to serve as reference to TNB's requirements. To be certified, the product shall be fully compliant with the TNB specification.

The self-declaration form to declare compliance with TNB specification shall be submitted with SGP application.

Note [1]: Critical Products are primary and/or secondary product used in TNB network, where the failure of the product may give impact to the customer and gives bad reputation to TNB. The List of Critical Product is available in the TNB Labs website.

2.5 ISO 9001 Quality Management System Certificate

The SGP Applicant shall possess an ISO 9001 certificate that fulfils the following:

i. The ISO 9001 certificate shall bear the name of the SGP Applicant.
ii. The ISO 9001 certification scope shall cover the product and/or process of manufacturing/assembling the product.
iii. The ISO 9001 certificate shall be valid during the SGP application.
iv. The ISO 9001 certificate shall be issued by a recognised Certification Body (accredited by the country's Accreditation Body).

For a design house, its scope of ISO 9001 certification shall cover at least the product design activity. Furthermore, the appointed manufacturer shall also possess its own ISO 9001 certification, with the relevant manufacturing activities covered under the certification scope.

TNB may perform audits during the periods of certification. This audit is to assess the effectiveness of the quality management system implemented by the applicant/holder.

A Product Quality Plan (PQP), which describes the manufacturing activities and the respective quality check point(s), shall be submitted with the SGP application.

2.6 Type Test

A type test is an essential method to test a product design, which can prove that the product is able to meet the design criteria. The type test shall be conducted at the lab(s) approved by TNB. The type test shall be conducted based on the requirement stated in TNB Specification and/or relevant International Standards.

2.6.1 Type Test for Medium and High Voltage Products

The type test shall be:

i. Conducted at the lab(s) listed in TNB Approved Lab, or
ii. Conducted at the manufacturer's lab accredited with ISO/IEC 17025[1] (or equivalent standard). The test(s) shall be witnessed by qualified TNB or its representative.
iii. Conducted at the manufacturer's lab not accredited with ISO/IEC 17025[1] but witnessed by the independent lab approved by TNB. The manufacturer's lab shall be equipped with complete type testing facilities.

2.6.2 Type Test for Low and Very Low Voltage Products and Non-Electrical Products

The type test shall be:

i. Conducted at ISO/IEC 17025[1] (or equivalent standard) accredited laboratory.

Note [1]: The test conducted shall be listed in the laboratory's accreditation scope.

2.6.3 Requirements for Type Test Report/Certificate

i. A type test report needs to be submitted by the manufacturer as evidence that the product has passed the required type test. A Full Type Test Certificate, if required, will be mentioned in the Technical Specification.
ii. In case of doubt, the original Test Certificate/Report has to be forwarded for review.
iii. The type test report is required to be issued in English. If the Report/Certificate is not in English, the lab is required to translate the report to English.
iv. TNB may request the type test to be repeated for any change that has been made to the product characteristics (design, main material composition, components, process and country of manufacturing).
v. The SGP Applicant is advised to consult with TNB before performing the type test(s).
vi. TNB has the right to reject any type test report that does not comply with the clauses stated above.

2.7 Equipment Characteristics

The SGP Applicant shall provide complete and accurate information about the product's components and raw materials, as well as the information on the manufacturing processes. This list shall not be changed without permission during the certification period. Any unauthorised change may result the certificate to be suspended or revoked.

The component test report / datasheet e.g., mill certificate / certificate of analysis shall also be submitted with the SGP application.

TNB shall reject any application with incomplete and/or inaccurate information.

TNB Labs shall be allowed access to information and premises to conduct product verification whenever necessary. TNB Labs reserves the right to verify conformity of the components used in the products and its corresponding quality system at the source where these components were made. The results of these evaluations shall be taken into consideration in granting SGP or in renewing existing certificates.

2.8 Product Drawing

The SGP Applicant shall prepare the product technical drawing and shall be submitted during SGP application.

The drawing shall be updated and resubmitted for approval whenever there are changes made to the product. The new approved drawing shall be updated into the SGP.

The product shall be rejected during Product Inspection if it is found that the product is not similar as the drawing.

2.9 SGP Validity

The SGP is valid for a maximum period of three (3) years from QCC approval or until the date the TNB specification linked to it is withdrawn, whichever comes first.

With the approval of the new version of TNB technical specification, the SGP automatically becomes obsolete. However, for several cases, SGP validity can be extended, subject to approval from QCC, as the following:

i. SGP holder has an ongoing contract of supply for the product referring to the previous TNB technical specification. In this case, SGP holders has the option to revise TNB technical specification reference in the SGP upon or before the end of contract supply.
ii. In the case where a new type test is not required to be conducted, SGP holder is required to apply for change of technical specification reference in SGP within 6-month period after issuance of the latest TNB technical specification.
iii. In the case where a new type test is required to be conducted, SGP holder is required to apply for change of technical specification reference in SGP within a 1-year period after issuance of the latest TNB technical specification.

The requirement of type test to be conducted will be decided by DN-ES.

2.10 Surveillance Audit

An annual Surveillance Audit shall be conducted on SGP holders to assess whether the SGP holders are maintaining their quality management system and maintaining its manufacturing quality.

For overseas SGP holders, a desktop audit may be conducted. For this case, SGP holders are required to submit all the necessary documentations and records for evaluation.

2.11 Recertification Audit

A recertification audit shall be conducted at least three (3) months prior to the SGP expiry date. The audit is conducted to assess whether the SGP holders are continually maintaining their quality management system and maintaining its manufacturing quality.

For overseas SGP holders, a desktop audit may be conducted. For this case, SGP holders are required to submit all the necessary documentations and records for evaluation.

SGP can only be considered for recertification after the SGP holder passes the recertification audit and fulfils all requirements for recertification.

2.12 SGP Recertification

SGP holders shall apply for SGP recertification to TNB Labs six (6) months prior to SGP expiry date. Recertification evaluation will be conducted based on product performance, validity of specification and recertification audit result.

The SGP validity will lapse if the SGP is not renewed after six (6) months of its expiry date. After this period, SGP holder shall apply for a new SGP application if the company wishes to get the product certified again.

2.13 Suspension and Revocation

SGP can be suspended or revoked if the product fails to meet TNB specification and SGP requirement.

The SGP holder shall be given a period of time to take corrective action before the SGP is revoked. For details, please refer to chapter 10.

2.14 Changes in Certificate Information

SGP holders are responsible to notify TNB Labs for any change. There are five (5) types of changes that can be allowed. SGP holder shall inform TNB Labs in writing when any of these occurs:

i. Change of TNB technical specification
ii. Change in product design/technical drawing/main material/main component/ manufacturing process.
iii. Change/addition of electrical/mechanical rating
iv. Change in SGP Holder's information e.g., change of company name, location and/or change in company ownership structure
v. Change/addition in component(s) that does not affect overall design, function and performance of the product.

The SGP certificate may be considered null and void if the actual characteristics differ from the ones declared in the certificate. More detailed information on changes application can be referred to Chapter 8.

2.15 Unsuccessful Application

At any stage of evaluation, if any nonconformity is found, the SGP Applicant will be notified to rectify or to give further clarification or evidence. The nonconformity must be resolved within 10 working days; otherwise, the application will be returned.

The SGP Applicant may resume the application through the proper procedure. The evaluation will be continued from the point where the evaluation was stopped. In this situation, additional fee may be applied.

2.16 Fees

The SGP Applicant shall pay the evaluation fees, which may include technical evaluator man-days, auditor man-days, administrative man-days and other charges. The fee imposed by TNB is as approved by the TNB Management and may be subject to change. The SGP Applicant is required to pay the quoted fee in advance before any work can commence.

2.17 Confidentiality

All the information submitted to TNB Labs are considered confidential and proprietary to the owner of the documents. TNB Labs may sign a non-disclosure agreement (NDA) with the SGP Applicant, where required.

-NOTES-

3. SCOPE OF PRODUCT CERTIFICATION

Based on the current policy, SGP will be issued to Critical Products (formerly categorised as Level 1 and Level 2 products) to be used by the Distribution Network Division. Critical Products are primary and/or secondary product used in TNB network, where the failure of the product may give impact to the customer and adversely affect the reputation of TNB. This may also threaten the safety of the staff and the public or affect other equipment connected to product. The List of Critical Product is available at TNB Labs website.

For the purpose of SGP technical evaluation, DN's critical products are categorised into three (3) categories:

Category A Most difficult to evaluate And critical product	*Transformers* *Switchgears: AIS, GIS, RMU* *Power cables* *Compact Substation Units (CSU)*
Category B Difficult to evaluate and critical product	*Feeder pillars* *Battery & battery charger* *Load break switches, auto reclosers* *Capacitor banks* *Energy meters, RTU, FTU* *Fire suppression system* *LV ATS*
Category C Less difficult to evaluate but critical product	*Cable joint/termination* *Lugs, ferrules, connectors, IPC* *Fuses* *EFI, LFI* *Cut out, neutral links* *Concrete poles* *HPSV Lantern*

The list is not exhaustive and it may be subjected to review by DN.

There are also Category D products which are defined as less critical products (formerly categorised as Level 3 products). SGP is not mandatory for less critical products. Instead, DN is planning to list the compliant products into the Approved Product List.

Category D Less critical products	*Supporting products; hooks, cable clamps, cable slabs, etc.* *Tools and testing equipment*

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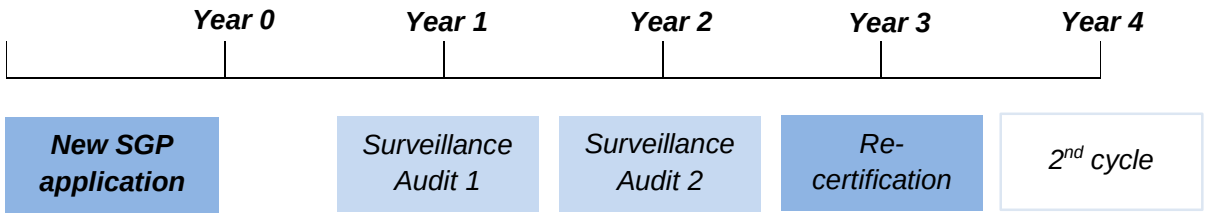
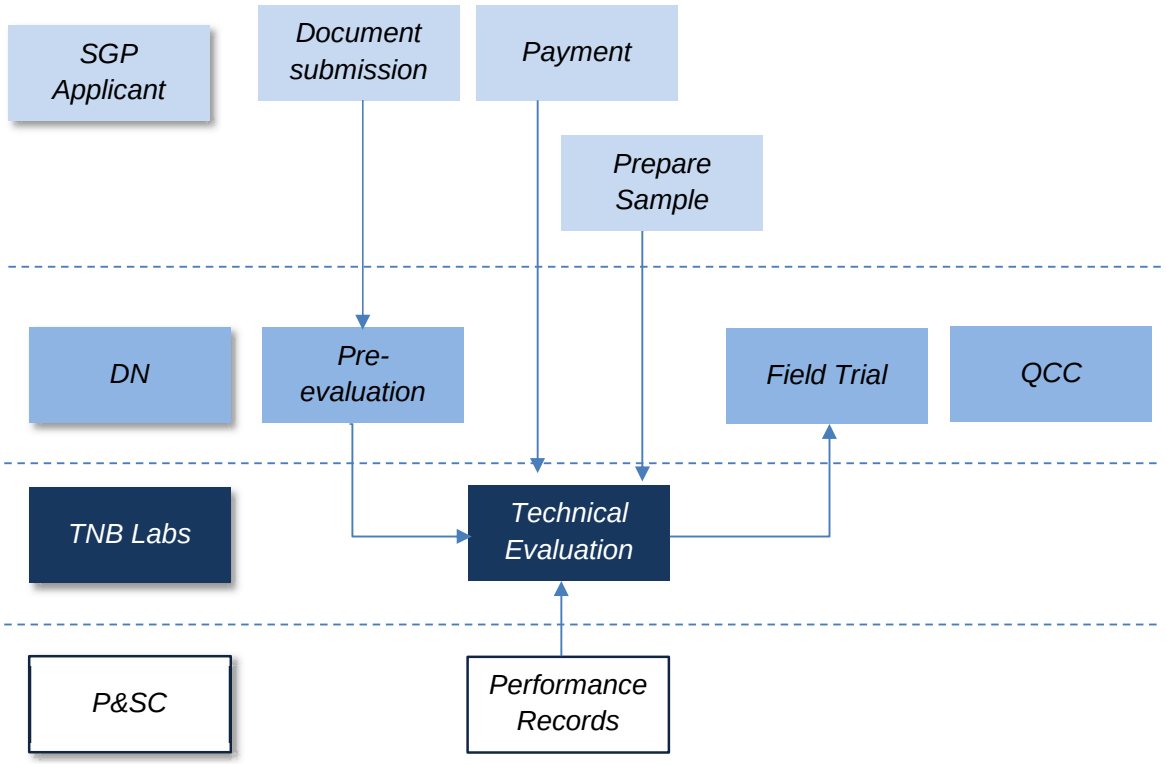
4. TYPES OF SGP APPLICATION

The types of SGP applications are as illustrated in the diagram below:



4.1 New SGP Application

All new products that are required to get certification shall undergo the New SGP Application process, which is illustrated below:



There are two types of New SGP Application:

i. Normal application: New product that has never been used by TNB.
ii. Fast track application: Product that has been used by TNB for at least six months and has no persistent quality issue. Field Trial will be excluded.

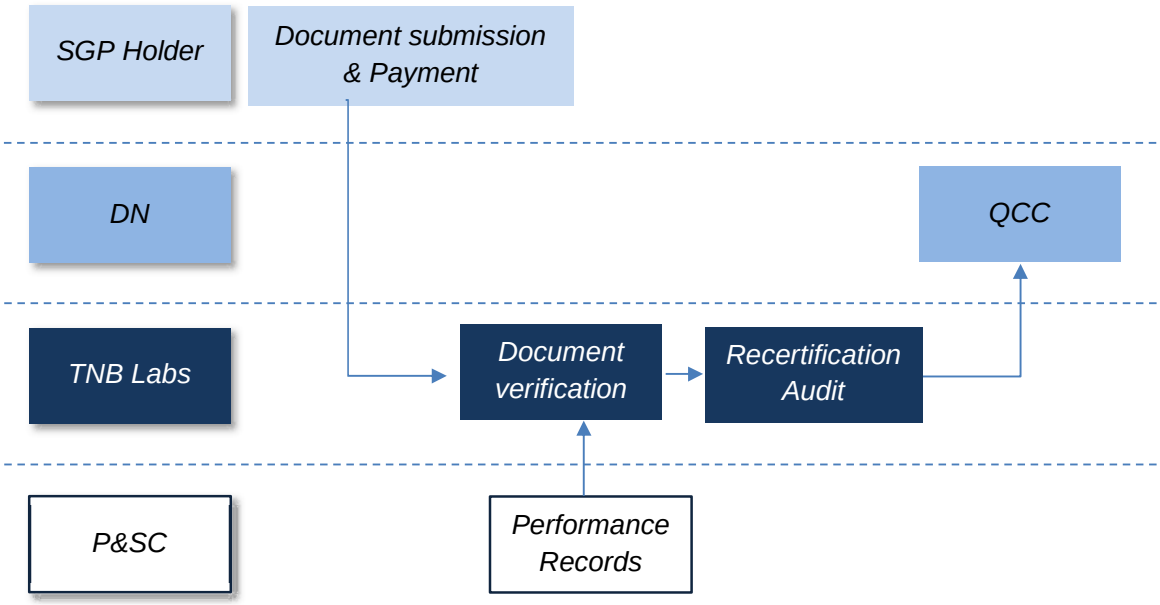
The detailed description of the New SGP Application process is elaborated in Chapter 5.

4.2 Surveillance Audit Cycle

Surveillance Audit is mandatory to be conducted in year 1 and year 2. The detailed description of the Surveillance Audit process is elaborated in Chapter 6. TNB Labs will contact the SGP holder for surveillance audit matters.

4.3 SGP Recertification Application

SGP Recertification application shall be made six (6) months prior to the SGP expiry. In brief, the SGP Recertification application process can be described as below:



The detailed description of the SGP Recertification process is elaborated in Chapter 7.

4.4 Application for Changes in SGP Information

There are five (5) types of changes that are permitted. SGP holder shall inform TNB Labs in writing to get approval for these changes. The detailed description of the application process for Changes in SGP Information is elaborated in Chapter 8.

5. NEW SGP APPLICATION

5.1 Document Submission

The process starts with the SGP Applicant submitting all the required forms and documents to the Chief Engineer (Engineering Services), Distribution Network Division (DN-ES). Submission of documents shall be made via SGP Online System through the following link:

https://sgp.tnblabs.com.my:8150

Before making the submission to DN-ES, SGP Applicant is encouraged get detailed information on SGP process flow from TNB Labs by contacting:

Head (Product Certification)
Quality Assurance Unit
TNB Labs Sdn. Bhd.
No 1, Lorong Ayer Itam, Kawasan Institusi Penyelidikan
43000 Kajang Selangor
Email: sgp-tnblabs@tnb.com.my

Any official correspondent regarding the SGP application shall be addressed to DN-ES:

Chief Engineer (Engineering Services)
Distribution Network Division,
Level 11, Wisma TNB, 19 Jalan Timur,
46200 Petaling Jaya, Selangor

5.1.1 List of Documents to be Submitted

The SGP Applicant is required to submit the documents listed below. The latest forms can be downloaded from TNB Labs website.

i. New SGP application form

ii. Compliance to TNB specification self-declaration form
The SGP Applicant is required to fill up self-declaration form indicating that the product applied is complying with TNB specification. The evidence of compliance to the specification shall be furnished together with the form.
The SGP Applicant shall use the latest version of TNB specification.

iii. Equipment Characteristics form
The SGP Applicant is required to declare the material and/or component used and their manufacturers, as well as the manufacturing processes and locations involved.

iv. Type test report/certificate
The type test report/certificate stipulated in the TNB specification shall be submitted. Please refer to clause 2.5 for the general requirements of type test.

v. Product drawing
Product drawings that indicate the overall dimensions and components of the product shall be prepared and submitted for endorsement by DN-ES. SGP Applicant shall follow the standardized cover page, content page & drawing title block prepared by DN-ES

vi. Materials and components test report
Mill certificate / Certificate of Analysis (COA) / test certificate / datasheet of the materials and components used shall be submitted.

vii. Product brochure
Description on key function, features and specification of the product. It should also come with the photos of the product and the basic operating instruction.

viii. Company profile
Background of the SGP Applicant, together with the company registration. This is to prove that the company is registered and is legal.

ix. ISO 9001 certificate
ISO certificate shall be valid during the certification application and the scope shall cover the manufacturing or assembly activities of the product applied. For design house, the certification scope shall cover product design & development.

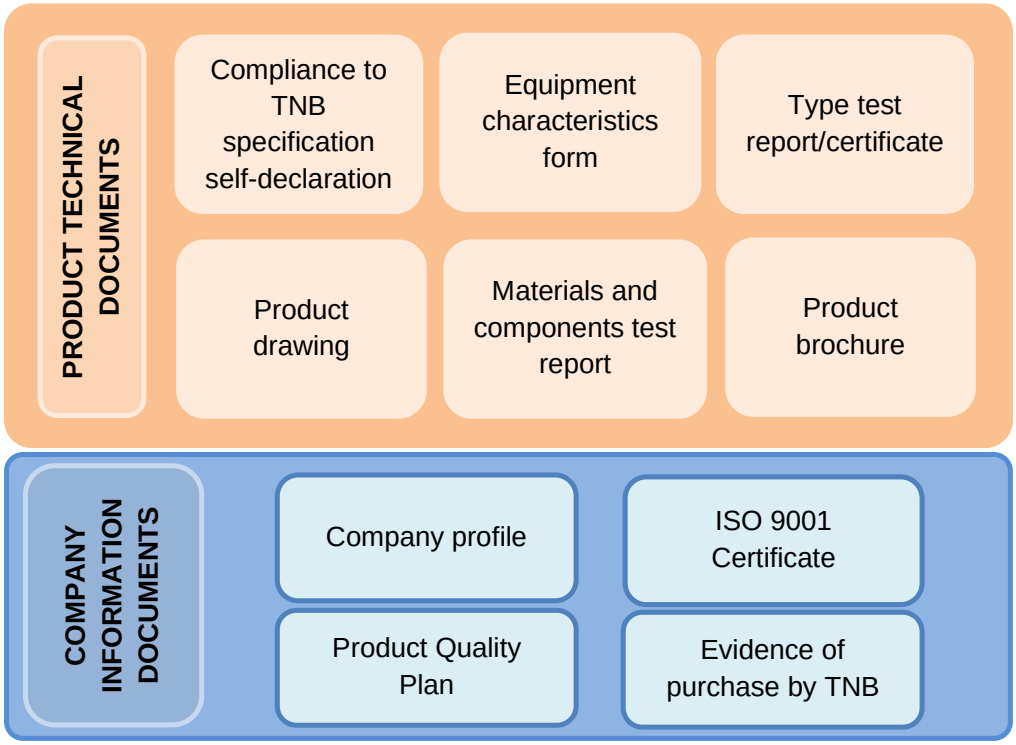
x. Product Quality Plan (PQP)
PQP is a document that describes manufacturing activities implemented by the SGP holder. It shall describe the respective quality check point(s) to ensure the products are manufactured according to the customer requirements.

xi. Evidence of purchase or use by TNB
Evidence of purchase can be a copy of purchase order (PO) from TNB or any type of report endorsed by TNB, for example, the Product Inspection (PI) Report. The document is only applicable for fast track application.

5.1.2 Document organisation

Documents shall be submitted in the forms of hard copy (1 copy) and soft copy (in a flash drive). The documents shall be organised, sorted and numbered according to the sequence stated in clause 5.1.1. The applicant shall ensure the submitted documents are correct and complete. The application will be rejected if the documents are not organised, incomplete or is missing some documents.

The ten mandatory documents to be submitted for New SGP Application



5.2 Preliminary Evaluation by DN-ES

5.2.1 Evaluation Criteria

The evaluation by DN-ES will focus on the suitability of the product to be used by DN, adequacy of the submitted documents, verification of type test report/certificate and approval of the product drawing. DN-ES may return the application if the product does not meet any of these requirements.

5.2.2 Drawing approval

DN-ES will evaluate the product design and consequently approve the product drawing. If the drawing does not meet the requirement, the application will be returned.

5.2.3 Submission of Documentation to TNB Labs

Once preliminary evaluation has completed, DN will issue a clearance letter and send it together with all the documents to TNB Labs for further evaluation.

5.3 Initiation by TNB Labs

After receiving the clearance letter and the documents from DN-ES, QA-PC will initiate the New SGP Application process.

5.3.1 Quotation and Payment

A quotation stating the total fee for SGP processing will be issued to the SGP Applicant. The SGP Applicant is required to prepare a purchase order addressed to TNB Labs Sdn. Bhd. and make the payment to TNB Labs. Detail on the bank account and payment method will be stated in the quotation.

Evaluation process will only commence after the payment is received.

5.3.2 Appointment of Technical Evaluator

The QA-PC will appoint a Technical Evaluator (TE) to continue with the evaluation. The TE will complete the evaluation, as explained in clause 5.5, and consequently submit the Technical Evaluation report. Selection of TE will be determined by TNB Labs.

5.4 Preparation of Samples

The SGP Applicant is required to prepare a product sample for physical verification. Unless stated otherwise, one (1) product sample per type per size per rating is sufficient for technical evaluation. The sample shall be prepared in accordance to the referred TNB technical specification.

For small products, such as overhead accessories, the samples can be submitted to TNB Labs. Otherwise, for larger products such as transformers and switchgears, sample can be evaluated at the factory.

The SGP application will not be continued and will be returned if the SGP Applicant failed to prepare the sample(s) within 10 working days from notice issued by TNB Labs for product sample.

5.4.1 Sample for field trial

The number of samples required for field trial shall be decided by DN-ES during kick-off meeting prior to the field trial installation.

5.5 Technical Evaluation

The Technical Evaluation is the most important step in ensuring the success of the SGP application. There are two (2) major steps involved in the Technical Evaluation, i.e. desktop evaluation and product verification. The purpose of technical evaluation is to ensure the product complies with TNB and international standard requirements as stipulated in the TNB technical specification.

The Technical Evaluation shall be started with the condition that:

i. Payment has been received.
ii. A complete set of documents have been submitted and comply with TNB requirement.
iii. Product sample(s) is ready for verification and complies with all requirements
iv. No emerging issue(s) during technical evaluation

5.5.1 Desktop evaluation

The desktop evaluation will be conducted by reviewing the following against the TNB specification requirements:

i. Self-declared specification compliance form
ii. Type test report/certificate, including the qualification of the type test according to clause 2.5
iii. Equipment characteristic form
iv. Approved product drawing
v. Materials and components test report
vi. Product brochure

The desktop evaluation will also verify the company background against SGP requirement:

i. Company profile
ii. ISO 9001 certificate
iii. Product Quality Plan
iv. Evidence of purchase by TNB

The Technical Evaluator has the right to request for more evidence in order to support his/her findings. In this case, the SGP Applicant is required to respond to the Technical Evaluator within 10 working days. Failing to respond will cause the evaluation to be stopped and the application to be returned.

5.5.2 Product verification

There will be technical details that cannot be verified by conducting desktop evaluation alone. Product verification will be conducted jointly by TNB Labs, DN-ES and representatives from DN Operations with the following methods: -

i. Physical inspection
This is a verification of the product sample against the approved drawings and the TNB specification, which includes dimensional measurements, physical appearance, component verification, positioning, build quality and all other requirements stated in TNB specification.

ii. Functional tests
All routine tests stated in the TNB specification shall be performed in front of the Technical Evaluator

iii. User Acceptance Tests (UAT)
To verify whether the product is able to be install, operate and maintain as intended in real network situation, including ease and practicality of operation, ergonomic and safety.

iv. Where possible, Product Quality Plan will also be verified to ensure that manufacturing/assembly of the product is as declared.

For overseas product, the SGP Applicant or the local agent shall provide the venue for product verification.

5.5.3 Changes in TNB technical specification during technical evaluation

Under certain situations, if there is a new revision of TNB technical specification while evaluation is in progress or has just complete, a re-evaluation on the compliance with the latest specification shall be conducted. The applicant will be informed prior to the re-evaluation.

5.6 Performance Records

For fast-track application, the product shall have a good performance record, which means that it has been used in TNB system for at least 6 months and has no persistent quality issue. The Plan to Deliver (PTD) department of the Procurement & Supply Chain Division is responsible to confirm the product performance.

In the case where there is/are complaint(s) recorded in the Sistem Maklum Balas Bahan (SMB), the applicants required to solve the unresolved issues in a timely manner with the agreement by DN-ES.

5.7 Field Trial

Technical Evaluation conducted earlier in the SGP application stage may not be able to verify every aspect of the product's compliance with the requirements. The remaining should be verified and tested during the Field Trial. Among others, during the Field Trial, the product can be evaluated based on user friendliness, performance and durability.

The Technical Evaluation was conducted in a factory environment and in not an energised condition, while during the Field Trial, the product will be subjected to actual conditions, with actual voltage and exposure to the harsh environmental conditions.

Note: Field Trial for fast-track application is waived.

Upon completion of the Technical Evaluation, TNB Labs will issue an official letter to DN-ES to proceed for Field Trial. DN-ES will coordinate and supervise the Field Trial process. A coordination meeting between the applicant, DN-ES, TNB Labs and other relevant parties will be held to discuss site selection. The quantity of products to be prepared for Field Trial will be finalised in this meeting

The SGP Applicant is required to agree with field trial terms and condition as stated in *Kontrak Pelaksanaan Ujian Padang.*

The SGP Applicant shall ensure the product to be used for Field Trial is the product applied for SGP. A pre-Field Trial Inspection may be conducted before the product is delivered to site. The SGP Applicant shall provide training, complete with spare parts and tools (where required) prior to the Field Trial.

Depending on the site conditions and the product category, the duration of the Field Trial will be set normally between three (3) to six (6) months excluding the site coordination and preparation. DN-ES will advise the suitable duration of Field Trial and any extension if due to any reasons for example data obtained is not sufficient for evaluation.

Upon completion of the Field Trial, the product will be evaluated based on the product performance and compliance to technical specification during the whole Field Trial period. Feedback and comment from DN Operations will be included in the Field Trial report. The Field Trial result and report will be endorsed by DN-ES.

All related costs for the Field Trial, including the preparation of sample(s), installation, termination, testing, commissioning, logistics, contingency and manpower shall be borne by the SGP Applicant. After the Field Trial period, the successful sample is expected to remain installed in the TNB system, unless instructed otherwise by DN-ES. If the sample has failed the Field Trial, the sample will be returned to the SGP Applicant and the related costs shall be borne by the SGP Applicant.

5.8 Noncompliance with SGP Requirements

5.8.1 Noncompliance with Technical Evaluation Requirements

In the event when the product evaluated is deemed as not complying with the TNB technical specification or international standard, the SGP Applicant is given 10 working days to respond and to rectify the issue. Failure to respond with acceptable evidence within the stipulated period will result in the application to be stopped and the application to be returned to the SGP Applicant.

5.8.2 Noncompliance with Field Trial Requirements

In case of any noncompliance detected during the Field Trial, and/or if the Field Trial has found to be failed at the end of the Field Trial period, the outcome will be presented at the QCC meeting. QCC will further deliberate on the outcome and decide whether the SGP application needs to be stopped or otherwise considered for improvement.

5.9 Quality Certification Committee

After completion of the Technical Evaluation and Field Trial, both reports will be compiled and presented to QCC. QCC will make a decision as stated in clause 1.2 of this handbook.

SGP will be issued if QCC approves the application.

As stated in clause 5.8 above, in cases where the outcome of the evaluation is regarded as fail, QCC may request the SGP Applicant to rectify the defect and get the product re-evaluated. In situations where the product is rejected outright, the application will be returned to the SGP Applicant.

5.10 Client Charter

5.10.1 Normal SGP Application

For normal SGP application, the process will take twelve (12) months, including a three (3) to six (6) months Field Trial period to complete provided that the SGP Applicant submitted a completed documentation and able to prepare product sample as requested. SGP Applicant who is unable to submit complete/correct documents during evaluation and to resolve Field Trial issues will result in a longer application period. Fast response and positive cooperation from SGP Applicant during this stage are two of the main factors that will ensure the smoothness of the SGP processes.

5.10.2 Fast Track SGP Application

The processing time for Fast Track SGP Application might take about four (4) months to complete provided that the SGP Applicant submitted a completed documentation and, subject to the resolution of any outstanding quality issue of the product.

5.10.3 Issuance of SGP

QA-PC will prepare the SGP certificate to be endorsed by the QCC Chairman within 15 working days from the QCC date.

The successful SGP Applicant shall collect the SGP certificate in person. Collection via any type of third-party courier service providers is not allowed. The purpose is to protect the SGP holder secrecy, as well as the confidential information written in the SGP.

-NOTES-

6. SURVEILLANCE AUDIT

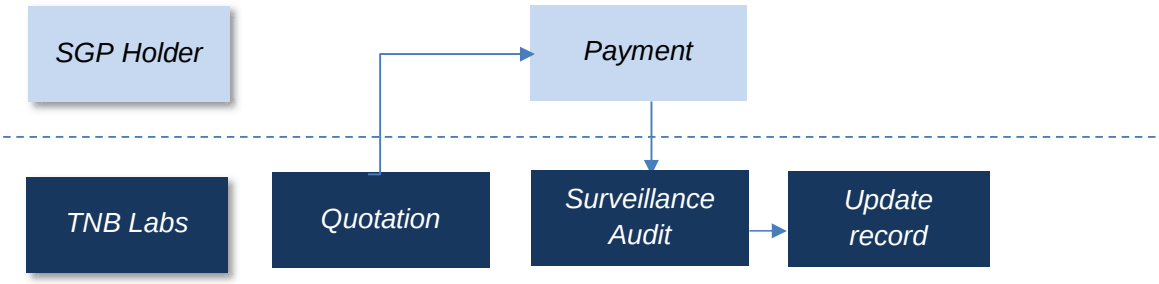
6.1 Purpose of audit

Surveillance Audit will be conducted annually to ensure that there are:

i. continuous compliance with quality system requirements.
ii. continuous compliance with TNB specification.
iii. no change in product design, component/material and manufacturing locations.

Surveillance Audit is mandatory and is part of the Product Certification scheme. Failure to perform audit will result in the SGP to be suspended. The reference used for the audit are the latest version of the ISO 9001 Quality Management System, TNB technical specification & the company's Quality Management System.

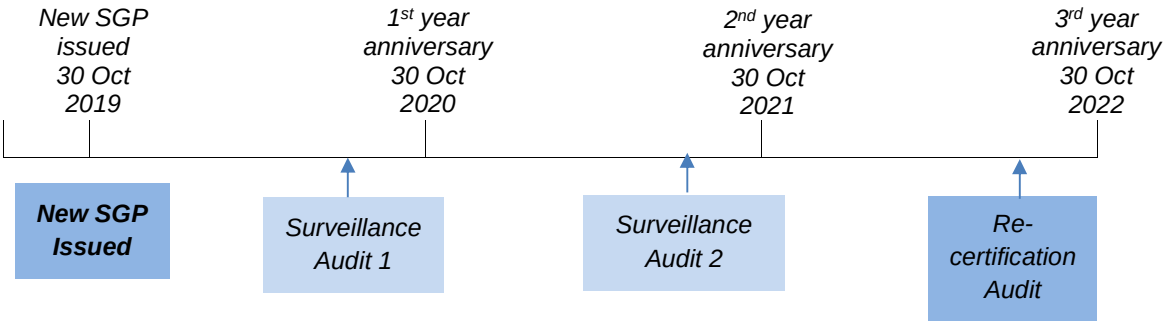
6.2 Surveillance Audit Procedure



6.3 Audit Schedule

Surveillance Audit should be conducted three (3) months before SGP anniversary date.

It can be illustrated in the diagram below:



For example, if an SGP was issued on 30 October 2019 and has an expiry date of 29 October 2022, the 1st anniversary will be on 30 October 2020 and the 2nd anniversary date will be on 30 October 2021.

The required date for Surveillance Audit 1 is therefore on 30 July 2020 i.e. 3 months before the 1st anniversary date and the required date for Surveillance Audit 2 is on 30 July 2021 i.e. 3 months before the 2nd anniversary date.

The 3 months lead time is required to give time to the SGP holder to close audit NCR (if any) and prepare any other documentations in case it is needed, for example, information change request, amendment in specification, etc.

6.4 Quotation and Payment

A quotation for Surveillance Audit will be issued to the SGP holder at least three (3) months before the audit required date.

The SGP holder is required to prepare a purchase order addressed to TNB Labs Sdn. Bhd. and make the payment to TNB Labs. The detail on bank account and payment method will be stated in the quotation.

Surveillance Audit will only be conducted after the payment is received.

6.5 Audit Location

The audit will be conducted at SGP holder's premise focusing on the manufacturing facilities. In case of a company having multiple locations, for example, the office for design and procurement activities is located in KL while the factory is in Seremban, the audit will be conducted at the manufacturing facility in Seremban. In this case, the representatives from the design and procurement functions are required to attend the audit in Seremban.

In case where there are multiple manufacturing sites, each site needs to be audited.

6.6 Audit Implementation

A two (2) man-day Surveillance Audit will be conducted on the manufacturer of the most complicated product (Category A) per site, while a 1 man-day Surveillance Audit will be conducted on the manufacturer of the less complicated product (Category B & C) per site. However, if the manufacturer is producing multiple category B & C products, a 2 man-day Surveillance Audit will be conducted per site.

For the company that has never been audited by TNB Labs before, the duration of the 1st Surveillance Audit will be as the following:

i. Category A within Malaysia: 4 man-days per site
ii. Category B & C within Malaysia: 2 man-days per site
iii. Overseas all categories: 3 to 6 man-days per site

Below is a sample of a typical of a two man-days audit schedule:

Time	Agenda
Day 1	
09.30 – 10.00	Opening Meeting • Briefing on company overview by the Auditee • Briefing on the audit plann by the Lead Auditor
10.00 – 10.45	Factory Tour
10.45 – 13.00	• Overview of implementation of QMS o Management Review o Internal Audit
13.00 – 14.00	Rest
14.00 – 17.00	• Verification of no design change • Verification of no change in SGP information
Day 2	
09:00 – 13.00	• Purchasing • Resource Management • Production Control • Handling, Storage and Packaging • Identification and Traceability • Inspection & Testing • Control of monitoring and measuring equipment
13.00 – 14.00	Rest
14.00 – 16.00	• Control of Nonconforming Product • Corrective Action & Preventive Action, customer complaint
16.00 – 17.00	Report Preparation
17.00 – 17.30	Closing Meeting • Report Presentation • Submission of preliminary audit report to client

To learn more about the audits, the SGP Applicant/SGP Holder may refer to the Quality Assurance Handbook: Quality Audit, which also was published by TNB Labs.

6.7 Desktop audit for overseas manufacturer

For overseas manufacturer, according to the current policy, physical audit will be conducted only once i.e. during the initiation of new contract. Surveillance Audits will be done remotely or known as desktop audit. SGP holder is required submit the following documents:

i. Current ISO 9001 certificate
ii. Audit result conducted by Certification Body
iii. Product Quality Plan

6.8 Audit Result

Audit will involve taking random samples to evaluate the effectiveness of the quality management system and compliance to the TNB specification. The auditor will issue a Nonconformity Report (NCR) in case of noncompliance with ISO 9001 requirements, TNB specification and company's procedures. The auditor may issue observation or opportunity for improvement (OFI) in any area that can be improved further.

6.9 Post Audit & Follow Up

In the event of NCR being issued by the auditor, the applicant shall respond with evidence and corrective action plan within 30 days from the audit date. Failure to resolve the outstanding nonconformity may cause the SGP to be suspended.

Any observation or OFI issued will be verified during the following audit.

7. SGP RECERTIFICATION APPLICATION

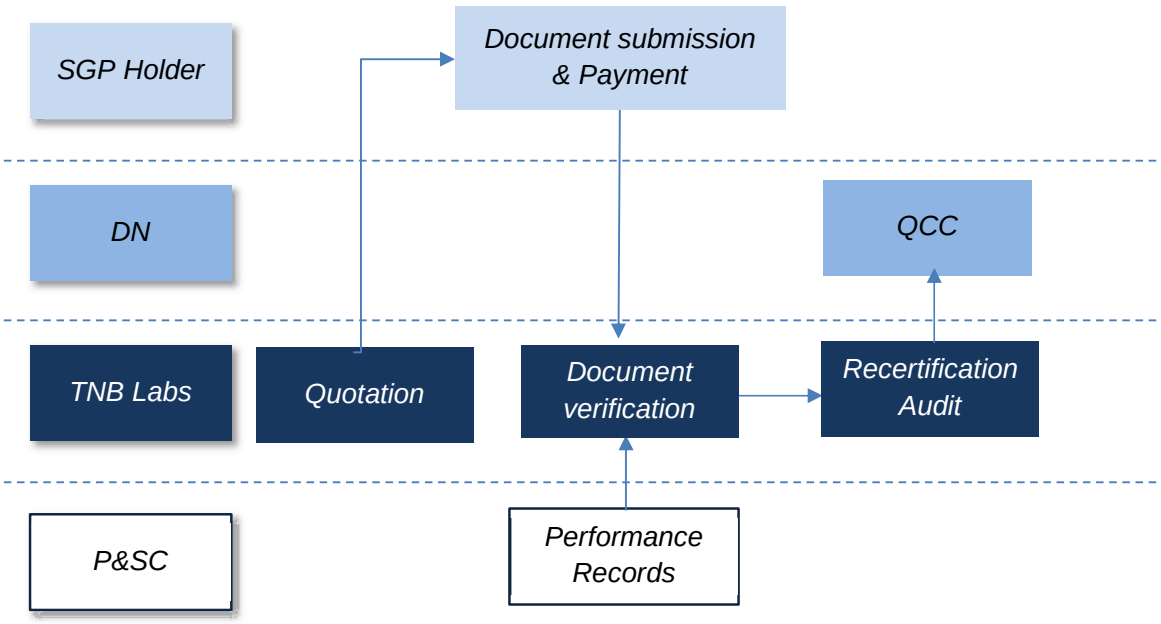
7.1 Recertification Criteria

SGP will be recertified based on the following criteria:

i. No change in SGP information
ii. Recertification Audit conducted
iii. No pending Non-Conformity Report (NCR)
iv. No persistent product quality issues

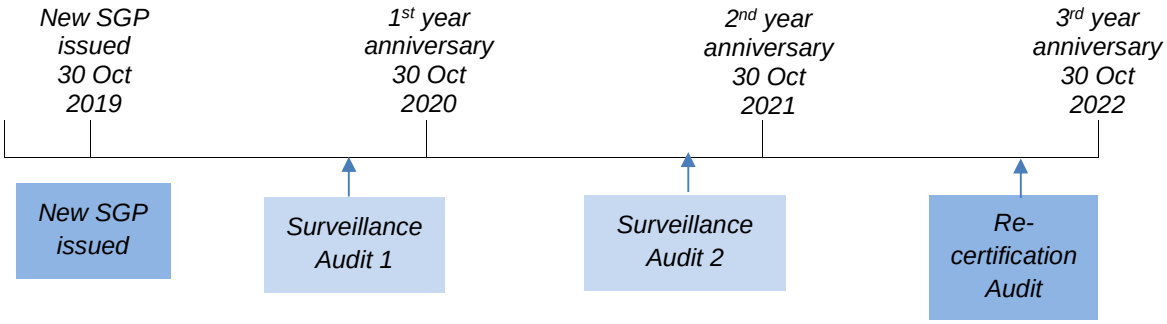
In case there are changes in terms of product design, material, source of components, manufacturing flow, manufacturing location, TNB technical specification or ownership structure of the SGP holder, the SGP holder is required to make change request before making recertification application. Please refer to Chapter 8 for details

7.2 SGP Recertification Application Procedure



7.3 Recertification Timeline

SGP recertification process shall be initiated six months before the expiry date.



For example, if the SGP expires on 30 October 2022, QA-PC will issue a recertification reminder and quotation starting 30 April 2022.

The SGP Holder is required to prepare a purchase order addressed to TNB Labs Sdn. Bhd. and make the payment to TNB Labs. Detail about bank account and payment method will be stated in the quotation

SGP Recertification process will only commence after the payment is received.

7.4 Document Submission

The SGP Holder is required to submit the following documents:

i. Declaration of no change in SGP information
   SGP holder shall declare that:
   - There is no change made to the product design, material and/or material composition
   - There is no change made to the product construction, manufacturing process and/or country of manufacture
   - The manufactured product complies with the TNB specifications and/or International Standards

ii. Latest valid ISO 9001 certificate
iii. Current SGP certificate
iv. Product Quality Plan
v. Audit report & evidence of NCR Closure
vi. Quality issue records
vii. Endorsed drawing
viii. Equipment Characteristic form & related component test report/datasheet
ix. Product Inspection records
   - Number of products supplied to TNB during certification period
   - Number of Product Inspection conducted during certification period
   - Number of Product Inspection Rejection (if any) during certification period

7.5 Recertification Audit

The Recertification Audit shall be conducted 3 months prior to the SGP expiry. The 3 months lead time is required to allow SGP Holder to close audit NCR (if any) and to prepare any other documentations needed, for example, information change request, amendment in specification, etc.

7.5.1 Recertification Audit Duration

The Recertification Audit procedure is similar to the procedure of Surveillance Audit, but it will be conducted more thoroughly. Duration of recertification audit will be as the following:

i. Category A within Malaysia: 4 man-days per site
ii. Category B & C within Malaysia: 2 man-days per site

Desktop Audit will be conducted for overseas manufacturers.

7.5.2 Discrepancy between recertification declaration and audit findings

NCR will be issued for inaccurate recertification declaration as stated in clause 7.3. This might prolong the recertification process. The SGP Holder is advised to check the declaration diligently.

7.5.3 Post Audit & Follow Up

In the event of NCR being issued by the auditor, the applicant shall respond with evidence and corrective action plan within 30 days from the audit date. Failure to close the NCR may result in the SGP not being recertified.

Any observation or OFI issued will be verified during the following audit.

7.6 Verification of Product Performance

7.6.1 Quality Records from *Sistem Maklum Balas Bahan* (SMB)

Concurrent with the recertification audit, QA-PC will request PTD to confirm product performance. SGP recertification will be deferred if there are persistent unresolved quality issue. SGP Holder is required to solve the unresolved issues in a timely manner.

7.6.2 Product Inspection Performance

The SGP Holder is required to declare Product Inspection performance during certification period. SGP recertification will be deferred if there are persistent unresolved Product Inspection Rejections. SGP Holder is required to solve the unresolved issues in a timely manner.

7.7 Verification of TNB Specification Revision

QA-PC will verify whether there is any update in the TNB technical specification. In case of a revision of the TNB specification, evaluation will be conducted to ensure the product conforms to the latest specification. The requirements on the SGP validity as stated in clause 2.8 are applicable.

7.8 Noncompliance with SGP Requirements

In the event the product evaluated is deemed as not complying with the TNB specification or international standard, the applicant is given 10 working days to respond and to close the issue. If the applicant fails to do this, the application shall be considered as non-compliant and the documents shall be returned to the applicant.

7.9 Quality Certification Committee

After a successful recertification evaluation, QA-PC will compile the report and present the application to the QCC. QCC will make a decision as stated in clause 1.2.

SGP will be issued if QCC approves the application.

If QCC does not approve the application, the SGP Applicant will be formally informed on what action to be done before the SGP can be recertified.

7.10 Client Charter

7.10.1 Normal SGP Recertification Application

Normally, recertification application process might take about two (2) months, provided that the SGP Holder submitted complete and correct document as requested. Fast response and positive cooperation from SGP Applicant during this stage are the two main factors that will ensure the smoothness of the recertification processes.

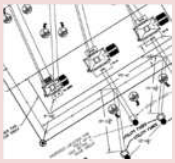
7.10.2 Issuance of SGP

QA-PC will prepare the SGP certificate to the successful applicant within 15 working days from the QCC date. However, the issuance of the SGP certificate might be suspended if there is any outstanding payment.

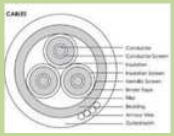
The applicant shall collect the SGP certificate in person. Collection via any type of third-party courier service providers is strictly not allowed. The purpose is to protect the SGP Holder secrecy as well the confidential information written in the SGP.

8. APPLICATION FOR CHANGES IN SGP INFORMATION

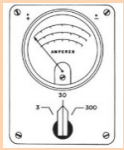
8.1 Categories of Changes



Category 1: Change in TNB Specification

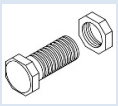


Category 2: Change in Product Design



Category 3: Change in Product Rating

Category 4: Change in Company Information



Category 5: Change in supporting component

There are five (5) categories of changes that can be allowed. SGP Holder shall inform TNB Labs in writing when any of these occurs:

i. Change in TNB technical specification
ii. Change in product design/technical drawing/main material/main component/ manufacturing process.
iii. Change/addition of electrical/mechanical rating
iv. Change in SGP Holder's information e.g. change of company name, location and/or change in company ownership structure
v. Change/addition in component(s) that does not affect overall design, function and performance of the product.

8.2 Common Procedure

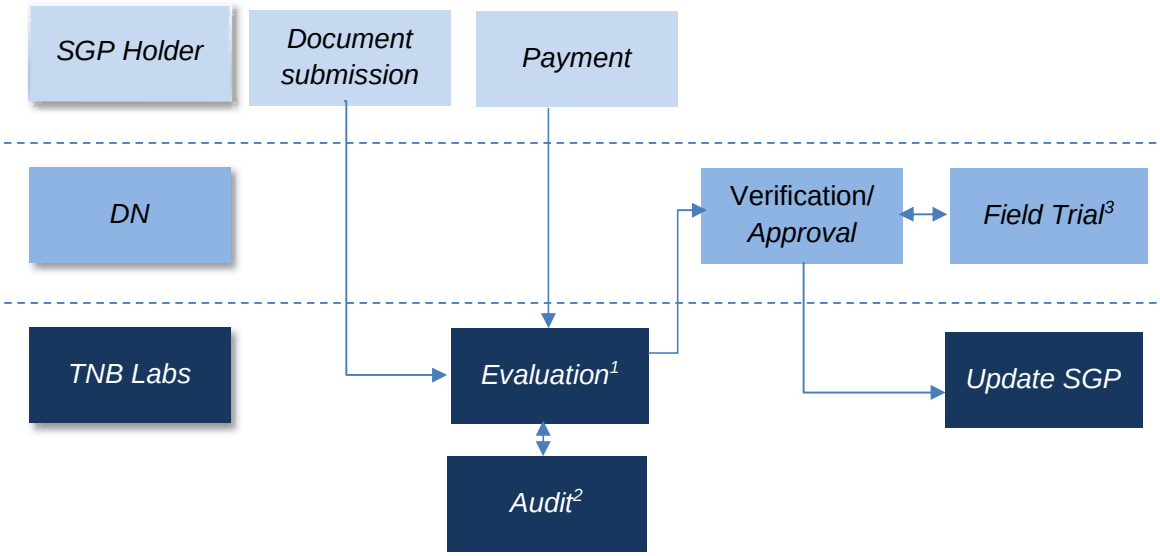
The request for change shall be done as soon as the change takes place. In the case where the change occurs close to SGP recertification period, the application for changes shall be made before the application for SGP recertification.

For all types of changes, SGP Holder is required to submit the Changes Application Form to QA-PC. All the supporting documents shall be submitted together with the application form.

QA-PC will issue quotation based on the man-days required to evaluate the changes. The SGP Holder is required to prepare a purchase order and make the payment to TNB Labs Sdn. Bhd.

The SGP information change process will only start after the payment is received.

The illustration describes the common SGP changes application process.



Note:

1. Evaluation may involve:
   a. Technical Evaluation – verification of documents and product
   b. Functional Test
   c. Approval of new technical drawing by DN-ES
2. Audit may be required if supporting evidence can only be gathered through audit
3. Field Trial may be required upon verification by DN-ES

8.3 Category 1: Change in TNB Technical Specification

When there are changes in TNB technical specification, SGP Holder is required to evaluate whether the product is still in compliance with the new specification. In the event that only minor changes are required to meet the specification, the SGP Holder is permitted to apply for change in SGP information.

However, if the changes are major, for example when a new type test is required to be conducted, the SGP Holder needs to apply for new SGP after all the new requirements has been fulfilled.

DN-ES is in the position to decide whether the changes are major or minor.

SGP Holder is required to update their product to the latest technical specification within 6 months after its release. If a new type test is required, the product shall be updated within 1 year after the specification is released.

8.3.1 Document Submission

For Category 1, the SGP Holder is required to submit the following documents:

i. Changes Application Form
ii. Compliance to TNB specification self-declaration form
iii. Equipment characteristic form
iv. New product drawing(s)
v. New type test report (SGP Holder is required to confirm with DN-ES if a new type test is required)
vi. New materials and components test report (if applicable)
vii. New Product Quality Plan (if applicable)

8.3.2 Technical Evaluation

QA-PC will appoint a Technical Evaluator (TE) to evaluate the product based on the submitted changes application documents. TE may conduct both desktop evaluation and product verification to confirm that the product is meeting TNB specification requirements.

8.3.3 Approval

QA-PC will forward the change application to DN-ES for approval. New technical drawing will be evaluated and considered for approval as well.

8.4 Category 2: Changes in Product Design

In the case when the SGP Holder make changes in the product design and/or technical drawing and/or main material and/or main component and/or manufacturing process, the SGP Holder is required to inform TNB Labs by applying for changes in SGP information. The changes may be due to product improvement or change and/or addition of component supplier.

However, if the changes affect product function and performance, which may or may not require a new type test to be conducted to the product, the application is required to go through the new SGP application.

8.4.1 Document Submission

For Category 2, the SGP Holder is required to submit the following documents:

i. Changes Application Form
ii. Compliance to TNB specification self-declaration form
iii. Equipment characteristic form
iv. New product technical drawing(s) (if applicable)
v. New material certificate and components test report
vi. New Product Quality Plan

8.4.2 Technical Evaluation

QA-PC will appoint a Technical Evaluator (TE) to evaluate the product based on the submitted changes application documents. TE may conduct both the desktop evaluation and product verification to confirm that the product is meeting TNB specification.

8.4.3 Field Trial

Based on the degree of change, DN-ES will decide whether field trial shall be conducted or not.

8.4.4 Approval

QA-PC will forward the change application to DN-ES for verification. Technical drawing will be evaluated and considered for approval as well.

8.5 Category 3: Change/Addition of Electrical/Mechanical Rating

In the case SGP Holder wishes to change and or add electrical and/or mechanical rating to an already certified product, the SGP Holder shall apply by using the following procedure.

8.5.1 Document Submission

In this case, the SGP Holder is required to submit the following documents:

i. Changes Application Form
ii. Compliance to TNB specification self-declaration form
iii. Equipment characteristic form
iv. New product drawing.
v. Additional type test report (if applicable)
vi. New materials and components test report (if applicable)

8.5.2 Evaluation

QA-PC will appoint a Technical Evaluator (TE) to evaluate the product based on the submitted changes application documents. TE may conduct both desktop evaluation and product verification to confirm that the product is meeting TNB specification.

8.5.3 Approval

QA-PC will forward the change application to DN-ES for verification. Technical drawing will be evaluated and considered for approval as well.

8.6 Category 4: Change in Company Information

In the case when there are changes in SGP Holder's information e.g. change of company name, location and/or change in company ownership structure, the SGP Holder is required to apply for change under this category.

8.6.1 Document Submission

For Category 4, SGP holder is required to submit the following documents:

i. Changes Application Form
ii. Company profile
iii. Evidence of change in company name e.g. company registration, shareholding structure
iv. ISO 9001 certificate incorporating the change
v. Product Quality Plan

8.6.2 Technical Evaluation

QA-PC will appoint a Technical Evaluator (TE) to evaluate the product based on the submitted documents. The TE may conduct both desktop evaluation and product verification to confirm that the product is meeting TNB specification.

8.6.3 Quality Audit

A Quality Audit may be conducted if the submitted documents are unable to satisfy the Technical Evaluator that there is no deterioration in product quality with the new quality management system (QMS) of the company compared to the QMS of the company originally certified.

8.6.4 Approval

QA-PC will forward the change application to DN-ES for verification.

8.7 Category 5: Change/Addition in Supporting Component

When there are changes or addition in component suppliers and material or component that do not directly affect the functionality or performance of the product, the SGP Holder is required to apply for change under this category.

8.7.1 Document Submission

For Category 5, SGP holder is required to submit the following documents:

i. Changes Application Form
ii. Equipment characteristic form
iii. New material and/or component test report
iv. New product drawing (if applicable)
v. New supplier evaluation record (if available)

8.7.2 Technical Evaluation

QA-PC will appoint a Technical Evaluator (TE) to evaluate the product based on the submitted documents. The TE may conduct both desktop evaluation and product verification to confirm that the product is meeting the TNB technical specification.

8.7.3 Approval

QA-PC will forward the change application to DN-ES for verification. Updated technical drawings will be evaluated and considered for approval as well.

8.8 Re-Issuance of SGP After Changes

QA-PC will prepare the SGP certificate to the successful applicant within 10 working days from approval by DN-ES. However, the issuance of the SGP certificate might be suspended if there is any outstanding payment.

The applicant shall collect the SGP certificate in person. Collection via any type of third-party courier service providers is strictly not allowed. The purpose is to protect the SGP holder secrecy as well the confidential information written in the SGP.

9. SGP CERTIFICATION DATE

9.1 New SGP validity

The validity period of SGP certificate will be a maximum of three (3) years from the date of issuance. However, for SGP holders with more than one SGP certificate, the expiry date of the new SGP will be synchronized with the existing SGP. Therefore, the new SGP might have a shorter validity period (for one certification cycle only). This synchronization will minimize the number of audits conducted in the factory to once per annum.

The issue date of SGP will be in accordance to the date of QCC approval.

Example 1:

SGP 1 Certificate No.: D2019-00xx, Expiry Date: 1 July 2022
SGP 2 Certificate No.: D2019-00xy, Expiry Date: 1 July 2022

Date of QCC Approval for the new SGP 3: 1 August 2020

Therefore, the new SGP 3 Certificate will have the issue and expiry date as following:
Issue Date:1 August 2020
Expiry Date: 1 July 2023

Example 2:

SGP 1 Certificate No.: D2019-00xx, Expiry Date: 1 July 2022
SGP 2 Certificate No.: D2018-00xy, Expiry Date: 1 July 2021

Date of QCC Approval for the new SGP 3: 15 April 2020

Therefore, the new SGP Certificate will have the issue and expiry date as following:
Issue Date:15 April 2020
Expiry Date: 1 July 2022

9.2 Recertification of SGP

SGP certificate that has been recertified will have issue date in accordance to the QCC approval date. The expiry date on the new SGP certificate, however, will be a continuation of the maximum three (3) year term from the previous SGP's expiry.

Example 1:

SGP Certificate No.: D2017-00xx, Expiry Date: 22 July 2020
Date of QCC Approval for Recertification: 7 August 2020

Therefore, the new SGP Certificate will have the issue and expiry date as following:
Issue Date:7 August 2020
Expiry Date: 22 July 2023

Example 2:

SGP Certificate No.: D2017-00xx, Expiry Date: 22 July 2020
Date of QCC Approval for Recertification: 1 September 2020

Therefore, the new SGP Certificate will have the issue and expiry date as following:
Issue Date: 1 September 2020
Expiry Date: 22 July 2023

9.3 Reissuance after changes

For SGP certificate that has been approved for change, the issue date will be the change approval date. However, its expiry date will remain the same.

Example:

SGP Certificate No.: D2019-00xx
Issue Date: 1 May 2019
Expiry Date: 30 April 2022

Date of Change Approval: 3 May 2020

Therefore, the new SGP Certificate will have the issue and expiry date as following:
Issue Date: 3 May 2020 (Issue 2, replacing Issue 1 dated 1 May 2019)
Expiry Date: 30 April 2022

9.4 Synchronization of existing multiple SGP dates

In case of an SGP Holder having multiple SGP with different expiry dates, the expiry date will be synchronized, so that the SGP Holder will only has one expiry date for all the SGP.

Example 1 :

SGP 1 Certificate No.: D2019-00xx Expiry Date: 30 April 2022 SGP 2 Certificate No.: D2019-00xx Expiry Date: 30 April 2022 SGP 3 Certificate No.: D2018-00xx Expiry Date: 31 July 2021 Therefore, the expiry date of SGP 3 will be synchronized/readjusted to: Expiry Date: 30 April 2021

Example 2 :

SGP 1-5 Certificate No.: D2020-00xx Expiry Date: 1 August 2022 SGP 6 Certificate No.: D2018-00xx Expiry Date: 12 January 2021 SGP 7 Certificate No.: D2018-00xy Expiry Date: 2 October 2021 Therefore, the expiry date of SGP 6 will be synchronized to: Expiry Date: 1 August 2021 The expiry date of SGP 7 will be synchronized to: Expiry Date: 1 August 2022

The synchronization is performed to ease the management of the SGP cycle and to ensure the audit can be done effectively. However, the validity period of 3 years shall be maintained as far as possible. For SGP with a shortened validity period, some discounts or other incentives may be given to the SGP Holder.

-NOTES-

10. SUSPENSION, REVOCATION, NON-ISSUANCE AND WITHDRAWAL OF SGP

10.1 Suspension

10.1.1 Reasons for suspension

SGP will be suspended due to any of the following:

i. Surveillance Audit is not conducted
ii. Surveillance Audit NCR is not closed
iii. Failure to comply with the TNB specifications
iv. Persistent product quality or performance problem
v. Unsanctioned changes, either in design, components, material, dimensions, process or product construction
vi. Breakdown in quality management system
vii. Invalid ISO certificate or certification scope
viii. Invalid type test report e.g. non-compliance in accreditation scope of laboratory, incomplete test, infringement of type test report, etc.

The SGP Holder will be given a time period to undertake effective corrective actions to the above nonconformities. During the suspension period, the SGP cannot be used for the purpose of engaging business with TNB. Upon satisfactory verification of corrective actions taken, the certification shall be reinstated. If the corrections done are not satisfactory to TNB or if no corrections are undertaken in the period given, the SGP may be revoked.

For product with persistent quality issues, proposal for suspension shall be endorsed or supported by the relevant Technical Committee of TNB Division.

For existing contracts, the product that has the SGP suspended due to non-compliance to TNB specification or with persistent or recurring quality issue and/or unsanctioned changes, either in design, components, material, dimensions, process or product construction (items iii, iv, v and vii above) will not be allowed to be delivered to TNB.

10.2 Revocation

SGP will be revoked due to any of the following:

i. Corrective measures related to its suspension were not implemented or were not effective/comprehensive
ii. Abuse of certificate
iii. Use of forged/altered documents during SGP application

iv. Discrepancy between declared information and actual practices e.g. manufacturing processes
v. Certificate was used against the interest of TNB
vi. Non-compliance to the latest TNB technical specification beyond the specified period (refer clause 8.3).

10.3 Non-issuance

SGP might not be re-issued or renewed due to the following:

i. The product is no longer in used by DN
ii. The related specification or standards have expired, obsolete or are under review. Other reasons that are deemed appropriate by the QCC in the interest of TNB e.g. unresolved quality issues
iii. SGP re-certification application is not submitted after 6 months of expiry date

10.4 Withdrawal

SGP holder may voluntarily withdraw from the scheme. The reason of withdrawal shall be notified in formal letter to DN and TNB Labs

11. CERTIFICATION FEES

SGP Applicant shall pay TNB Labs all fees with respect to the SGP certification activities quoted by TNB Labs.

11.1 SGP Fee Structure

The SGP fee covers the following stages of the certification processes:

i. Administrative work
ii. Technical Evaluation, including product verification and functional test (where applicable)
iii. Quality Audit (where applicable)
iv. Preparation for Field Trial (where applicable)
v. Surveillance Audit
vi. Recertification process
vii. Application for change of SGP information

Traveling cost for overseas audit/evaluation (if required) will be charged separately.

In the case where application was returned at any of the above stages, the applicant shall bear the charges of administrative costs and the re-evaluation of the previous non-conformance.

11.2 Approval for SGP Fee Structure

The current SGP Fee Structure was advised by the TNB Board Tender Committee, presented to the DN Technical Committee and approved by the Jawatankuasa Eksekutif Kumpulan (JEK) TNB. The rate shall be subjected to periodical review by TNB. Appeal for price reduction is not allowed.

11.3 Quotation

TNB Labs shall issue quotation to the SGP Applicant based on the required service.

Where applicable, quotation for overseas audit/evaluation will be issued separately.

11.4 Payment

The applicant shall issue a Purchase Order and make the payment before any service can be rendered.

11.5 Refund

In case the certification process is halted due to any reason, the unused portion of the fee can be refunded. This refund amount is decided on a case by case basis.

11.6 Payment Method

Payment can be made through:

i. Cheque payable to TNB Labs Sdn. Bhd.
ii. Bank transfer (internet banking or conventional).
iii. FPX/credit card.

The applicant is requested to inform QA-PC when the payment has been made in a timely manner.

12. LAYOUT OF THE SGP CERTIFICATE

12.1 Front page of SGP

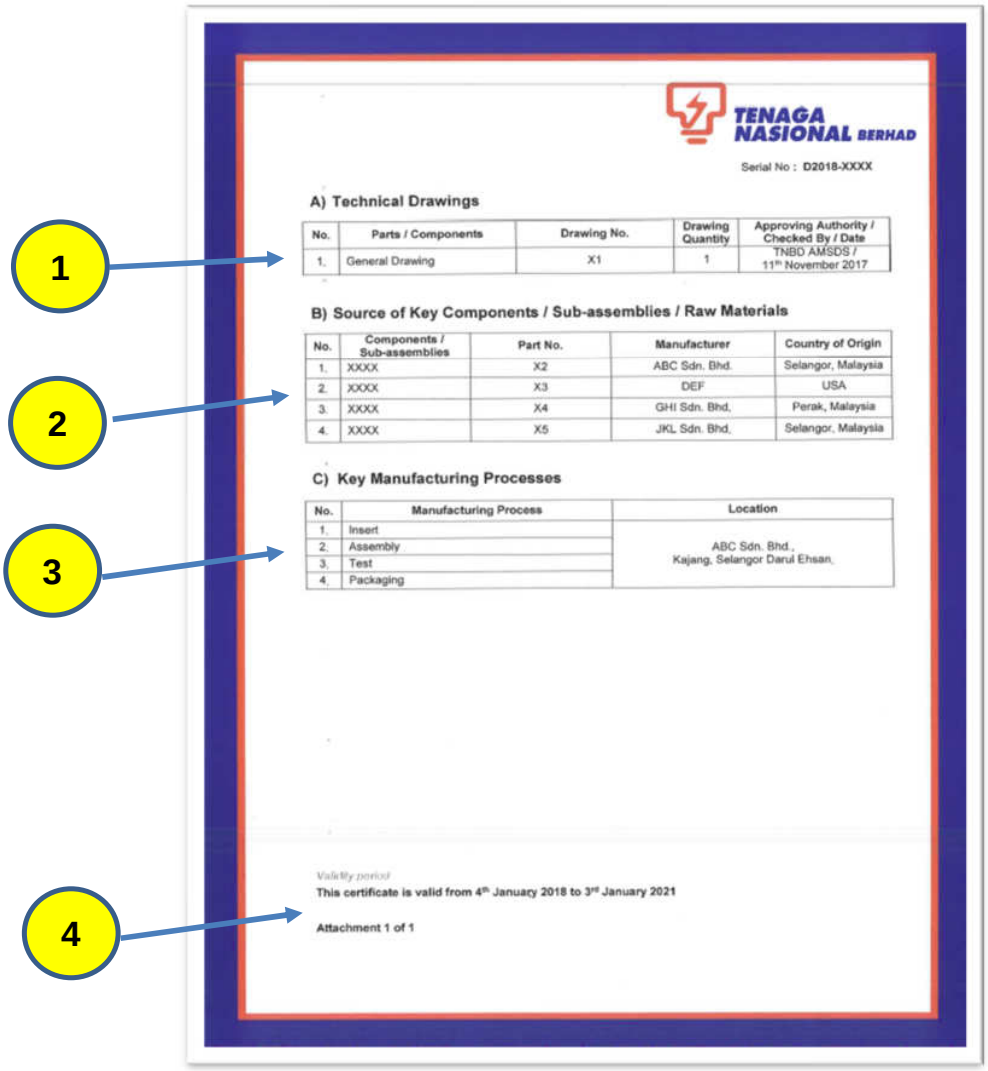
The front page of the SGP provides the following information:

No	*Title*	*Remark*
1	Serial No	Certificate Serial Number: 'D' indicates Distribution Network 20YY – the year the certificate was issued XXXX – a unique running number for the SGP
2	Name & Address of SGP holder	Full name and full address
3	Name of product	Name of product according to the TNB Specification, together with the rating and material number

4	Product Model	Product model as declared by SGP holder
5	TNB Specification	Name and version of the specification
6	Signature	By QCC Chairman from DN
7	Dates	Dates of SGP validity, 'certified since' and re-issuance (where applicable)

The front page of the SGP shall carry a red seal of TNB Labs logo, embossed with the words "Unit Jaminan Kualiti, TNB Labs Sdn. Bhd."

12.2 Second page of SGP



The second page of the SGP provides the following information:

No	Title	Remark
1	Section A: Technical Drawings	Drawings related to the certified product which are endorsed by the DN-ES.
2	Section B: Source of Key Components	A list of major components or sub-assemblies of the certified product, and their supplier or country of origin.
3	Section C: Key Manufacturing Processes	A list of the major processes involved in the production of the certified product and their locations.
4	Validity Period	The SGP validity period is a maximum of 3 years from the date of certification or recertification.

Information printed on the second page of the SGP may vary based on the complexity of the product and the specification requirements.

12.3 Terms & Conditions of SGP Certification

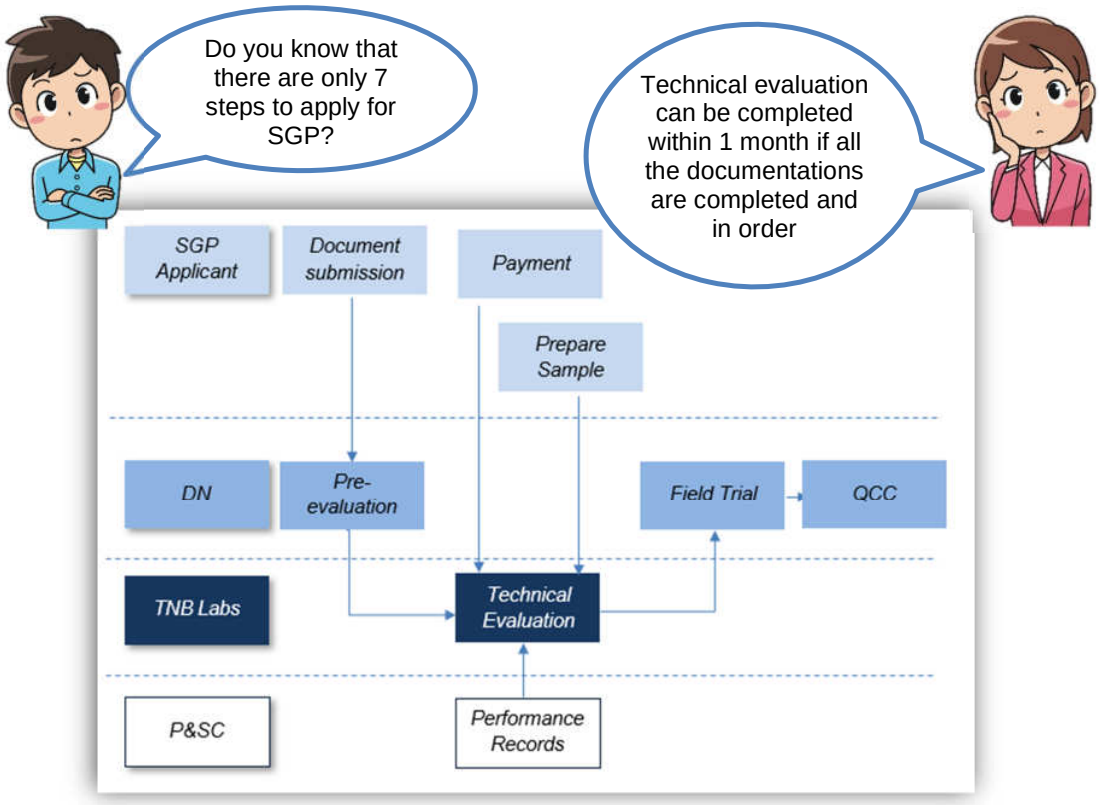
The terms and conditions of SGP certification are printed at the back of the front page of the SGP certificate. The content of the terms and conditions are as stated in clause 1.5 of this handbook.

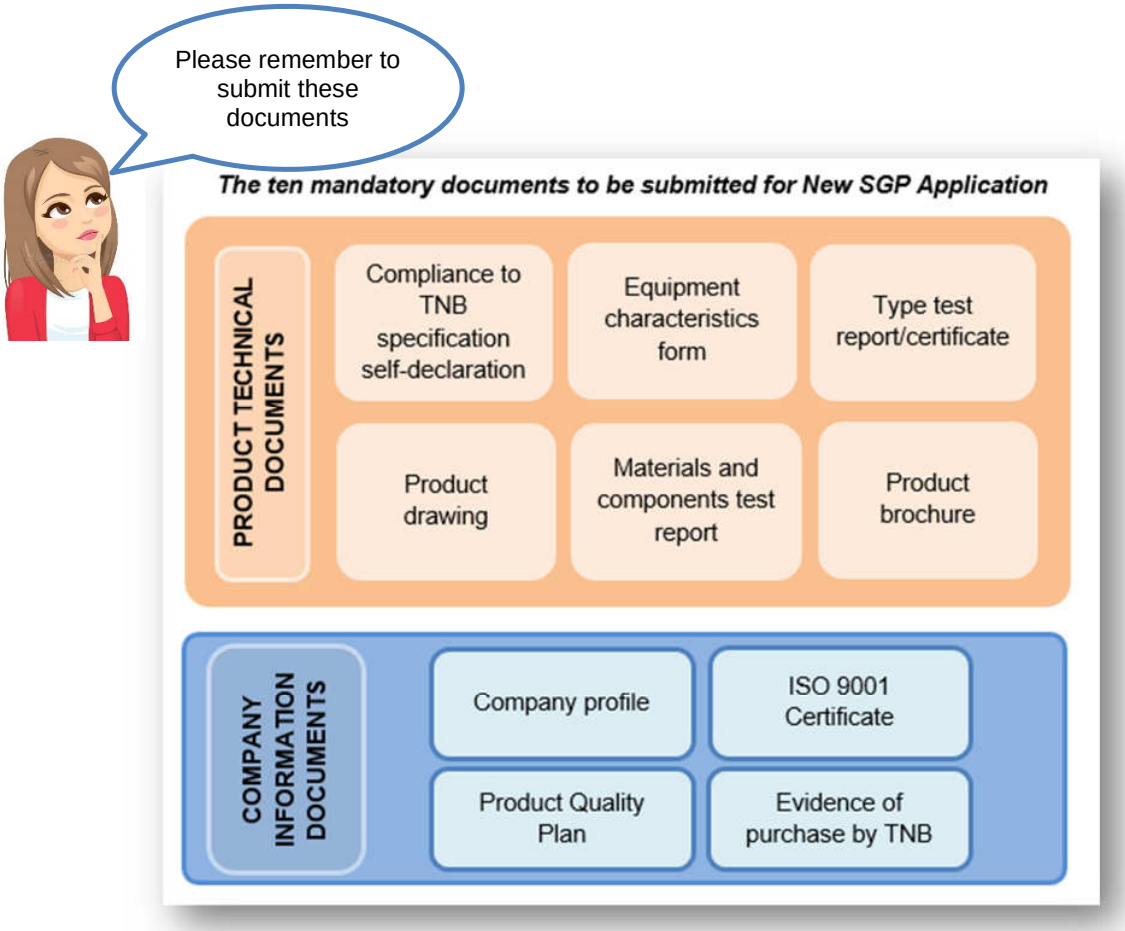
-NOTES-

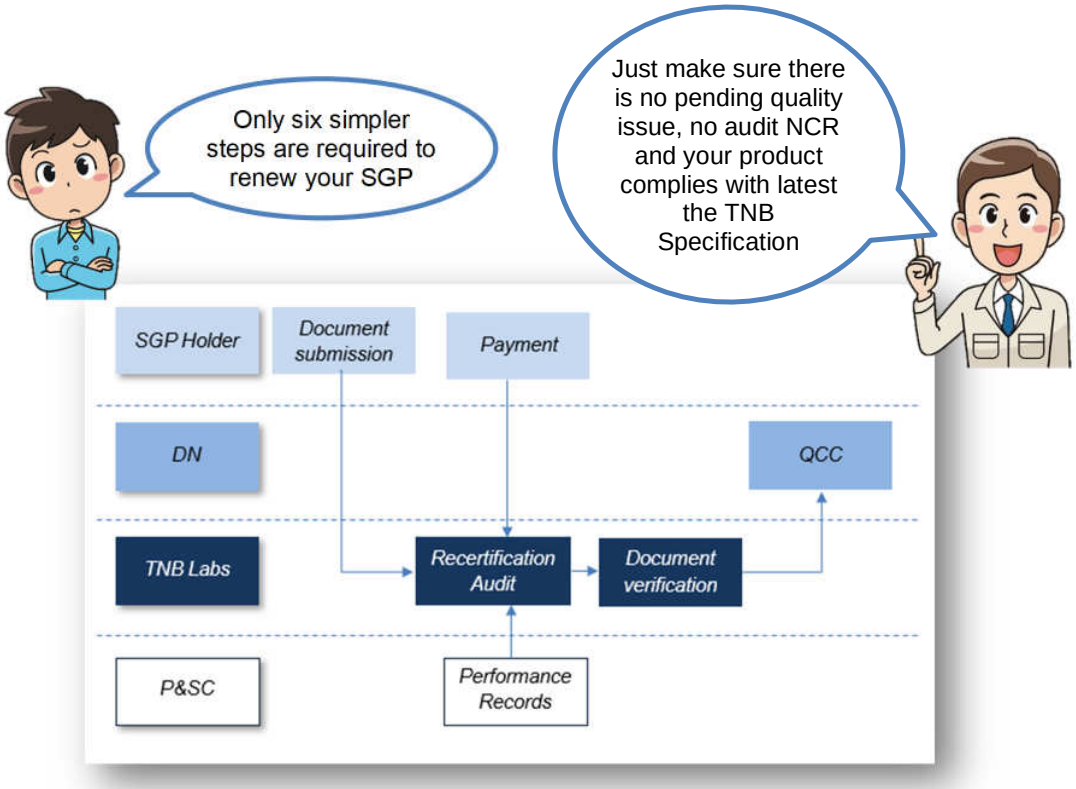
13. GLOSSARY

For the purpose of this handbook, the following definitions shall apply:

Product	:	Materials, equipment and tools, including components which are supplied by manufacturer / supplier, to be used in TNB system.
Quality Assurance	:	The process to ensure that the product is meeting customer specification and standard through verification, testing, certification and audit activities
Product Certification	:	The process of technically accepting a product to be used in the Distribution Network Division of TNB, which includes evaluation of product compliance with TNB specification, performance measurement through field trial, conformance to quality system through quality audit and compliance to all certification requirements.
'Sijil Guna Pakai Produk' (SGP) or Certificate of Product Acceptance	:	Certificate issued by TNB as an indication of product conformance to TNB specification and Product Certification requirements.
Supplier	:	The party that is responsible to supply product to TNB.
SGP Applicant	:	The company that applies for its product to be certified.
Engineering Services (DN-ES):	:	The representative department of Distribution Network Division, which is directly involved in the SGP certification related processes, which include the determination of Technical Specification, Technical Evaluation and Field Trial.
TNB specification	:	A technical document issued by TNB describing features, technical requirements and performance required from a product
Technical Evaluation	:	A process of assessing a product's full technical compliance with all requirements in the TNB specification of the product
Field Trial	:	A mechanism used in the SGP certification to test the compatibility and suitability of a product and its performance in the TNB system.
Quality Audit	:	An independent and documented process for obtaining evidence and evaluating objectively to determine the extent to which criteria are fulfilled.


Do you know that there are only 7 steps to apply for SGP?
Technical evaluation can be completed within 1 month if all the documentations are completed and in order
SGP Applicant
Document submission
Payment
Prepare Sample
DN
Pre-evaluation
Field Trial
QCC
TNB Labs
Technical Evaluation
P&SC
Performance Records


Please remember to submit these documents
The ten mandatory documents to be submitted for New SGP Application
PRODUCT TECHNICAL DOCUMENTS
Compliance to TNB specification self-declaration
Equipment characteristics form
Type test report/certificate
Product drawing
Materials and components test report
Product brochure
COMPANY INFORMATION DOCUMENTS
Company profile
ISO 9001 Certificate
Product Quality Plan
Evidence of purchase by TNB


Only six simpler steps are required to renew your SGP
Just make sure there is no pending quality issue, no audit NCR and your product complies with latest the TNB Specification
SGP Holder
Document submission
Payment
DN
QCC
TNB Labs
Recertification Audit
Document verification
P&SC
Performance Records


SGP creates win-win benefits to TNB and the SGP holders
Benefits of Product Certification
Products are proven fit for use
Expedite tender evaluation process
Product Uniformity
Efficient process Cost & time reductions
Best manufacturing practice
Reduce paper works

Kindly submit any feedback or enquiry regarding this Handbook or the Product Certification Scheme to:

Head (Product Certification)
Quality Assurance Unit
TNB LABS Sdn. Bhd.,
No. 1, Lorong Air Hitam,
Kawasan Institusi Penyelidikan Bangi
43000 Kajang, Selangor Darul Ehsan
MALAYSIA

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