

PENSIJILAN & PENGUJIAN BAGI PERANTI ROKOK ELEKTRONIK

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Testing Services Department
7 April 2022



Best Partner for Innovation

CONTENT

1. Introduction of SIRIM QAS International
2. What is Electronic Cigarette
3. Overview of Testing Laboratory
4. Equipment
5. Summary of Testing
6. Testing Fee
7. Testing & Certification Process
8. Product Certification Process (Type 1b & Type 5)
9. Certification Fee

ABOUT US



Established in 1996 as a wholly-owned subsidiary of SIRIM Berhad



Conformity assessment services since 1970s



>800 staff



Malaysian based



Local and international clients



VISION

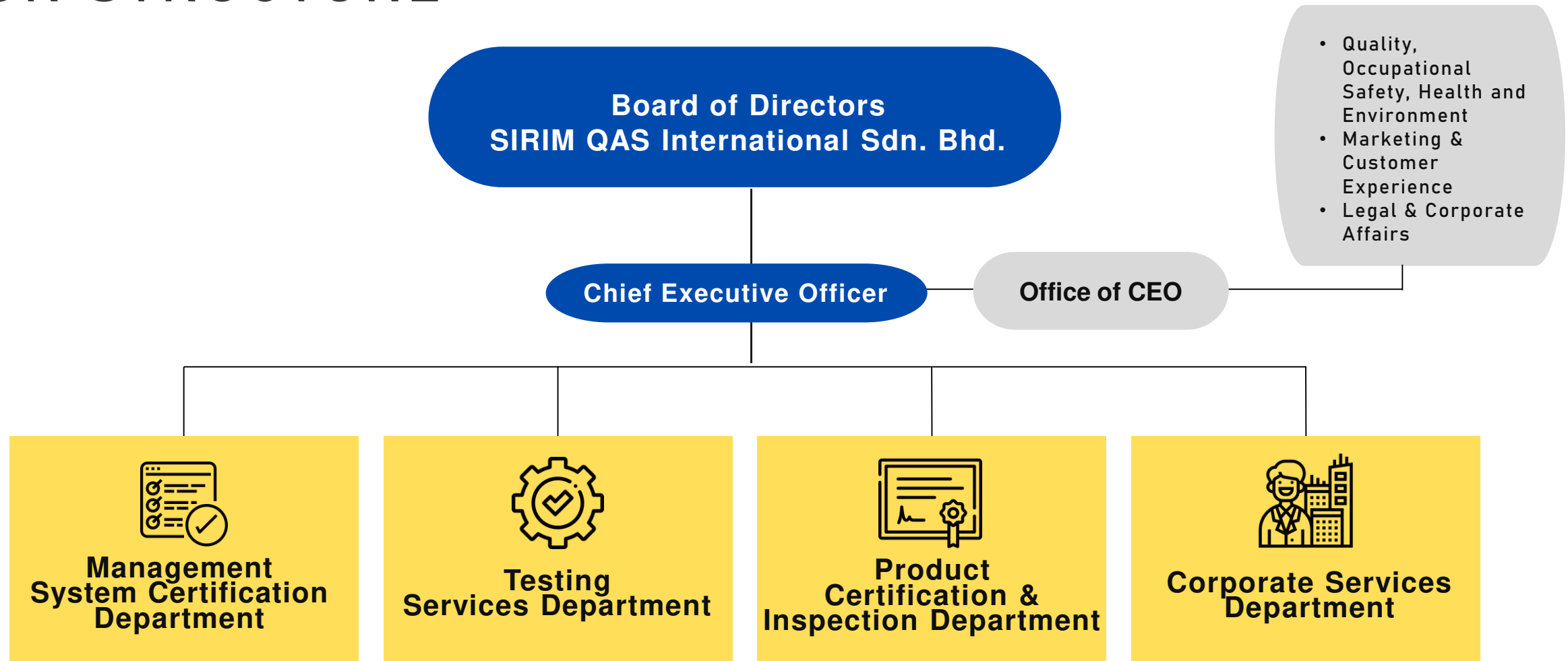
We aim to be a trusted partner for growth and sustainability



MISSION

Our mission to provide innovative solutions through Testing, Inspection and Certification services for our customers to be globally competitive

OUR STRUCTURE



OUR SERVICES

CERTIFICATION

- Management System Certification
- Product Certification
- Personnel Certification

TESTING

Product compliance testing to standards, regulatory requirements and specifications

INSPECTION

- Engineering Inspection
- Inspection on behalf of other CBs
- Other 3rd party inspections



ACCREDITATIONS & RECOGNITIONS



APPOINTMENT OF SIRIM QAS INTERNATIONAL BY NATIONAL AGENCIES/REGULATORY BODIES



JABATAN KESELAMATAN DAN
KESIHATAN PEKERJAAN
MALAYSIA



Kementerian Kesihatan Malaysia



KPDNHEP



WHAT IS ELECTRONIC CIGARETTE?

An electronic cigarette is an electronic device that simulates tobacco smoking.

It consists of a atomizer, a power source such as a battery, and a container such as a Cartridge or tank.

Various types of e-cigarettes;

- Disposable e-cigarette
- Rechargeable e-cigarette
- Medium-size tank device
- Large-size tank devices
- E-cigar & E-pipe

REPORTED CASES



Nyaris buta vape meletup depan muka

November 11, 2015 Berita Utama, Utama 0

BAHANA VAPE

LEBIH
3 JUTA
TRUFI FACEBOOK
BNI ONLINE

// SEORANG PENIAGA, SALLEH
AWANG HAT MENERIMA ENAM
JAHITAN SELEPAS BAHAGIAN
mukanya melecur apabila 'mod vape'
yang digunakannya meletup

BERITA MUKA 12



WHAT ARE THE LIKELY CAUSE (S) OF SUCH INCIDENTS..

3 things **potentially**
make the device **EXPLODE**

Remember: Do not turn on e-cigarette in your pocket

Poor Battery Quality

- Made from cheaper material to save cost
- Use recycled batteries

Wrong Circuit Design

A device should have good circuit design incorporating with;

- Power Protection:
Mechanism that ensures the battery stops Charging once it has reached full capacity
- Short Circuit Control:
It's circuit fully insulated to prevent short circuit
- Temperature Control:
Such that once it hits a particular temperature, it shuts down to cool off

Improper / Wrong Usage

- Expose to high temperatures or humidity
- Overcharging

THE COST OF NON-COMPLIANCE

User

- Might expose risks to user's safety & health
- If incidents happen – resulted in injury or in worst case, fatality
- Less value for money – purchase/use of unsafe product and low quality, less reliable

Supplier / Importer / Manufacturer

- Cost of product recall (if required)
- Affect company's reputation & brand
- Unable to sell

Regulator / Country

- Influx of low quality / sub standard product in the market
- Become an issue – safety issue / dumping ground etc.

OVERVIEW OF TESTING LABORATORY

- Lab- Electrical and Electronic 1 Section (EEST 1), SIRIM QAS International Sdn. Bhd.
- Accredited since 1995
- Scope of Services:
 - ✓ Safety Test
 - ✓ Performance Test
 - ✓ Energy Efficiency

EQUIPMENT

FACILITIES AVAILABLE

Drop Tester

Battery Tester

Hot Chamber

E-cigarette Tester

EMC Chamber

Cyclic Chamber

Vibration Machine

Temperature & Humidity Recorder

E-Cigarette Tester



Battery Tester



Cyclic Chamber



Temperature Recorder



Vibration Machine



EMC Chamber





MALAYSIAN STANDARD

MS 2716:2019

MS 2716:2019 Electronic Cigarette Device- Safety Requirements & Test Methods

*** Specifies the safety and test method requirements for electronic cigarette device (e-cigarette device) with electronic liquid (e-liquid).
Only applicable to e-cigarette device and does not cover the e-liquid.

Electronic cigarette device - Safety requirements and test methods

ICS: 19.020; 19.080; 31.020; 31.080.01

Descriptors: electronic cigarette, device, safety requirements, test methods

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DEPARTMENT OF STANDARDS MALAYSIA

SUMMARY OF TESTING OF E-CIGARETTE DEVICE MS2716

Safety Test

- Electrical Test
- Mechanical Test
- Chemical Test
- Functional Test
- EMC Test
- Wireless Connectivity Test
 - communication module

Functional Test

All function stated on the brochure should be working as declared

Electrical Test

Risk associated with structural integrity:

- **Drop Test**
 - Recharge after drop test
 - External short circuit test
- **Risk of burns**
- **Malfunction of ECU**
- **Incompatibility of accessories**

Chemical Test

The mouthpiece should be food grade compliance

EMC Test

- **Radiation Emission**
- **Electrostatic Discharge test**
- **RF Field Strength Susceptibility**
- **Magnetic Field Immunity**

Mechanical Test

- **Risk associated with filling**
- **Risk of injury**
- **Risk associated with sealing**
- **Vibration test**
- **Shock test**

Wireless Connectivity Test

Applicable for devices that have Bluetooth, WIFI or any communication module

Functional Test

All function stated on the brochure should be working as declared

TESTING FEE (TYPE TEST)

Electrical Test	: RM 3,450
Mechanical Test	: RM 4,950
Chemical Test	: RM 1,700
EMC Test	: RM 5,500
Wireless Connectivity Test	: RM 2,000/mode (if applicable)
Functional Test	: RM 500

Total Per Model : RM 16,100**

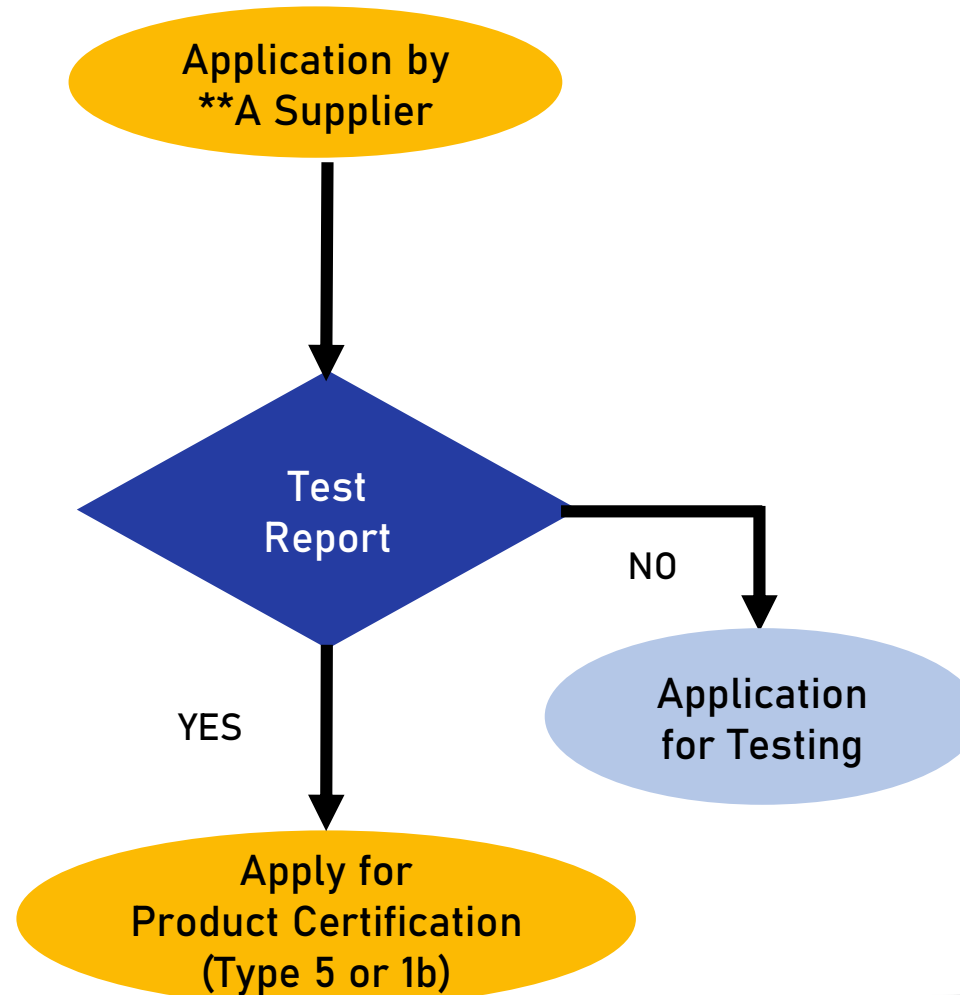
****Minimum testing fee.**

Note:

1. Battery shall comply to MS IEC 62133:2017
2. USB Charging Port shall comply to MS IEC 60950-1

TESTING & CERTIFICATION PROCESS

GENERAL PROCESS



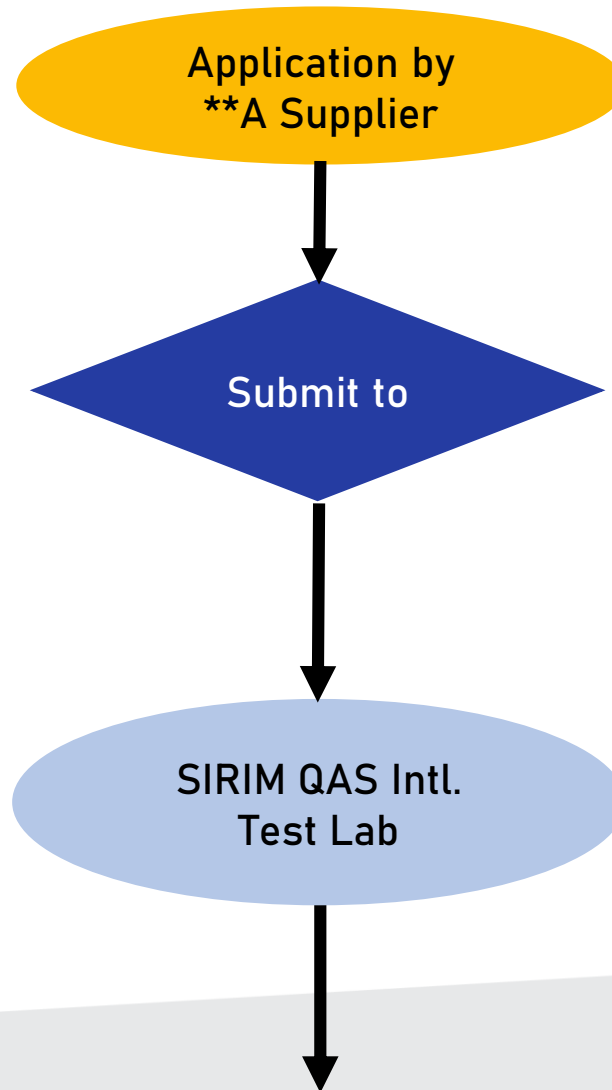
****E-Cigarette supplier which includes importer, manufacturer and trader**

Requirement of a FULL TYPE TEST Report;

- a. Issued by test lab
- b. Reference standard – either MS 2716:2019
- c. Shall contain specific product information such as Brand Name and Model No.

Applicant submits test report to SIRIM QAS for Product Certification Process

APPLICATION FOR TESTING



*A supplier includes **importer, manufacturer & trader.**

A supplier submit a complete test application with

- Product information
- Sufficient quantity as specified by standard

SIRIM QAS Intl test lab performs **a full type test** to a standard (MS 2716:2019)

TEST REPORT

REPORT NO.: 2022EA7890

PAGE : 1 OF 23

This Test Report refers only to samples submitted by the applicant to SIRIM QAS International Sdn. Bhd. and tested by SIRIM QAS International Sdn. Bhd. This Test Report shall not be reproduced, except in full and shall not be used for any purpose by any means or forms (including but not limited to advertising purposes) without written approval from the Head of Quality, Occupational Safety and Health & Environment (QOSHE), SIRIM QAS International Sdn. Bhd. Please refer to the last page of this Test Report for Conditions Relating to the Use of Test Report.

Applicant : 

Manufacturer : 

Product : ELECTRONIC CIGARETTE DEVICE

Reference Standard/
Method of test : MS 2716: 2019

Description of sample:

Brand Name	: TCT
Model / Type	: TPD-40
Rating	Voltage : 5V
	Current : 5,000mAh
	Power : 80-100 Watt

Date received : 18 NOVEMBER 2021

Job No./Ref.No. : J20211426547

Overall test result : **COMPLIED** (see page 3 for details)

Issued date : 23 MARCH 2022

(MOHAMAD ASNAN BIN AHMAD)
Senior Testing Executive

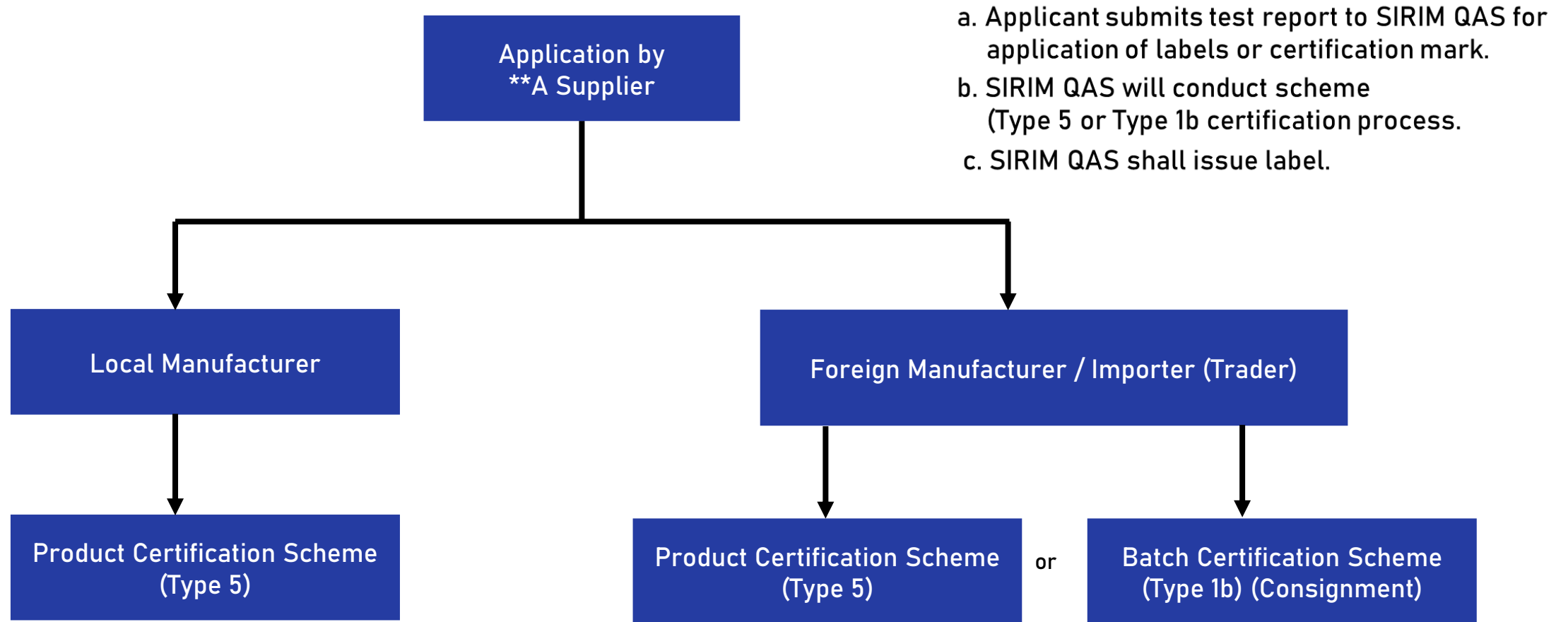


(M. ZAMRI BIN MUSTAFFA)
Head
Electrical & Electronic 1 Section
Testing Services Department

SIRIM QAS Intl. test lab shall issue a full type test report.

The report shall then be used for submission for an application for Product Certification.

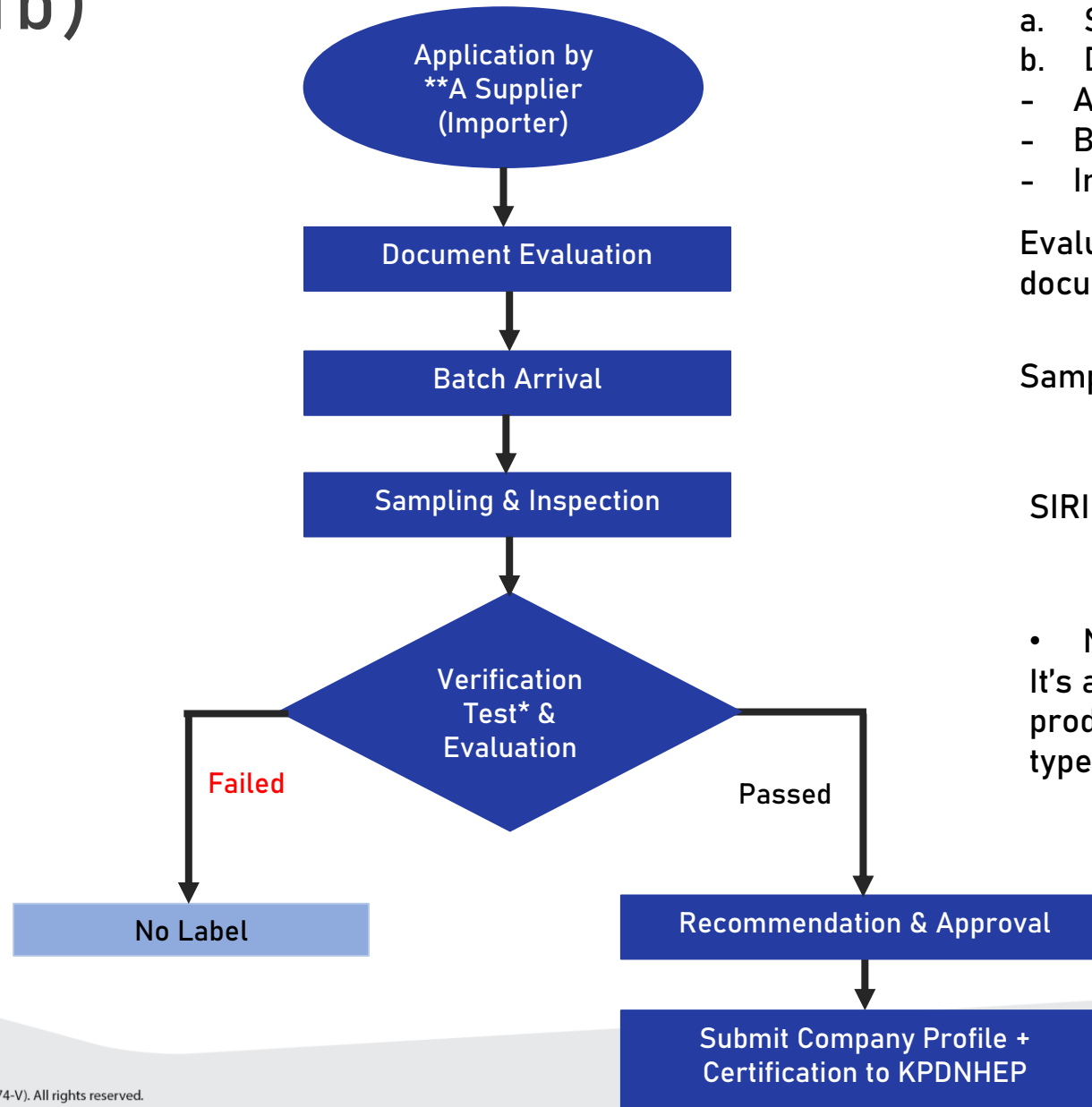
APPLICATION FOR CERTIFICATION



****A battery supplier which includes importer, manufacturer and trader**

PRODUCT CERTIFICATION PROCESS (TYPE 1b & TYPE 5)

PROCESS FLOW : BATCH CERTIFICATION SCHEME (Type 1b)



- a. Submit application
- b. Document required
 - A full type test report
 - Bill of landing
 - Invoice/packing list

Evaluation on full type test report + all the submitted document (as above)

Sample at warehouse

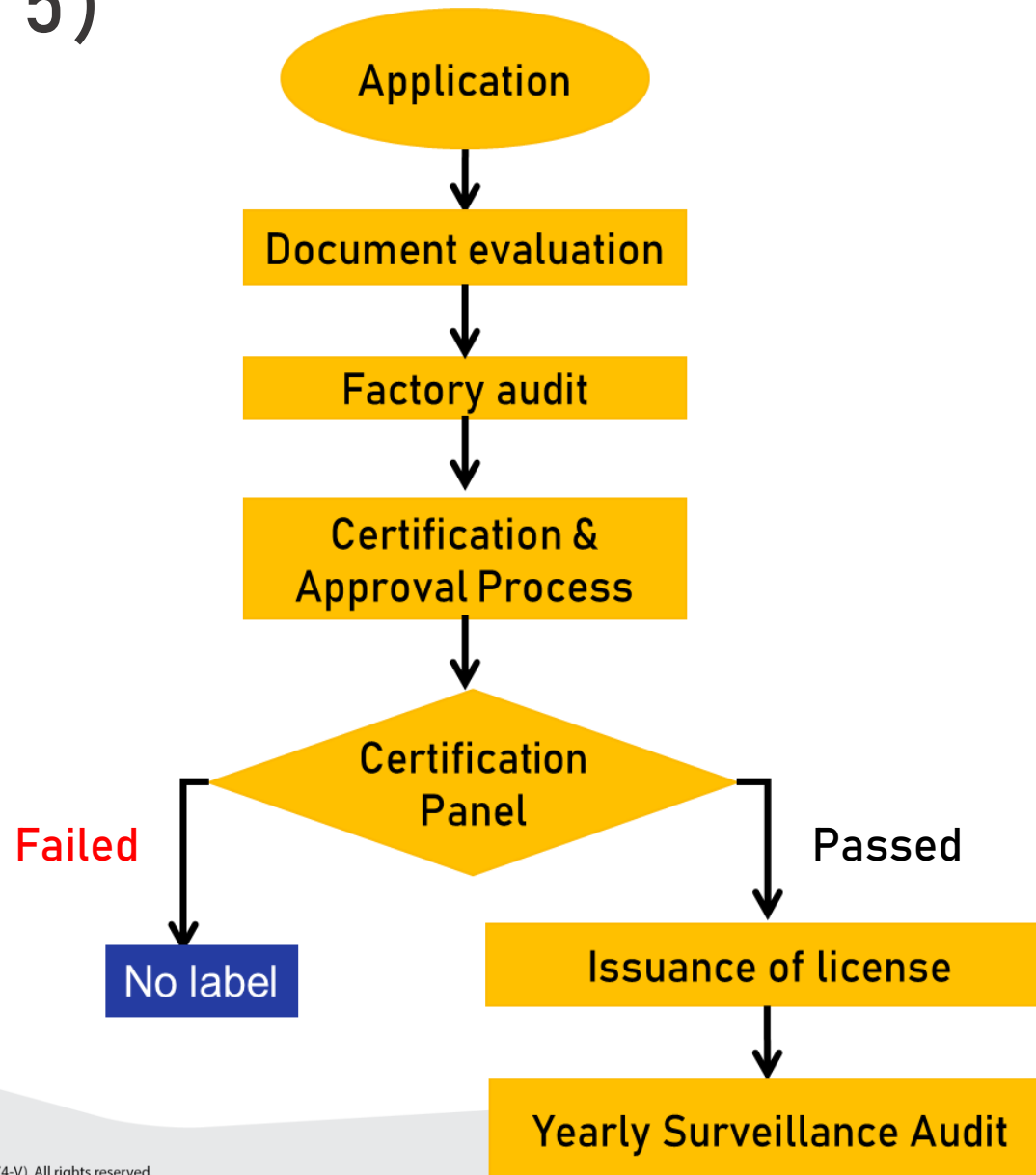
SIRIM QAS conduct consignment sampling & inspection

- Not a full type test
It's a **confirmatory test / partial test** to ensure that imported products are that same products as per declared in the full type test report



SIRIM QAS will issue label based on number of imported quantity

PROCESS FLOW : PRODUCT CERTIFICATION SCHEME (Type 5)



- a. Submit application
- b. Document required:
 - A full type test report - Bill of landing
 - Invoice / Packing list

Evaluation on full type test report + all the submitted document (as above)

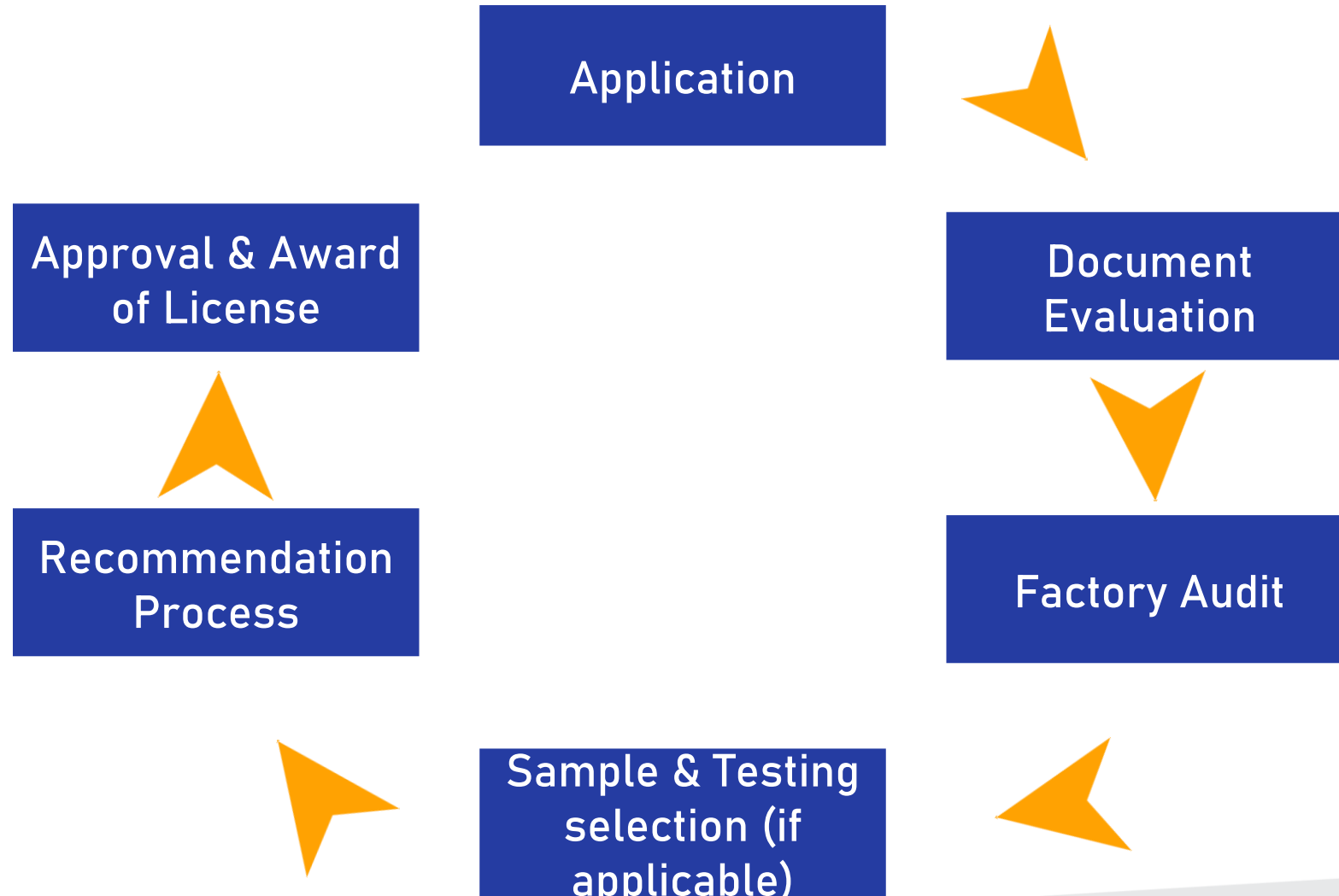
Factory audit at manufacturing site including QC plan adequacy, test equipment calibration, and record-keeping system and safety routine test.

Certification Report preparation and recommendation to Certification Panel



SIRIM QAS will issue label based on applied quantity (3 months)

PRODUCT CERTIFICATION SCHEME PROCESS (Type 5)



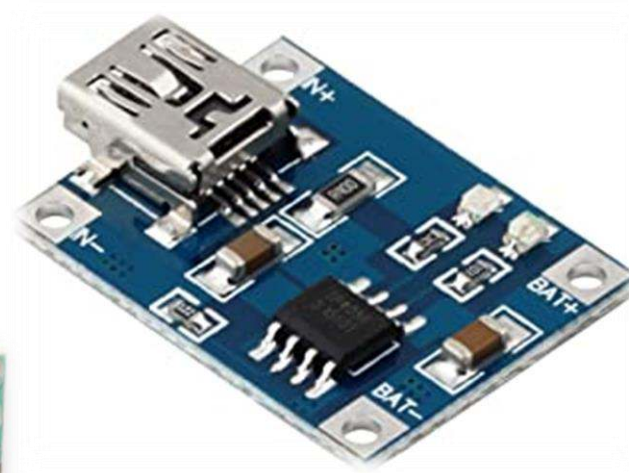
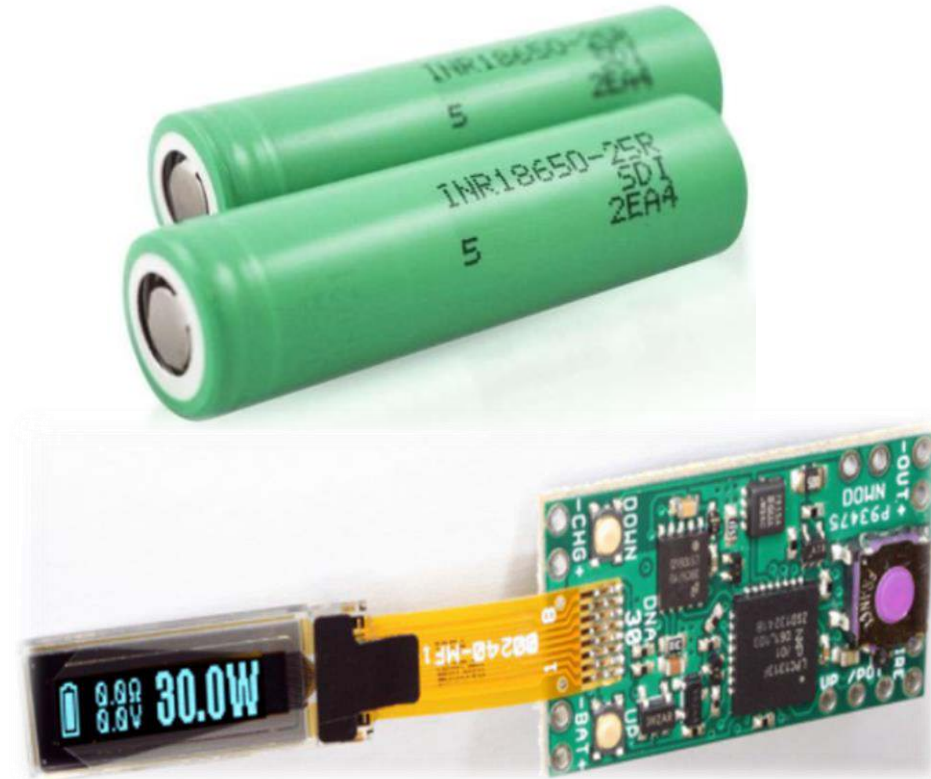
PRODUCT CERTIFICATION SCHEME PROCESS (Type 5)

Factory Audit



PRODUCT CERTIFICATION SCHEME PROCESS (Type 5)

Factory Audit: Evaluation



Note:

1. Battery: shall comply to MS IEC 62133: 2017
2. USB Charging Port: shall comply to MS IEC 60950-1

PRODUCT CERTIFICATION SCHEME PROCESS (Type 5)

Factory Audit



PRODUCT CERTIFICATION SCHEME PROCESS (Type 5)

Certification Panel Approval



Approval and Award of Licence



LESEN PENSIJILAN BARANGAN
Product Certification Licence

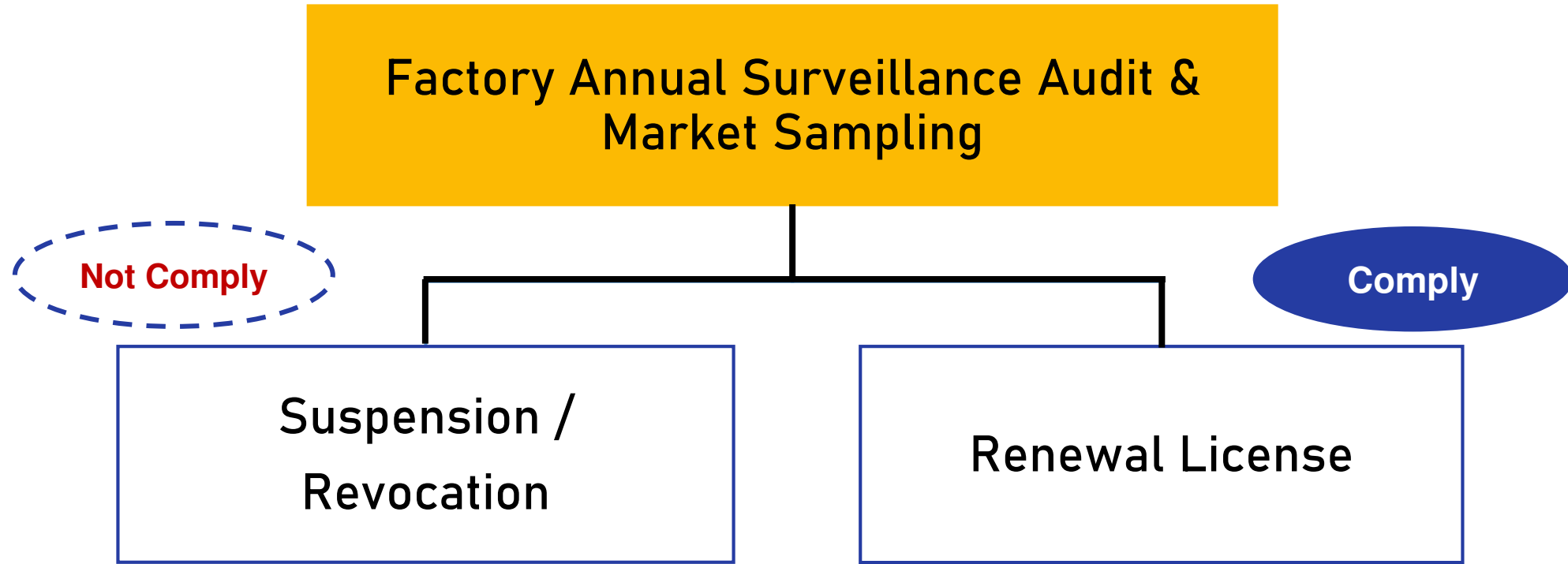
SIGNIFY MALAYSIAN SDN BHD
UNIT 3-1, LEVEL 3 WEI E 0A BL LESS PARK
NO 1 JALAN PIR LARC DA Y51A
SEKINJAU
48000 KUALA ALAM
SEKINJAU MALAYSIA

MS 2716:2019

maile



SURVEILLANCE AUDIT AND RENEWAL LICENSE



CERTIFICATION FEE (TYPE TEST)

PRODUCT CERTIFICATION SCHEME (Type 5)

Application fee	: RM 500
Evaluation fee	: RM 3,000
Factory Audit Fee	: RM 1,200**
Incidental	: As charged where applicable for accommodation, living allowances and flight ticket / transportation / mileage
License / Renewal Fee	: RM 600 per Year

BATCH CERTIFICATION SCHEME (Type 1b)

Verification Test (Batch Certification)	: RM 1,700
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** Minimum factory audit fee, based on location.

Thank you

Contact our team:

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