

**MUTUAL RECOGNITION ARRANGEMENT ON CONFORMITY
ASSESSMENT OF ELECTRICAL AND ELECTRONIC EQUIPMENT**

**APEC EEMRA
Information Interchange Format**

PART 1

Introduction

This format is being prepared to assist member economies participating in the APEC MRA to prepare documentation required for participation in a consistent format.

It is expected that each participating member economy would submit their information in the recommended format to the APEC Secretariat as required by the MRA.

The format is based on the Information Notes on Good Practice for Technical Regulation and therefore provides for information to be supplied for each of the regulatory regimes identified in the notes. There are 7 regimes, they are for products requiring inspection, products requiring licensing, products requiring batch testing, products requiring approval (or certification), products requiring listing or registration, supplier declarations and essential safety requirements. Participating member economies need only provide information relating to the regimes which are in force in their economy. The regimes that are not enforced by the economy need to be noted also, please indicate this by placing 'none' in the standards table on the front of each regime.

Where more than one regulatory system applies within a participating member economy information on each regulatory system should be provided separately.

The format also draws upon the survey on Conformity Assessment of Electrical and Electronic Equipment conducted by the APEC SCSC. The format includes reference to applicable international standards and uses the international convention for describing the relationship of national and international standards, i.e. IDT for identical, MOD for modified, and NEQ for not equal.

When information makes reference to documents or legislation, the documents or legislation should be available on a website for that economy or provided as part of the information supplied to the APEC Secretariat.

ECONOMY – THAILAND

APEC EEMRA Information Interchange Format

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PART I – INFORMATION EXCHANGE

Regime Overview

The regime is to provide the following objectives:

1. To protect consumers
2. To protect environment and natural resources
3. To enhance industrial competitiveness in the world market
4. To ensure fair trade and eliminate trade barriers caused by standardization measures

In Thailand, some electrical and electronic products are required by the Royal Decree to conform with the standards. Many of these standards are harmonised with the relevant IEC Standards, particularly household products which are aligned with IEC 60335. A voluntary compliance mark is also available as provided for the electrical and electronic products which are manufactured in the country.

A mandatory compliance mark is required for the products both manufacturing in the country and importing abroad. These products are required to be approved prior to sale (pre-market certification).

The regulatory regime implements ASEAN EE MRAs with ASEAN members, allowing for the recognition of test reports from listed laboratories in ASEAN.

voluntary certification mark



mandatory certification mark



Legislative References

Legislation Applicable	Scope of the Legislation	Government Agency
INDUSTRIAL PRODUCT STANDARDS ACT B.E. 2511 (1968) together with Ministerial Regulations	<ul style="list-style-type: none">- Electrical Safety- Electromagnetic Compatibility EMC- Energy efficiency requirements	Thai Industrial Standards Institute, Ministry of Industry

1. **PRODUCTS REQUIRING INSPECTION**

Yes

2. **PRODUCTS REQUIRING LICENSING**

Yes

3. **PRODUCTS REQUIRING BATCH TESTING**

Yes

4. **PRODUCTS REQUIRING APPROVAL (OR CERTIFICATION)**

Yes

5. **PRODUCTS REQUIRING LISTING OR REGISTRATION**

None

6. **SUPPLIER DECLARATIONS**

None

7. **ESSENTIAL SAFETY REQUIREMENTS**

None

Products covered by any of the above

Products covered by approval

No.	Product type or grouping	Regulations	Standards			
			Domestic Standards	Please tick if mandatory	Relevant International Standards	Extent of Alignment
Mandatory						
1	PVC insulated Copper cables		TIS 11 Part 3-2553 (2010)	√	IEC 60227-3 (1997)	MOD
			TIS 11 Part 4-2553 (2010)	√	IEC 60227-4 (1997)	MOD
			TIS 11 Part 5-2553 (2010)	√	IEC 60227-5 (2003)	MOD
			TIS 11 Part 101-2559 (2016)	√	-	NEQ
2	PVC insulated aluminium cables		TIS 293-2541 (1998)	√	-	-
3	Electrical Switches		TIS 824-2551 (2008)	√	IEC 60669-1 (2007)	IDT
4	Low-voltage distribution link fuses		TIS 10-2529 (1986)	-	-	-
5	Residual current operated circuit-breakers with integral overcurrent protection for household and similar used(RCBO)		TIS 909-2548 (2005)	√	IEC 61009-1 (2003)	MOD

No.	Product type or grouping	Regulations	Standards			
			Domestic Standards	Please tick if mandatory	Relevant International Standards	Extent of Alignment
Mandatory						
6	Fluorescent lamps : safety requirements		TIS 956-2557 (2014)	√	IEC 61195 (1999), Am.1 (2012)	MOD
7	Ballast for fluorescent lamps		TIS 23-2558 (2015)	√	IEC 61347-2-8 (2002), Am.1 (2016)	IDT
8	Starters for fluorescent lamps		TIS 183-2547 (1985)	√	IEC 60155 (1993), Am.1(1995)	IDT
9	Incandescent lamps		TIS 4 Part 1-2558 (2015)	√	IEC 60432-1 (2012)	MOD
10	Lampholders for tubular fluorescent lamps and starter holders		TIS 344-2549 (2006)	√	IEC 60400 (2002)	MOD
11	Electric irons		TIS 366-2547 (2004)	√	IEC 60335-2-3 (2002)	IDT
			TIS 1375-2547 (2004)		IEC 60335-1 (2001)	MOD
12	Electric stoves; open type heating elements: safety requirements		TIS 870-2532 (1989)	√	IEC60335-2-9, Am.1 (2005)	NEQ
13	AC electric fans : safety requirements		TIS 934-2558 (2015)	√	IEC 60335-2-80 (2008)	IDT

No.	Product type or grouping	Regulations	Standards			
			Domestic Standards	Please tick if mandatory	Relevant International Standards	Extent of Alignment
Mandatory						
			TIS 1375-2563 (2020)		IEC 60335-1 (2016)	MOD
14	Electric rice-cookers : safety requirements		TIS 1039-2547 (2004)	√	IEC 60335-2-15 (2002)	MOD
			TIS 1375-2547 (2004)		IEC 60335-1 (2001)	MOD
15	Tumbler dryers : safety requirements		TIS 1389-2559 (2016)	√	IEC 60335-2-11 (2012)	IDT
			TIS 1375-2563 (2020)		IEC 60335-1 (2016)	MOD
16	Washing machines for household use : safety requirements		TIS 1463-2556 (2013)	√	IEC 60335-2-7 (2008)	IDT
			TIS 1375-2563 (2020)		IEC 60335-1 (2016)	MOD
17	Electric fryers: safety requirements		TIS 1509-2547 (2004)	√	IEC 60335-2-13 (2002)	MOD
			TIS 1375-2563 (2020)		IEC 60335-2-15 (2002)	MOD
					IEC 60335-1 (2016)	
18	Instantaneous water heaters :safety		TIS 1693-2547 (2004)	√	IEC 60335-2-35 (2002)	IDT

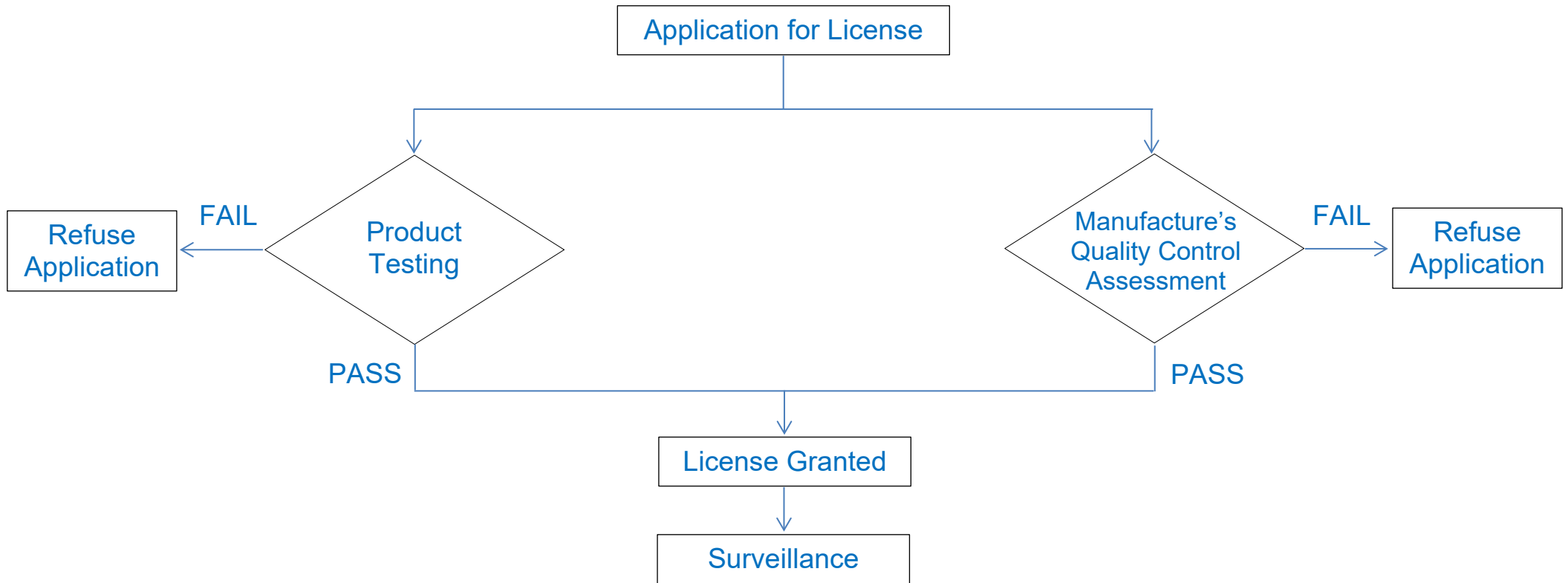
No.	Product type or grouping	Regulations	Standards			
			Domestic Standards	Please tick if mandatory	Relevant International Standards	Extent of Alignment
Mandatory						
	requirements		TIS 1375-2547 (2004)		IEC 60335-1 (2001)	MOD
19	Electric thermo pots : safety requirements		TIS 2062-2558 (2015)	√	IEC 60335-2-15 (2008)	MOD
			TIS 1375-2563 (2020)		IEC 60335-1 (2016)	MOD
20	Household refrigerators : safety requirements		TIS 2214-2548 (2005)	√	IEC 60335-2-24 (2002)	MOD
			TIS 1375-2547 (2004)		IEC 60335-1 (2001)	MOD
21	Appliances for skin or hair care: Safety requirements		TIS 1985-2549 (2006)	√	IEC 60335-2-23 (2005)	IDT
			TIS 1375-2547 (2004)		IEC 60335-1 (2001)	MOD
22	Mains operated electronic and related apparatus for household and similar general use : safety requirements		TIS 1195-2536 (1993)	√	IEC 60065 (1985)	MOD
23	Uninterruptible power system		TIS 1291 Part 1-2553 (2010)	√	IEC 62040-1 (2008)	IDT

No.	Product type or grouping	Regulations	Standards			
			Domestic Standards	Please tick if mandatory	Relevant International Standards	Extent of Alignment
Mandatory						
			TIS 1291 Part 2-2553 (2010)	√	IEC 62040-2 (2005)	IDT
			TIS 1291 Part 3-2555 (2012)	√	IEC 62040-3 (1999)	IDT
24	Lighting and similar equipment : radio disturbance limits		TIS 1955-2551 (2008)	√	CISPR 15 (2007)	IDT
25	Room Air Conditioners Environment Requirement : Energy Efficiency		TIS 2134-2553 (2010)	√	-	-
26	Household refrigerators : environmental requirements : energy efficiency		TIS 2186-2547 (2004)	√	-	-
27	Secondary cells and batteries containing alkaline or other non-acid electrolytes - safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications		TIS 2217-2548 (2005)	√	IEC 62133 Ed.1.0 (2002)	IDT

No.	Product type or grouping	Regulations	Standards			
			Domestic Standards	Please tick if mandatory	Relevant International Standards	Extent of Alignment
Mandatory						
28	Round wire concentric lay overhead electrical stranded conductors		TIS 85-2548 (2005)	√	IEC 61089 (1991)	IDT
29	plugs and socket-outlets for household and similar		TIS 166-2549 (2006)	√	-	NEQ
30	Copper and copper alloys		TIS 408-2553 (2010)	√	-	NEQ
31	Motor-compressors		TIS 812-2558 (2015)	√	IEC 60335-2-34 (2012)	MOD
			TIS 1375-2547 (2004)		IEC 60335-1 (2001)	MOD
32	Grills, toasters and similar portable cooking appliances		TIS 1641-2552 (2009)	√	IEC 60335-2-9 (2006)	IDT
			TIS 1375-2563 (2020)		IEC 60335-1 (2016)	MOD
33	Microwave Ovens, including combination microwave ovens		TIS 1773-2548 (2005)	√	IEC 60335-2-25 (2002)	IDT
			TIS 1375-2547 (2004)		IEC 60335-1 (2001)	MOD
34	Optical fiber cable		TIS 2165-2561 (2018)	√	IEC 60794-3-10 (2015)	MOD
			TIS 2166-2548 (2005)	√	IEC 60794-3-20 (2002)	IDT

No.	Product type or grouping	Regulations	Standards			
			Domestic Standards	Please tick if mandatory	Relevant International Standards	Extent of Alignment
Mandatory						
35	Power cables with XLPE insulated for rated voltage from 60 kV up to 115 kV		TIS 2202-2547 (2004)	√	-	NEQ
36	Self-ballasted lamps		TIS 2234-2557 (2014)	√	IEC 60968 (2012)	IDT
37	Single-capped fluorescent lamps		TIS 2235-2557 (2014)	√	IEC 61199 (2012)	MOD
38	Ballasts for tubular fluorescent lamps : energy efficiency		TIS 2337-2557 (2014)	√	-	NEQ
39	RCCBs		TIS 2425-2560 (2017)	√	IEC 61006-1 (2002)	MOD
40	Cord extension sets		TIS 2432-2555 (2012)	√	IEC 60884-1 (2006)	IDT
41	Polyolefin insulated copper conductor telecommunication cables for aerial installation		TIS 2434-2552 (2009)	√	-	NEQ
42	Portable power bank		TIS 2879-2560 (2017)	√	-	NEQ

Diagrammatic Representation or Flowchart of the Regime



Description of the Regime

In Thailand, electrical and electronic products which are required by the Royal Decree to conform with the standards must be based on test reports showing compliance with the recognized Thailand's standards. The test reports must be issued by recognized testing agencies and factory inspection must be done by designated inspection bodies or the Thai Industrial Standards Institute's officers.

The approval may be held by either a party located in Thailand, or within the supply chain for products manufactured overseas.

Legislative Regime Overview



Testing Facilities

Thailand recognizes national and international testing agencies with the approval of the IPC (Industrial Product Council). For more details on the list of accredited laboratories, available on www.tisi.go.th.

Approval (Certification) Agencies

The approval must be issued by the Thai Industrial standards Institute.

Labeling Requirements

Thailand's approved products are required to be marked.

Regulatory and Legislation Requirements

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Mains Voltage, Frequency and Mains Plug Configuration

This schedule provides information on the electricity supply arrangements and plug configurations that apply to new electrical and electronic products.

Country	Mains voltage and Tolerance	Mains Frequency and Tolerance	Applicable legislation	Mains Plug Configuration				
				Domestic Standards	Please Tick box if mandatory	Relevant International Standards	Extent of Alignment	Diagram, of Main Plug Configuration
THAILAND	220 volts single phase tolerance + 7, -3 %	50 Hz +/- 1.0 %	NA	TIS 166-2549 "3 Pin, round pin," "2 Pin, round pin,"	√	IEC 60884-1	NEQ	
	380 volts three phase tolerance + 7, -3 %	50 Hz +/- 1.0 %	NA	No specific plug	-			