

# Anti-Counterfeiting Measures on Electrical Appliances in Japan

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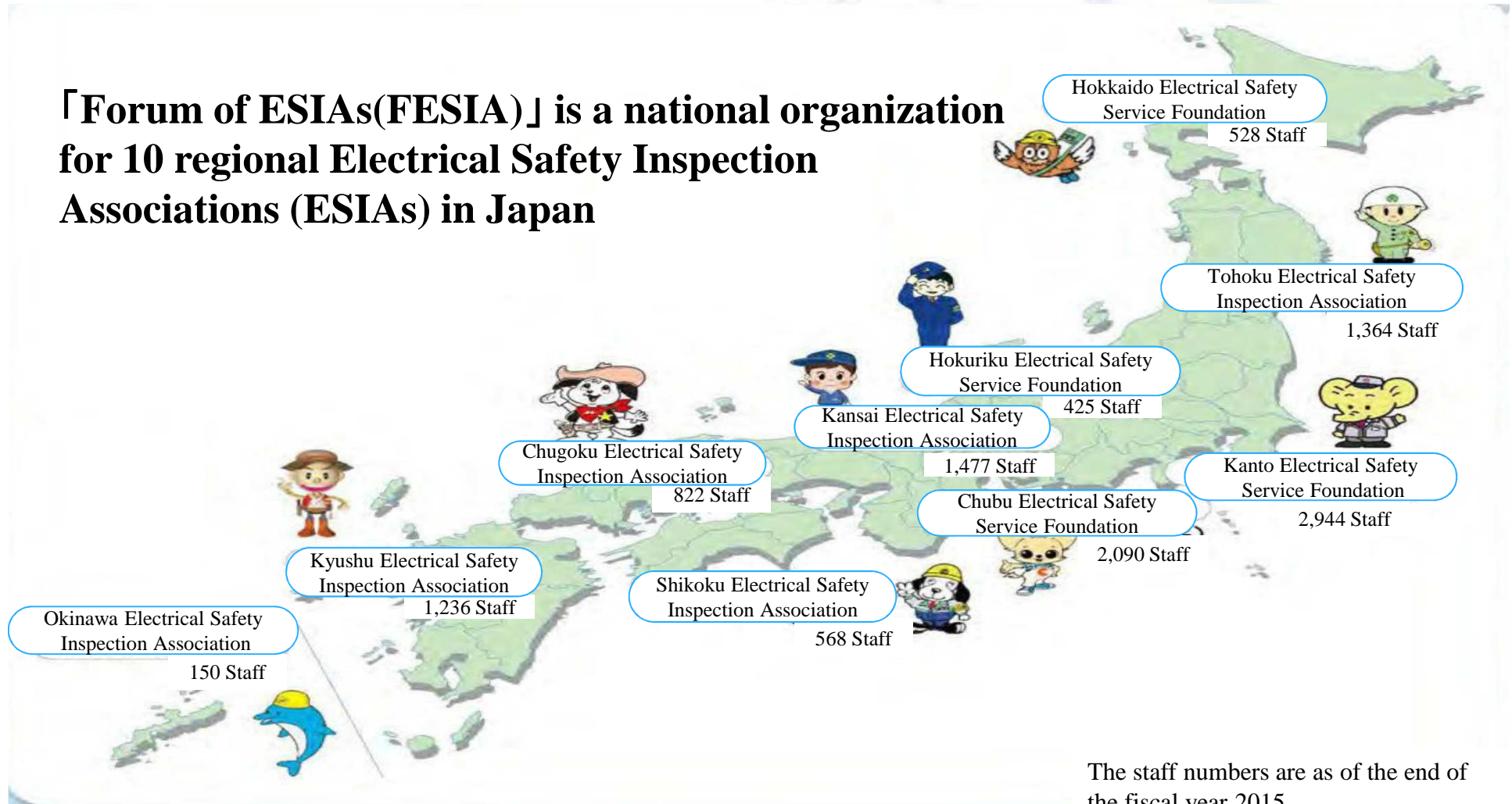
Forum of Electrical Safety Inspection  
Associations, Japan

Symposium Fisuel – Maroc – 11 & 12 Mai 2016

Fisuel Symposium – Morocco – 11th & 12th of May, 2016

## Locations of Electrical Safety Inspection Associations in Japan

「Forum of ESIA(FESIA)」 is a national organization for 10 regional Electrical Safety Inspection Associations (ESIAs) in Japan



The staff numbers are as of the end of the fiscal year 2015.

# Primary services of Electrical Safety Inspection Associations (ESIAs) in Japan

## (1) Survey/diagnosis service

Conduct periodic door-to-door surveys and diagnoses on electrical safety at general households, shops, etc. on behalf of electric power companies

## (2) Safety management service

Conduct safety management for electrical equipment of buildings, factories, etc. on behalf of equipment owners/operators

## (3) Public relations service

Public relations (communication) including educational and public awareness activities on electrical safety, energy-saving, etc.

## Characteristics of Japan's anti-counterfeiting measures on electrical appliances

- Japan is an island country:  
Trade control by  
customs duty
- Regulations  
concerning electrical safety:  
Electricity Business Act,  
Electrical Appliance and Materials Safety Act , Electricians Act, etc.
- Appropriate implementation of regulations concerning electrical safety:  
Implementation of regulatory administration for electrical safety  
by the Ministry of Economy, Trade and Industry (METI) and its  
10 Regional Bureaus and Regional Industrial Safety and Inspection Divisions  
and Branches

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## **Regulations concerning safety of electric facilities**

### **1. Electricity Business Act**

(Purpose) To protect the interests of electricity users and assure public safety

(Regulation)

- Requires conformity to the technical standards established under the Act
- Regulates the construction, maintenance and operation of Electric Facilities for Private Use
- Requires electricity suppliers to investigate whether or not Electric Facilities for General Use conform to the technical standards

### **2. Electrical Appliance and Materials Safety Act**

(Purpose) To prevent hazards and disturbances to Electric Facilities for General Use resulting from electrical appliances and materials

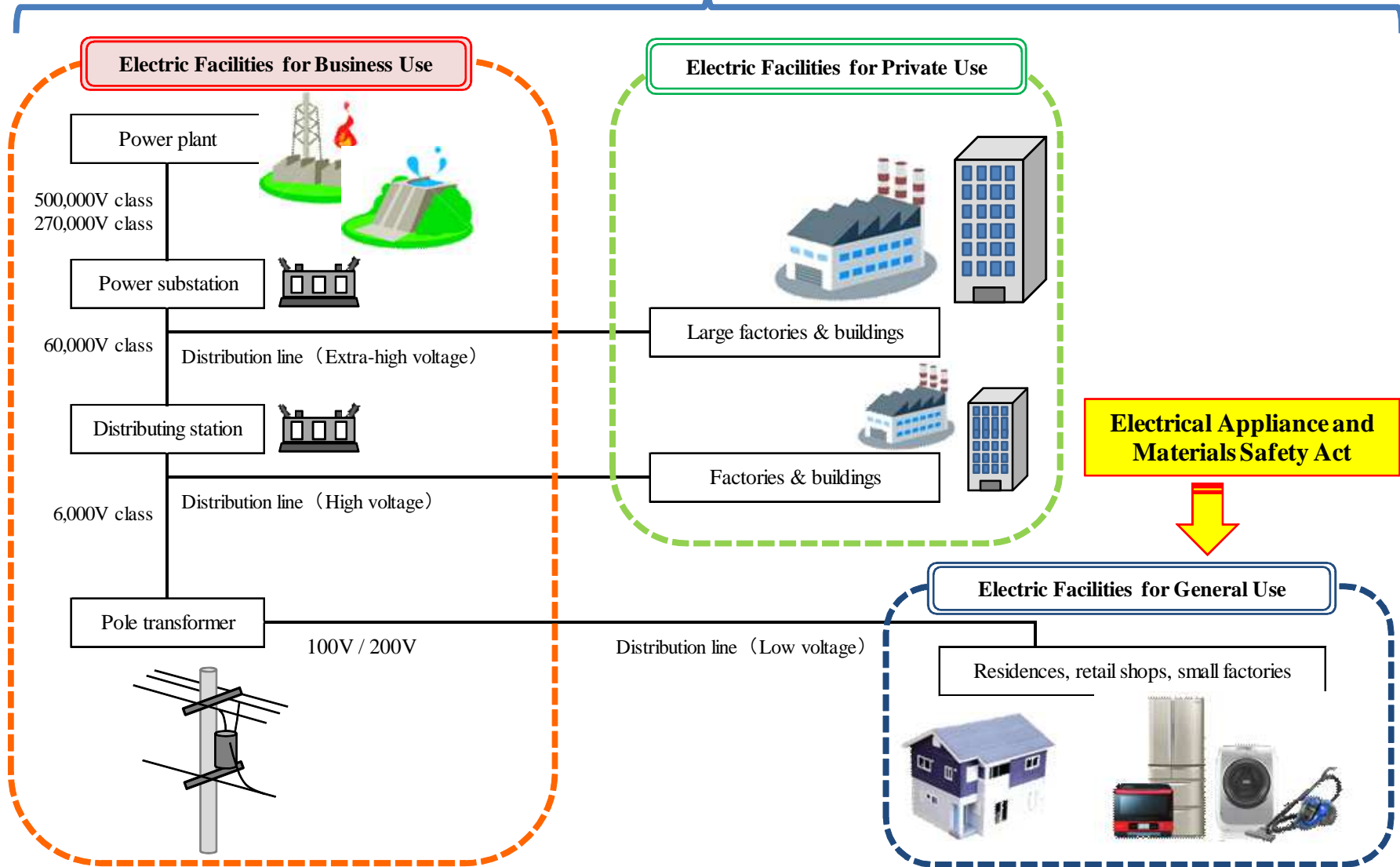
(Regulation) Regulates the manufacture, sale, etc. of electrical appliances and materials

### **3. Electricians Act**

(Purpose) To prevent disasters caused by defects in electrical construction (less than 500kW)

(Regulation) Defines qualifications required of technicians to engage in electrical construction and obligations of those technicians

**Electricity Business Act**



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# Outlines of Electrical Appliance and Materials Safety Act

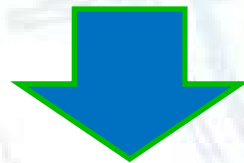
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## What is “Electrical Appliance and Materials Safety Act”?



- A law to regulate the manufacture, sale, etc. of electrical appliances and materials
- And to foster voluntary activities by private businesses to ensure the safety of electrical appliances and materials



In order to prevent hazards (electric shock, fire, etc.) and disturbances (radio disturbance, etc.) resulting from electrical appliances and materials



## Procedures required by Electrical Appliance and Materials Safety Act

- All the manufacturers/importers of electrical appliances and materials are required to fulfill the following requirements:
  1. Notification of commencement of manufacturing/import business
  2. Obligation to comply with technical standards
  3. Conformity inspection/assessment  
(applicable to Specified Electrical Appliances and Materials only)
  4. Self inspection
  5. Labeling requirement (  or  )
- No seller is allowed to sell any electrical appliance or material unless after confirming that the labeling requirement (5 above) is met.

## Conformity inspection/assessment

Conformity inspection/assessment consists of:

- Inspection/assessment to verify that appliances/materials conform to the technical standards required by the Act, and
- On-site inspection/assessment at manufacturing facilities to verify that each facility is able to manufacture and inspect their appliances/materials in conformity to the technical standards.

Prior to selling Specified Electrical Appliances and Materials in Japan, manufacturers and importers of such appliances/materials are required to have them inspected by a Domestic Registered Conformity Assessment Body pursuant to the Act and certify conformity of the inspected appliances/materials to the technical standards and other requirements.

## What are regulated products?

Under the Act, the following items are subject to the regulation:

1. Parts of Electrical Facilities for General Use, and machines, appliances and materials used in connection thereto
2. Portable power generators
3. Batteries

Specifically, 457 items are designated in the Cabinet Order for Enforcement of the Electrical Appliance and Materials Safety Act (government ordinance), based on a positive-list system.

## 1. Specified Electrical Appliances and Materials (116 items)

Example:

- Cables , Cords
- Thermal fuse
- Wall sockets
- Battery chargers
- AC adapters
- Molded case circuit breakers
- Massage appliances
- Sauna heating appliances



## 2. Non-Specified Electrical Appliances and Materials (341 items)

Example:

- Electric irons
- Vacuum cleaners
- Washing machines
- Air conditioners
- Refrigerators
- Lighting products
- Microwave ovens
- Television receivers
- Lithium-ion rechargeable batteries



## Labeling

Manufacturers/importers are required to affix labeling of the PSE Mark and the company name (or the abbreviated name of the inspection agency if the product is a Specified Electrical Appliance or Material).

- Specified Electrical Appliances and Materials



○○ Inspection Agency

○○○ Trading, Inc.

- Non-Specified Electrical Appliances and Materials



○○○ Trading, Inc.

## Marketed Products Trial-Purchase Tests by METI

For the purpose of preventing occurrence/recurrence of accidents caused by electrical products, the Ministry of Economy, Trade and Industry (METI) conducts tests every year by buying out marketed electrical appliances and materials, in order to verify compliance with statutory requirements concerning safety of electrical appliances and materials (conformity to the technical standards and appropriateness of labeling required under the Electrical Appliance and Materials Safety Act ) and to verify safety of electrical appliances and materials.

Items to be tested in Trial-Purchase Tests: All the items covered by the safety regulations (457 items)

✘ Partly due to the budget limitation, the tests are conducted by selecting only a part of all the items each year in a planned manner so that all the applicable items are tested at least once in 3-5 years.



## Details of Trial-Purchase Tests 2014

Category	Electrical appliances/materials tested in Trial-Purchase Tests (examples)	Number of applicable items	Number of applicable models/types
(1) Regular items (Cabling materials)	Lamp receptacles, synthetic-resin conduits, electromagnetic switches, lighting ducts, etc.	30 items	60 models/types
(2) Regular items (Other than cabling materials)	Electric water heaters, electric pumps, electric water coolers, electric sanders, intercoms, etc.	39 items	100 models/types
(3) Regular items (Home electric appliances)	Electric stoves, electric vacuum cleaners, electric dryers, other audio equipment, etc.	20 items	66 models/types
(4) Special items (Home electric appliances)	AC adapters, electric toasters, air cleaners, etc.	4 items	32 models/types
(5) Energy saving devices	Electric rice-cookers, electric refrigerators, TV receivers, microwave ovens, etc.	7 items	35 models/types
(6) Energy saving devices (lighting equipment, etc.)	LED lamps, other electric-discharge appliances	2 items	14 models/types
Total		102 items	307 models/types

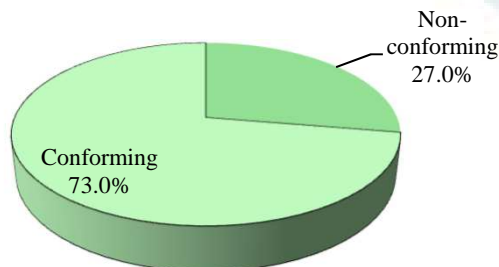
**\*Special items:** Items extraordinarily bought out as necessary, taking accident information and other conditions into consideration

# Marketed Products Trial-Purchase Tests by METI

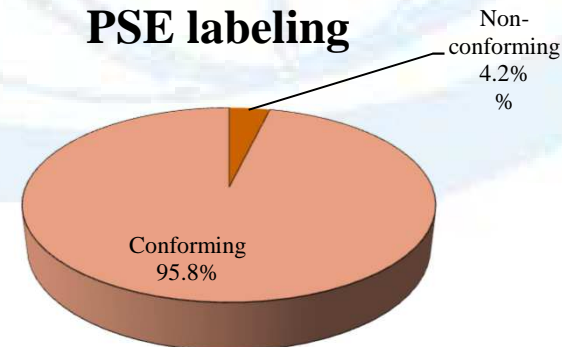
## Number and reasons of non-conforming products by category (2014)

Category	Number of applicable items	Number of applicable models/types	Non-conformity to the interpretation of technical standards	Non-conformity to PSE labeling requirements
(1) Regular items (Cabling materials)	30 items	60 models/types	3 models/types ( 5.0%)	—
(2) Regular items (Other than cabling materials)	39 items	100 models/types	32 models/types (32.0%)	5 models/types ( 7.7%)
(3) Regular items (Home electric appliances)	20 items	66 models/types	19 models/types (28.8%)	4 models/types ( 6.1%)
(4) Special items (Home electric appliances)	4 items	32 models/types	13 models/types (40.6%)	4 models/types (12.5%)
(5) Energy saving devices	7 items	35 models/types	15 models/types (42.9%)	—
(6) Energy saving devices (lighting equipment, etc.)	2 items	14 models/types	1 model/type ( 7.1%)	—
<b>Total</b>	<b>102 items</b>	<b>307 models/types</b>	<b>83 models/types (27.0%)</b>	<b>13 models/types ( 4.2%)</b>
<b>Fiscal year 2013</b>	<b>97 items</b>	<b>334 models/types</b>	<b>95 models/types (28.4%)</b>	<b>12 models/types ( 3.6%)</b>

Technical standards



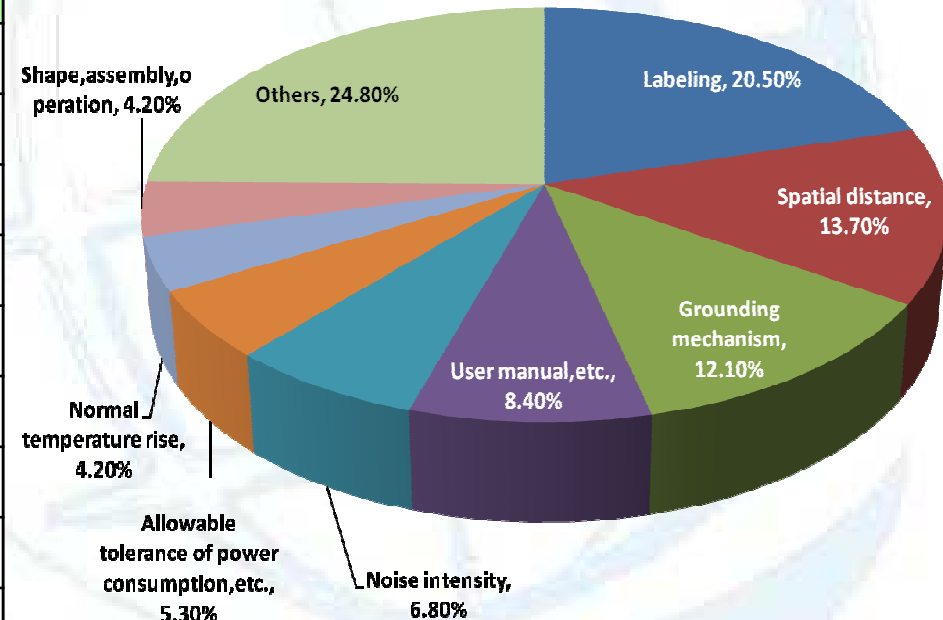
PSE labeling



# Marketed Products Trial-Purchase Tests by METI

## Number and reasons of non-conformity to the interpretation of technical standards (2014)

Category of non-conformity to the interpretation of technical standards	Number of non-conformity	Percentage
Labeling	39	20.5%
Spatial distance	26	13.7%
Grounding mechanism	23	12.1%
User manual, etc.	16	8.4%
Noise intensity	13	6.8%
Allowable tolerance of power consumption, etc.	10	5.3%
Normal temperature rise	8	4.2%
Shape, assembly, operation	8	4.2%
Others	47	24.8%
<b>Total</b>	<b>190</b>	<b>100%</b>



**THANK YOU**

**MERCI**

