



# fisuel INFO

FISUEL INFORMATION LETTER

www.fisuel.com

International Federation for the Safety of Electricity Users

## Edito

### FISUEL's Beliefs

*Electricity has the appearance of being safe so that, thankfully, one does not have to be careful about it!*

*But watch out! Electricity is the victim of its outstanding safety record! Such a safety record has been achieved and can continue only if, in any country: There is a Standard, even if it is only a minimum requirement and; This Standard is recognised and is actively promoted. This is good; If it is compulsory, so much the better;*

*But it is necessary that it should be taught to those who will have to apply it, as well as to those who will be authorised to verify that it has been applied.*

→ *Its application must be verified before the first connection to the network, this is obvious: This is Verification of a new electrical installation.*

→ *It follows that, after a complete renovation, it is necessary to make a new verification ...*

*But, as the years pass, an installation's components may deteriorate, ... Like us, each year, an installation gets older by one year, and is not immune to ageing, becoming progressively decrepit.*

*Slowly they become non compliant and, in other words, potentially dangerous.*

*Our way of life changes; electrical equipment and appliances multiply beyond what was envisaged for the original installation, which may not be suitable with the increase power consumption.*

*Consequently, it is no longer fit for its requirement and is possibly dangerous.*

→ *It is therefore a necessity, and not a luxury, for older installations to be regularly and periodically, verified; it is no more than normal.*

*This should be done:*

- *either, every 5, 10, 15, 20 or 25 years,*
- *or, when there is a change of tenant or owner,*
- *or, otherwise, when a combination of those two conditions occurs. Age and change!*

*What indeed is the cost of a verification compared with the cost of the dwelling itself?*

*Finally, whether it is initial, periodic or regular, the verification must be made:*

- *either by a neutral, independent, agreed organisation (third parties), who themselves are licensed,*
- *or by recognised independent inspectors,*
- *or – self certification – by the installer, so long as he is himself, agreed, recognised as competent, registered, ... – preferably every year or two years – his competence and qualifications verified and checked.*



*Such is the ideal road in which FISUEL believes: a road which certainly embraces several different approaches; but that is precisely what emerges from the richness of the exchanges which are the characteristic of our Federation.*

*It is this ongoing debate which will lead to, over the years, progress for all, some convergence, ... and, one day, a truth, or better still, the truth!*

José TOMAZ GOMES  
President of FISUEL

## NEWS

### > The two latest members to join FISUEL

During its meeting of 16 February, the Board of Directors announced the following two members:

#### ■ ASSOCIATE MEMBERS

- ISPEL, Istituto Superiore Prevenzione e Sicurezza sul Lavoro  
Tel. +39 06 47 141 – Fax : +39 06 48 203 23  
presidenza@ispsel.it – Site : www.ispsel.it
- ASORCO, Asociación de Organismos de Control  
Tel. +34 91 564 37 64 – Fax : +34 91 561 48 42  
asorco@asorco.org



### > Italy: electrical installations and the role of ISPEL



The main legislative references for electrical installations are L. 46/90, D.P.R. 447/91, D.P.R. 380/2001 but by the end of 2007, according to Legge 17/2007, new references will be substituted to them.

Electrical installations are required too be in accordance with the state-of-the-art. The application of standards published by the Italian Electrotechnical Committee (CEI) is deemed to provide conformity. For electrical installations in dwellings (230-400V, TT) the standard is CEI 64-8, (IEC 60364 with national deviations).

Electrical installations are required to be earthed and to be protected by a high sensitivity differential current device or with an equivalent protection system.



Giovanni Luca AMICUCCI  
Department Safety Technology

The new legislation expected within 2007 will establish the intervals between periodic verification for installations in dwellings (intervals for the periodic verification in workplaces of lightning protection systems, for earthing systems and for electrical installations used in potentially explosive atmospheres).

Town Councils with more than 10,000 inhabitants are required to carry out annually the periodic verification of 10% of the number of dwellings recorded as being fit for habitation.

Town Councils, Local Health Bodies (ASL), Fire Departments, ARPA, ISPEL are able to select, from lists of authorised persons, professional technicians to carry out these verifications.



Electrical contractors carrying out installations are required to be on a list maintained by the Chamber of Commerce or the Commission of Craftsmanship and Agriculture. To be on such a list a contactor must demonstrate his technical and professional competence. The Chamber of Commerce or the Commission of Craftsmanship and Agriculture maintain the integrity of their own lists.

ISPESL is dependant on Health Ministry; it has a President, namely Professor Antonio Moccaldi, a Board of Directors representative of the main concerned Ministries, a Scientific Committee and a Supervising Board.

There are 6 central Scientific Departments, in which «Technology and Safety», in charge, among other issues, of electrical safety. Besides, ISPESL has 36 local branches.

ISPESL makes the first verification lightning protection systems and earthing systems in workplaces.

ISPESL also participates in national and international standardisation working groups concerned with electrical safety. ISPESL finances researches into electrical safety and ISPESL makes also training/information about the outcome of these discussions by the provision training and by other means of dissemination.



### Spain : ASORCO Asociación de Organismos de Control



The Association of Control Organisms – In spanish: Asociación de Organismos de Control (ASORCO) – was founded in 1995, following the representation of the inspector collective that began another Associations since 1978. The central office is placed in Madrid (Spain).

In ASORCO are joined the major part of the Control Organisms and Inspection Bodies, correctly accredited and authorized to work in the Industrial Safety statutory fields and in another fields where exist risks for the persons, devices and installations.

Actually, ASORCO have 37 associated members what suppose human resources over a twenty thousand people, most of them highly qualified technical people, counting too with approximately 600 delegations of the associated companies, and 16 more of each Autonomic Committee of ASORCO, over all the national territory.



Michel RODRIGUEZ  
General Secretary of ASORCO

About Electric Safety, is important to say that the Control Organisms in Spain are ordered to make the inspections of Low Voltage installations, Power Stations and Substations, Transformation Centres and High Voltage Electric Lines.

Across 2006 the associated companies to ASORCO took part in more than

30.000 actuations in electric installations.

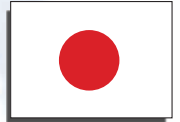
ASORCO keep permanent contact with the Central and Autonomic Administrations and is member of the most important enterprise organizations and of those which activities are related to the Quality and Industrial Safety.



### FESIA

#### History

Non-profit organisations, Electrical Safety Inspection Associations (ESIAs) were established in each service area of electric power companies to ensure the safety of electricity users. (1965-66).



Under the agreement of each ESIA, the Forum of Electrical Safety Inspection Associations (FESIA) was established, recognising that information exchange and cooperation between ESIAs and correspondence with the government and related organisations were necessary to improve the safety level of electricity users. (1968).

#### Main Activities

To achieve the purpose of establishment, FESIA

- Conducts information exchange on the operation of ESIAs.
- Collects information and makes proposals to the government on legislations and administration systems for electrical safety.
- Collects information and carries out studies on electrical safety technologies.
- Conducts other activities deemed to be necessary.

#### Members

The members of FESIA are ten ESIAs: Hokkaido, Tohoku, Kanto, Chubu, Hokuriku, Kansai, Chugoku, Shikoku, Kyushu, Okinawa, covering the whole of Japan.



M. Katsumasa ISHIGE,  
President of FESIA

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[www3.ocn.ne.jp/~fesia/fesiahome.html](http://www3.ocn.ne.jp/~fesia/fesiahome.html)







## I Regulation Systems for The Safety of Electricity Users in Japan

Nobody can install electrical installations without license. There are Grade 1 and Grade 2 licenses. One has to pass a national exam to get the Grade 2 license ; and, for Grade 1, one has to have three years of experience after having passed a national exam for Grade 1.

Different regulation systems are applied for the safety of electricity users, mainly according to the voltage received from an electric power company.

### ■ Electrical installations receiving electric power with low voltage

- Receiving voltage: 100/200 V
- Users: Houses and small shops, etc.

#### ● Basic regulatory requirements:

- The government of Japan shall provide technical standards.
- Installers, licensed by the government must comply with the technical standards while installing electrical installations.
- Electric power companies shall inspect electrical installations of their users so as to check the conformity with technical standards when installed and every four years afterwards. Electric power companies may entrust the inspections to government authorised entities such as ESIA.

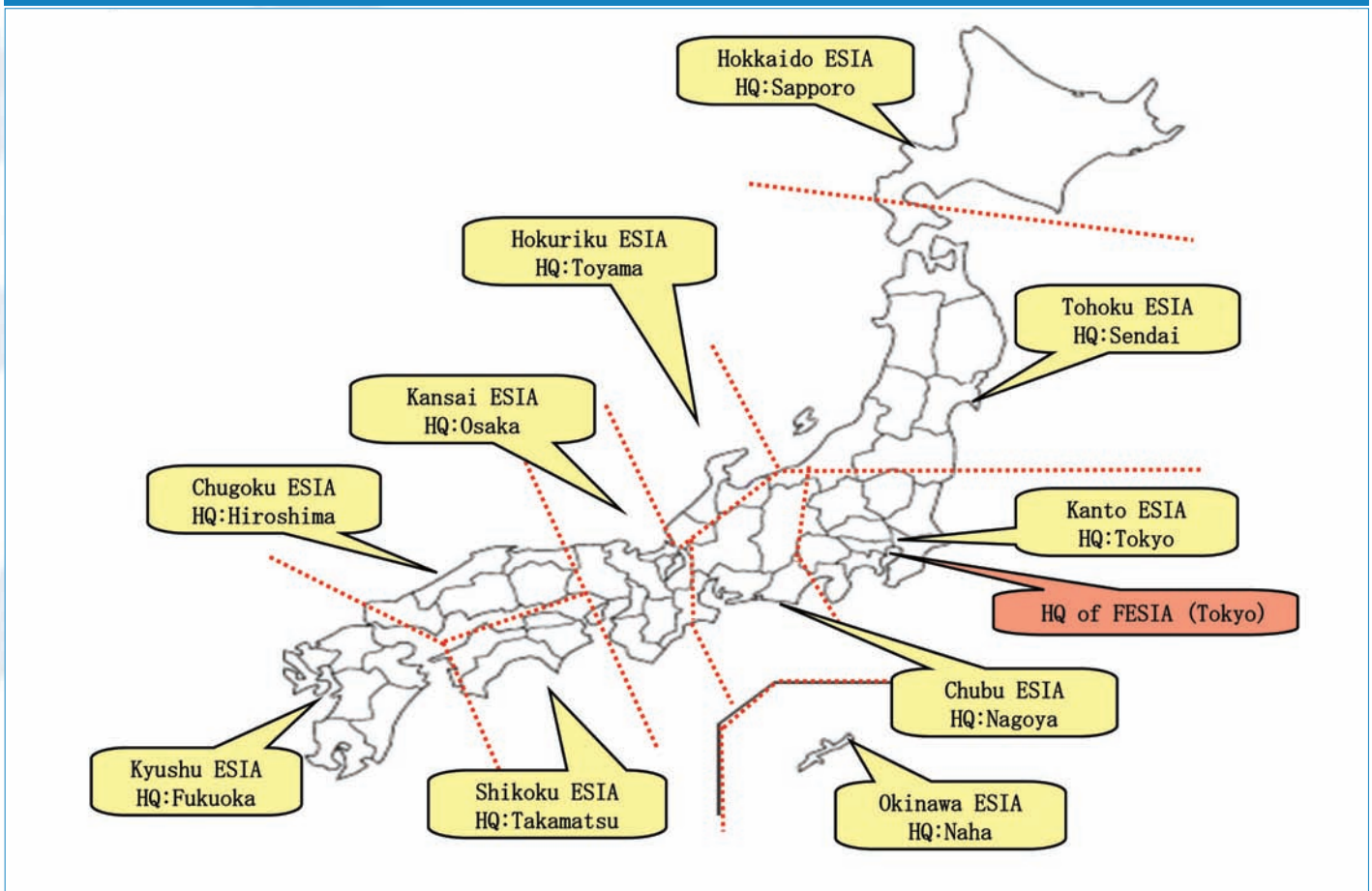
### ■ Electrical installations receiving electrical power with high voltage

- Receiving voltage: 6 600 V
- Users: Buildings and factories, etc.

#### ● Basic regulatory requirements:

- The government of Japan shall provide technical standards.
- The owners of electrical installations shall appoint government licensed electrical experts.
- The owners of electrical installations shall make and comply with "Safety Rules" which contain inspection

## 10 members of Forum of Electrical Safety Inspections Associations





and patrol rules, operation and maintenance rules, education and training of employees, etc.

- The electrical experts shall supervise the process of installing, operating and maintaining electrical installations so as to check the conformity with technical standards.
- The owners of the electrical installations may outsource the safety management with government approval, to competent entities such as ESIA's instead of appointing electrical experts.

Whatever the voltage is, when ESIA, or a licensed expert, has done the inspection, it issues a written proof of conformity and delivers it to the installer. Then the installer submits it to the electric power company. The electric power company supplies electricity after having checked the written proof issued by the expert or ESIA.

For older installations, and after the four yearly regular inspections, the ESIA (or expert, or electric power company) informs the owner of following points, by a written form :

- Results of the inspection
- Defects (if any), non compliances with technical standards,

and possible dangers arising from this situation.

## II• The role of ESIA's for The Safety of Electricity Users

1. ESIA's, entrusted by electric power companies, inspect electrical installations receiving electric power with low voltage so as to check the conformity with technical standards.
2. ESIA's, entrusted by the owners of electrical installations receiving electric power with high voltage, supervise the process of installing, operating and maintaining electrical installations so as to check the conformity with technical standards.
3. ESIA's provide information regarding electrical safety to the public.
4. ESIA's, on request, advise electricity users on the safe and efficient use of electricity.

ESIA's have in total 470 offices and about 12,000 employees including about 10,000 licensed electrical experts to perform their tasks.



## Dates for your diary

- **Friday 26 October 2007– PARIS**
  - Board of Directors (has to be confirmed)
- **Wednesday 7 November 2007 – BUENOS-AIRES (Argentina)**
  - International Forum on Electrical Safety (has to be confirmed)



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