NEWSLETTER

March 2019

Contents

FISUEL General Information

For consistent newsletters

Thank you to everyone who contributed to the richness of this newsletter.
As them, if you have topics that you would like to share with the recipients of the FISUEL newsletter, send us a page with photos to the e-mail address fisuel@fisuel.com

Known dates today for Fisuel meetings in 2019

Africa Working Group in April 2019 in Beirut
Asia & Pacific Working Group in April 2019 in Beirut
Europe & Middle East Working Group in April 2019 in Beirut
The Board meeting in March and April 2019

The Newsletter is available on website www.fisuel.org

Website FISUEL:

For technical reasons and updating with the new possibilities, the FISUEL website is being rebuilt. It will offer a better user-friendliness as well as a tree structure adapted to the immense works realized by FISUEL and by its members since 2002. It will be opened before the end 2019.

Reminder

- The address for any letter to Fisuel : Fisuel chez Promotelec, Tour Chantecoq, 5 rue Chantecoq, 92808 Puteaux Cedex, France
- The e-mail address to Mrs Annie Besançon: **fisuel@fisuel.org**,
- Phone number : + 33 (0) 9 52 19 68 75
- Head office are 21 rue Ampère, Paris, 75017, France.

Eneo Cameroon S.A.: Fisuel new partner member

Eneo Cameroon S.A. joining to FISUEL was approved by the Board of Directors in March 2019.

Eneo Cameroon S.A.: Bring reliable energy and quality of service

A historic operator of the electricity sector in Cameroon and a catalyst for economic growth, Eneo aims to provide its customers with reliable energy and quality of service while being a model of governance in Africa. To accomplish this mission, four values guide our daily activities, namely, **integrity, cohesion, respect and commitment.**

Since 2014, the transformation of Eneo brought some results: secure access to electricity for **3,000,000** people and businesses, the recruitment of **1,000** Cameroonians, the installation of **1,000** new transformers, the contribution of **150 MW** additional capacity, replacement or repair of **250,000** wood poles, raising awareness every year of an average of **800,000** people on the dangers of electric current, improving customer satisfaction with the creation of an agency in online, streamlining procedures and turnaround times, facilitating payment of invoices, creating new customer spaces and strengthening technical bases and repairing teams.

Go further…

Eneo intends to accelerate the implementation of its transformation plan in order to provide a greater response to the challenges of the electrical service: the improvement of the quality of service, the improvement of safety, the balance of supply and the demand for energy, the facilitation of access for new operators to production, the increase in the rate of access to electricity, the maintenance of the hydroelectric dams at Songloulou, Edea and Lagdo.

Eneo currently has **1,280,000** customers, the company is supported by **3,700** employees, holders since 2017 of 5% of the capital alongside the majority shareholder, the British group Actis (51%) and the State of the Cameroon (44%).

More information on www.eneocameroon.cm Facebook.com/Eneo, Twitter @EneoCameroon14

Solar power station of Djoum in southern Cameroon

Megger S.A.R.L.: Fisuel new partner member

Megger S.A.R.L. joining to FISUEL was approved by the Board of Directors in March 2019.

Megger designs and manufactures portable test and measurement equipment. Megger products help you install, reduce the cost, increase the efficiency and life of your equipment and those of your customers. Established in the late 1800s, the company designs and manufactures electrical test and measurement equipment used in preventive maintenance, troubleshooting, control and commissioning for decades. Megger products have supported customers around the world to improve service, reduce costs and extend equipment life.

Megger has many locations, with teams of engineers and technicians trained to help customers around the world. Our seven manufacturing plants are located in Germany, Sweden, the United Kingdom and the United States.

The Megger brand
One of our fundamental principles is to manufacture all our products with only one and unique brand: Megger. Our customers have the assurance that the products and their respective software will work together seamlessly. You also benefit from the most modern technologies.

Collaborate with our Clients ...
Megger is convinced that close collaboration with its customers enables to offer them the most suitable solutions and a better after-sales service. Thus Megger has been able to improve its products for the control of electrical installations by collaborating with, in particular, the control bodies around the world.
Today and in the future, Megger is committed to anticipating the needs of its customers by listening to users and industry experts, while continually investing in research and development innovations, engineering design and manufacturing techniques.

More information on www.megger.com

FRANCE : Dwellings data
ONSE – December 2018

FRENCH NATIONAL OBSERVATORY OF ELECTRICAL SAFETY

ONSE

For 23 years, Promotelec Association and Consuel gathered committed stakeholders to share data in order to analyze and improve the electrical safety.

Nowadays, many electrical damages are still due to electrical source

DWELLING FIRES / YEAR

200,000 dwelling fires

responsible for

300 fatalities - **900** serious injuries - **15,400** slight injuries

among them

80,000
fires with brigade interventions

50,000
fires due to electrical source:

- **61%** related to electrical equipment
- **36%** related to fix or mobile installations
- **3%** related to installations in common parts or to energy distribution

ELECTRICAL ACCIDENTS / YEAR

3,000 people
electrification casualties

40 people
electrocution casualties

ELECTRICAL DAMAGES / YEAR

400,000
Due to:

- lightning, overvoltage, overload,
- heating,
- failure of a component,
- electric default

ECONOMICAL CONSEQUENCES/YEAR

For dwelling fires, estimated to **4.3 billion** € of which **1 billion** € for fires due to electrical source

For electrical damages and accidents estimated close to **1.7 billion** €

All data result of ONSE and some of them are based on an average over 5 years.

KEY DATA

WHOLE FRANCE excluding Mayotte on 1 st January 2018

36.3 million dwellings among which

30.3 million over 15 years

DWELLINGS with electrical installations over 15 years

2/3 of the electrical installations do not comply with at least 1 of 6 mandatory safety points *

- **80%** with a defective earth connection
- **60%** with a bad equipotential connection and a safety zone of the bathroom not respected
- **60%** present risks of direct contacts with live elements
- **50%** own obsolete devices

COMMON PARTS: electrical installations

- **75%** present hazards of direct contacts with live elements
- **50%** present hazards of indirect contacts with live elements

*Decree N° 2008-384 of 22-04-2008

In 41 years, the number of electrocutions/year was divided by 5, going from 200 to 40

Thanks to the evolution of the regulations:

- Decrees on the protection of the workers in 1962
- The NF C 15-100 standard and the earth connection in 1969
- The electrical switchboard in 1980
- The 30mA earth leakage device in 1991
- The mandatory electrical diagnosis (DEO) for over 15 years dwelling sale in 2009
- The DEO for dwelling rental from 2017

Direct correlation between regulation and decrease of the accidents

FRANCE : Common parts data in residential buildings
ONSE – December 2018

FRENCH NATIONAL OBSERVATORY OF ELECTRICAL SAFETY

ONSE

THE COMMON PARTS, WHAT IS IT?

The term "Common parts" is defined in the law of 10 July 1965 regarding co-ownerships as those parts of the building assigned to the use or utility of all the co-owners or several of them. It is then the co-ownership regulations that regulate the limit cases: floors, ceilings, pipes...).

Source: law n°65 557 of July 10, 1965 fixing the status of co-ownership of built buildings.

About ONSE

For 23 years, Promotelec Association and Consuel gathered committed stakeholders to share data in order to analyze and improve the electrical safety.

THE HOUSING STOCK IN FRANCE

36.33 million dwellings in 2018

- 20.5 million individual dwellings
- 15,8 million collective dwellings

COLLECTIVE HOUSING STOCK:

1.2 to 1.3 million buildings.

1.4 to 1.6 million stairwells and technical rooms.

1.2 to 1.4 million "general service" ducts, technical rooms (standard NF C 15-100).

1.6 million standard connection points (NF C 14-100).

600,000 to 800,000 emergency lighting units.

FIRES IN COMMON PARTS OF RESIDENTIAL BUILDINGS

15,000 fires in common parts in residential buildings.

Economical consequences estimated to 200 million €.

KEY REFERENCE DATA & FINDINGS

ELECTRICAL INSTALLATIONS

75% have risks of direct contact with powered components.

50% have risks of indirect contacts with powered components.

- Socket without shutter or out of the wall.
- "General service" sheath door not locked.
- Class 1 porthole or obsolete.
- No ground connection.
- No ground continuity.
- Faulty differential switch.

FIRE PROTECTION SYSTEM

Approximately 40% of fire protection systems failing:

- No security plan in place.
- Maintenance not performed.

SECURITY-LIGHTING SYSTEMS

Between 30 and 40% of security lighting systems fail:

- Autonomous emergency lighting units (BAES) or residential lighting units (BAEH) are damaged, obsolete or defective.
- BAEH incorrectly positioned, absent in half-level.
- BAES with low visibility of markings indications.
- Checking and maintenance not very carried out.

All data result of ONSE.

REGULATION

NEW HOUSING

FIRE PROTECTION MEASURES

Residential buildings are governed by the Construction and Residential Code.

ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

The decree of 24 December 2015 defines the technical rules of accessibility for people with disabilities applicable to collective residential buildings during their construction. Article 10 specifies the requirements for lighting the common parts.

ELECTRICAL INSTALLATIONS

Decree of 3 August 2016 regulating the electrical installations for residential buildings.

EXISTING HOUSING

FIRE SAFETY

The decree of 5 February 2013 sets out the safety measures to be implemented in the common parts of residential buildings to prevent the risk of fire.

The ALUR law, which came into force in March 2014, foresees a Global Technical Diagnosis (DTG) for co-ownerships. It is mandatory for buildings:

- more than 10 years old and which are subject to co-ownership (creation of the co-ownership);
- or which are the subject of a procedure for insalubrity and for which the administration asks the Syndic to produce it.

Article R*111-13§2 the Construction and Residential Code requiring the maintenance and verification of residents' fire protection systems.

THE CO-OWNERSHIP IS RESPONSIBLE FOR THE COMMON PARTS OF THE BUILDING

SUGGESTION FOR REFLECTION

FOR NEW DWELLINGS:

update regulation.

FOR EXISTING DWELLINGS:

fill the gap in regulation.

ACT NOW

- By contributing to the functioning of the structure.
- By sharing data with the Observatory.
- By attending the next restitution of data.

March 2019 Photos credits : Thinkstock - Agence & Vous

To contact us: contact@onse.fr

ONSE
www.onse.fr

General Annual Meeting 2019 of FISUEL in Lebanon invited by OEA & FLE

FISUEL GAM 2019

Federation of Lebanese Engineers

Theme of the GAM 2019:

« Safety Related to Renewable Energy »

The event, from April 29th to May 3rd, 2019,
will take place in **Kempinski Summerland Hotel and Resort** - Hôtel
address : El Akhtal El Saghir, Beirut, Lebanon.
Tel : +961 1 858 000. website : www.kempinski.com

PROGRAM

1st Day : MONDAY 29th of APRIL / Board meeting - General Assembly		
16h - 17h30		BOARD of DIRECTORS
17H30- - 19H00		GENERAL ASSEMBLY OF FISUEL
2nd Day : TUESDAY 30th of APRIL / Symposium		
09H30 – 11H00		**Official Opening ceremony**
11H00 – 11H15		Coffee break
11H 15 – 13H00		SYMPOSIUM
13H00 – 14H00		Lunch
14H00 – 16H00		SYMPOSIUM
16H00 – 16H15		Coffee break
16H15 -18H30		SYMPOSIUM
3rd Day : WEDNERSDAY 1st of MAY / Working Groups (WG)		
9H00 – 13H00		Working Groups Africa WG, Europe / Middle East WG, Asia / Pacifica WG
4th Day : THURDAY 2nd of MAY / Symposium		
08H00 – 10H00		SYMPOSIUM
10H00 – 10H15		Coffee break
10H15 – 12H15		SYMPOSIUM
12H15 – 13H15		Lunch
14H00 – 15H00		RESTITUTION
15H00 -16H00		WORKING GROUPS REPORTS
16H00 - 17H00		CLOSING CEREMONY
17H00 – 17H30		COCKTAIL
20H30		**GALA DINNER with AWARDS CEREMONY**
5th Day : FRIDAY 3rd of MAY / Technical tour		
7H30 - 13H00		Departure to Byblos – visit of Matelec and Cables du Liban
14H00		End of the GAM 2019