



AIE STRATEGIC ROADMAP

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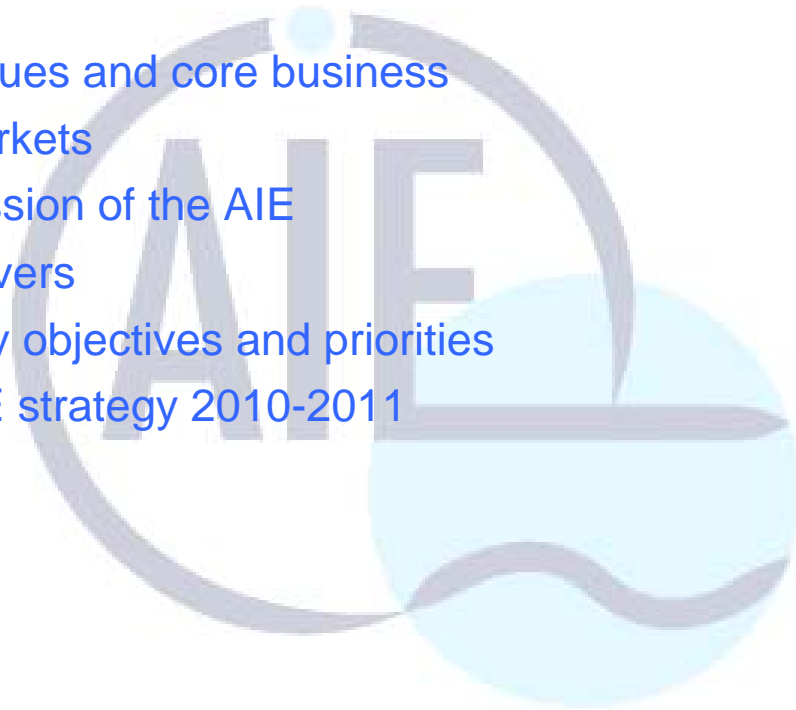


***‘ELECTRICITY SURROUNDS US,
EVERY DAY, EVERYWHERE.’***

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1. VALUES & CORE BUSINESS

1. **Covering both private and public sector business opportunities**
2. **Installing technical solutions for private and public customers**
3. **Promoting business opportunities - subject to European legislation – in the following areas**
 - Energy Efficiency – *optimising energy performance*
 - Energy Services and Standardisation – *advising customers on solutions and implementing them*
 - Smart, Information and New Technologies – *integration of Electrical & Web*
 - Renewable Energies – *stimulating usage; optimisation & correct installation*
 - Training and Education – *providing a dynamic approach, leadership & constant upskilling*
4. **Establishing and promoting the added value of electrical contractors**
 - Promoting the electrical contractor as THE expert in installation of any and all electrical solutions and devices
 - Promoting the electrical contractor as THE expert advisor in electrical matters
 - Promoting the electrical contractor as THE expert advisor on energy efficient solutions
 - Contributing to energy demand management and comfort by means of Information and control systems
 - Stimulating installation of new technologies
 - Improving sustainable energy together with renewable energy sources
5. **Establishing the added value of AIE**
 - Monitoring and influencing key EU legislation and ISO and CENELEC standards
 - Promoting safety of the electrical installations, e.g. by periodic verification
 - Providing an information and coordination platform / network in Europe

2. MARKETS

- **Infrastructure, transport and public lighting** – low, medium & high voltage networks - improving standards and quality

- **Industry and tertiary** – enhancing productivity, quality, safety, control & performance
- **Buildings** – industrial, commercial and public premises - ensuring optimal solutions
- **Residential** – ensuring comfort and safety; encouraging innovation & facilitating communication
- **Electric Mobility** – a key future market - building and maintenance of the necessary infrastructure and providing special mobility solutions in niche markets

3. AIE's MISSION

The purpose of the AIE is to act on behalf of its members in matters that cannot be acted upon by individual members, or where this would not be practical or feasible. This means that issues that the AIE decides to act upon should be in the interest of at least a significant majority of member associations. AIE can never pursue matters that are demonstrably contrary to the interest of one individual member association.

In accordance with the principle of subsidiarity, the mission of AIE is to:

1. **Co-ordinate and promote the common interests of European electrical & electro-technical engineering contractors**
2. **Identify and consider differences and specificities in practice between the member states**
3. **Monitor and influence the legislative and consultative process of the European Union relevant to the businesses of European Electrical and electro technical engineering Contractors**
4. **Facilitate the exchange of relevant information between AIE members on EU law implementation**

4. DRIVERS FOR THE AIE

1. Political & economic drivers

- The **political agenda** of the European institutions;
- Existing and emerging **market opportunities** for contractors
- The need to maintain the **competitiveness** of the electrical engineering industry, identified by the Commission as one of the keys to a competitive and strong industrial base in the European Union;

- Fulfilling the potential of electrical & electro technical engineering contracting companies by maximising their contribution to the European society and economy;
- The consolidation of the European Union (EU) **internal market** e.g. Services Directive.

2. Environmental drivers

- **Climate Change** caused by CO2 emissions, largely from the use of fossil fuels to provide energy.
- **Declining fossil fuel reserves** – which reinforces the need to use alternative energy sources.
- **Energy efficiency:** reducing energy consumption and optimising energy performance by installing automation, control and metering systems in buildings; and also in infrastructure and industrial applications
- **Renewable Energies:** stimulating use, optimisation and correct installation of photovoltaics, heat pumps, combined heat and power systems (CHP);
- **Solutions providers:** The need for electrical contractors to be the promoters and advisers to support the EU energy and climate change package (20/20/20 goals) and provide integrated technical solutions.

3. Societal drivers

- Awareness of **new societal needs** further to an ageing European population (health and care);
- Changing **ambient comfort and assisted living** requirements and increasing familiarity of generations with internet and other IT applications
- **Energy services and standardisation: Responding to** customers' requirements for advice on energy efficient solutions that best respond to their needs; together with the need to provide reliable energy through safe electrical networks in accordance with the highest appropriate EU electrical standards and measurements.

4. Technological drivers

- Continuing **improvements in electrical technology** in general; and in particular in building automation; systems to provide and store energy out of renewable sources; and developing lighting-technologies.
- Continuing improvements in **information & communication technologies (ICT), including “smart” technologies.** The Web and Ethernet TCP/IP are becoming more

and more integrated for better electricity distribution control and management. 'Smart' automation is not just a luxury item, but a reliable tool to enhance comfort

- **Smart Metering and Smart Grid:** Energy providing systems, consumption and ICT are starting to interact.

- **Electric Mobility:** New mobility solutions create new challenges in respect of energy providing systems, charging and storage management.

- **Training and Education:** the increasing complexity of technical installation and the constant development of new technologies in the sector require a dynamic approach towards education and training, pushing up the educational level in respect of new technologies and regular up-skilling.

5. KEY OBJECTIVES AND PRIORITIES

The general priorities of the association are:

- Monitoring and influencing the European **Energy Policy**, in particular regarding Energy Efficiency, Energy Services and Renewables (photovoltaics, water and wind...)
- Improving and promoting **Electrical Safety** through quality of installation, inspection and maintenance
- **Encouraging demand for Intelligent Homes**, Ambient, Assisted Living, Health Care and ICT
- Ensuring and protecting the market position of electrical contractors in the growing **electric mobility** markets.
- Following-up legislation and **standardisation** issues in the electro technical field
- Maintaining relations within the **electrical value chain** and improving relationships especially in the context/framework of the general/main contractor.
- Representing the interests of contractors in relationships with partners in the value chain.

6. AIE STRATEGY up to 2015

1. Monitor EU Policy and Directives

- The agenda of the European Union influences increasingly the legal framework wherein the companies in Europe need to operate. This includes:
 - The energy market/ action plans and the renewable energy sources
 - ICT and energy efficiency
 - The products and technologies
 - The fiscal and financial regime (VAT)

- Internal market for services
- Labor law and labor safety
- Consumer protection

Three categories of documents can be identified in the legislative process:

- **Published Directives** such as the Directive on the promotion of the use of energy from renewable sources and the European Directive on the Energy Performance of Buildings
- **Well advanced pieces of legislation**, difficult to influence e.g. recast of the WEEE Directive
- **EC consultations** on existing Directives e.g. the Services Directive or **Commission working papers** (Green Papers, Communications, Recommendations, ...) e.g. on energy efficiency of lighting in the tertiary sector

These may have a business wide impact such as those on VAT or employment & social issues (European sector dialogue); they may deal specifically with upstream electrical issues that impact on our members (eg. smart grids); or they may affect directly the electrical & electro technical engineering contracting companies.

- Key legislation/topics for the AIE are in first instance **sector specific, eg:**
 - EC Recommendation on ICT and low carbon society
 - The ELECTRA Communication
 - European Electric mobility Strategy
 - Energy Performance of Buildings Directive
 - Energy End-use Efficiency and Energy Services Directive
 - Directive on Renewable sources of energy
 - Electric and Electronic Waste Directive (WEEE)
 - Low Voltage Directive
 - Electro magnetic Compatibility Directive
 - Energy- using Products Directive (Eco-Design) e.g. Energy efficient lighting
 - Etc.

Suggested strategy of AIE:

- Be a watchdog of the different EU initiatives & draft legislations
- Contribute and give input into the draft European energy efficiency Action Plan and related
- Contribute and give input into the new 'thinking' of the European Commission in moving from a product approach towards a system approach i.e. the use-phase energy efficiency is to a large extent determined by the design of the entire system (e.g. lighting)
- Network with other stakeholders
- Inform & consult regularly the AIE member associations so as to raise awareness of contractors about the on-going developments

This list of legislative documents results in the following topics and headings:

2. Energy management

In January 2008, the Commission adopted the Communication *20 20 by 2020 'Europe's climate change opportunity'*, proposing a far-reaching package of concrete measures; indicating that the agreed climate change targets were technologically and economically feasible; and providing a unique business opportunity for thousands of European companies.

The EU's package on climate change is all about 20-20-20 targets:

- a 20% cut in emissions of greenhouse gases by 2020, compared with 1990 levels;
- a 20% increase in the share of renewables in the energy mix;
- a 20% cut in energy consumption.

and gives rise to several EU initiatives and legislative documents:

- **The Energy Performance of Buildings Directive**

The recast of the Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings (EPBD) is published in the Official Journal of the European Union on 18 June 2010. The Energy Performance of Buildings Directive (EPBD) and its revision is a key Community instrument for addressing the energy efficiency of buildings.

Suggested strategy of AIE:

- o Outline the interests of the contractors towards the European Commission
- o Follow-up the implementation of the new EPBD in AIE member countries

- **The ELECTRA Communication**

The Electra Communication (COM 594 2.3.5) '**For a competitive and sustainable electrical engineering industry in the European Union**' considers the energy management of buildings as one of the pillars to achieve a sustainable electrical engineering industry in the EU. The Commission lists a set of actions, proposals and ideas in some market segments and focus areas.

Suggested strategy of AIE:

- o Prepare AIE position paper on the ELECTRA COM
- o Networking: Give input to the FEEDS (European Forum for Electrical Domestic Safety) position paper on the ELECTRA COM and drive the common initiative

- **Smart metering**

The new European Directive on the promotion of Renewable Energy Sources and the Directive on Energy End-use Efficiency and Energy Services (ESD) both state the importance of installing metering and billing systems allowing consumers to gain transparency, regulate and steer their consumption. Extra information provided by these Smart Meters is proposed as an important technological innovation to improve energy efficiency.

Equally in the Commission Recommendation on ICT and a low carbon society (09.10.09) the Commission recommends Member States:

- To agree common standards for smart metering systems by 2010
- By end of 2012, set up a coherent timeframe for the roll-out of smart metering devices

In the next few years the European energy markets will face a challenging task – implementation of Smart Metering systems for small and middle-size customers. The public policies and implementation paths of Smart Metering today vary across Europe from full-scale implementation to very limited.

Suggested strategy of AIE:

- Prepare AIE position paper on smart metering ensuring the benefits of smart metering to the customers and not only to the utilities.
- Clarify the interests and performance of electrical contractors.
- Communicate the links between the smart grid and smart metering. These must be seen and understood. Basic smart metering solutions can provide transparency only. For time- and load-related services further applications with connection, monitoring and automation within the building are needed
- Smart metering systems have to be modular, ready for extension and not proprietary. Only then, can open markets around the metering systems develop.
- The end customer must be able to keep control over his own data. Following his wishes, necessary data may be provided to his chosen service contractor/provider.
- Participation in:
 - CEN/CLC Smart Meters Coordination Group and its 2 Working Groups (WGs)
 - The European Commission's Task Force on smart grids
 - The CEN/CLC Focus Group on standards for smart grids

- **Building electronic systems and smart technology**

Energy management systems can greatly reduce the CO2 footprint of buildings. Several EC Communications on the relevance of ICT towards energy efficiency were published in 2008, 2009 and 2010 resulting in the Commission's recommendations **on mobilising Information and Communications Technologies to facilitate the transition to an energy-efficient, low-carbon economy**. The latter identifies ICT-based solutions for monitoring, managing and measuring energy-use and carbon emissions in energy-using activities.

Suggested strategy of the AIE:

- Translate and extensively promote the AIE SH Planning Tool at European and national level to help the electrical contractor and the client understand/identify its needs
- Profile the electrical contractor as being THE specialist and solution provider
- AIE position paper to be submitted to DG ENTR regarding the ELECTRA COM

- **Energy efficient lighting**

The publication of 19 May 2010 of the Digital Agenda for Europe states:

- About 70% of electricity consumption can be saved by combining an advanced technology known as Solid State Lighting (SSL) / LED with intelligent light management systems. ... To achieve emissions reductions, a mix of awareness-raising, training and multi-stakeholder cooperation is required.
- The Commission will... in 2011 publish a **Green Paper on Solid State Lighting (SSL)** to explore the barriers and to put forward policy suggestions;
- Member States should... By 2012 include **specifications for total lifetime costs** (rather than initial purchase costs) for all public procurement of lighting installations).
- Promotion of low energy lighting: By 2020 at least 20% overall reduction in energy use on lighting. (This means achieving an SSL market share of at least 50%, translating to an installed base of at least 35%...)

The July 2010 working document of the Commission on possible measures targeting the energy efficiency of lighting in the tertiary sector states that the Commission services are now considering the possibility to address lighting at system level, which responds to a long request from the lighting industry to have **lighting system legislation (LSL)**.

The aim is to go further than the eco-design Directive requiring energy efficient products, but to make sure that these efficient lighting products are used in systems that are well designed, well installed and well operated.

Suggested strategy of the AIE:

- Prepare AIE contribution to the Green Paper which will put forward policy suggestions
- Promote total life cycle costs in public procurement
- Prepare AIE position paper on LSL
- AIE needs to have regular contacts with the lighting industry regarding communication and information campaigns
- AIE to be involved as partner in a new project on SSL (Pro-LED - still to be accepted by the EC)

- **Qualification and Certification**

The educational and training systems of the member states differ considerably from one another. No common standard is apparent. Good basic qualification is of high importance in a technological highly developing market.

Suggested strategy of the AIE:

- AIE needs a position on „qualification and certification“ that emphasises the need for a high standard of basic qualification.
- Several qualification levels should be defined, reaching from basically-trained electricians up to the highest technical standards. In addition it is important to recognise that additional skills are required to run a business; ie to be self-employed.
- Member states must be free in reaching and ensuring the defined levels.

- **Problem of qualification and certification requirements for individual technical systems (e.g. in the Renewable energy sources Directive (RES))**

Further to the new Directive on renewable sources, the renewable sector is in constant evolution. According to Article 14 of the Directive, Member States shall ensure that certification or equivalent qualification schemes become or are made available by 31/12/2012 for installers of small-scale biomass boilers and stoves, solar photovoltaic and solar thermal systems, shallow geothermal systems and heat pumps.

It is essential that we have a clear view on both the training and the assurance of competence for companies and retain leadership in this sector. Qualification and Certification schemes always have high impact on national educational systems.

Suggested strategy of the AIE:

- Develop and promote the AIE position on qualification/certification and demonstrate the competence of installers
- Have a picture of the existing training and education systems in the different countries for renewable
- Resist bureaucracy and duplication by opposing the imposition of requirements for the installation of individual technical systems. Acknowledge that member states must be free to determine if and how measures that have impact on their education, training and skills systems should be implemented.
- Be an observatory for the new technologies; provide information on them to the national member associations so they can inform their members companies
- Participate and support European projects on training, qualification and certification in this area (Quali'Cert – INSTALL RES)

- **Electric mobility**

Electric mobility has become an increasingly important topic in the European agenda, representing an undeniable potential contribution to achieving the 2020 target of reducing carbon emissions. The push to develop viable electric cars has been driven in particular by the need to cut greenhouse gas emissions in order to curb climate change and reduce reliance on fossil fuels.

On 28 April 2010 the European Commission tabled the new strategy to promote the uptake of clean and energy-efficient vehicles in the EU. The EU's industry ministers attending a

Competitiveness Council meeting on 25 May gave their support to the European Commission's strategy for clean and energy-efficient vehicles and called for the rapid development of a European standard for electric vehicles to speed up their uptake.

Industry ministers thus urged European standardisation bodies to come up with a harmonised solution for the interoperability of plugs by mid-2011. Safety, interoperability and performance of electric vehicle chargers are at stake.

On 29 June the European Commission handed over the mandate to the EU standardization institutes on Electrical Vehicles. CEN and CENELEC have created a Joint Focus Group that will prepare an initial response to the mandate, by urgently assessing European needs and seeking to ensure that international standards meet these. The Focus Group hopes to complete its report by 31 March 2011.

Suggested strategy of the AIE:

- Enhance contacts with relevant stakeholders
- Monitor the standardisation process
- Illustrate the role of electrical contractors.

3. Periodic inspection of domestic electrical installations

For several years the AIE has tried to have a European initiative from the EU institutions with regard to periodic inspection of domestic electrical installations.

The ELECTRA Communication recognizes that many existing buildings are not adapted to their future role and have a problem in terms of electrical safety (see supra). Existing buildings offer great scope for improvement in both safety and environmental terms. The Commission will launch a study in 2011 to assess how to improve the safety of electrical installations in buildings while at the same time increasing their energy efficiency and enabling safe integration of renewable energy sources and new services like charging of electric vehicles.

Suggested strategy of the AIE:

- Prepare with the FEEDS group, the specification for the EC study to be launched in 2011
- Link the arguments for safe electrical installations as a pre-condition for maximising the potential energy efficiency measures; maximise thereby the market opportunity for electrical contractors
- Identify "Best Practice" models in Europe

New No 4. Organisation and leadership in AIE

"The environment in which the Association operates is in a constant state of change; the organisation and structures of the AIE must therefore be kept under continuous review in order to ensure that they remain fit for purpose and effective."

4. Representation and Communication

- Cooperation with the CEETB

Over the last 2 years, the cooperation with and within the CEETB has not been satisfactory for the AIE. On-going discussions and roadmap papers have been produced to find a solution.

Suggested strategy of the AIE:

- The topics to be dealt with by CEETB and the work structure should be clearly defined.
- A final solution agreed by both the CEETB members needs to be sorted out before the end of 2010.

- Cooperation with other relevant European associations in the electrical and related sectors

The increasing speed at which new technologies are being introduced and the need for the integration and interface of these with the electricity grid, result in the challenge to our own and related sectors. We must cooperate to provide sustainable and integrated solutions to the customer. We should stick together as a consolidated value chain.

Suggested strategy of the AIE:

- Enhance the cooperation with other European associations in the electrical and related value chain so as to be seen as strong and able to provide sustainable responses/solutions.
- Develop a common manual with NORMAPME for electrical contracting companies

5. Sector statistics

The AIE needs good, strong and harmonised sector statistics for lobbying and representation purposes. These should equally benefit AIE's member associations as information and as a benchmarking tool.

In 2010 STUL has produced statistics for the electrical installation sector in most countries in Europe.

Suggested strategy of the AIE:

- Make the analysis of the statistics produced by STUL
- Decide how to proceed with statistical material in the future, in order to support AIE's lobbying positions

6. Information & communication policy

Information and communication with the AIE's national member associations is a priority for the AIE.

Beyond being an information platform, the AIE is also a networking platform between the AIE member associations and between the AIE secretariat and the member associations.

Suggested strategy of the AIE:

- Regularly inform AIE's member associations through info flashes and newsletters is of utmost importance
- Make regular visits to AIE's member associations to remain updated on the members' needs and expectations
- Constantly increase visibility of the AIE to the European institutions and other external partners
- Review website and consider overhaul during 2011

7. European Competition of Young Electricians – CYE

The European Competition of Young Electricians has a good reputation but the participation of additional member associations could be increased.

In order to increase the transparency and an expert competition team, the current guidelines have been reviewed.

Suggested strategy of the AIE:

- Promote the CYE to non participating countries
- Profile the CYE as THE value added European competition in our sector

8. New associate AIE members

Since the enlargement of Europe to 10 new Member States, the AIE has established relationships with sister associations in those countries.

Suggested strategy of the AIE:

- Regularly invite the identified contacts to, and inform them on, AIE's activities, in particular Estonia and Iceland
- Consider possibility that existing AIE members might 'sponsor' new members from the enlarged Community