



18.07.2011

**AIE statement regarding Skilled workforce – Certification and/or equivalent qualification schemes**

*The AIE represents the Electrical Contracting Industry in Europe which comprises about 175,000 enterprises, the vast majority of which are SMEs, having a combined turnover in the order of 70 Billion Euro and a workforce of more 1,000,000 people.*

The AIE draws attention to the fact that the work of installers of electrical, electro technical and electronic systems includes a whole range of activities, for example:

- power generation
- home and office networks
- information technology and telecommunication systems
- fire and security systems
- central management processing
- integration of renewable energy sources (heat pumps, photovoltaic systems etc. )
- indoor and outdoor lighting
- access control
- automation and active control systems
- integrated energy management, monitoring and metering systems.

**The AIE considers electrical, electro technical and electronic installations and systems as an integrated discipline, needing a holistic approach.**

**A fragmented approach, divided according to market segment, would be inefficient and damaging.**

In the framework of the EU Energy policy, the need for qualified and skilled workforce is increasingly highlighted. The ***EU roadmap towards a low carbon economy in 2050<sup>1</sup>*** recognises 'the need to ensure a skilled work force, especially in the construction sector and the technical professions. This will

<sup>1</sup> COM (2011) 10-11

AUSTRIA  
Elektrotechniker

BELGIUM  
FEDELEC

DENMARK  
TEKNIQ

ENGLAND  
ECA

FRANCE  
FFIE  
SERCE

FINLAND  
STUL

GERMANY  
ZVEH

GREECE  
POSEH

IRELAND  
ECA Ireland

ITALY  
ASSISTAL

LUXEMBOURG  
APEL

NETHERLANDS  
UNETO-VNI

NORWAY  
NELFO

PORTUGAL  
AECOPS

SCOTLAND  
SELECT

SPAIN  
FENIE

SWEDEN  
EIO

SWITZERLAND  
USIE/VSEI

Associated members:

HUNGARY  
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Corresponding members:

SOUTH AFRICA  
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ASIA  
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require targeted vocational training of the existing work force towards green job opportunities.'

Several EU Directives or communications are becoming more pressing on the lack of appropriate training and the need for skilled workforce.

The Commission's initiative "**An Agenda for New skills and Jobs**" calls for skills supply to be matched with labour market needs.

Adopted in 2009, the RES Directive acknowledges the substantial need for training and according to **Article 14 of the RES Directive**<sup>2</sup>, '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'.

Equally the large contribution expected from the building sector through the implementation of the **Energy Performance of Buildings Directive**<sup>3</sup> to the 2020 objectives is a major challenge to the construction sector and to industry as a whole, which needs to be ready to deliver renovations offering a high energy performance as well as new (nearly zero-energy) buildings.

The Commission has therefore launched the initiative '**Build Up Skills**' to help and support Member States in assessing training needs and developing national strategies in this area.

The **Energy Efficiency Plan 2011** of the Commission reiterates the building sector to be one of those with the greatest energy saving potential, when accelerating the refurbishment and renovation rate of existing buildings and integrating energy-efficient building technologies and solutions. Once more the focus on appropriate training and skills is highlighted.

**Article 12 of the recent draft Directive on energy efficiency** equally states: "With a view to achieving a high level of technical competence, objectivity and reliability, Member States shall ensure that, by 1 January 2014, certification schemes or equivalent qualification schemes become or are available for providers of energy services, energy audits and energy efficiency improvement measures, including for installers of building elements as defined by Directive 2010/31/UE." The Preamble, paragraph 30, refers only to "certification schemes."

Unlike some other sectors in the construction field, the electrical installation sector has a long-established learning and training culture and is used to adapting continually to accommodate rapidly-developing new technologies.

The AIE supports the **Cedefop study "Skills for green jobs"**<sup>4</sup> which shows that the answer to the question, of whether a job is seen as a new green one or an existing one with new elements, differs according to the Member State concerned.

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<sup>2</sup> Directive 2001/77/EC Directive on Electricity Production from Renewable Energy Sources

<sup>3</sup> Directive 2010/31/EU of 19 May 2010 on the energy performance of buildings

<sup>4</sup> Cedefop: Skills for green jobs: European synthesis report

Cedefop's study also argues that many of the skills needed for low carbon jobs can be found in existing occupations. A definition of skills suitable for a green job doesn't really exist and would be moreover artificial.

The AIE is convinced that qualification in the electrical contracting sector already covers a very high proportion of the required skills because electrical and related services already are expected to be designed and installed in ways that respect the need for safety, energy efficiency and energy saving. The sector is already adapting to developing technologies.

Emphasis should be placed on improving current skills and facilitating their continued development in the light of technological change rather than developing new curricula and training mechanisms labelled as providing so-called new "green" skills.

Together with its 19 national member associations, the AIE - the European Association of Electrical Contractors - is absolutely committed to the EU's 20-20-20 targets and fully supports the Commission's initiatives to achieve these.

Both **buildings and electrical energy efficient measures** have been identified as crucial by the EU in this respect.

The AIE therefore acknowledges and welcomes the different EU initiatives and policies regarding energy saving measures.

The AIE equally recognises that good basic qualification is of high importance in a technological highly developing market and that one of the problems which hampers the development of the energy efficiency is the shortage of engineers, electricians and other high-skilled personnel who can design, produce and install advanced technologies.

Competent electrical energy efficiency advisors need to understand complex technologies and reach end -customers with a detailed knowledge of possible cost effective solutions. Training, education and experience of the new technologies, whether for installation, advice or audit, needs to be gained. This is a natural extension of the contractor's traditional skills and scope of work.

The educational and training systems of the member states do however differ considerably from one another.

Recognising that continuous up-skilling and awareness-raising of both installers and customers is needed, the AIE offers the following comments from an installers' perspective with the aim of ensuring that the existing skills and competences in the sector, which includes companies of all sizes, the majority being SMEs, are not ignored or under-valued.

Rather they should be recognised and used as a highly cost effective instrument to implement the Union's energy efficient solutions.

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## **AIE position concerning qualification and certification**

Contractors throughout Europe are required to demonstrate their ability to be responsible for, and to perform, electrical work in different categories.

Various national schemes exist for that purpose, based on the need of authorities or clients to specify systematically the minimum requirements for safe and effective installation.

The number of such schemes is increasing, and they differ considerably in content and method of operation.

These schemes typically relate to the companies – “certification” – although this is sometimes confused with the separate but related issue of “qualification” of the individuals that work for the companies. The AIE believes that while certification schemes can be effective and appropriate, they can also represent an additional burden for contractors, the reduction of standards and the fragmentation of the industry into specialist niche market segments, leading to a loss of efficiency and effectiveness, increasing costs and undermining especially the small business infrastructure of the Community.

AIE aims to ensure that certification schemes are:

- Introduced only when proved necessary
- Designed to take appropriate cognizance of the existing vocational systems and training practices that are recognised by the sector in the respective Member States
- Designed specifically to avoid duplication of proofs of competence to deliver functionality and safety that are already achieved by other methods
- Designed to minimise cost, whether financial or in terms of time, to the contractor.

Present national arrangements aimed at ensuring competence, quality and safety in electrical installations reflect different national traditions and basic conditions of business. They differ considerably from Member State to Member State.

Such schemes are however referred to in general terms in EU initiatives, for example, the Directive on Renewable Energy and the proposed Directive on Energy Efficiency.

This has proved to be a source of confusion because the Directive texts have been interpreted differently by individual Member States according to their traditions.

In some Member States the qualification requirements of individuals may be judged sufficiently robust to comprise, alone, sufficient criteria for certification of the enterprises for which they work.

AIE believes that it would be impracticable to harmonise or force an identical approach to qualification in all Member States, and that the Commission’s approach to certification should be taken at “framework” level and be flexible, honouring existing National approaches and taking care to avoid confusion.

One key step should be to resolve the ambiguous language common in recent legislation, for example, the Directive on Electricity Production from Renewable Energy Sources and the proposal for Directive on energy efficiency. The Commission has used the words “qualification” and “certification” in a way that does not sufficiently recognise the distinction between them. This has resulted in the legislation being interpreted in different ways by

certain Member States and the loss of some established schemes which were important to the safety of consumers. The same wording is now used in the proposal for a Directive on Energy Efficiency Directive.

Another important requirement, as implied above, is that the Commission should fully recognise, as the core requirement for certification, the huge importance of sector-recognised schemes to qualify individuals as competent.

The Commission should ensure that the relevance of all-round electrical installation competence to the installation of renewable and energy-efficient technologies is recognised, and that certification schemes do not allow dangerous "short-cuts" to be taken.

In other words, the Commission should recognise the demonstration of competence implicit in traditional national training schemes for electrical operatives and, furthermore, the risk that unless the Commission is watchful, certification schemes for companies as competent to install specific technologies may not require what we believe to be essential levels of basic competence on the part of employees. The Commission should also ensure that contractors of proven competence are not asked to duplicate that proof in order to qualify under several fragmented schemes.

We propose as follows:

#### 1. Definitions

In order to avoid confusion, we recommend that the following definitions be adopted for all future legislation and updates of existing legislation in this field, and that their use by Member States be encouraged.

"Certification" shall mean the process by which companies are quality-checked or authorised to work in particular disciplines and are issued with a certificate or other document to this effect.

"Qualification" shall mean recognition of the achievement of competence by individuals, whether by training and/or experience, as required by the appropriate national regimes.

#### 2. Principles for EU policy

AIE recommends strongly that the Commission should recognise that the education and training, qualification and certification systems of the Member States are sufficiently different from one another to make harmonisation impracticable and potentially undesirable, in that it could threaten some very effective systems already in place.

Member States should therefore remain free to determine the best means of ensuring the competence of contractors in respect of the functionality and safety of sustainable technologies and of electrical installations in general, subject to provisions as follows:

- i. They should recognise that a fundamental requirement in ensuring quality and safety of electrical contractor services is a high level of education of individuals. Even for

highly specialised market segments, a good general basic knowledge as an electrician is essential.

- ii. They should acknowledge that certification of companies' competence in general electrical installation may subsume a majority, if not all, of the competences required to install specific renewable technologies. They should carefully avoid the imposition of duplicative schemes that impose nugatory cost on the contractor.
- iii. They should require that company certification schemes, where these are necessary and appropriate, require levels of qualification for operatives, supervisors and managers that are recognised by the national installation sectors, as discussed below.

It follows that the schemes should be developed in close association with the representative bodies and trade associations for the sectors.

- iv. Financial incentives or subsidies should be granted for works carried out only by competent contractors companies. This will enhance customer awareness and help avoid the danger to customers which arises when competent contractors are underbid by competitors who are inadequately qualified or of otherwise unproven competence.

### 3. Principles of Qualification of Individuals

Competence through qualification of individuals is the bedrock of safety and quality in the work of contracting companies.

For the electrical, electro technical and electronic contracting companies it is of course of vital importance to have qualified and competent workers as such workers provide the companies' main resource to deliver safe, top-quality electrical installations to the customer.

Responsible electrical contractors recognise this and have a strong commitment to good basic education and continuous upskilling of their experts. Continuous upskilling is needed to keep up with technological developments in, for e.g. energy and efficiency services, decentralized energy production systems, home automation and ambient assisted living and smart grid application, as well as related developments like electric mobility. As the complexity of technology rises, however the quality of basic electrical training remains critical to overall competence and the ability to see the electrical and building system as an integrated whole. Such integration will be a key to the sector's future success.

The challenges of new technology cannot be managed by fragmenting qualifications and promoting knowledge of only parts of the electrical and building system.

Electrical contractors are, in general, committed to high standards of individual competence; and in many countries and regions, vocational training is based on strong contractor involvement and cooperation between national authorities and companies, with resulting high standards and efficiency. We perceive a risk that European measures could unintentionally harm these existing arrangements

The Commission should therefore encourage the recognition of national standards established with the support of the respective sector stakeholders and trade associations.

#### 4. Principles of certification of companies

AIE recognises that certification of companies competent to perform general installation work may be desirable, in countries where no recognised competence scheme for companies exists. It can help enhance quality and competence in the sector, and improve the image of the sector.

Requirements for schemes to certify competence in installing individual technologies, if required at all, must be integrated with the schemes for general electrical competence and avoid duplication. Unnecessary multiplication and redundancy of schemes must be avoided.

In summary, therefore, Member States should be encouraged to adopt the following principles:

- i. All certification schemes should require appropriate qualification of individual employees.
- ii. All certification schemes should be designed to ensure that companies are not required to duplicate proofs of competence already demonstrated.
- iii. All schemes should pay proper regard to companies' administrative burden and other costs. Any internal quality control systems should be proportionate and flexible.

#### 5. Principles of free movement of companies and labour

AIE supports the fundamental importance of ensuring the free movement of workers and business across the borders of Member States. All legislation should be drafted so as to be compatible with this; however, the Commission should aim to ensure that such legislation, for example the Services Directive, is not used to remove existing measures which are already contributing to the achievement of essential safety levels within individual states (such as in Spain and Luxemburg). AIE recommends that the Commission should give guidance to Member States to prevent this occurring.