



EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR ENERGY

Directorate C - New and renewable sources of energy, Energy efficiency & Innovation
C.3 - Energy efficiency of products & Intelligent Energy – Europe

Brussels, 13th December 2010
M/479 EN

MANDATE TO CEN, CENELEC AND ETSI FOR ELABORATION OF STANDARDS REGARDING ENERGY AUDITS

1. BACKGROUND

1.1. Legal Basis of the Mandate

This mandate relates to Directive 2006/32/EC of the European Parliament and of the Council on energy-end use and energy service and to measures implementing this Directive for which a Harmonised Standard(s) should be developed.

1.2. The aim of the Mandate

The aim of the mandate is to create European harmonised standards on energy audits. Article 12 of Directive 2006/32/EC provides for the obligation of the Member state to ensure high-quality energy audit schemes which are designed to identify potential energy efficiency improvement measures and which are carried out in an independent manner, to all final consumers, including smaller domestic, commercial and small and medium-sized industrial customers. The standard should support the member states to design energy audit programmes or anyone undertaking an energy audit carried out in relation to energy use in buildings, processes or transportation. According to the definition of energy audit provided in the Directive 2006/32/EC the energy audit should provide adequate knowledge of the existing energy consumption profile of a building or group of buildings, of an industrial operation and/or installation or of a private or public service, including public transportation, identify and quantify cost-effective energy saving opportunities, and report the findings. The harmonised European standard(s) should cover these requirements.

2. DESCRIPTION OF THE MANDATED WORK

The Commission requests CEN, CENELEC and ETSI to elaborate a reliable, accurate and reproducible European standard(s), which takes into account the generally recognised state of the art, and/or adopt or adapt existing European and International standards for energy audits, laying down common aspects of the auditing process and the outcomes of this process with a view of conceiving an energy audit methodology..

The standard should cover all forms of energy carrier and conversion, including in its scope the energy services, and it applies to any energy audit carried out in relation to energy use (e.g. buildings, processes and transportation).

Benefits of a standard on energy audit:

- Reduce uncertainties related to: expectations, objectives and terminology
- Important tool to stimulate investments in energy savings
- Contributing to a fair competition of auditors in the internal market
- A tool for designing energy audit methodology and energy audit programmes
- Reduce risk of energy efficiency investments
- Ensure customer confidence in the outcome of the energy audit

The standardisation tasks covered by this mandate are as follows:

General part

Define horizontal aspects of energy auditing:

- *Definitions of terminology*: definitions of the terminology used with regard the energy audit activity and methodology should be developed - Define relevant concepts related to energy audit - audit, auditor, the legal or physical person commissioning the audit – the client -, installation to be audited, etc.

- The definitions should be *understandable* for policy makers and market actors

- The standardization work should address *minimum requirements relating to the quality of the auditing process*– identifying minimum requirements of the necessary processes in order to obtain through energy audit the existing consumption profile [...], identify and quantify cost-effective energy saving opportunities and report the findings (as defined in the ESD).

- Taking in consideration the state of the art in Member States, *minimum requirements of qualification of an auditor* (in terms of the level of training) should be part of the standardization work.

- Standardization work should cover *general requirements* covering the auditing service, information and disclosure, quality and objectivity of the audit results

- Energy audits should deliver cost effective solutions upon which an investment decision could be made. The audit shall *facilitate the financial decisions* linked to improve energy efficiency, and therefore it shall contribute to identifying the financial costs and benefits and the associated risk and the risk mitigation strategies.

-The energy audit standards shall describe a reliable and relevant harmonised methodology: (i) to identify potential energy efficiency improvements for domestic, commercial, public and industrial customers; (ii) to define common indicators to get comparable results in order to allow benchmarking of the strategies of improvement of energy efficiency.

Sectoral parts

Standardization work on energy audit covering only general aspects of all sectors would yield a broadly drafted standard which might be of no practical use. Therefore standardization work should be broken down on 3 sectors.¹

Buildings

Energy audit carried out in relation to buildings (building structure and fabric, heating, cooling, ventilation and air conditioning, hot water, light and lighting and other building services and their associated controls, renewable energies and co-generation or tri-generation) covering all forms of energy carrier and conversion. The audit should cover individual equipment and also more complex systems and the building as a whole, in order to identify system level opportunities to improve efficiency and implement renewable energy sources. In particular attention shall be paid to the current or future use of the building (e.g. user behaviour, operational hours, etc.). Reference to the CEN standards developed in the frame of the Energy Performance of Building Directive (EPBD) shall be made (Note that EPBD distinguishes major renovation and other energy relevant "anyway" renovations from separate energy renovation activities in the audit to judge investment for reduction of energy consumption). It applies to commercial and public buildings as well as to residential buildings.

Processes

Energy audits carried out in relation to industrial processes, systems and equipment will apply to commercial, industrial and public-sector organizations and includes common systems and utilities such as motor systems, pumps, compressed-air and steam systems, boilers and self-generation systems. Reference to the CEN standards on energy management shall be made.

Transport

Energy audits in the transport sector would cover all forms of energy carrier and conversion, means of transport (private vehicles, heavy duty vehicles, including buses, trains, etc). The audit shall also be applicable to transport systems (e.g. a city public transport system, a taxi service, etc.) including logistics.

3. EXECUTION OF THE MANDATE

CEN, CENELEC and ETSI are requested to communicate to the Commission, within 2 months as of the acceptance of this mandate, a work plan for the execution of the above mentioned standardisation tasks, indicating the standard(s) requiring revision or amendment, and the new standard(s) that would need to be developed, if any.

CEN, CENELEC and ETSI are requested to communicate to the Commission within 6 month as of the acceptance of this mandate a report on the state of the art of the energy audit methods and programmes in Europe comparing it with international best practices.

¹ The sectoral approaches should be compatible allowing for the integrated assessment of industrial sites consisting of buildings and processes.

The report should also contain a list of incentive measures in force in support of the realisation of energy audits in EU Member States.

CEN, CENELEC and ETSI are requested to communicate to the Commission after 10 months from the acceptance of this mandate an interim report on the progress of the tasks set out in this mandate, indicating any eventual difficulties encountered and communicating details of any Standard(s) that has been taken into consideration and modified to answer to the needs of the Mandate.

CEN, CENELEC and ETSI are requested to provide, in the three working languages of the ESOs, a copy of the standard(s) developed under this mandate **within 36 months** of the acceptance of the mandate.

CEN, CENELEC and ETSI are requested to forward the titles of the standard(s) developed or adapted under this mandate in all the official languages of the European Union.

CEN, CENELEC and ETSI are requested to draw up the work plan and execute the above mentioned tasks in close cooperation in order to ensure consistency and avoid overlapping standards.

Wherever possible the tasks should be executed within the framework of the Vienna and Dresden Agreements with a view to duly take into consideration the activities already done or in process at international level.

Acceptance by CEN, CENELEC and ETSI, as applicable, of this mandate starts the standstill period referred to in Article 7 of the Directive 98/34/EC of 22 June 1998 (Of N° L 204/37 of 21 July 1998).

4. BODIES TO BE ASSOCIATED

As appropriate, CEN, CENELEC and ETSI will invite the representative organisations of consumers' interests (ANEC), environmental protection (ECOS), workers (ETUI-REHS) and small and medium-size enterprises (NORMAPME) to take part in the standardisation work.