

CENELEC/TC or SC 100X	Secretariat Germany	Date 2012-11-22
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**TC title: Audio, video and multimedia systems and equipment and related sub-systems**

## **A Background**

CENELEC TC 100X (CLC/TC 100X) was established in 2012 following the restructuring of CLC/TC 206. It comprises:

CLC/TC 206 (Ecodesign aspects).

TC 100X has absorbed the Ecodesign part of TC 206 as well as focusing on the IEC/TC 100 TAs (Technical Areas) except Technical Area 5.

The role of TC 100X is to develop standards at the area of audio, video and multimedia systems and equipment based on the work carried out by IEC TC 100 as well as any European requirements.

Please see Section F for a link to the TC 100X web page for the most recent version of the scope of the TC.

## **B Business Environment**

### **B.1 General**

With the advent of digital technologies and convergence between consumers, IT and communication industries, interoperability between consumer and professional markets are ever more important.

The AV entertainment market has expanded by moving from analogue to digital technologies, at the same time it is moving to High-Definition and Ultra definition TV and storage technologies (DVD, BD). Furthermore the 3D TV technologies and content have been working their way into the market place. In addition personal/portable devices such as tablets, e-books etc. have entered into the market.

CLC/TC 100X is to ensure that the work programme is based on European needs and legislative framework.

### **B.2 Market demand**

With the market size of over 100 Billion Euro, the AV market is on the rise based on year-to-year growth results over the last few years. This is more evident than before with the advances of technology and diversity of the AV systems and services. It is essential that the equipment and systems are interoperable and can be connected. The users and consumers cannot easily resolve the incompatibilities. Thus standards are essential to address both consumer and professional systems and equipment.

Major companies worldwide marketing AV products, to name a few are, Appel, Fujitsu, Fuji-Xerox, Haier, Hitachi, HP, Intel, JVC, Kenwood, Mitsubishi-Electric, Nokia, Panasonic, Philips, Pioneer, Samsung, Sharp, Sony, Toshiba, TP-Vision which will use standards to develop products.

TC 100X will produce standards based on the work of IEC/TC 100, European Mandates such as M/477, M/495, and M/451 as well as specifications developed by fora or consortia.

### **B.3 Trends in technology**

Advance in display technology, storage capability, content format are significant changes in technology which will enable new AV and multimedia services and equipment. The move from hardware based to software based development plays an important role in the future of AV systems and equipment. This will provide the capability of access to content and services anywhere anytime and in any place.

The development of 3D technology and its variation will enable users and consumers to experience new content.

The access to broadband will bring the Connected TV closer to reality with reach services and products.

Energy efficiency and inclusion are the key stone of current EU policy and to this end technology advance has provided the means to achieve the reduction of energy for AV system. The advances in conversion technology such as Text-to-Speech and others has provided the means to support the inclusion policy set forth in EU.

## **B.4 Market trends**

Standardisation of AV and multimedia system will continue as new technologies find their way to products. These are related to 3DTV, new broadcast technologies, connected TV and its services, rich content. However the new trend in standardisation such as environment, energy efficiency and accessibility are on the increase and standardisation with respect to regulatory framework is required.

## **B.5 Ecological environment**

Ecological considerations are of an importance in audio, video and multimedia systems. The reduction in CO<sub>2</sub> and energy efficiency consideration will influence the future of audio, video systems.

CLC/TC 100X will address the energy efficiency and environmental aspects through its consideration of EU mandates such as M/477, M/495 and M/451.

## **B.6 Involvement of societal stakeholders**

CLC/TC 100X will strive to involve the societal stakeholder through liaison with such organisations as:

EDF (European Disability Forum),

ANEC,

ECOS,

EBU (European Blind Union),

European Union of the Deaf,

as well as industry trade associations.

## **B.7 Involvement of SMEs**

CLC/TC 100X will strive to get SMEs involvement in the activities and projects of the committee through National Committee participation or liaison with NORMAPME.

## **C System approach aspects**

CLC/TC 100X can be considered as product committee, however, due to interconnectivity and ubiquitous networking, CLC/TC 100X also considered as system committee. CLC/TC 100X will plan to build relation with other CENELEC technical committee such as CLC/TC 205, CLC/TC 209, CLC/TC 59X as well as ETSI and IEC as and when necessary.

## **D Objectives and strategies (3 to 5 years)**

CLC/TC 100X aims to enrich the life of Smarter Consumers through smarter devices and richer media content anywhere any time any place. To this end CLC/TC 100X will focus on providing the necessary standardisation and adoption of specifications.

The energy efficiency and reduction of CO<sub>2</sub> is one of the focal point of EU policy, to this end TC 100X will focus on energy usage and energy reduction for AV and multimedia systems and equipment.

The demand for accessibility is growing, CLC/TC 100X will consider the accessibility from the European perspective and European mandates for AV and multimedia systems and equipment. CLC/TC 100X will also consider the development of standards based on European mandates for environmental aspects.

CLC/TC 100X will continue to support the adoption/harmonisation of IEC/TC 100 standards related to its work.

## **E Action plan**

To achieve the above objectives, CLC/TC 100X is organised into two categories:

- WG: Working Group responsible to carry out the project task,
- Focus Area: will carry out study and development of the requirements for a specific topic which is identified by CLC/TC 100X. After the initial study, the activity will be carried out by Working Groups.

The following activities will be transferred from CLC/TC 108X to CLC/TC 100X:

- CLC/TC 108X 'Safety of electronic equipment within the fields of Audio/Video, Information Technology and Communication Technology' to transfer all environmental issues to CLC/TC 100X.
- The JWG between CLC/TC 59X and CLC/TC 108X to be converted into a JWG between CLC/TC 59X and CLC/TC 100X.

WG1: Working towards mandates regarding Environmental aspects at Mandate M/451 Power consumption measurement and Mandate M/477 TV and Set top Box energy efficiency.

3 Focus Groups have been created respectively are under consideration; these are:

a) Focus Area 1: Energy efficiency:

Measurement methods for power consumption and energy efficiency are essential to define and improve the status quo, also for audio, video and multimedia systems and equipment, related sub-systems and of networked multimedia equipment. In networked environments system interfaces and management protocols need to support settings which allow energy efficient multimedia service delivery.

To this end TC 100X Focus Area 1 will consider how energy efficiency will impact the AV and multimedia systems and equipment.

b) Focus Area 2: AAL (Ambient Assisted Living):

The European population is aging rapidly and it is expected that by 2020 25 % of population will be over 65 years old (according to studies of the European Commission). Ambient Assisted Living will bring comfort and assistance to the life of European senior citizens by enriching their lifestyle. To this end CLC/TC 100X Focus Area 2 will consider how the Ambient Assisted Living will impact the AV and multimedia systems and equipment.

c) Focus Area 3: Connected Home (under consideration).

## **F Useful links to CENELEC web site**

TC home page giving access to Membership, TC/SC Officers, Scope, Publications, Work programme [password-protected area].

[http://www.cenelec.eu/dyn/www/f?p=104:7:2463643863585428::::FSP\\_ORG\\_ID,FSP\\_LANG\\_ID:10824,25](http://www.cenelec.eu/dyn/www/f?p=104:7:2463643863585428::::FSP_ORG_ID,FSP_LANG_ID:10824,25)

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