TC 205_SBP_14-06-2024

BUSINESS PLAN

CENELEC/TC or SC	Secretariat	Date
TC 205	DE	2024-06-14

Please ensure this form is annexed to the TC Report to the CENELEC Technical Board if it has been prepared during a meeting or sent to CCMC promptly after its contents have been agreed by the Committee by correspondence.

TC or SC title: **Home and Building Electronic Systems (HBES)**

A Background

TC 205 Home and Building Electronic Systems created 1996 to produce horizontal standards for all aspects of home and building electronic systems to ensure integration of a wide spectrum of control applications and the control and management aspects in and around homes and buildings, including the gateways to different transmission media and public networks.

Scope:

To prepare standards for all aspects of home and building electronic systems in relation to the Information Society. In more detail: To prepare standards to ensure integration of a wide spectrum of control applications and the control and management aspects of other applications in and around homes and buildings, including the gateways to different transmission media (cabled and wireless) and public networks taking into account all matters of EMC and electrical and functional safety and cybersecurity. TC 205 will not prepare device standards but the necessary performance requirements and necessary hardware and software interfaces. The standards should specify conformity tests. TC 205 will perform the work in close co- operation with relevant CENELEC TCs and those in CEN and ETSI.

International aspect:
The mirror in IEC is to TC 23
WG 12, IEC SC 23K WG 3
TC 205 protocol standards are adopted by ISO-IEC JTC1
SC 25. IEC JAG TC23-TC34

B Business Environment

B.1 General

Homes and buildings are becoming ever more complex in terms of electronic systems and connected products and services. At the same time these systems are providing a growing market for products and services into homes and buildings. Such services support energy management, smart meters and grids, security systems, assistive living and health systems and ultimately the wellbeing of people at home.

As part of this growing market manufacturers require a wide spectrum of standards which support these systems, services and products in an interoperable range of supporting standards.

The role CENELEC TC205 is to manage or deliver a set of standards in this area and support the growth of Europe by homes and buildings reliably using a wide range of valuable products and services.

B.2 Market demand

The rapid advance of technology, as intelligence and connectivity is incorporated in products and services of the smart home, is driving the demand for standards for HBES to ensure the interoperability and functionality of these devices and systems.

The market for Smart home systems and products can only grow rapidly where HBES
standards are made available to support
it.

HBES manufacturers and product Committees shall use the standards produced by TC 205.
EN 50491 Home and Building Electronic Systems, HBES and Building Automation and
Control Systems (BACS) series (Listed under the LVD, EMC and RED directive).
This standard series will be replaced according to the DOW dates by the standards of IEC EN 63044 series resulting from the Frankfurt agreement.

EN 50090 Home and Building Electronic Systems (HBES) series

Work is in progress to cover requirements from Mandates
M/441 smart meter
M/490 standardization mandate for Smart Grid deployment

B.3 Trends in technology

Technology advance is acting on products and services for the home in many ways; the processing power and functionality of devices is rapidly growing and supporting widespread connectivity; the size and cost of devices that provide the processing ability, is falling equally quickly and this is allowing almost any electrical using device to become an intelligent device in the home.
These technology advances are making possible massive increases in the overall functionality of home systems but also in their complexity. Standards to manage this complexity are essential.

Increasing connections from the House to external networks based on broadband networks running IP would imply development of interoperability among existing and future systems.

IT security, also known as cybersecurity, and data protection topic is getting more in the focus for the HBES system and products.

B.4 Market trends

It is widely acknowledged that Home Electronic Systems such as those that manage services to the home and deliver information have a high degree of interoperability within their own specifications and working environments and provide interoperability internally for their component devices and networks.

There will be many environments associated with both commercial and domestic premises and business processes that will employ different and multiple systems and protocols for which interoperability strategies will be required.

It is noted that mandates Smart Metering M441 and Smart Grid M490 call for intelligent control systems for energy management in buildings.

B.5 Ecological environment

Energy management will be used for energy savings ensuring TC 205 conforms to Mandate M/480 – Energy performance of buildings
Mandate M/490 – Smart grid deployment Mandate M/511 – Low voltage directive (LVD) Mandate M/552 - Electromagnetic compatibility (EMC)
Ecodesign Directive 2009/125/EC - Preparatory Study for Building Automation and Control Systems (BACS); Lot 38
Ecodesign Energy Smart Appliances (former Preparatory Study on Smart Appliances; Lot 33)

B.6 Involvement of societal stakeholders

Liaison with ANEC, European Commission and ECOS

B.7 Involvement of SMEs

Contacted SBS and under discussion

C System approach aspects

By its very definition Home and Building Electronic Systems is a systems approach and about systems, their interworking methods, their components, elements and scope. TC205 standardizes different systems within its scope and is working towards ensuring their interoperability in the Smart home. HBES/BACS integration of security, alarm intrusion, access control, video surveillance, intercom system may be subjected to specific requirements.

List of registered liaisons

CLC TC 13 Equipment for electrical energy
CLC TC 23 BX Plugs and socket-outlets and switches for household and similar fixed electrical installations
CLC TC 34 Lamps and related equipment
CLC TC 57 WG 21 Power system management and associated information exchange
CLC TC 72 Automatic controls for household use
CLC TC 79 Alarm systems
CLC TC 108X 'Safety of Information Technology equipment
CLC TC 210 Electromagnetic Compatibility (EMC)
CLC TC 215 Electrotechnical aspects of telecommunication equipment
CLC TC 219 Network based on mains (former TC205A)

CEN/CLC -ETSI Coordination Group on Smart Grids (CG-SG)
CEN/CLC RED Delegated Act on Cybersecurity - SRAHG
CEN/TC 169 Light and Lighting
CEN/TC 247 Controls for Mechanical Building Services
CEN/TC 294 Communication systems for meters
CEN/TC 371 EPB Project Group
CEN/TC 442 BIM
CEN/CLC JTC 13 Cybersecurity and Data Protection

IEC TC 23 WG 12 Home and Building Electronic Systems (HBES)
IEC TC 23 JAG13 TC 23 - TC 34 linked to TC 34
IEC SC 23K WG 3 Customer Energy Management Systems
IEC SyC Smart Energy

ISO/TC 205 Building Environment Design
ISO/TC 274 Light and lighting

ISO/IEC JTC 1 SC25 WG1 'Home electronic systems'NEC European consumer voice in standardization
Digital Europe
European Commission
ECOS Environmental organization worldwide specialized in standardization
KNX
ANEC

D Objectives and strategies (3 to 5 years)

TC 205 aims to enable a horizontal model for applications and services creating a set of recommendations that covers issues such as

- Interoperability
- Data privacy
- IoT
- Artificial intelligence
- Cybersecurity
- BIM
- Energy management
- Cyber Resilience Act (CRA)

TC205 is in the contact with ETSI Smart M2M committee which is hosting SAREF.

E Action plan

TC 205 has distributed the work to working groups:

JWG GTR Home and building automation and control systems - General safety requirements and environmental conditions **/ Dormant**

WG 02 Standardization structure

WG 03 General safety requirements and environmental conditions **/ Dormant**

WG 05 Residential gateways guidelines for connection to other networks **/ Dormant**

WG 08 Planning, design and installation of HBES **/ Dormant**

WG 13 R205-012 Guidelines on requirements for functional safety of products intended to be integrated in a home control system **/ Dormant**

WG 16 Smart Metering - Application Specifications - Simple External Consumer Display

WG 17 Definition of levels for HBES installations **/ Dormant**

WG 18 Smart grids

WG 19 Adhoc group on Energy management ontology

WG 20 IT security and data protection

WG CAG Chairman's advisory group (WG 02 is actually holding this role)

Adhoc group 'SR Cyber' (former SRAHG - Joint working group between CEN/CLC /ETSI)

F Useful links to CENELEC web site

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

https://www.cenelec.eu/dyn/www/f?p=104:7:723344744827501::::FSP_ORG_ID:1258281

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Secretary TC 205