



IEC/TC OR SC:	SECRETARIAT:	DATE:
TC 11	ZA	2019/10/17

Please ensure this form is annexed to the Report to the Standardization Management Board if it has been prepared during a meeting, or sent to the Central Office promptly after its contents have been agreed by the committee.

**A. STATE TITLE AND SCOPE OF TC**

**OVERHEAD LINES**

Are there any new or emerging trends in technology that will impact the scope and work activities of the TC? No.

Do you need to update your scope to reflect new and emerging technologies? No.

The Scope remains:

To prepare International Standards for Overhead Lines above 1 kV AC and 1.5 kV DC Nominal Voltage, excluding railway traction supports and line materials.

These Standards will provide design criteria that may serve as a guide to national regulations differing from each other only in the local conditions and in the assumed safety level.

These Standards will deal with mechanical loadings and strength of the line, with clearances and with tests on supports, fittings and foundations.

Including design requirements for supports and foundations to be able withstand the required mechanical loadings.

Excluding Recommendations dealing with tests on conductors and insulators established respectively by Technical Committees Nos 7 and 36.

**B. MANAGEMENT STRUCTURE OF THE TC**

**Joint Working Group**

TC11/JWG13 IEC 61284 – Requirements and tests for fittings inked to TC 7

**Maintenance Teams**

MT1 Maintenance of TC 11 documents

MT2 Maintenance of IEC 466 Parts

TC 11 reviewed its management structure at the Plenary Meeting held in Milan 17 October 2019

### **C. BUSINESS ENVIRONMENT**

In developing countries, there are many new overhead line constructions, in contrast to other countries, especially the developed countries where new constructions have slowed and older overhead lines have started reaching the end of their life cycle, and may need refurbishment. On account of the reduced rate of new construction in developed Country there is the need to increase transmission capacity of existing OHLs. Solutions are the replacement of existing conductors with high temperature conductors, use of RTM (Real time Monitoring) systems, use of probability based ratings, voltage uprating, use of HSIL lines and AC to DC conversion of lines. There is also the challenge of reducing the environmental impact of overhead lines both from an aesthetic impact and minimization of electric and magnetic fields.

In addition to the primary aspect of transportation of electric power, the safety of workers involved in the erection and maintenance of overhead lines has to be taken into account.

With the increased interest in HVDC (and EHVDC) transmission lines TC 11 needs to ensure that publications issued are relevant to the needs of both the AC transmission and DC transmission communities.

### **D. MARKET DEMAND**

The customers for standards developed by TC 11 are electricity utilities, T&D Companies, manufacturers, test laboratories, overhead line contractors and designers.

There is some duplication of work by CENELEC, however CENELEC have signalled that they do not regard harmonization as a priority (also in account of the recent modifications introduced in the new edition (2012) of EN 50341-1 with direct references to Eurocodes).

### **E. TRENDS IN TECHNOLOGY AND IN THE MARKET**

The increased interest in EHVDC transmission and possible increase in AC transmission voltages (also by conversion of existing AC lines). The replacement of existing conductors with High Temperature Low Sag conductors. The adoption of innovative supports solutions. New technologies in the construction of overhead lines. The design of high surge impedance lines and bundle expansion (BEX) Reducing the cost of HV DC Converter Equipment

### **F. SYSTEMS APPROACH ASPECTS (REFERENCE - AC/33/2013)**

TC 11 will actively continue to promote the establishment of liaisons with other committees. There is interdependence with committees as listed below:

TC 11 as a customer for standards of other Technical Committees.

TC 7 Overhead conductors

TC 42 High Voltage Test Techniques

TC 11 as a supplier of standards to other Technical Committees.

TC 115 High Voltage DC

TC 122 UHV AC transmission systems

Cooperation established:

Liaison officers, and experts participating in IEC TC 7, TC 36, TC 78 and TC 99 (request of liaison member)

Cooperation to be established: IEC TC 106; TC 115, TC 122

Experts working in other Technical Committees CIGRE SC B2 and CENELEC TC 11

**G. CONFORMITY ASSESSMENT**

With reference to clause 6.7 of Part 2 of the ISO/IEC directives, are all your publications in line with the requirements related to conformity assessment aspects?

Yes

Will the TC/SC publications be used for IEC Conformity Assessment Systems (IECEE, IECEx, IECQ, IECRE)?

No

Will any of your standards include test specifications, reproducible test requirements, and test methods?

Yes

Are there likely to be special conformity assessment requirements generated by any standards projects? If yes, list which projects.

No

**H. 3-5 YEAR PROJECTED STRATEGIC OBJECTIVES, ACTIONS, TARGET DATES**

STRATEGIC OBJECTIVES 3-5 YEARS	ACTIONS TO SUPPORT THE STRATEGIC OBJECTIVES	TARGET DATE(S) TO COMPLETE THE ACTIONS
Maintain the time development of TC 11 work within requested time scales	Complete the revisions of IEC 60652, IEC 61284, IEC 61854 and IEC 61897	ongoing
Keep TC 11 Standards up to date reflecting new technologies and user requirements	Review of publications that will reach the stability date within two years, assess viability, and technology changes and initiate action for revision.	Ongoing
Continue work on High Temperature fittings to IEC 61284	Established Joint WG13 with TC 7	ongoing
Coordination with Cigre for future revision of IEC TC11 standards		

Note: The progress on the actions should be reported in the RSMB.