



IEC/TC OR SC:	SECRETARIAT:	DATE:
78	France	2018

A. STATE TITLE AND SCOPE OF TC

TC 78 was established in 1975 with the scope "To prepare international standards on electrical and mechanical characteristics, as well as the reliability requirements of tools and equipment used in Live Working".

In response to market trends, the work of TC 78 was expanded in 1996 and the scope modified. In 2002, the scope was amended for editing purpose.

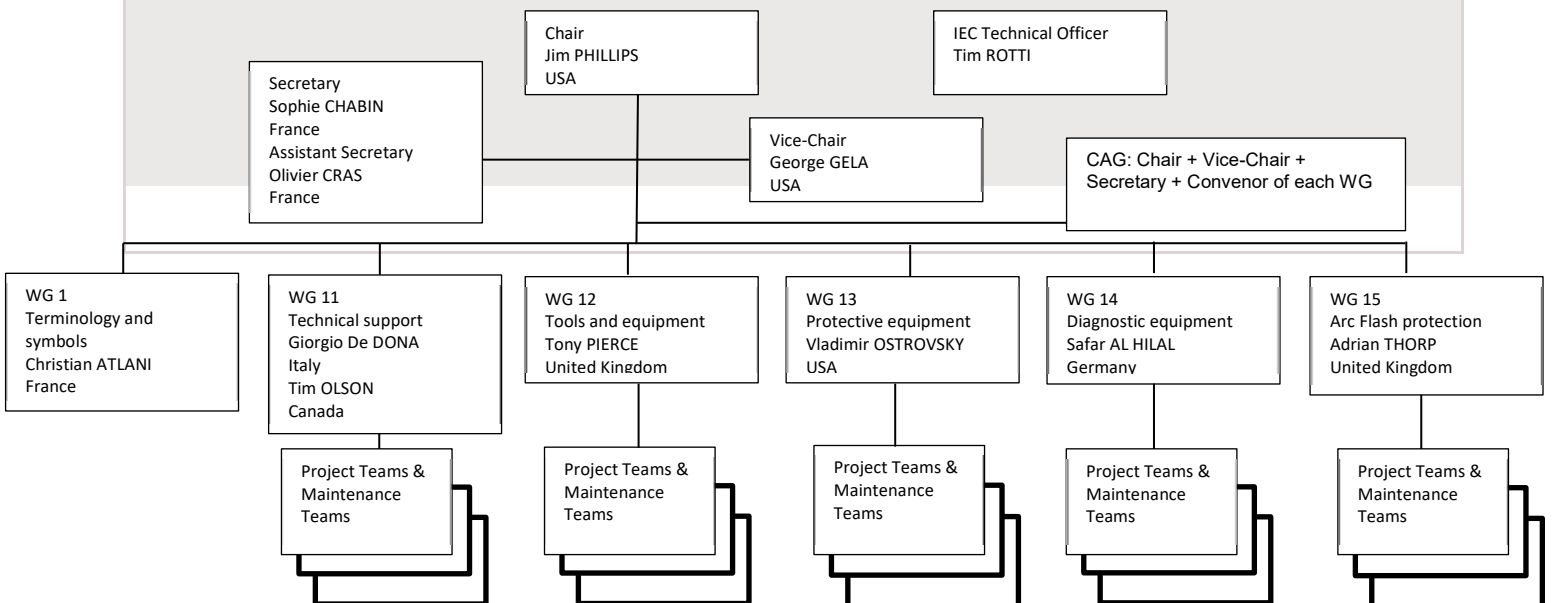
"To prepare International Standards for tools, equipment and devices for utilization in Live Working, including their performance requirements, care and maintenance.

Excluded: Work practices and methods for Live Working.

To prepare technical publications related to the utilization of tools, equipment and devices on, and in the vicinity of, live parts of electrical installations and systems."

B. MANAGEMENT STRUCTURE OF THE TC

TC 78 works are carried out by six working groups. The Chair also has a CAG that is composed of the Chair, the Vice-Chair, the secretary and the WG convenors as shown:



C. BUSINESS ENVIRONMENT

The increasing use of electricity throughout the world coupled with the rapid growth of producers, transmitters and distributors (utilities) makes obtaining power outages for maintenance more difficult. The mounting economic and environmental pressures worldwide make installation of new networks ever more difficult and require greater utilisation of existing facilities.

Live working can assist in the avoidance of outages. These outages are disruptive to electricity users and costly to both the utilities and the users in terms of loss of revenue, interruption in manufacturing, administration resources and penalties. Similarly, live working provides a means for power network operators to achieve efficiencies through cost effective preventive maintenance, improved reliability and availability without the need for an outage.

Sales statistics of tools and products for live working are not available to the Committee.

External environment (out of our control):

- regulatory constraints, live working methods and use of products which may be specific to each region or country;
- penalties for outages, congestion fees;
- difficulties to access live lines;
- difficulties to obtain outages;
- perception of increased risk of live working;
- lack of available resources and funding at some utilities.

Internal environment (under our control):

Standardization provides a means for manufacturers to produce tools, equipment and devices of similar performance and therefore create a competitive and free market environment without bias to any particular manufacturer or National regulation.

Specifying performance criteria in the standards should provide a platform for manufacturers to develop and manufacture tools, equipment and devices that improves worker safety when used in accordance with the prescribed limits without impeding innovation in technology or materials.

Live working can help realize cost savings and improve quality of performance.

D. MARKET DEMAND

TC 78 has developed and is developing a range of standards to be used by manufacturers and the support industry to produce tools, equipment and devices that contribute to safety and meet performance requirements. These standards are also used worldwide by electrical power utilities and industries for the construction, inspection, maintenance and repair of their live networks in a safe manner. Manufacturers, utilities and other bodies have been actively involved in this work.

TC78 publications are widely used at the regional and national levels, and are often adopted as national standards. They are increasingly referenced in legislation, which can have business impacts. They are also used as the basis for contracts.

E. TRENDS IN TECHNOLOGY AND IN THE MARKET

Emerging technologies require standard development process to occur at a more accelerated pace to keep up with a fast moving technology.

Increase of the nominal voltage of power installations (AC and DC).

The increasing use of helicopters, Unmanned Aerial Vehicles (UAV), robotics, asset tracking devices, DC applications, renewable energies, changes in the electrical power markets and occupational health concerns will possibly require new standards for tools, equipment and devices as new materials (high temperature conductors, different composite materials, etc.) are developed, new work methods become available and new issues arise.

Asset management changes.

Changes in practices, methods, procedures and qualifications.

Increase in the demand for arc flash protection products.

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

TC 78 has no need for a systems approach.

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? Not applicable to TC78.

Some TC78 publications are used by the IEC System for Conformity Testing to Standards for Safety of Electrical Equipment (IECEE). On October 2016, these publications were IEC 60900 ed.3, IEC 61318 ed.3, IEC 61482-1-1 ed.1, IEC 61482-1-2 ed.1 and IEC 61482-2 ed.1.

TC 78 standards include test specification, reproducible test requirements and test methods.

Are there likely to be special conformity assessment requirements generated by any standards projects? If yes, list which projects. Not applicable to TC78.

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
Increase the awareness of TC78 publications; Increase the awareness of the benefits of live working	Deliver presentations and develop papers of TC78 activities at various events (ESMO, ICOLIM, CIGRE...)	2021
Working in the presence of RF fields	To establish liaison with IEEE Std 1654	2021
Impact of new technologies on overhead lines (and on substations) like high temperature conductors	Consider the impact of high temperature on live working tools, devices and equipment.	Revise or develop standards as applicable
Live working on DC electrical installations	Monitor activities Identify gaps in current IEC standards	Revise or develop standards as applicable
Expand protection against arc flash	WG15 to evaluate additional PPE classes and additional product standards	2021
Note: The progress on the actions should be reported in the RSMB.		