

THE 17TH EDITION A BRIEF OVERVIEW

Uncovering the mysteries behind making BS7671:2008

by Geoff Cronshaw

Introduction.

This article is intended to explain briefly the relationship between the British Standard (BS 7671) and the European and International Standards for electrical installations. The article also gives a brief overview of CENELEC and IEC together with information on the work of our National Committee.

BS 7671: 2008 requirements for electrical installations, IEE Wiring Regulations 17th Edition is scheduled to be issued on January 1st 2008 and come into effect 6 months later. Technical authority for this standard is vested in a Joint IET/BSI Technical Committee JPEL/64, which is the UK National Committee for the Wiring Regulations. The constitution of the Committee includes representatives from a wide area of the electrical industry including electrical contracting, electrical manufacturers, the electricity supply industry and Members of the Institution of Engineering and Technology.

In accordance with BSI procedures a draft of the 17th Edition was issued for comment in December 2006; the closing date for comments was the 28th February 2007. The National Committee, and its Panels, are now busy examining all the comments received (approximately 2500) and making a decision on each comment. The agreed changes will then be incorporated into a revised document. It is planned that the 17th Edition will be signed off towards the end of this year and published January 2008.

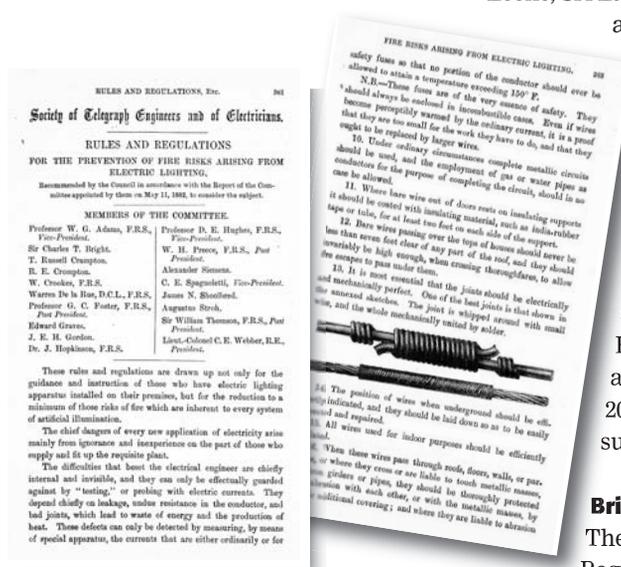


Fig. The First Edition of the Wiring Regulations, 1882

History

For over 100 years the IEE (now the IET) have been at the centre of producing standards to promote electrical safety in industry and to the public. The IEE issued their first Wiring Rules in 1882 which consisted of 4 pages and 21 Regulations. See figure above.

In 1981 the 15th Edition of the Regulations was published, under the new title Regulations for Electrical Installations. This marked a significant step towards the alignment of UK installation practices with those of the rest of the world. Its structure and detailed requirements were based closely on IEC Publication 364, Electrical Installations of Buildings.

In 1992 the IEE Wiring Regulations became a British Standard (BS 7671) and are now treated like all other British Standards. The Wiring

Regulations are based on European Standards, which in turn are based on International Standards.

The Regulations are the National Standard in the UK for electrical installations up to 1000 v a.c. or 1500 v d.c., however, they are used outside the UK in other countries including Mauritius, St Lucia, St Vincent, Sierra Leone, Sri Lanka, Trinidad & Tobago, and Uganda. Other countries

base their Wiring Regulations on BS 7671.

The IEE Wiring Regulations are non-statutory, however, they have been extensively referred to in HSE guidance over the years and are referred to in the Electricity Safety, Quality and Continuity Regulations 2002 for the electricity supply industry.

British Standards

The IET publish the Wiring Regulations in agreement with BSI which are produced in accordance with BS 0 (a Standard for Standards). BS 0 specifies the role of BSI, as the UK National Standards Body and that of the committee members in the preparation of national standards. It also defines the responsibilities of BSI as the National Standards body in its involvement with International and European Technical Committee work.

The British Electrotechnical Committee (BEC) works as an integral part of BSI. The BEC is the UK member of the International Electrotechnical Commission (IEC) and the European Committee for Electrotechnical Standardisation (CENELEC). The task of UK participation in International and European work on the Wiring Regulations has been delegated to JPEL/64 by BEC. This means that the Wiring Regulations Committee agree the UK experts who serve on European and International Working Groups.



CENELEC

BS 7671 is based on CENELEC harmonisation documents (European Standards) which in turn are usually based on IEC standards (World Standards). However, in many cases it has been found necessary to include common modifications within the European Standard in order to make the requirements suitable for application within Europe.

CENELEC, the European Committee for Electrotechnical Standardization, was created in 1973. CENELEC is a non-profit technical organisation set up under Belgian law and composed of the National Electrotechnical Committees of 22 European countries.

CENELEC's mission is to prepare voluntary electrotechnical standards that help develop the Single European Market/European Economic Area for electrical and electronic goods and

services removing barriers to trade, creating new markets and cutting compliance costs.

CENELEC publishes two kinds of standards, the European Standard (EN) and the Harmonised Document (HD). The HD and EN differ slightly. The EN must be literally transposed as it is, word for word in all CENELEC member countries, whereas, in the HD it is only the technical content that must be transposed into national standards. BS 7671, Requirements for Electrical Installations takes account of the technical intent of CENELEC Harmonization Documents.

IEC

The international electrotechnical committee (IEC) is the oldest of the international standardisation organisations. It was founded back in 1906 with the support of 7 countries. The IEC is an international non-

governmental organisation whose members are the national electrotechnical committees (like the British Electrotechnical Committee in the UK).

The IEC counts today 48 full members, 8 associate members, 6 pre-associates and is globally recognized as the provider of standards to facilitate international trade in the electrotechnical field. Unlike CENELEC's membership, however, IEC members are not required to adopt the standards issued by this body at national level.

Conclusion

The IET publish the Wiring Regulations in agreement with BSI which are produced in accordance with BS 0. Technical authority for this standard is vested in a Joint IET/BSI Technical Committee JPEL/64.

BS 7671, Requirements for Electrical Installations takes account of the technical intent of CENELEC Harmonization Documents which in turn are usually based on IEC standards. The task of UK participation in International and European work on the Wiring Regulations has been delegated to JPEL/64 by BEC. BS 7671: 2008 is scheduled to be issued on January 1st 2008 and come into effect 6 months later. Further information can be obtained from: www.theiet.org/DPC, www.bsi-global.com, www.iec.ch, www.cenelec.org ■



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