

The year as it was: a review of 2015

Wiring Matters chats to the IET Technical Regulations team about 2015 and discusses what to expect in 2016.

Mark Coles, Technical Regulations Manager

Mark is Secretary to Panel D of JPEL/64 – External Influences. Mark is also Great Britain expert to four international and CENELEC technical committees.

What was the most interesting aspect you worked on as part of Amendment No. 3?

Well, I enjoy a good technical discussion! Within committee work, everyone brings a position and/or opinion to the table and, like in any group of people, opinions differ. In the meetings it's important to ensure everyone has their say. Often, the committee naturally arrives at a consensus as the positions or arguments presented lead to a generally accepted view. Sometimes, however, there can be entrenched positions, which may lead to a voting situation. I'm sure I echo my colleagues in saying that the most interesting aspect was the development of requirements for non-combustible consumer units

In terms of your IET work, what defined 2015?

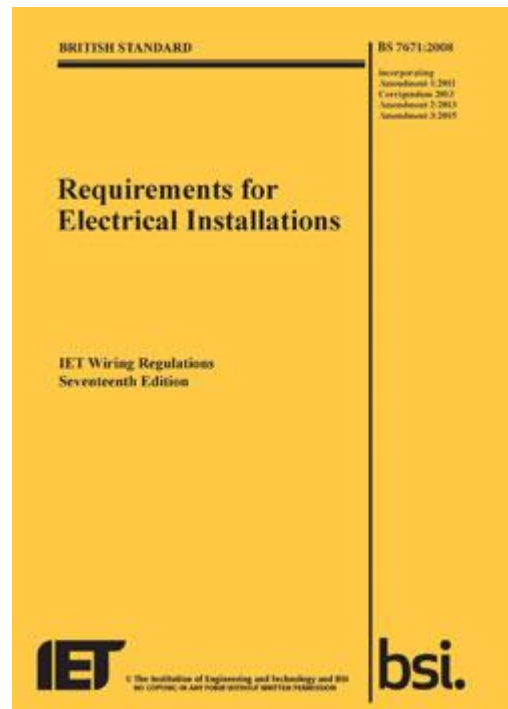
Beyond the committee work, I very much enjoyed presenting Amendment No. 3 seminars and lectures across the UK. Without doubt, the key topic has been the requirement for non-combustible consumer units. There were some stimulating debates and just when you think you've got a topic straight in your head a member of the audience can ask a question that can turn your position around.

What will you be focusing on in 2016?

The panels of JPEL/64 have a heavy workload over the next two years to track changes internationally and at European level. Great Britain, along with every other CENELEC member country, has to adopt the technical intent of European HDs to prepare documents for GB implementation. In addition, there are areas of guidance I want to focus on where technology has moved on, such as diversity; an example here is lighting circuits, where lamps of a far lower power rating than ever before are installed and electrical loadings in kitchens.

What will be of most interest to you in the 18th Edition of the IET Wiring Regulations?

We are a long way off being able to state what will and what won't be included in the next edition but one important aspect is the inclusion of 'requirements for consideration'. Historically, the IET Wiring Regulations have been very specific, i.e. RCDs shall be used in specific circumstances or a protective conductor shall be sized in accordance with Section 534, etc. What we're seeing more of is "the designer shall consider", for example, Regulation 332.2: "Consideration shall be given by the designer of the electrical installation to measures reducing the effect of induced voltage disturbances and electromagnetic interferences (EMI)". I think we'll see more of this.



Geoff Cronshaw, Chief Engineer

Geoff is Secretary of JPEL/64, which is the UK's national wiring regulations committee.

What was the most interesting aspect you worked on as part of Amendment No. 3?

I think the one area that stands out is the new requirements for non-combustible consumer units.



In terms of your IET work, what defined 2015?

Apart from the international work I found updating the IET Guidance Note 7 *Special Locations* very interesting.

What will you be focusing on in 2016?

The national committee (JPEL/64) has a full programme of work to develop the requirements for the 18th Edition. A great deal of work has been carried out at international level in areas such as surge protection, arc fault detection, embedded electric heating, energy efficiency etc. As Secretary of JPEL/64 I will be closely involved in incorporating these requirements into the IET Wiring Regulations.

What will be of most interest to you in the 18th Edition of the IET Wiring Regulations?

Incorporating the requirements for energy efficiency into the IET Wiring Regulations will be a major change and will be very interesting. Exactly how this will impact the work of designers is not yet known but could mean designers having to take account of how lighting is

controlled. Also, types of electric motors, use of motors, how energy can be saved using variable-speed drives etc. In addition, the use of metering to measure power quality, voltage levels and loads etc. Finally, ways in which power factor correction can be provided to improve the power factor of inductive loads, such as induction motors.

You're a regular contributor to Wiring Matters. What was your favourite article of 2015?

I enjoyed writing the article of shore supplies to ships. As Secretary of JPEL/18 (Ships and Off Shore Installations committee) I found this an interesting and complex area.

Leon Markwell, Senior Engineer

Leon is Secretary of JPEL/64 Panel B, Thermal Effects and attends the meetings of JPEL/64 and of the other panels. Leon also sits on BSI committees FSH/12 and FSH/12/1 covering fire alarm installations and TCT/7/2 covering the installation of IT cabling.

You returned to the IET in June 2015, how have you enjoyed being back at the IET?

I initially worked for the IET in the 1990s but when I left IET employment I retained my seats on some of the panels, so I'm not back as such as I've never really been away! I enjoy the technical discussions and the mental discipline it requires to debate a technical point and draft technical requirements.

In terms of your IET work, what defined 2015?

Really just getting back into the swing of the technical authoring work and re-establishing contact with all the engineers I'd not seen regularly for the last few years.

What will you be focusing on in 2016?

Planning for the 18th Edition of course, but I had previously been working in Facilities Management and that made me think more about operation and maintenance and areas where the IET can provide further information and guidance to industry and installers.

What will be of most interest to you in the 18th Edition of the IET Wiring Regulations?

Trying to get a set of regulations that will be helpful guidance to industry and installers and not produce more questions.



Richard Townsend, Senior Engineer

Richard is the Secretary of Panel A of JPEL/64, which covers Verification, and also attends JPEL/64 meetings and working groups. Richard also represents the IET on BSI committee CPL/061 (Safety of household and similar equipment), the ECA's Power and Technical committee, CIBSE's Electrical Services Group and The Electrical Safety Round Table.

What was the most interesting aspect you worked on as part of Amendment No. 3?

Working on the new model forms and schedules of inspections was most interesting for me, as I come from a facilities management background and certification and reporting is very important.

In terms of your IET work, what defined 2015?

Launching Amendment No. 3 was a defining moment of 2015 for me, as this required a great deal of involvement with the industry from all of us. We needed to shine a light on the changes and try to explain both why they came about and how the industry could begin to comply with them.

What will you be focusing on in 2016?

My focus for 2016 will be the upcoming changes required for the planned 18th Edition. From a Panel A perspective some of the changes could impact significantly on the way the industry operates.

What will be of most interest to you in the 18th Edition of the IET Wiring Regulations?

I'm looking forward to the possibility of incorporating energy efficiency and environmental impact within BS 7671. This is a very new concept for BS 7671 and will make the industry look very closely at how it operates and installs new installations.

Steven Devine, Electrical Engineer, Educational Sector

Steven is the Secretary to JPEL/64 Panel C Shock Protection.

What was the most interesting aspect you worked on as part of Amendment No. 3?

To me, the most interesting aspect of the work for Amendment No. 3 to the IET Wiring Regulations is the requirement for the supports used for wiring systems in escape routes. The need for this requirement is in part a result of investigations into the deaths of several firefighters in the UK where the coroner's reports concluded that the cause of death was contributed to by the equipment used by the firefighters being entangled in cable from a wiring system that had prematurely collapsed. I think this is a good example of how the IET Wiring Regulations are developed as a direct response to incidents that occur.



In terms of your IET work, what defined 2015?

In October 2015 the *Student's Guide to the IET Wiring Regulations* was published. I had been working on this publication from mid-2014 and with the help of a fantastic team at the IET and some external experts we managed to get it out and available to students across the UK this year. The *Student's Guide* is the first of many resources being produced at the IET designed for students studying to become electricians, electrical engineers and many other professions that require some knowledge of electrical installations. This is certainly the title that defined my work at the IET during 2015.

You authored the Student's Guide to the IET Wiring Regulations. What was this experience like for you?

Writing the *Student's Guide* was a fantastic experience that has given me the opportunity to reach out to a huge number of students. Having worked closely with electrical students in the past I know all too well how difficult it can be starting an electrical qualification. I have designed the *Student's Guide* in a way that provides easily accessible information to students that is relevant to the qualification they are studying as well as essential

hints and tips for working in the electrical industry.

Will you be doing any more work in this area in future?

The *Student's Guide* is the first of many publications designed for students. Our close relationship with awarding bodies and learning providers, such as Further Education (FE) colleges, will ensure that the content we produce will meet the requirements of students as well as lecturers and employers.

What will you be focusing on in 2016?

2016 will be an interesting year. Our primary focus will be incorporating any new work and changes to BS 7671 for the 18th Edition. Each of the panels has a lot of work to do to make sure we can capture as much information as possible to include in the 18th Edition. Panel C will be focusing specifically on Chapter 41 and Chapter 53. We are also looking into developing a UK requirement for foundation earthing based on existing requirements in some European countries.

What will be of most interest to you in the 18th Edition of the IET Wiring Regulations?

There is a document that is to be incorporated into BS 7671 relating to the co-ordination of electrical equipment for protection, isolation, switching and control. The Harmonised Document (HD) specifies the requirements for the selection and erection of electrical equipment for protection so that various protective devices on the same circuit function correctly and in order.

Nicole Whitton, Publishing Manager and Editor of Wiring Matters

2015 was incredibly busy for Assistant Editor Amy Walker and me, with the primary focus being the publication of the BS 7671 guidance titles. All but two were published in the same year that BS 7671 came out; the *Commentary* and the *Electrical Installation Design Guide* will be published this year. We published a new title last year, the *Student's Guide to the IET Wiring Regulations*. We want to make it easier for students to understand the fundamental concepts of their coursework. We achieved endorsement of the book's accessible language and clear illustrations from the Plain English campaign and we've received positive reviews on Amazon and on the IET Electrical Forum. We're now working on a series of videos to help students even more – please keep an eye on Wiring Matters, where we'll tell you more about these during 2016.



Speaking of our favourite electrical magazine (no bias here!), [Wiring Matters](#) has gone from strength to strength. Thank you to all our readers who have continued to support the online magazine. Subscription numbers are climbing and we receive a lot of good feedback. Our biggest challenge is to take a fairly complicated and lengthy process – the committee work behind the changes to BS 7671 – and make that process as clear and accessible to you as possible. We read the IET Electrical Forum and we know that you want more clarity about the changes to BS 7671 before they are made. We're working hard to find more ways to get information to you on a regular basis, via podcasts, videos and, most recently, the blog. Please keep checking the IET Electrical site and reading Wiring Matters online so that we can keep you informed. If you want to know when new issues of Wiring Matters are published, please subscribe and you'll get an email notifying you whenever a new issue has been published.

We have some exciting titles coming out this year, such as *Guide to Energy Efficiency*; *Guide to Consumer Units* and *Guide to Electrical Installations in Medical Locations*. We're always happy to receive non-technical questions – for example, questions about the magazine or suggestions for articles: wiringmatters@theiet.org. For any technical queries, please phone the Technical Helpline: +44 (0)1438 765599 Monday and Friday, 09.00-12.00 and 14.00-16.30 (please see <http://electrical.theiet.org/wiring-regulations/help/> for more details).