www.esc.org.uk

Issue 23 | Winter 2011/12 | £5.00

SwitchedOn

News for the industry from **The Electrical Safety Council**

ELECTRICAL SAFETY COUNCIL

Every second counts

Interlinked fire detectors can help to save lives

WELCOME

The Council has had an intense period of lobbying at Westminster and Holyrood over the last three months in support of the campaigns that we have been running.

At Westminster our main focus has been on how we maintain *Part P*, which is to be included in the consultation on the future of the *Building Regulations* for England and Wales starting in December 2011. The Council's concerns over *Part P* being watered down, or worse still scrapped, are shared by NAPIT, ELECSA and NICEIC and consumer groups such as Which? and Shelter. To this end, the ESC led a delegation to meet with Andrew Stunell, Parliamentary Secretary of State for Communities and Local Government (DCLG) to discuss these concerns.

I must say the meeting didn't confirm either way the Government's thinking, but there is no cast iron certainty that *Part P* will survive. I would urge you, therefore, to have your say about retaining *Part P* when the consultation begins in December (**www.communities.gov.uk/corporate/publications/consultations/**). This will not only benefit consumer safety but is also good for legitimate businesses as it helps to have a regulatory framework that keeps the cowboys at bay.

At the Scottish Parliament we have made progress in lobbying for the introduction of regular checks on the condition of the electrical installation in homes in the private rented sector. The opportunity to introduce electrical checks followed the launch of our Landlords' Guide in Scotland in 2010. Whilst a final decision has yet to be taken, we are optimistic that legislation will be in place during 2012 that will make it a requirement for landlords to check their tenants' electrics at least once every five years.

We continued to punch above our weight in the political arena when we attended all of the main party conferences during the autumn. Our attendance gave us the opportunity to seek cross-party support on the retention of *Part P*, discuss the important work we are doing to raise awareness amongst consumers of the benefits of using registered electricians and to gain further support for our Plug into Safety campaign.

Away from the political arena we continue to work hard to help people most in need of advice and support on electrical safety issues. In the autumn edition of *Switched On* we announced that we provided £140k of grant aid to our partners for this year's Fire Safety fund. You will be able to read in this edition (page 12) that we have just awarded £100k to home improvement agencies UK-wide to support local electrical safety initiatives in the homes of vulnerable people in our society. The Grants Scheme has real impact on people's lives and is achieved through the gift aid that we get from our trading subsidiary Ascertiva Group. It is a credit to colleagues in Ascertiva and its customers that, despite the difficult economic times, we are still able to provide a significant sum of money in the form of grants.

I hope you all have a good Christmas and let's hope that the New Year brings some respite from the harsh economic times that we have all been experiencing over the last few years.

As always, we would welcome feedback on *Switched On*, to help us improve the content. Email **feedback@esc.org.uk**

Phil Buckle Director General

ESC's Product Safety Conference success - see page 6

switchedon

issue 23 Winter 2011/12

your insight into the electrical safety industry

news

technical

Letters

I'm sure that there are many within the electrical industry that will have strong feelings about some of the issues raised in *Switched On*. So feel free to shout about them.

Please email your letters to the **Editor** of *Switched On* at: **andrewbrister@ymail.com**

ELECTRICAL SAFETY COUNCIL

features

Published by:
The Electrical Safety Council
Unit 331, Great Guildford Business Square
30 Great Guildford Street
London SE1 0HS
www.**esc**.org.uk
www.**eschub**.org.uk
www.**twothirtyvolts**.org.uk
www.**switchedonkids**.org.uk
Tel: 0203 463 5100 Fax: 0203 463 5139
email: switchedon@**esc**.org.uk

IN BRIEF

Government consults on the future of Part P

As previously reported in *Switched On*, the Department for Communities and Local Government (DCLG) has been reviewing *Part P* of the *Building Regulations* (relating to electrical safety in dwellings) with a view to reducing the bureaucracy and cost burdens it imposes on business, building control bodies and consumers.

DCLG is expected to consult on its plans for the future of *Part P* in December, with a closing date in March 2012.

If you want to have a say in the future of *Part P*, look out for the consultation package which is expected to be published on the DCLG website at:

www.communities.gov.uk/corporate/publications/consultations/

If *Part P* is amended, the changed requirements will come into effect in April 2013, after six months' notice.

Protection of concealed cables of SELV and PELV circuits

An important clarification on the protection of concealed cables of SELV and PELV circuits was missing from the recently published amendment to *BS 7671*.

Amendment 1 to *BS 7671: 2008*, which comes into full effect on 1 January 2012, was intended to clarify that, where an installation is not intended to be under the supervision of a skilled or instructed person, cables of SELV and PELV circuits concealed in a wall or partition at a depth of less than 50 mm are not required to be provided with additional protection by means of an RCD.

However, due to an oversight, the agreed clarification was omitted from the published version of the amended standard. Regulation 522.6.102 should have read:

Where Regulation 522.6.101 applies and the installation is not intended to be under the supervision of a skilled or instructed person, a cable installed in accordance with Regulation 522.6.101(v), and not also complying with Regulation 522.6.101 (i), (ii), (iii), (iv) ***or (vi)****, shall be provided with additional protection by means of an RCD having the characteristics specified in Regulation 415.1.1.*

The ESC and other bodies have therefore been requested to confirm that the intended effect of Regulation 522.6.101 is as given above.

The answer to Question 21 in the *'New or rewired domestic and similar installations'* section of the *'Industry Guidance on the Wiring Regulations'* section of the ESC website has been amended accordingly.

ESC exhibits at Citizens Advice Service annual conference

The ESC exhibited at the Citizen Advice Service annual conference in September for the first time. The conference attracts professionals from Citizen Advice Bureaux (CAB) around the country and provided an invaluable opportunity for the ESC to position itself alongside high profile advice and regulatory bodies.

Over the two-day conference the ESC discussed the range of advice, guidance and literature that can be made available to CAB professionals to help answer queries from clients and members of the public.

The ESC looks forward to continuing to explore opportunities in the future to work with key stakeholder groups such as Citizens Advice to help promote electrical safety to vulnerable groups and those most in need.

ESC at The Safety Shop at Bluewater

The ESC participated in a safety initiative at Bluewater shopping centre during a few days in August. A range of safety organisations including Kent Fire & Rescue Service and the British Red Cross were invited to participate in the month-long campaign.

The shop space was provided free of charge by Bluewater to Kent Police who organised the programme of safety activity. As one of the busiest shopping centres in the south-east of England, this provided an invaluable opportunity for ESC to provide electrical safety advice to shoppers. It also presented the Council with a chance to undertake research, including asking individuals for their thoughts on electrical safety; their personal experiences; and gaining feedback on the Charity's initiatives and campaigns.

The Council would like to thank Kent Police for giving it the opportunity to participate in this community event.

Royal Assent for Energy Bill paves way for Green Deal

The Energy Act 2011 has received Royal Assent and become law, setting in stone the legal framework for the Green Deal. It is now under one year to go until the launch of the Green Deal in October 2012.

"The Green Deal will revolutionise the energy efficiency of the nation's homes and businesses," said energy minister Greg Barker. "It will help people insulate against rising energy prices, creating homes which are warmer and cheaper to run. As well as helping people save money through home energy improvement, the Green Deal will be a massive business opportunity. The Energy Act is a crucial milestone, allowing us to move onto the next steps of making the Green Deal a practical reality."

COUNCIL TEAMS UP WITH LIZ BREWSTER TO ADVISE ON SAFE OUTDOOR CELEBRATIONS

A YouGov survey for the ESC has found that more than 20 million UK adults attended or hosted a garden party or outdoor celebration this summer - but two-thirds of hosts don't think about ensuring that their guests are protected from electrical accidents. And more than a million people have attended a garden party where there has been an electrical accident, injury or fire.

To increase public awareness of the need for electrical safety when celebrating outdoors, the ESC teamed up with party planner to the stars, Liz Brewster. Liz – who stars on ITV's *Ladette to Lady* and has produced parties for Shirley Bassey, Ivana Trump and 10 Downing Street – joined ESC staff in a series of radio interviews which were repeated on more than 30 local radio stations across the UK. Coverage was also gained in a range of regional and online media.

"Our research found that garden parties across the UK were quite extravagant events, with people including things like bouncy castles, paddling pools or water slides and live music," explained Angela Murphy, ESC's media manager. "It's great that people are being so imaginative but electrical safety is still not the priority it needs to be. Many accidents could, for example, be prevented with RCD protection. It's a simple safety measure but a vital one, especially when doing anything outdoors, where there is increased risk of electric shock."

The survey also found that many party hosts are also exposing themselves to unnecessary risk when preparing for their party, with:

- 38% tidying up by mowing the lawn or trimming the hedge without RCD protection
- just 31% of hosts checking plugs and leads for signs of damage before use
- and only 31% ensuring outdoor power sockets are not exposed to wet weather or water hazards.

The ESC has produced a guide, *Using electrical equipment outdoors*, which can be downloaded from the website.

ESC'S PRESENCE AT ELEX CONTINUES TO GROW

The Electrical Safety Council's presence at the Elex shows this year has once again proved a resounding success.

Elex shows provide the Council with an ideal opportunity to meet with electricians, apprentices and tutors, and other interested parties, where it can communicate and distribute best practice guidance. With visitor numbers to Elex continuing to grow, the ESC's stand at September's show at the Ricoh Arena, Coventry attracted over 500 visitors.

This provided the charity with a platform to distribute around 4,000 printed copies of its literature and Best Practice Guides, which included the latest two in the range, covering test instruments for electrical installations and the use of plug-in socket-outlet test devices. All eight guides can be viewed on, or downloaded free of charge from: **www.esc.org.uk/industry**

Visitors to the show were also welcome to join the Council at the Elex Industry Forum. Hosted by the ESC, the forum brought together experts from ELECSA, ECA, the IET, NAPIT and NICEIC, who provided news on developments within the industry and issues such as changes to *BS 7671*. With the new-style technical Q&A session in the second half of the forum, there was something for everyone, especially those lucky enough to win a printed copy of *BS 7671: 2008 (2011)*. The Council would like to thank the Institution of Engineering and Technology (IET) for donating 20 printed copies of *BS 7671: 2008 (2011)*.

Come along to future forums, but you will have to arrive early though, as there is often standing room only.

ESC'S PRODUCT SAFETY CONFERENCE PRODUCES THE GOODS

Phil Buckle welcomes delegates to the conference and introduces keynote speakers

The Electrical Safety Council's recent Product Safety Conference brought together a wide range of speakers and delegates to discuss the latest developments in market surveillance and electrical product safety.

The event, entitled *Market surveillance – overcoming cut-backs through a combined approach,* was launched by Edward Davey MP, the Minister for Consumer Policy and Consumer Affairs. He thanked the ESC for hosting the event and using its expertise to support a more integrated approach to market surveillance.

The Minister emphasised the increasing importance of co-operation to avoid duplication of effort and better use of intelligence gathering, stating that: "Partnership is critical and business working with enforcement agencies is critical, particularly in these challenging times." In a speech which noted the need for greater collaboration at all levels – both within the UK, the EU and globally – he also made it clear that consumer safety remained the priority. "This Government is totally committed to consumer safety. There is no intention of compromising this. But we have to target our resources to the areas of real concern."

The programme covered a range of key issues, including a review of the UK's surveillance priorities and a look at how collaborative working between manufacturers and government agencies is increasing seizures of unsafe and counterfeit goods. Other presentations covered the creative approaches used by local enforcement agencies to deal with budget cuts, product testing and third-party certification.

"This is the second Product Safety Conference we have run", explained Phil Buckle, director general of the ESC. "With the success of the first one, we knew there was a demand for an event of this nature. It offers an ideal opportunity to bring together various key stakeholders from across the board – manufacturers, consumers, industry and government bodies – to work together to ensure consumer protection benefits fully from a collaborative approach. By working together, and sharing resources and knowledge, we can make a real impact on the electrical product market and work towards a safer future."

In addition to the conference proceedings, an exhibition, staged in the stunning Assembly Hall at Church House, Westminster, gave delegates an ideal chance to collect the latest information on product safety and build contacts with sponsors and exhibitors.

Reduced public spending and local authority jobs, plus increased obligations arising from the EU's New Legislative Framework, have all put increased pressure on the product safety community. Over the past 12 months we've seen the biggest upheaval in consumer protection in decades, initiated by the Government's plans to reform the consumer landscape, transform regulatory enforcement, and the future of the Local Better Regulation Office and Primary Authority scheme. All these initiatives are designed to reinvigorate the public's trust in democracy, free up business growth and rationalise the framework for consumer protection.

The ESC felt there was need for a platform to discuss the safety of consumer electrical

Lots of interest at the ESC stand

Phil Buckle talks to the Minister about combating counterfeit goods

products and to explore how the Council can collaborate with others to ensure a high level of consumer protection in such a climate of change. The conference provided a welcome opportunity to exchange ideas and share information.

The ESC would like to thank sponsors, exhibitors and supporters of the conference, and of course, the speakers for their valuable contribution to the event.

The Council will be following up on presentations and discussions from the day and will report back in future issues of *Switched On* on how the outcomes and proposed actions will help to shape the ESC's product safety activities and strategic goals.

Is it time to call for third-party certification of higher risk electrical products? Views expressed by: L-R: Martyn Allen, ESC head of technical development, Richard Harris, assistant director, Product Regulation Branch, Department for Business, Innovation & Skills, Luigi Meli, director general of the European Committee of Electrical Installation Equipment Manufacturers, Arnold Pindar, president of the European Consumer Voice in Standardisation (ANEC) and chairman of the National Consumer Federation.

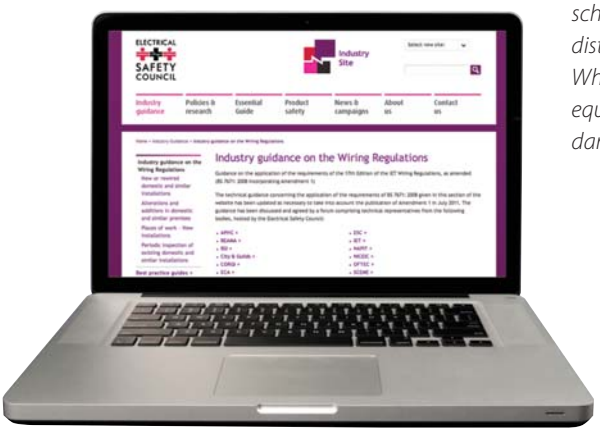
The busy exhibition area

Edward Davey MP, the Minister for Consumer Policy and Consumer Affairs, pictured (right) with Baroness Jenny Tonge, ESC Patron and member of the House of Lords

INDUSTRY GUIDANCE ON THE WIRING REGULATIONS – MORE QUESTIONS ANSWERED

Since the autumn issue of *Switched On* was published, the agreed answers to several new commonly-asked questions have been added to the *'Industry guidance on the Wiring Regulations'* section of the ESC website, including:

- *What is the procedure for periodic inspection and testing when an electrical installation is not energised to enable the necessary live testing to be undertaken?*
- *What should be inserted in the column 'Maximum disconnection times permitted by BS 7671' where a circuit is protected by an RCD or RCBO?*
- *What inspection, testing and certification should a contractor undertake when carrying out a like-for-like replacement of an accessory or an item of current-using equipment?*
- *On the new Electrical Installation Condition Report, the first few lines of the inspection schedule is the verification of the distributor's/supply intake equipment. What should I recommend if that equipment is in a dangerous or potentially dangerous condition?*



In addition, a revised answer has been given to the previously-published question No 21 in the *New or rewired domestic and similar installations* section: *'Does Regulation 522.6.102 require additional protection by RCD for cables of SELV and PELV circuits concealed in walls and partitions at a depth of less than 50 mm?'*

For the industry-agreed answers to these and many other commonly-asked questions relating to the application of the 17th Edition as amended, please visit **www.esc.org.uk/forum**

visit www.esc.org.uk/forum

The ESC recommends that those following the guidance provided by the Electrical Installation Forum visit the site at least every couple of months to see what other additions and amendments have been made.

SPATE OF METAL THEFTS PUTTING LIVES AND PROPERTY IN DANGER

According to the Energy Networks Association, there were 6000 incidents of metal theft affecting the energy networks in 2010. From January to July 2011 this year, there had already been 4500 incidents, showing a 50% increase in the level of this crime.

Cable thefts can and often do result in dangerous occurrences. In low voltage networks for example, the loss of combined neutral and earth (CNE) conductors causes the voltage on exposed- and extraneous-conductive parts in homes to rise to near mains potential. This, in turn, raises a serious risk of fire from damaged electrical equipment, as well as of electric shock, especially if the main bonding arrangements are inadequate.

In a debate in the House of Commons in September, Graham Jones MP called on Government take the issue of metal theft more seriously. "The increase in metal theft in the UK and elsewhere in the past few years has been alarming. Electricity North West has seen a 40-fold increase in thefts over the past 10 years," he said.

"The shocking figures speak for themselves. In 2009 there were about 100 reported metal thefts per month according to the Energy Networks Association. Two years later, in 2011, that figure has risen to 700 thefts per month, and in one calendar month - March this year - it rose to a record 900 reported thefts. We can contrast that with March 2009, when there were around 70 thefts. That is an increase of more than 1000% in two years.

"The reality is that on a daily basis, thefts are taking place against our national energy infrastructure across the UK. These are malicious and leave sites unsafe as well as causing disruption to the public and the economy. These thefts have led to 750 cases of loss of supply to at least 25,000-plus homes. Of these, there were over 2,500 cases involving damage to customer's TVs, computers and boilers as a result of the outages. In addition there have been 23 environmental incidents and at least 60 fires.

"A recent theft in Yorkshire cost local residents and insurers over £500,000 in broken electrical equipment and boilers as a result of

ESC LAUNCHES ELECTRICAL SAFETY CHECK APP

A new app has been launched by the ESC which will allow anyone who is planning to move into a new home to do a quick visual check to ensure its electrical safety. The app - which has been released to coincide with the anniversary of the National Grid - will also be promoted to landlords to help them confirm their rental properties are safe.

Designed to be as easy to use as possible, the app highlights potential dangers for each room and explains how to resolve simple, non-technical problems. Where more serious issues are flagged, people are advised to use a registered electrician. Available for use on iPhone and Android phones, the ESC app can be found by visiting the App Store or Android Market, searching for 'Home Electrical Safety Check' and then following the download instructions. It is also available by following the links on the ESC's website.

"We wanted to create something which people would find effortless but essential," explains Anneke Rousseau, head of communications at the ESC. "Ideally it will be considered as a basic tool when viewing accommodation, whether you are planning to buy or rent. However, landlords should also find it useful. It will allow them to undertake a fast and effective review of their properties and help them fulfil their responsibility for tenant safety.

"Electricity is all around us and has become vital to our lives since the formation of the National Grid, 76 years ago. Yet even though we are using more electrical appliances and gadgets than ever before, there is a worrying gap between the public's perception of electrical danger and the reality. This results in people making simple yet fatal errors which could have been easily prevented. The ESC's Home Electrical Safety Check app was developed to help bridge that gap."

a theft of just £40 of copper when customers' voltage rose from 240 V to a dangerous 430 V. In Castleford, two houses blew up after the neutral wire was removed, resulting in a 430 V current in a cooker burning through a gas pipe. Caught on video, it is lucky no one was home."

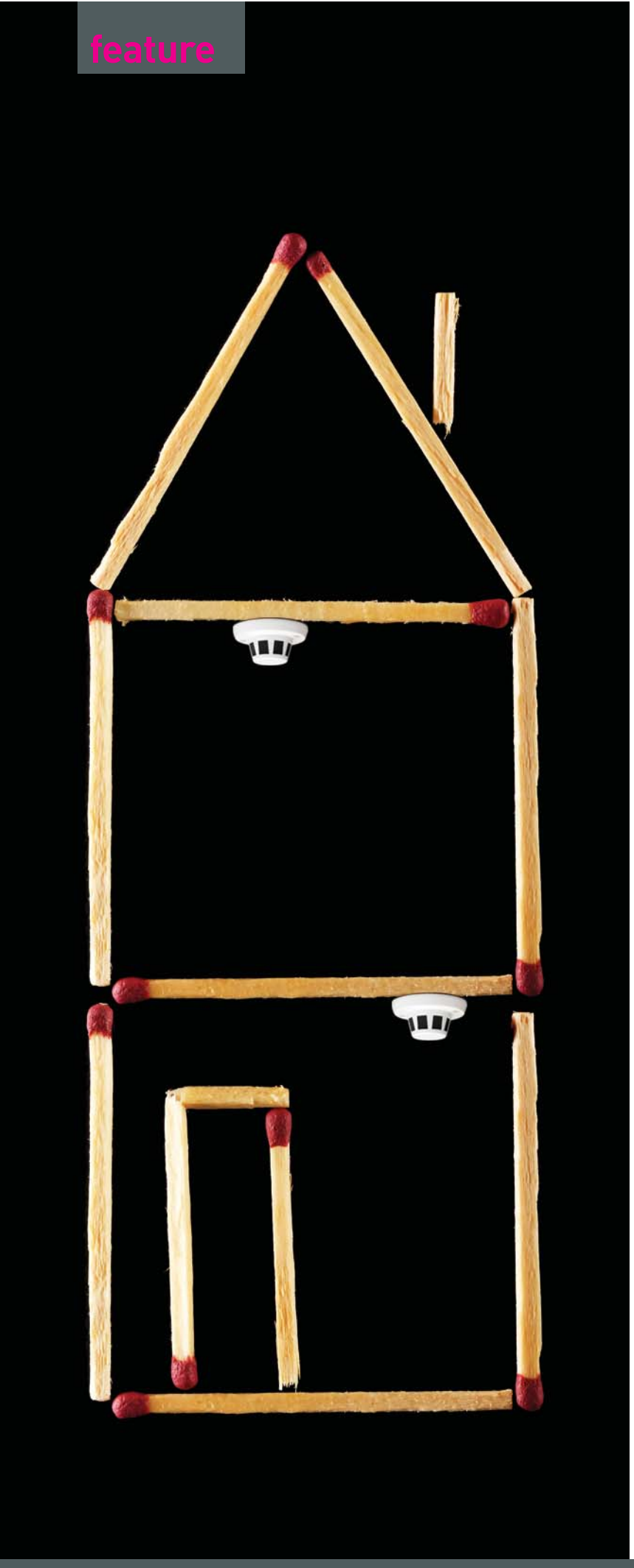
Responding to Mr Jones, energy minister Charles Hendry MP said that metal theft was undoubtedly growing in occurrence and severity and agreed more needed to be done. "We are determined to address the issue, which is causing massive inconvenience, great threats and a really serious challenge to people working in the industry," he said.

"Let me be clear that the Government fully recognises the serious consequences of metal theft. This is not a victimless crime, as the hon. Gentleman made clear. As he said, a young teenager was recently killed attempting to steal copper cable from a substation in Leeds. That is a terrible thing for all concerned to deal with, and unfortunately was just one of several fatalities that occurred over the past year, along with countless injuries to the thieves themselves and the risk to engineers who are called out in the middle of night to make safe equipment that has been damaged.

"It is not only those lives that are put at risk, but those of innocent householders whose appliances can be damaged or catch fire because of a metal theft in their area. The lives of our emergency services attending fires caused by metal theft are also at risk. I, too, was shocked to see the recent footage of a gas explosion at a house fire in Castleford in July. It appeared to me that it was only by pure luck that the firefighters in attendance avoided death or at least serious injury.

"Although individual progress is being made by police forces and the electricity industry to tackle metal theft, we are conscious that more effort is required if we are to address this problem seriously across all critical national infrastructure sectors. The Government is looking at what more can be done. Discussions, led by the Home Office as the lead department for crime prevention, are under way with a number of departments, including DECC, to identify further options for tackling metal theft."

In the meantime, it seems that the rate of potentially dangerous 'loss of neutral' incidents affecting PME supplies is set to rise.



Every se

Interlinked fire detector can give householders a when fire occurs

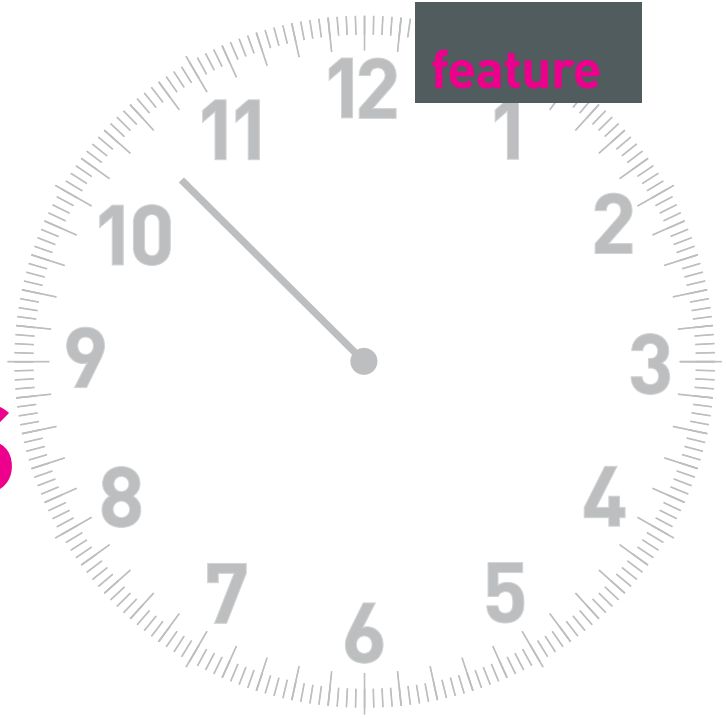
A woman survived when fire spread through her three-storey dwelling in Milton Keynes during the early hours of a July morning. She was alerted by a smoke alarm on the first floor. However, she was prevented from escaping from the dwelling via the stairs, as the fire had already taken hold. Consequently, she became trapped on the second floor, where her shouts for help were heard by neighbours.

The neighbours erected a ladder to a bedroom window, providing the woman with a means of escape from this life-threatening situation. Their prompt action prevented her from becoming another fire statistic; in the financial year 2010-11 there were 321 fire-related fatalities in England, of which 212 were in dwellings[1].

Firefighters attended promptly at the scene but on arrival were confronted with a well-developed fire on the ground and first floors, which had already resulted in destruction of the staircase at these levels.

The smoke alarm that alerted the occupant was not interlinked with other smoke alarms in the dwelling. The woman's narrow escape and the potential risk to firefighters might have been avoided had a fire detection and fire alarm system having interlinked detector/sounder units been installed in accordance with *BS 5839-6* (the Code of Practice for fire alarm systems in dwellings). Such systems are provided to give the earliest practicable warning of fire to occupants.

[1] *Data reproduced from Department for Communities and Local Government and available at: www.communities.gov.uk/publications/corporate/statistics/monitorq1q42011*



cond counts

s in domestic premises nd firefighters more time

The importance of time

The above incident highlights how important it can be to minimise the time it takes for the alarm to be raised to protect life and property when a fire occurs. Detecting fire and sounding the alarm at the earliest opportunity maximises the time available for occupants to take appropriate escape action and to contact the Fire and Rescue Service.

Fire detection and fire alarm systems

For a typical dwelling, having two or three storeys with no floor exceeding 200 m^2 in area, a system consisting of smoke alarms (at least one appropriately-sited smoke alarm on every storey) and heat alarms (in the kitchen and principal habitable room, such as the lounge) will generally meet the recommendations of *BS 5839-6*, although this must be checked in detail against the requirements of that code of practice.

The smoke alarms and heat alarms should generally be interlinked, either by wiring or radio links, to ensure that the earliest warning of fire is provided to the occupants, as a fire detected by any detector element will produce an audible warning by all fire alarm sounders in the dwelling.

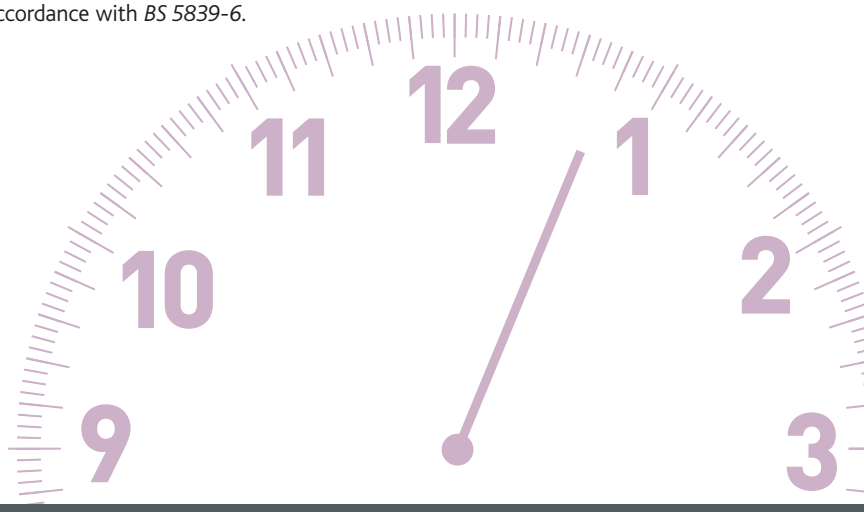
BS 5839-6 recommends a smoke alarm no more than 3 m outside each bedroom door. In addition, where the designer identifies that the characteristics of the occupants place them at risk when a fire occurs, such as where occupants have deep sleep patterns due to the influence of drugs or have reduced ear sensitivity, alarms may be required within the bedroom to provide an adequate sound level likely to rouse them from sleep.

Compliance with the recommendations of *BS 5839-6* is generally necessary in order to meet the applicable requirements of the building regulations in England and Wales, Scotland and Northern Ireland. Guidance on meeting those requirements is given in the associated Approved Documents in England and Wales, Technical Handbooks in Scotland, and Technical booklets in Northern Ireland.

Summary

No life was lost in the incident described in this article because vital time to evacuate was provided by the individual alarm that roused the occupant. However, greater time might have been available for evacuation and the fire damage to the property might have been reduced by the installation of a fire detection and fire alarm system having interlinked detector/sounder units in accordance with *BS 5839-6*.

> "She was alerted by a smoke alarm on the first floor... was prevented from escaping from the dwelling via the stairs... consequently became trapped on the second floor"



COUNCIL'S GRANTS SCHEME MAKES HOMES SAFE

One of the many happy householders who benefited from last year's scheme.

The Electrical Safety Council's Home Improvement Grants Scheme continues to support vulnerable people in their local community by helping to provide them with a safer home environment.

Through the Grants Scheme, the ESC works in partnership with Home Improvement and Care and Repair Agencies across the UK. Last year, £80k in funding was shared between 17 organisations. This funding enabled 662 vulnerable householders to have essential minor electrical works carried out which were arranged, managed and overseen by these agencies.

Home Improvement Agencies are not-for-profit organisations which assist vulnerable homeowners and private sector tenants who are older, disabled or on a low income to repair, improve, maintain or adapt their homes to allow them to remain living independently in safer living environments.

Work completed under the Grants Scheme included 93 cases relating to upgrading earthing, bonding and consumer units, 86 repairs to electrical lighting, and the provision of portable appliance testing (PAT) for 123 households.

One funded body, Newham Home Improvement Agency, helped over 15 clients with electrical work ranging from the replacement of failed light fittings and dangerous sockets through to the installation of residual current device protection.

Nicolete Johnson, the caseworker responsible for delivering the funding in Newham said: "The scheme proved invaluable, particularly in situations where clients were unable to carry out emergency electrical works due to low incomes or having very little savings."

This year, the ESC has made a further£100k available through the Grants Scheme and in September 2011 the funding was shared between 31 home improvement agencies UK-wide: 20 in England, 6 in Scotland, 4 in Wales, and 1 in Northern Ireland.

The Council works closely with the national bodies for Home Improvement/Care and Repair Agencies in England, Scotland and Wales, who assist in promoting the Grants Scheme to their respective agencies and also help to co-ordinate the application process on ESC's behalf. The Council values the support it receives from Foundations (representing England), Care & Repair Scotland (representing Scotland), and Care & Repair Cymru (representing Wales). The ESC also works with Gable (Shelter) in Northern Ireland. By collaborating with these national bodies, the Council can ensure that every eligible agency in the UK has the opportunity to apply for funding.

In total, 112 applications were submitted and the national bodies filtered applications to shortlist stage and provided the ESC with their recommendations for funding. This process is based on assessment criteria provided by the Council which is dependent upon an agency's size, capacity and capability to manage and deliver the grant scheme in their area. A full list of the 31 funded partners is provided in the table below.

Grants can be awarded to individuals who are home owners over 60 years of age, on means-tested benefit or state pension (and with no other income) or registered disabled. Home owners who are 21 years of age or over, who are registered disabled, are also eligible.

Shona Milne, the service manager at Aberdeenshire Care and Repair said: "The funding we have just been awarded from the Electrical Safety Council will enable us to assist clients who are financially unable to rectify dangerous electrical issues and ultimately make their homes safer, which would not have been possible otherwise."

All 31 partners will deliver funded schemes until the end of March 2012. To find out more about the Grants Scheme, visit: **www.esc.org.uk/stakeholder/news-and-campaigns/campaigns/grants-scheme/**

Home Improvement Scheme- Funding Awards

England

Age UK North Tyneside ..... North Shields
Bolton HIA ..... Bolton
Guildford Waverley Care & Repair ..... Guildford
Lancaster City HIA ..... Lancaster
Newham HIA ..... Newham
In Touch HIA for Kent & Midway ..... Kent
Manchester Care & Repair ..... Trafford & Wigan
Orbit Care & Repair Coventry ..... Coventry
Orbit Care & Repair Rugby ..... Rugby
Orbit Care & Repair Mid Staffs ..... Burton on Trent
Papworth Trust Home Solutions .....
W & S Essex, Waltham Forest, Corby & Kettering
Ridgeway Care & Repair Somerset ..... Somerset
Ridgeway Care & Repair Berkshire ..... Reading
Ridgeway Care & Repair Swindon ..... Swindon
Ridgeway Care & Repair Wiltshire ..... Wiltshire
Three Rivers Housing Care & Repair ..... Durham & Northumberland
Lincolnshire Home Improvement ... Gainsborough
Epsom & Ewell Home Improvement ..... Epsom
WE Care & Repair ..... Bristol
Foundations Independent Living Trust .... Glossop

Scotland

Aderdeenshire Care & Repair ..... Ellon
Arran Care & Repair ..... Isle of Arran
Borders Care & Repair ..... Selkirk
Inverclyde Care & Repair ..... Greenock
Inverness Care & Repair ..... Inverness
Lomond and Clyde Care & Repair ..... Dumbarton

Wales

Ynys Mon Care & Repair ..... Llangefni
Flintshire Care & Repair ..... Flintshire
Blaenau Gwent Care and Repair ..... Abertillery
Cardiff Care & Repair ..... Cardiff

Northern Ireland

Gable (Shelter) ..... Strabane

LATEST HSE PROSECUTIONS GRAPHICALLY ILLUSTRATE THE PERILS OF LIVE WORKING

Two recent prosecutions by the Health and Safety Executive graphically publicise the dangers of working when electrical systems are live.

In the first case, Terence Hayes, the owner of Hayes Electrical and Building Services, was prosecuted after two employees suffered facial burns in an arcing incident at Liverpool's ferry terminal.

One of the workers received severe burns to his face and hands, needed three months off work to recover, and required treatment to remove debris from his eyes. The consequences might have been even more serious had he not been wearing glasses.

The remains of the worker's badly charred glasses

Liverpool Magistrates' Court was told that in April 2009, the employees had been replacing a temporary generator for the landing stage at the Pier Head ferry terminal with a supply from the mains. This involved installing a new fuse in a switchboard.

The court heard that that the work had gone ahead while the switchboard was still live, even though it would have been reasonable to isolate the supply in between ferry sailings. When one of the men tried to install the new fuse, there was a bright flash and an intense heat caused by a fire, lasting just a few seconds.

The 50-year-old's glasses were badly charred and he needed four days in hospital after suffering severe burns. The other worker, a 57-year-old man, also received burns to his face and required hospital treatment.

Hayes admitted a breach of the *Electricity at Work Regulations 1989* after he allowed his employees to carry out work while the electricity supply was still live. He was fined £8,000 and ordered to pay £4,766 in prosecution costs.

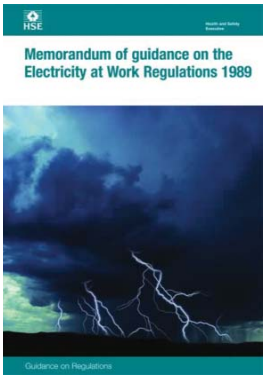
In the other case, also heard at Liverpool Magistrates' Court, crane maintenance firm Carrylift Materials Handling Ltd was prosecuted after two dock workers suffered injuries in a high voltage electric shock incident at the Seaforth Container Terminal.

One of the men was temporarily blinded and both were burned in the 6.6 kV flashover in March 2008 after climbing up a dockside crane to check the electricity supply.

Carrylift Materials Handling was prosecuted after an HSE investigation revealed that the workers wrongly believed that the supply to the crane was just 415 V.

The court heard that a maintenance worker at the site was asked to investigate why the power to the crane had failed. The 33-year-old decided he needed the assistance of an electrician to fix the fault and climbed up to the crane platform with three electricians.

All four men thought that it was a low voltage crane, similar to the one next to it, and had not been given any information or diagrams that said otherwise.



After undoing the bolts on a junction box, the maintenance worker used his low-voltage multimeter to test the electricity supply. There was an immediate flash and bang, causing him to be blinded for approximately 15 seconds.

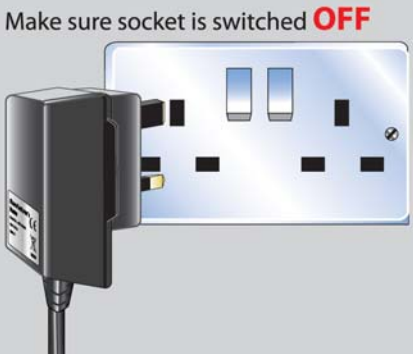
He sustained severe burns to his face and hands, and was permanently scarred as a result. One of the electricians also suffered minor burns to his face.

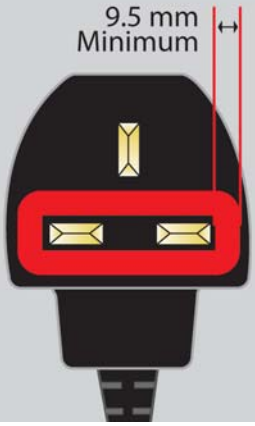
The HSE investigation found that none of the men had received adequate training or been given sufficient information about the electricity supplies to the dockside cranes.

The company admitted three breaches of the *Electricity at Work Regulations 1989* and was fined £15,000 with £14,568 in prosecution costs.

These two latest cases follow hot on the heels of the prosecution of Innovia Films reported in the autumn edition of *Switched On* (page 11).

The crane platform where the workers suffered high-voltage electric shocks





Electrical chargers- buyers' guide now available

In the summer 2011 edition of *Switched On*, the Council reported on its work with Trading Standards to identify unsafe mobile phone chargers.

To help raise consumer and trader awareness of the safety issues, the ESC has collaborated with Lambeth Borough Trading Standards to produce a guide that offers straightforward advice about the essential safety checks you need to make when buying plug-in chargers.

The guide explains that all suppliers of electrical equipment have a legal duty to ensure that everything they sell is safe, and provides a three-point safety check that buyers of plug-in chargers can follow.

The checklist includes looking for particular markings on the charger itself, ensuring adequate warnings and instructions are provided, and describes a simple visual inspection of the plug pins that can be carried out.

Check point 1 - If the distance between the edge of the pins and the edge of the charger is less than 9.5 mm, there is a risk of electric shock when plugging in and unplugging the charger from a socket. Also, if the charger does not easily plug into a socket, the pins may be the wrong size or length, or the distance between the pins may be wrong. If pins do not fit properly into the socket, overheating, arcing and mechanical damage can occur to both the socket and the charger, which can be dangerous.

Check point 2 - Do not rely on a CE mark alone as a guarantee of safety. A CE mark on a product is simply a declaration by the manufacturer that the product meets all the safety requirements of European law. Like all markings, they can be easily forged. Also, look for a model or type reference, and a batch marking (if present), which will ease traceability of unsafe or defective products.

Check point 3 - Sufficient information must be provided to ensure the charger can be used safely. As a minimum, user instructions should provide information on conditions and limitations of use, how to operate the charger safely, basic electrical safety guidance and details of how to safely dispose of the charger when it is no longer required.

The guide was launched at the Trading Standards Institute conference in June this year, where the Council was in attendance. The guide has already received a lot of interest from local trading standards authorities, wanting to joint-brand the guide and distribute to market traders and other suppliers of plug-in chargers in their regions.

"straightforward advice about the essential safety checks you need to make when buying plug-in chargers"

Three-point safety check

1
- Check that there is at least 9.5 mm between the edge of the pins and the edge of the charger (9.5 mm is about the width of a ballpoint pen)
- Plug the charger into a socket but don't switch it on or connect it to your appliance.
- Does it plug in easily?

2
- Look for a manufacturer's brand name or logo, model and batch number.
- Check for a CE mark.
- Check that the output voltage and current ratings marked on the charger and your electrical device are the same.

3
- Adequate warnings and instructions must be provided.
- The guide includes an explanation for each of the recommended safety checks.

The guide, in printable form, can now be downloaded from the Public section of the Council's website www.esc.org.uk . Printed versions are also available in small quantities upon request.

COUNCIL RESPONDS TO FURTHER SMART METER CONSULTATION FROM GOVERNMENT

In August, the Department of Energy and Climate Change (DECC) issued another lengthy consultation document which included questions relating to the technical specification for smart metering equipment. The consultation closed in mid-October.

One of the questions related to the business case* the ESC had made to DECC last June, which recommended the provision of a means of isolation in smart meters as an engineering solution to the longstanding 'temporary de-energisation' issue.

Existing meter with integral isolating switch

The following is an extract from the DECC consultation document:

The Electrical Safety Council (ESC), supported by a number of electrical installer trade associations, proposed that Smart Metering Equipment should include an electricity isolation switch as an additional minimum functional requirement. This would allow electrical installers to work safely on equipment between the meter and the consumer's main switch without requiring the main supply fuse to be removed.

In the Response, the Government acknowledged this issue and undertook to consider whether inclusion of an isolation switch as part of the Smart Metering Equipment or alternative approaches should be adopted as part of the Smart Meter Implementation Programme. As such ESC was asked to consider the provision of an isolation switch alongside other potential options.

Working with the Energy Networks Association (ENA) and the Association of Meter Operators (AMO), ESC presented to Government a business case that covered four potential options:

1. *Modify the design of the currently-specified single-pole 'load switch' in the smart meter to permit manual isolation by an electrician;*
2. *Incorporate an additional manually-operated single-pole or double-pole switch in the smart meter to provide for isolation;*
3. *Install a separate double-pole isolating switch at the same time as the smart meter; and*
4. *Introduce a system for the authorisation of competent non-supply industry personnel to withdraw cut-out fuses.*

Through the industry working group process, the ESC, trade representatives of electrical installers, ENA and AMO were strongly supportive of options 1 and 2. BEAMA, the trade association of meter manufacturers, supported option 3. High-level costs and benefits were included in BEAMA's submission that allowed an initial comparison of the options.

On the basis of evidence presented to date, the Government does not believe that sufficient benefits have been identified to justify the additional costs that would be incurred by amending the functional requirements (and related industry drafted technical specifications) or the approach to roll-out to support options 1, 2 or 3. Option 4 is an option that goes beyond the scope of the Smart Metering Implementation Programme.

The Government recognises the importance of resolving the issue raised by ESC as a matter of urgency. As such, the Government will continue to work with Ofgem, HSE and other relevant stakeholders to ensure that the most appropriate solution is developed and implemented.

The question posed by DECC in the consultation document was:

Do you have any views on the options presented to ensure that electrical contractors can work safely and efficiently between the electricity meter and the consumer unit/fusebox? Please provide evidence to support your reasoning.

In response, the ESC re-submitted the detailed business case, and said:

We continue to strongly recommend the acceptance of either of the engineering solutions given as options 1 and 2 in the consultation document, not only in the safety interests of electrical contractors and electricians, but also in the safety interests of consumers.

We are surprised and concerned that, on the basis of the evidence and robust case presented to date, the Government does not believe that sufficient benefits have been identified to justify the additional costs that would be incurred by amending the functional requirements to include an isolating switch in smart meters.

We then went on to repeat a number of the additional points we had made when the case was originally rejected, and concluded by saying:

The Electrical Safety Council urges DECC to reconsider their current stance on this significant issue, which we believe does not take into consideration the overall picture that extends beyond the smart meter programme.

The full text of our response has been published in the 'smart meter' section in the 'industry' part of the Council's website at **www.esc.org.uk**. We understand that a number of bodies including ENA, AMO, ECA, ELECSA, SELECT, NAPIT and NICEIC have further supported the ESC recommendation. The ESC will report on the outcome of this part of the consultation in the spring issue of *Switched On*.

* *Details of the business case submitted by the ESC were given in the autumn issue of Switched On*

Distributors' responsibility for providing an earthing facility

Unlike the *Electricity Supply Regulations 1988*, the *Electricity Safety, Quality and Continuity Regulations 2002* (ESQCR) place an obligation on distributors to offer to provide an earthing facility for consumers' installations when making a new connection, unless there is a safety reason for not doing so.

The obligation is contained in Regulation 24(4) of the ESQCR, which states: *'Unless he can reasonably conclude that it is inappropriate for reasons of safety, a distributor shall, when providing a new connection at low voltage, make available his supply neutral conductor or, if appropriate, the protective conductor of his network for connection to the protective conductor of the consumer's installation'.*

Regulation 24(5) goes on to state: *'In this regulation the expression "new connection" means the first electric line, or the replacement of an existing electric line, to one or more consumer's installations.'*

The HSE is now the sole government regulator for all safety issues associated with the transmission and distribution of electricity, but when the ESQCR were wholly administered by DTI (now BIS), they published guidance on the regulations (DTI reference URN 02/1544*). The guidance to Regulations 24(4) and (5) states:

'For a new connection the distributor would normally be expected to offer to connect his combined neutral and protective conductor (or protective conductor) to the consumer's earthing terminal.

In certain circumstances the distributor may take the view that such connection to the consumer's protective conductor could result in danger, and therefore not connect his combined neutral and protective conductor to the consumer's protective conductor via the earthing terminal. Examples of situations where caution would be warranted are included in comments for regulation 9 Protective Multiple Earthing.

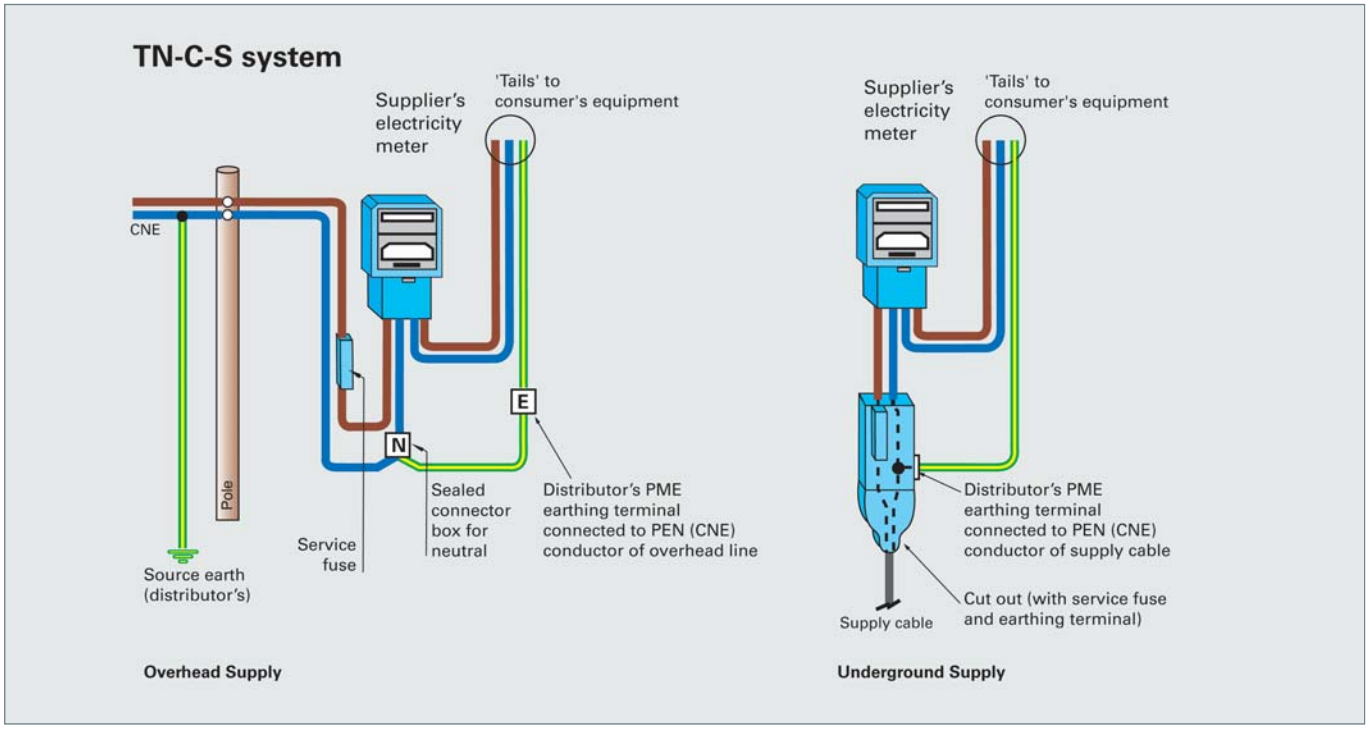
Where the distributor does not offer to connect his protective conductor to the consumer's earthing terminal he should advise the consumer in writing of the reasons for not offering such a connection. In these circumstances the consumer should install his own earthing arrangements and protective devices in accordance with the requirements of BS7671 Requirements for Electrical Installations.'

Regulation 9 does not allow PME supplies to caravans or boats. The DTI guidance to Regulation 9 identifies locations where special consideration of the earthing and protection arrangements are required when using PME supplies, such as locations where it may prove difficult to attach and maintain all the necessary bonding conditions (such as farms and building sites), installations in certain wet environments (such as swimming pools and petrol stations) and certain equipotential zones outside buildings (such as some street furniture).

The expression 'new connection' used in Regulation 24 can be taken to also mean the replacement of an existing 'electric line'. The guidance suggests that the definition of 'electric line' has a much wider application than, say, the term 'conductor', and it explicitly states that this can include equipment such as cables, ducts, marker tape and underground link boxes amongst other things.

The question of whether a new cut-out constitutes a "new connection" is not explicitly covered in the DTI guidance, but this is implied. Irrespective of this point, the guidance indicates that the distributor is under an obligation to inform the consumer in writing if deciding not to offer such a connection on justifiable safety grounds.

** The full DTI guidance on the Electricity Safety, Quality and Continuity Regulations 2002 can be downloaded from* ***www.bis.gov.uk/files/file26709.pdf***



Have you ever been asked... how do I find the maximum earth fault loop impedance for an overcurrent protective device if this is not given in *BS 7671*?

The tables of maximum earth fault loop impedance (Z_s) for overcurrent protective devices in any edition of BS 7671 cover only the commonly used types and ratings of device that are in production at the time of publication.

However, manufacturers also produce overcurrent protective devices of other types and ratings, and many older installations include obsolete overcurrent protective devices. Finding the maximum value of Z_s for any of these can be a problem for electrical contractors, such as when carrying out periodic inspection and testing or fault diagnosis on an installation. This article aims to help solve this problem.

Circuit-breakers to *BS EN 60898* and RCBOs to *BS EN 61009-1* in non-preferred current ratings

Circuit-breakers to *BS EN 60898* or RCBOs *BS EN 61009-1* are sometimes encountered that have a rated current other than the preferred values (3 A, 6 A 10 A, etc) listed in Table 41.3 of *BS 7671*.

The maximum value of Z_s for such a device, at a nominal voltage of U_0 of 230 V, can be found from the right-hand column of Table 41.3 of *BS 7671*. **Table 1,** right, gives the relevant information.

For example, for a Type B circuit-breaker having a rated current (I_n) of 8 A (or the overcurrent characteristic of an 8 A Type B RCBO) the maximum value of Z_s at 230 V is $46/I_n$ = 46/8 = 5.75 ohms.

Obsolete circuit-breakers

Maximum values of Z_s for circuit-breakers for which this information is no longer given in *BS 7671* can be obtained either from the edition of *BS 7671* that was current when the devices were readily available, or by reference to the manufacturer's data.

Alternatively, for MCBs to *BS 3871*, **Table 2,** right, can be used to find the maximum value of Z_s at a nominal voltage of U_0 of 230 V.

For example, for a Type 2 circuit-breaker to *BS 3871* having a rated current (I_n) of 30 A, the maximum value of Z_s at 230 V is $32.8/I_n$ = 32.86/30 = 1.1 ohms.

Obsolete fuses

Maximum values of Z_s for fuses for which this information is no longer given in *BS 7671* can be obtained either from the edition of *BS 7671* that was current when the devices were readily available, or by reference to the manufacturer's data.

For example, after 31 December 2011, one of these approaches is necessary for fuses to *BS 88-2.2, BS 88-6* and *BS 1361*, as data for them is not included in *BS 7671: 2008* incorporating Amendment 1.

Overcurrent protective devices generally

For any type and rated current of a fuse or overcurrent circuit-breaker, including all those mentioned above, the maximum value of Z_s can be found using the formula given in Appendix 3 of *BS 7671*, reproduced below.

Where:

$$Z_s = \frac{U_0}{I_a}$$

U_0 is the nominal a.c. rms line voltage to Earth (typically 230 V)

I_a is the current causing operation of the protective device within the specified time (such as 0.4 s or 5 s), obtained from the manufacturer's time/current characteristics for the particular device type and rating

For example, suppose the manufacturer's time/current characteristic for a 400 A fuse to *BS 88-2.1* gives a value of I_a of 2840 A for a disconnection time of 5 s. Using the above formula, the maximum value of Z_s for the fuse, for a disconnection time of 5 s and a nominal voltage (U_0) of 230 V, is 230/2840 A = 0.08 ohms.

Measured values of Z_s – taking account of conductor temperature

It should not be forgotten that when comparing a measured valued of Z_s with the maximum value of Z_s allowable for the device used for fault protection, account must be taken of the temperature and resistance of the circuit conductors. Appendix 14 of *BS 7671* gives some guidance on this.

Table 1: Maximum Z_s for circuit-breakers to *BS EN 60898* and the overcurrent characteristics of RCBOs to *BS EN 61009-1*, for instantaneous operation giving compliance with the 0.4 s and 5 s disconnection times at nominal voltage (U_0) of 230 V

Type	Z_s (ohms) for device of rated current I_n
B	$46/I_n$
C	$23/I_n$
D	$11.5/I_n$

Table 2: Maximum Z_s for circuit-breakers to *BS 3871*, for instantaneous operation giving compliance with the 0.4 s and 5 s disconnection times at nominal voltage (U_0) of 230 V

Type Z_s	(ohms) for device of rated current I_n
1	$57.5/I_n$
2	$32.86/I_n$
3	$23/I_n$
4	$4.6/I_n$
B	$46/I_n$
C	$23/I_n$
D	$11.5/I_n$

BASEC answers your technical questions

The British Approvals Service for Cables (BASEC) is a recognised sign of assurance of independent cable testing and approval. BASEC's technical team answers hundreds of questions each month from electrical contractors from across the UK covering many different cable-related issues. Here, *Switched On* publishes BASEC's top five technical questions:

What should I do if I think the cable I have purchased is faulty?

Any concerns about a cable must be referred to the immediate supplier in the first instance, which should be a wholesaler or cable distributor, asking for the problem to be investigated. This is best done before the cable is installed to avoid compounding the problem. If necessary, the supplier will contact the cable manufacturer, who should be able to provide prompt technical assessment and assistance in resolving the concerns. If these cannot be resolved, and the cable is marked with an approval mark such as BASEC, then BASEC may be able to assist.

I've purchased cable in the past where it has been difficult to separate the sheathing from the insulation. What does this mean?

Cable needs to be strippable in order to install it successfully and safely. A dusting of chalk powder is applied to insulated cores before sheathing or other outer layers are added, but sometimes the amount of chalk is insufficient or a manufacturing fault results in no chalk being applied. A quick check with a fingernail before first fix installation can provide reassurance. If concerns are raised, then try to strip the cable using tools. If the sheathing or bedding does not come away cleanly from the insulation of the cores then contact the supplier and arrange to have the cable replaced.

I am often aware of problem cable alerts in the trade magazines and forums, however the problem is that they often come after it has been installed. If this happens in the future, what should I do?

Problems with a cable are usually limited to a particular type of cable, a particular size or core combination, and usually to a small number of batches, rather than to all cables from a particular manufacturer. The problem may also be variable, in that only certain lengths of cable are affected. Check the batch numbers that may be found on the sheath marking or on the supply reels or drums. If your cable is from an affected batch, then the supplier (wholesaler or distributor) should be contacted in the first instance for advice on what to do next. Usually it is best not to start to replace cable unless the situation has been discussed with the supplier.

I am installing some armoured cable and it is developing lumps. What is happening and can I stop it?

If armoured cable is harshly treated the armour wires can become displaced, twisted or stretched, leading to bulges in the sheath material. Cables are uniform and circular in cross section when manufactured, but mishandling can result in bulges and kinks which can cause difficulties in pulling into ducts, termination at glands, as well as being unsightly. Such problems can be caused by incorrect pulling from drums, the introduction of loops and kinks, pulling round too tight a bend, re-drumming too quickly and other poor practices. If cable is delivered in this condition, the supplier should be contacted and if necessary the cable replaced. If it begins to occur during installation, stop and check the pulling conditions, and refer to the supplier.

I am terminating cable and the lugs are still loose no matter how hard I crimp them. What should I do?

Firstly, check you have the correct size of lug for the cable's nominal size. Never use a smaller-sized lug just to get it to fit, or the lug could overheat at high current loads. Lugs are designed to take the same electrical current as the conductors they are terminating. Some cable manufacturers make cables with conductors more compacted than normal – this is permitted in the standards – and this sometimes results in additional play when terminating. The solution is to use the manufacturer's recommended brand of lugs rather than generic products, so that they are correctly sized.

For more information about BASEC visit: **www.basec.org.uk**, email: technical@basec.org.uk, or contact BASEC directly on 01908 267300.

BEAMA warns against 'mixing and matching' devices and assemblies

BEAMA (the British Electrotechnical and Allied Manufacturers' Association) has issued a Technical Bulletin that warns against installing one manufacturer's devices (circuit-breakers, RCBOs, etc) into another manufacturer's assembly such as a consumer unit or distribution board.

The bulletin, which is reproduced below, reflects safety considerations. Devices may appear similar by marking and physical size but factors such as their technical performance (including let-through energy and temperature rise) and connection arrangements are not necessarily safely compatible. The photograph below shows an example of a manufacturer's test arrangement to verify that overheating does not occur when its devices are installed into one of its own assemblies.

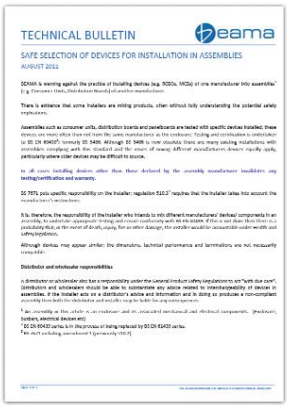
TECHNICAL BULLETIN – SAFE SELECTION OF DEVICES FOR INSTALLATION IN ASSEMBLIES AUGUST 2011

BEAMA is warning against the practice of installing devices (eg RCBOs, MCBs) of one manufacturer into assemblies[1] (eg consumer units, distribution boards) of another manufacturer. There is evidence that some installers are mixing products, often without fully understanding the potential safety implications.

Assemblies such as consumer units, distribution boards and panelboards are tested with specific devices installed; these devices are more often than not from the same manufacturer as the enclosure. Testing and certification is undertaken to *BS EN 60439*[2]; formerly *BS 5486*. Although *BS 5486* is now obsolete there are many existing installations with assemblies complying with this standard and the issues of mixing different manufacturers' devices equally apply, particularly where older devices may be difficult to source.

In all cases, installing devices other than those declared by the assembly manufacturer invalidates any testing/certification and warranty.

BS 7671 puts specific responsibility on the installer; Regulation 510.3[3] requires that the installer takes into account the manufacturer's instructions. It is, therefore, the responsibility of the installer who intends to mix different manufacturers' devices/components in an assembly, to undertake appropriate testing and ensure conformity with *BS EN 60439*. If this is not done then there is a probability that, in the event of death, injury, fire or other damage, the installer would be accountable under health and safety legislation.


TECHNICAL BULLETIN

beama

SAFE SELECTION OF DEVICES FOR INSTALLATION IN ASSEMBLIES

AUGUST 2011

Although devices may appear similar; the dimensions, technical performance and terminations are not necessarily compatible.

Distributor and wholesaler responsibilities

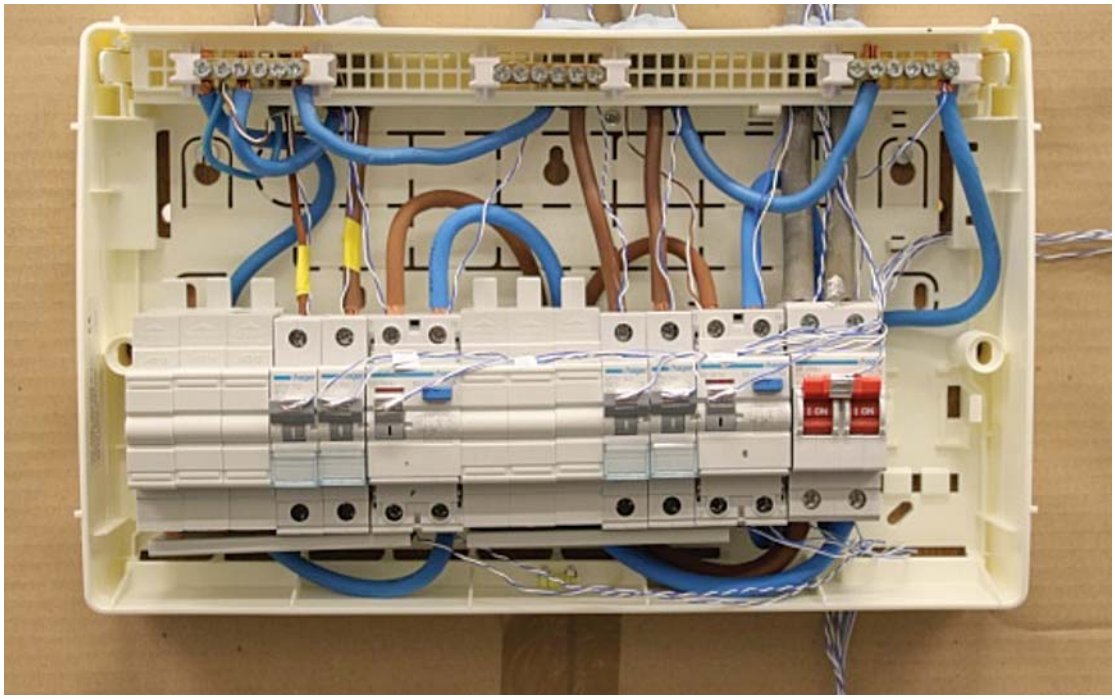
A distributor or wholesaler also has a responsibility under the General Product Safety Regulations to act "with due care". Distributors and wholesalers should be able to substantiate any advice related to interchangeability of devices in assemblies. If the installer acts on a distributor's advice and information, and in doing so produces a non-compliant assembly, then both the distributor and installer may be liable for any consequences.

[1] An assembly in this article is an enclosure and its associated mechanical and electrical components. (Enclosure, busbars, electrical devices etc)

[2] BS EN 60439 series is in the process of being replaced by BS EN 61439 series.

[3] BS 7671 including amendment 1 (previously 510.2).

The bulletin can be downloaded at **www.beama.org.uk/en/publications**



Manufacturers test that overheating does not occur in assemblies. Photo courtesy of Hager Engineering Ltd

ELECTRICAL SAFETY COUNCIL TACKLES E-COMMERCE AND ROGUE LANDLORDS AT PARTY CONFERENCES

The Electrical Safety Council took a two-pronged approach to its political engagement at this year's round of political party conferences. The ESC focused on '**Making e-commerce safe**' at the Liberal Democrat conference and looked at '**Raising standards in the private rented sector and regulating rogue landlords**' at the Labour and Conservative conferences. The formula proved to be successful with strong engagement around the topics at all three conferences.

E-commerce

The Electrical Safety Council recognises that the growth in online retail sales puts consumers at greater risk and is keen to call for an extension of the RAPEX system. RAPEX allows for the rapid exchange of information among EU Member States of all dangerous consumer products, with the exception of food, pharmaceutical and medical devices. The ESC believes an extension of RAPEX to encompass online sales, specifically coupled with public education, is crucial to increasing consumer confidence and protection in the online trade.

At the Liberal Democrat fringe event, Catherine Bearder, MEP and Member of the International Trade Committee, supported the idea for an expanded RAPEX system while noting that the European Commission is currently considering how RAPEX can be further improved. She added that there are some challenges in co-ordinating positions across Member States around complex regulatory problems given differing levels of interests and priorities.

Nevertheless, it was agreed that an extension of RAPEX could provide a solution once there is greater awareness of the system among the general public.

Private rented sector

Tackling rogue landlords in the private rented sector (PRS) generated much debate at the Labour and Conservative fringe events.

The strong mix of MPs and stakeholders observed that it cannot be business as usual in the PRS. Private landlords provide almost 14 percent of all UK homes and more than 40 percent of privately rented flats and houses in England are in a 'non-decent' condition, according to figures released by the Government. 'Non-decent' condition can encompass the age of the kitchen or bathroom, communal area size, standard of insulation against noise and safety of electrical appliances.

There was consensus that the majority of landlords are decent but accidental and rogue landlords pose a challenge to the sector. Landlords can be ignorant about their responsibilities and obligations and there is also a lack of awareness among tenants about their rights.

On the future of *Part P* of the *Building Regulations*, Labour MPs were keen to support the Charity's campaign for the retention of *Part P* which provides the only legal framework for electrical safety in dwellings in England and Wales. Former Shadow Housing Minister Alison Seabeck has asked the Secretary of State for Communities and Local Government what discussions he has had with the Electrical Safety Council on: (a) *Part P* of the *Building Regulations* and (b) fire risks of faulty appliances and installations in the private rented sector.

Partners at this year's conferences were the Trading Standards Institute, Shelter and the Residential Landlords Association.

BACK ISSUES OF SWITCHED ON

All the previous issues of Switched On are available to read or download from the 'Business & Community' section of our website.