ELC Members 2007

Chairman
Harry Lee – Chairman, Daleth plc.

Members
Derek Boyd – Chair, UK Electronics Alliance
Ashley Evans – Chief Executive, Electronics Knowledge Transfer Network
David Box – Industry Expert
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Dr Chris McArnt – Managing Director, Infotec Ltd
Ian Phillips – Principal Staff Engineer, ARM
Gavin Cover – Chair of the Electronics Sector Strategy Group, SEMTA
Neville Rayner OBE DL – Chairman, Anglo Components Limited
Professor John Robinson – CEO Scimas Solutions Ltd
and Industrial Professor of Electronics at Edinburgh University
Ian Russell – Managing Director, Goodway Ltd
Christopher Kayer – Chairman, Conectoring Solutions Group Ltd
Gav Shrimans – Chair Executive Officer, Ricards plc
Peter Skye – National Officer, Unite – The Union
Norman Smith – Managing Director, Thinstor

Public Sector Observers
Bill Baffin – RSA Seconded
Keith Hodgkinson – Director, Electronics and IT Services Unit,
Department for Business, Enterprise and Regulatory Reform (BERR)
Vince Ogden – Head IT Technology Sector Team, Engineering
and Physical Sciences Research Council (EPSRC)
Dr Nick Appleyard – Lead Technologies, Electronics/Protonics/Electrical Systems,
Technology Strategy Board (TSB)

www.electronicsleadershipcouncil.org

Acronyms/abbreviations

ARM
ARM Holdings

BBfR
Department for Business Enterprise and Regulatory Reform

CRR
Cambridge Science Park

DfIS
Department for Innovation, Universities and Skills

EISTI
Electronics Innovation and Growth Team

ELC
Electronics Leadership Council

EMC
Electromagnetic Compatibility

EMES
Electromagnetic and Environmental Services

ENMC
European Nanoelectronics Initiative Advisory Council

ENRG
Engineering and Physical Sciences Research Council

ERS
Electronics Regulatory Group

EU
European Union

ETIP
Energy Using Products Directive

ETP
Framework Programme / R
e

IET
Institution of Engineering and Technology

IP
Integrated Product Team

IIR
Information Technology

KTN
Knowledge Transfer Network

MASC
Manufacturing Advisory Service

NEMS
National Measurement System

NDI
Research and Development

RDAs
Regional Development Agencies

RFID
Radio Frequency Identification

RITA
Regional Information Technology and Electronics

RSMP
Review of National Measurement Policy

SLEDA
South East of England Development Agency

SEMSTA
Sects Skills Council for Science, Engineering and Manufacturing Technologies

SME
Small and Medium Enterprise

STEM
Science, Technology, Engineering and Maths

STEMNET
Science, Technology, Engineering and Maths Network

TSB
Technology Strategy Board

UKELA
UK Electronics Alliance

UKTI
UK Trade and Investment

WEEE
Waste Electrical and Electronic Equipment

Designed and produced by Stanley Yeates (London)
“The speed of technological development over the past few years have been remarkable, with devices involving UK technology such as the iPod and the Blackberry, not just enjoying huge popularity but also changing our leisure and work habits. With this and companies such as ARM and CSR punching above their weight on the world stage, BERR has been pleased to see the UK electronics sector in such good shape.

We need to build on the successes achieved so far and we believe the ELC, in partnership with the UKEA, has a continuing part to play in this. In the context of the ever changing nature of the sector, it is sensible to review both how it operates and what workstreams it focuses on. Just as electronics customers are continuously demanding more for less, so should the sector be demanding more from the ELC. We are therefore pleased that under Harry Tee's leadership the ELC is taking this opportunity to look at progress to date and to set out the priorities for future activities.”

The Department for Business Enterprise and Regulatory Reform
Electronics Leadership Council Chairman’s review of 2006/07

Electronic technology is at the heart of our modern society. It enables every labour-saving device, drives the development of high-speed communications and information processing, is an essential enabler in transportation and aviation and is transforming entertainment, amusement and business today. We often hear tales of doom and gloom and overseas hegemony yet there are many excellent UK successes many of which go unnoticed and uncelebrated. Electronics is, and will remain, a major contributor to our economy, through its creation, reproduction, installation and support; but also through its effective utilisation. The Electronics Leadership Council believes strongly that to achieve the maximum economic return for the UK, our electronic sector needs to be coordinated, represented and nurtured.

Electronics can help provide the solutions to the major societal challenges we are facing:

ENERGY: More efficient electronics devices, underpinned by low-power chips, reduce energy consumption. Microcontrollers enable smart metering with remote connect/disconnect features so energy demand in the home and businesses can be more effectively managed. Solid State Lighting applying the latest LED technologies, will significantly reduce energy demand.

ENVIRONMENT: Improved sensor technologies linked to microprocessor control and internet access enable remote calibration of environmental monitoring and control systems. This leads to cleaner manufacturing processes, not only in electronics but also in other sectors as a result of electronics, that will reduce the carbon footprint of companies.

HEALTHCARE: Demographic changes mean an increasing proportion of the population will be elderly, supported by a relatively shrinking workforce. Assistive technologies will enable more healthcare to be provided in the home, rather than in hospitals.
TRANSPORT: Electronics now form up to 40 per cent of the value of a new car, making fuel performance more efficient, improving safety, and providing in-car entertainment and navigation. Traffic Management, congestion charging and, if introduced, road pricing all rely on electronic technology.

SECURITY: Advances in sensor technology will continue to improve detection techniques. The terahertz (THz) region of the electromagnetic spectrum has a number of exciting properties: intrinsically safe, opaque materials can appear transparent, many materials have a readily identifiable frequency “footprint” and a wide range of inspection solutions are available. This region of the spectrum has yet to be properly exploited but advances in terahertz science are now leading to the uptake by early adopters.

UK companies can play, and indeed already are playing, a significant part in meeting these challenges. The role of the ELC is to provide a voice for these companies, making more visible to policy makers the hidden role of electronics. We need also to make sure the UK has the most favourable conditions for UK businesses to succeed at home and abroad. The ELC’s refreshed strategy focuses on seven key themes to achieve this and I look forward to working with our key delivery partners to bring even more success to our industry.

I would like to sincerely thank all members of the ELC, and those who have worked with us, for their strong contributions to our work over the past two years since the ELC was formed.

Harry Tee
Chairman
Electronics Leadership Council

The ELC seeks to influence a wide range of stakeholders across central and local government, academia and the industry itself.
Technology

Key metric:
Public and private spending on R&D in electronics increases.

What we want
We need to encourage small and large businesses active in the UK economy to identify appropriate and innovative electronic technologies and establish world-competitive products based on them. The Electronics Leadership Council sees increased spending in research and development; dynamic relationships between universities and industry; and more effective collaborations between businesses as fundamental to achieving this.

What we have done
We have engaged in constructive dialogue with the Technology Strategy Board (TSB), so that they have a clear understanding of the nature of the UK electronic community and the best way that their funding programme can be tailored to assure an optimum return on that investment. This has already had an effect on the construction of the 2007 calls. This also extends to guiding the activities of the Electronics Knowledge Transfer Network, which is funded by the TSB, and whose formation was one of our major concerns last year.

We have also engaged with European strategic funding agencies, including the seventh Framework Programme, Eureka and the Technology Platforms (particularly Artemis and Eniac). Participating at Governmental and industrial levels, we have achieved a much better understanding of the opportunity that these programmes can provide to UK electronic communities. This has resulted in influence on the content of future FP7 calls and recognition of the roles of TSB and Government in supporting the UK-end of the recently agreed Joint Technology Initiatives on embedded computing systems and nanoelectronics.

We have been closely involved with the Engineering and Physical Sciences Research Council (EPSRC) in dissemination of this information, but also in clarifying the relationship between business and the research community in universities. Only by establishing the correct economic basis for an Industry/University relationship will such relationships flourish. Industry needs the publicly funded research base to establish the technology and capability that it needs to develop its next product at the lowest possible risk. Universities have a role to help provide the skilled people, technology and science by anticipating that need. In this context we have actively participated in the development of the UK Research Grand Challenges for Silicon (Si-Futures) and System Design (Common Vision), to provide guidance and integration to all activities in this domain. We are also starting communications with the Department for Innovation Universities and Skills whose activities are complementary to this.
Throughout the year we have been major contributors to several government-sponsored studies, perhaps most notably the Sainsbury Report in November. We have participated in the Information Age Partnership and the UK Science Forum, both Ministerial forums and been able to propagate the messages about the nature of the UK electronics sector and its contribution to the UK economy. We have also had discussions with Trade Associations and Professional Bodies about the way that they can support the technology objectives of the ELC.

Much of these discussions are based on the Technology Strategy document, which was also produced this year by the ELC.

What we need to do
Over the coming year, we want to continue to build strong links with the Technology Strategy Board, particularly its newly appointed Chief Executive, Iain Gray, who comes from a sector, aerospace, that knows very well the importance of electronics. We plan to build up the economic propositions underpinning the technology priorities we have identified. We want to see as many UK companies as possible taking up the opportunities in the ARTEMIS and ENIAC Joint Technology Initiatives, and we want to see the Technology Strategy Board provide strong backing for potential collaborations. We will organise a showcasing event on funding opportunities. Finally, the R & D tax credit has been a benefit to many companies, often proving the balancing factor in deciding whether to invest in research in this country. We want to see whether it can be improved so it is even more effective in providing support to electronics companies in the UK.
Regulation

Key metric:
Our aim is to ensure that the UK is in the top three countries on international rankings for regulatory environment.

What we want
Greater investment in research and development is a necessary but not sufficient condition for the success of the UK electronics sector. We need to consider the whole ecosystem in which companies operate. In particular, the regulatory environment must facilitate growth and innovation, and not impose undue administrative burdens nor stifle entrepreneurship. Setting the right regulatory, tax and investment environment should be a priority for Government. Government departments need to be encouraged to pursue more objective-based regulation and avoid prescription that impedes competitiveness and innovation.

What we have done
Over the past year, our industry has had to come to terms with the implementation of WEEE and RoHS. It is to the credit of the adaptability of our companies, and also the sensible enforcement approach of in particular the National Weights and Measures Laboratory (NWML) that we have done so without major disruptions. We need to make sure that the forthcoming reviews of these regulations ease some of the administrative burdens and do not introduce further unnecessary restrictions.

The Electronics Regulatory Group, comprised chiefly of the main trade associations, enables our sector to engage in a direct dialogue with regulators. It provides a route to channel information about regulatory developments to companies, through intermediaries such as trade associations.

What we need to do
Over the coming year, we need to become more effective at influencing the shape of regulation. The Council is pleased that the UK Electronics Alliance is resolved to bring about significant improvement in the quality of evidence on regulation by making use of intelligence gathered by their members, addressing supply chain implications and providing mechanism for SME issues to be taken on board.

We need also to become better at exploiting the innovation opportunities that some regulation creates. Companies can often get first-mover advantage by correctly anticipating regulation. Already in Brussels, there are discussions on measures to implement the Energy Using Products Directive in key sectors such as consumer electronics, stand-by enabled equipment and boilers and water heaters. The Council would like to see the Electronics Knowledge Transfer Network helping to stimulate research projects to develop products that meet the likely requirements of the implementing measures and that deliver benefits to the environment and help preserve energy resources.
Supply chain

Key metric:
Number of companies who adapt behaviour following case studies and awareness.

What we want
The electronics sector is at the forefront of globalisation. It has set the trail on new manufacturing and the break-up of traditional value chains that others are now following. More than ever, UK companies need to take account of best practice when taking decisions on supply chain operations and be aware of the importance of supply chain management issues including where to go next for assistance and training. Our aim has been to establish a library of case studies which can be used to support companies with a requirement to upskill their supply chain management capabilities.

What we have done
The Council has been raising awareness of existing support mechanisms via Council members, the Alliance, OEMs, Regional Development Agencies (RDAs) and Devolved Administrations, and Knowledge Transfer Networks. It has adopted the MAS/KPMG “Offshore? Be Sure!” toolkit as fit for purpose along with the Welsh Assembly Government’s “total acquisition costs” tool. The Council is pleased that the Electronics KTN has agreed to take a co-ordinating role in addressing this issue and is developing proposals for delivery in the regions using up-to-date delivery media such as podcasts.

What we need to do
Over the coming year, to help identify audiences (SMEs, large companies, different sub-sectors etc) and find the right messages, including good case studies, the Council would like to see the establishment of an expert panel with international reach and mentoring capability. This can develop a topic schedule to enable the community to see where we are going and to enable them to plan their interactions, with a focus on supply chains for specific markets (such as medical devices).
Skills

Key metric:
There are no significant skills gaps or shortages.

What we want
The electronics sector must have the high-level skills it needs to compete in global markets. This means the education system must be more synchronised to business needs and respond in a shorter, more flexible way to industry demands. We need more young people studying science, technology, engineering and mathematics (STEM) subjects, more people on physics or engineering courses in universities and more graduates deciding to work in our sector. Beyond shortages of generic skills, we hear continually of difficulties in recruiting software and analogue engineers.

What we have done
There is much activity in hand. Indeed, one criticism may be that there are too many disparate actions that dilute the impact and confuse companies. Over the course of the year, the Council has worked with SEMTA, the sector skills council for science, engineering and manufacturing, to ensure better signposting of recognised provision and to provide better information, advice and guidance to young people starting their career. SEMTA also has a key role in the National Skills Academy for Manufacturing which the Council wants to have a strong electronics focus. The Chairman of the ELC sits on the board of SEMTA to ensure our sector is well represented.

The Council welcomes the introduction of the new Engineering Diploma in September 2008 and notes plans to develop a Science Diploma, but believes more must be done to excite young people about science and engineering. Over the past year, it has actively championed the STEMNET ambassadors programme, whereby individuals from industry go into schools, and has worked with the Institution of Engineering and Technology’s (IET) Science Working Party examining the challenges around the image of STEM subjects in schools and the opportunities to challenge and improve negative views.

What we need to do
Over the coming year, the ELC believes it is necessary to focus on one initiative at each stage where people make decisions about their education and career choice: at 14 when selecting school courses, at 18 when choosing universities and after when looking for employment. We will continue to promote STEMNET, working with the UK Electronics Alliance. We want to explore with the IET the scope to replicate their successful “Power Academy” scheme in the electronics sector. Finally, we want to work with the IET and the Engineering Training Board (ETB) to improve information, advice and guidance on career opportunities, including promoting and recruiting more sector role models onto www.scenta.co.uk
Image

**Key metric:**
Public perceptions about electronics are improved

**What we want**
Linked to the skills challenge we need to improve the image of our sector and we need to engender enthusiasm for new technology. The industry has to be more visible to investors and people considering career opportunities, and managers and the business community in general need to understand better the opportunities offered by new and emerging technologies. Overseas, potential investors and customers need a better appreciation of the strengths of UK electronics.

**What we have done**
The Council has been working with UK Trade and Investment (UKTI), to promote a strategy that presents a positive vision of the UK ITEC sector to the world, marketing UK capabilities and identifying global opportunities to exploit. Consultation on the strategy was launched on 7 December. The Council has also jointly sponsored the IDEA awards aimed at recognising and rewarding the key role played by mechanical and electronic design engineers in the creation of new and successful products. The Chairman of the ELC sits on the IET’s Science Forum Working Party on the image of science and engineering chaired by Sir Robin Saxby. The Forum is setting out an agenda to improve the image of the technology sector and, in particular, STEM subjects in schools.

**What we need to do**
Trade associations and professional institutions have a key role to play in improving the image of the electronics sector. The Council would like to see the UK Electronics Alliance working with bodies such as the IET on a major new campaign to boost our sector. There are many valuable trade shows in the UK, serving different sectors, but none has the scale nor impact of those in our key competitor countries. We are encouraging UKTI to consider as part of its new strategy the scope for a major new event to promote the UK as a source of high quality electronics, working with partners in the private sector.
Public procurement

Key metric:
Procurement from SMEs increased by 100 per cent from its 2004 level.

What we want
The Government spends £125 billion on goods and services every year. The Council wants to see more of this public procurement used as a showcase for the UK world-class capability, creating an environment which catalyses innovation and generates new business opportunities. This will result in improved public services, infrastructure and productivity. However, our companies, particularly small firms who form the backbone of our sector, find it difficult to identify the current and future requirements of major public purchasers of electronic products/services across UK Governments’ departments.

What we have done
The Council has made a start in identifying the key opportunities in Government departments, with information placed on its website. The Council has had a number of meetings with the Chief Executive of the Office of Government Commerce to set out the capabilities of the sector and to discuss greater access, particularly for SMEs, to Government procurement.

The Council is pleased that the Electronics Knowledge Transfer Network has developed a database with the potential to list every electronics company in the country and the markets they serve.

What we need to do
We need to generate a functioning network of UK companies:

- to deliver electronic goods/services to Government;
- to have an ongoing and productive relationship with key Government procurers in the UK;
- to be active in working with and through relevant agencies to promote UK capabilities in electronics overseas.

The Knowledge Transfer Networks working in conjunction with their regional partners and the Business Link in each region have a role in this.
Business support

Key metric:
A higher profile for electronics in the Regional Strategies produced by the RDAs, and equivalent documents in Scotland, Wales and Northern Ireland.

What we want
Regional Development Agencies need to recognise the importance of the electronics sector in their Regional Strategies, particularly given the importance of electronics as an underpinning technology. The support for businesses that public authorities provide must be relevant to and accessible by all sizes of business in the UK sector. We want the UK to be seen as a leader in innovation and exploitation of ideas. More support should be provided to educating companies about the need for and role of industrial research in their business and to encourage partnering nationally and in Europe.

What we have done
Since its establishment, the Council has met with the Chair or Chief Executive of each Regional Development Agency in England and through its links with Electronics Scotland and the Welsh Electronics Forum, has fed into the devolved administrations. It has supported SEEDA’s work in establishing a Regional IT and Electronics (RITE) Group to share best practice between the regions and to develop a clearer picture of the electronics sector (its nature, its strengths, its numbers, its contribution to the UK economy) through better data.

What we need to do
We need to ensure more effective support for exporters. UKTI’s marketing strategy provides an opportunity to achieve this. The Council also wants to see Selective Finance for Investment targeted at high quality and sustainable investments in priority opportunities. The State Aid Rules, revised at EU level, provide more opportunities to support innovation. The RDAs need to be encouraged to support Technology Strategy Board initiatives in the electronics area, within the framework of the business support simplification exercise.
UK Electronics Alliance

What we have done

The UKEA, an alliance of the major UK trade associations, acts as a vehicle, through mutual cooperation of its members, to represent the interests of the UK electronics industry.

In the second year of its existence, the Alliance continued to make inroads in addressing some of the challenges highlighted in the EIGHT Report Making a Visible Difference. In particular it:

- now provides a platform for invaluable networking, close cooperation and the sharing of best practice between the various sectors within the industry via the member trade associations. Member trade associations have shared knowledge and are working cooperatively on a number of issues including the RoHS and WEEE Directives, counterfeit components, skills shortages and the particular issues faced by SMEs;

- has improved communication with trade association members regarding regulatory issues by working closely with the Electronics Regulatory Group (ERG) and has provided feedback on a number of topics including the RoHS and WEEE Directive reviews and the new Energy-Using Products Directive;

- has launched its own website, which provides a wide range of information including news of Government initiatives that provide support to the sector, industry events including conferences, seminars and workshops and, in addition, industry technical publications, many of which are downloadable free of charge.

Current work in progress includes:

- work on a navigation tool for industry to public sector recruitment, training and collaboration with academia to help address the UK skills shortage;

- developing a closer working relationship with the Electronics Knowledge Transfer Network (EKTN) to share knowledge accumulated by the trade associations with the wider electronics community and promote the work of the EKTN to trade association members.
What we need to do

Looking towards the future, the Alliance will:

- continue to develop the partnerships between the Trade Associations to raise the profile on common issues, such as skills shortages and counterfeiting, affecting the sector;
- work in partnership with the Electronics Leadership Council (ELC) and other bodies to help develop and implement the Strategic Plan for Electronics;
- develop its relationships with the Electronics KTN to support their work in developing a knowledge sharing platform and with the ELC to support their work in implementing the Strategic Plan for Electronics;
- develop its mechanisms for disseminating information and collecting feedback on regulatory concerns and opportunities;
- support Government more widely by promoting its initiatives to trade association members and providing intelligence to Government on issues affecting the electronics industry.

Derek Boyd
Chairman
UKEA

UKEA Members:
AFDEC
AIM UK
Component Obsolescence Group (COG)
Electronics Scotland
Electromagnetic Compatibility Industry Association (EMCIA)
GAMBICA Association
International Association of Broadcast Manufacturers (IABM)
Intellect
Joint Equipment and Materials Initiative (JEMI UK Ltd)
National Microelectronics Institute (NMI)
Welsh Electronics Forum

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The Electronics Knowledge Transfer Network...
One year on

What we want
One year after its inception, the Electronics Knowledge Transfer Network has started delivering value to companies throughout the electronics sector with over 1,000 members participating.

Targeted at the heart of the electronics community in the UK, the electronic design enterprises, our goal is to drive innovation through design for the benefit of the electronics value chain; from research, through product development, all the way through to supply chain, bringing together academia and business to improve our capacity to develop innovative products and services.

There are many initiatives and intermediaries, delivered at a regional and national level, designed to help companies develop and grow their business. We aim to complement these initiatives with additional services, knowledge and content tailored to develop the innovative and competitive capability of our sector.

One of the strongest catalysts for innovation is the energy that's created when you bring peer groups, technology users and technology providers together in environments that will stimulate those “disruptive” ideas. This is a fundamental object of our networking activities.

What we have done
Connecting the electronics sector throughout the UK was a priority, and we’ve achieved this by forming strategic alliances with regional partners, leveraging, enhancing and connecting existing networks. Electronics Yorkshire, Electronics Scotland, the Welsh Electronics Forum, Universities of Bath, Hertfordshire and Kent, Oxford Innovations and Cambridge Networks are our first regional partners with other regions to follow later this year. These partners will deliver our national content and their own regional programmes, tailored to meet the priorities or interests of their network.

Putting the UK electronics sector on the global map was another important objective. This was achieved through the delivery of the Capability Directory. Prospective buyers or collaborators can identify companies across the electronics value chain by searching for a specific technology, product and within a specific region. Ease of use was a key consideration, and promotion through UK Trade and Investment was another. The directory is quickly gaining credibility as an important resource to showcase the UK’s strength and depth across the electronics value chain. Have you checked your company details on it yet?

Our content programme covers the spectrum of “new” science and technology (the innovations of tomorrow), and the “new to them” technologies, (the best practice and adoption of existing technologies or processes).
When considering our content programme, we took account of the strengths of our sector, including our universities, the potential areas of opportunity, and the issues that our sector would face in the future.

For “new” technology, we identified High Frequency RF, including Terahertz, as potentially disruptive technologies where the UK has academic strength and the potential to lead. Power management and energy scavenging are two other key technology areas where deployment of new technologies or process will gain market advantages. We also recognise the increasing importance of embedded technologies to deliver innovations, as programmable devices are more widely adopted and embedded software will in the future be where the innovations are created.

From the “new to them” technology angle, we include topics including the application of RFID, best practice for EMC design (now increasing in importance as physical dimensions of devices continue to decrease whilst frequencies increase), as well as design guides that will help engineers to understand how to comply with the latest coming out of Europe, specifically the EuP Directive.

We’re also working closely with the Electronics and IT Services Unit at BERR to deliver content relating to electronic regulations, enabling companies in the sector to keep abreast of the European Community or UK legislation that will impact them.

**What we need to do**

Accessing new markets is vital for companies to grow and prosper, and the coming year will see programmes that will help companies to understand how to access or develop products in the medical and security markets, and will give guidance how to access other public procurement programmes such as the 2012 Games.

Working with our KTN partners who have special relationships with key market sectors (such as Healthcare) or a deep understanding of technologies (such as Sensors or Photonics), we aim to deliver brokerage events to open up these markets, and to translate the impact of new technologies on the design process.

Working with the UK Electronics Alliance will also enable a wider distribution of their members’ specialist content or expertise.

The first year has been a very exciting start, and we have a stretching, challenging programme to deliver in 2008.

Without the participation and interaction with our community however, we can never achieve our goal of creating a network which learns from itself and develops its peers to be a world-class force in the market.

If you haven’t already done so, register for membership today, it’s free (www.electronics-ktn.com), and we only ask you for your time!

**Ashley Evans**

Chief Executive,
Electronics Knowledge Transfer Network
Electronics make:
cars more reliable
aircraft safer
energy more efficient
homes more comfortable
entertainment more colourful
manufacturing processes more manageable
quality standards more accurate
oil and gas more available
healthcare more effective
communications more capable
photography more versatile
information more available
music clearer
travel wider
data movement faster

In fact everything is better because of electronics, the technology that has changed, and will continue to change, the world we live in.
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Neville Rayner – CEB, Chairman, Anglian Components Limited
Professor John Roulston – CEO Scimus Solutions Ltd
and Industrial Professor of Electronics at Edinburgh University
Ian Russell – Managing Director, Godfrey Ltd
Christopher Sawyer – Chairman, Computing Solutions Group plc
Gary Stansfield – Chief Executive Officer, Ricardas plc
Peter Sylte – National Officer, Unite – The Union
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Keith Hodkinson – Director, Electronics and IT Services Unit, Department for Business, Enterprise and Regulatory Reform (BEER)
Vince Ogston – Head of Technology Sector, STEM, Engineering and Physical Sciences Research Council (EPSRC)
Dr Nick Apleyard – Lead Technologist, Electronics/Proteins/Electrical Systems, Technology Strategy Board (TSB)

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<td>UK Trade and Investment</td>
</tr>
<tr>
<td>WEEE</td>
<td>Waste Electrical and Electronic Equipment</td>
</tr>
</tbody>
</table>

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