# Electronics KTN

# UK Design Forum Meeting

Nigel Rix

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# Knowledge Transfer Networks

- **24 Knowledge Transfer Networks**

    "A Knowledge Transfer Network is a single over-arching national network in a specific field of technology or business application which brings together people from businesses, universities, research, finance and technology organisations to stimulate innovation through knowledge transfer. "

- **Goal: Establish the UK as a**

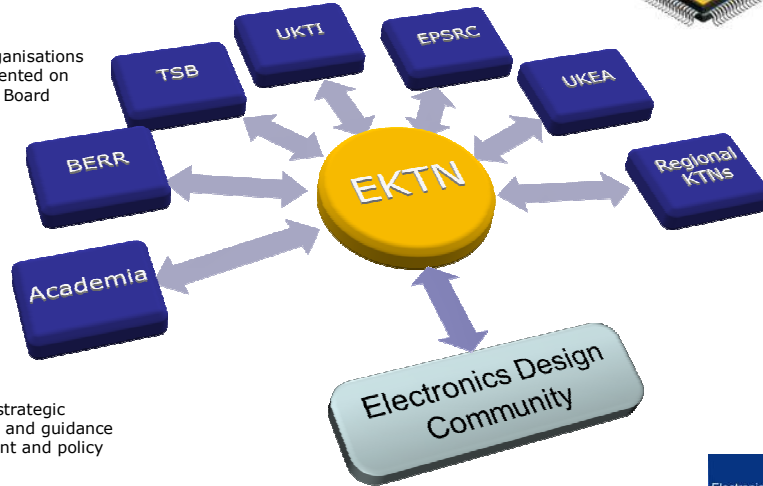    **"global electronic design centre of excellence"**

- **Governance**
  - Independent
  - Not for profit, limited by Guarantee

# A national network

- **Regional Delivery Partners**
  - RDA Regions + Devolved Administrations
  - Building the community in the regions
  - Delivering content to meet regional priorities
  - Industry led steering groups
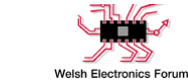


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# Electronics KTN

## Our key technology & business themes

- Millimetre and Sub-Millimetre (Terahertz) Wave RF
- Medical & Healthcare Electronics
- Embedded Systems
- Power Management
- AIDC and RFID
- Modern Built Environment / Interoperability
- Design tools and processes
- Supply Chain for the electronics sector
- Standards compliance; EMC, EUP, China RoHS

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**179 Sites 2k FTEs**  **6277 Sites 50k FTEs**  **2051 Sites**
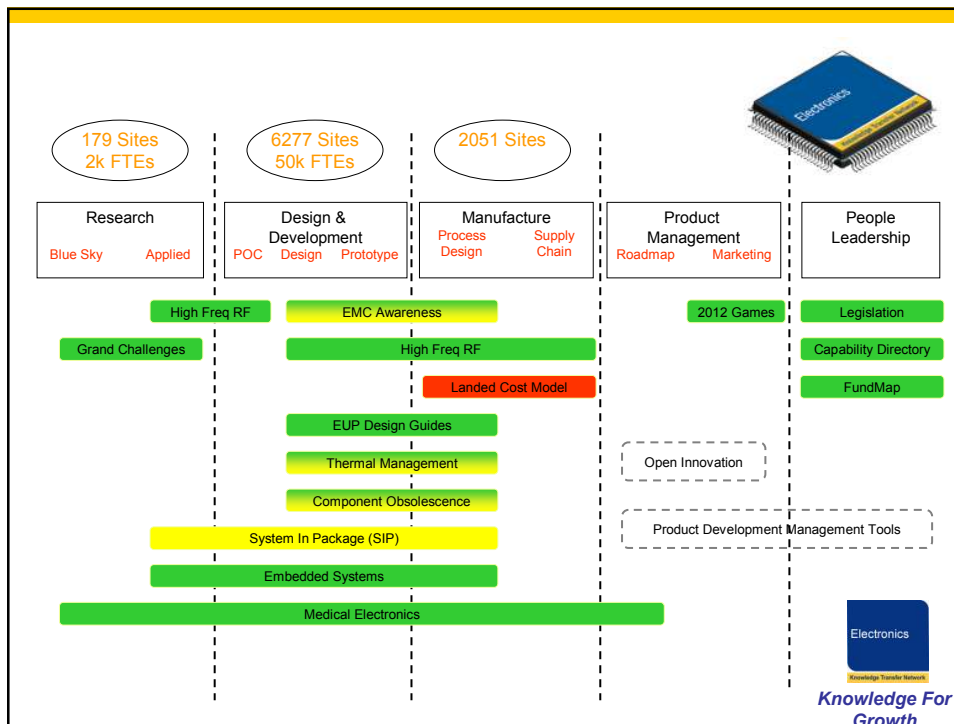
| Research | Design & Development | Manufacture | Product Management | People Leadership |
|---|---|---|---|---|
| Blue Sky    Applied | POC   Design   Prototype | Process Design    Supply Chain | Roadmap    Marketing | |

High Freq RF  EMC Awareness  2012 Games  Legislation

Grand Challenges  High Freq RF  Capability Directory

Landed Cost Model  FundMap

EUP Design Guides

Thermal Management  Open Innovation

Component Obsolescence

System In Package (SIP)  Product Development Management Tools

Embedded Systems

Medical Electronics

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# KTN Events

- RFID (Radio Frequency Identification)
  - 2nd May – RFID Information Day – Bracknell
  - 15th May – RFID Information Day – Halifax

- EMC
  - 4th June – EMC Directive for Railways – IET, Savoy Place
    (in conjunction with IET and York EMC Services Ltd)
  - July – EMC Design Tools
    with COMSOL & CST (contacted Flomerics and Ansoft)
  - Evening seminars: Benefits of "design for EMC"
    target CEOs, FDs, Ops Dir

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# KTN Events

- High Frequency
  - July - SKA and what it means for electronics sector working with Prof Missous at M/cr

- Embedded Systems
  - Safety in Embedded Systems
    A perspective on how software development techniques, tools and processes are used in various industries – automotive, defence, medical

- Medical and Healthcare
  - Advances in Lab-on-Chip Technology

  - June 26th - Medical Innovation forum

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# ARTEMIS and ARTEMISIA

- London Brokerage event on ARTMIS and ENIAC

  - Speakers from ARTEMIS, EC, TSB, EKTN, NMI, NCP

  - 150 attendees with follow-up

  - EKTN joined ARTEMISIA in order to represent the interests of our members and provide access to information and alerts

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## Special Interest Groups

- Embedded Software

  - Up and running for several weeks

  - 70 members

  - Event materials uploaded for members

  - Members uploading their own calendar events, and documents and participating in discussions

  - Seeking SIG champions to stimulate discussion and activity

## Website Content

- EuP
  - Webinars and other details
  - Model includes user interface and a content manager

- Regulations (ERG)
  - Reach
  - WEE
  - RoHS

- EMC

- RFID and AIDC content

# New Content Projects

- Fundmap
    - Produced jointly with Photonics KTN
    - Model includes user interface and a content manager
    - Subject to final audit, "go-live" ready

- Thermal Management Awareness
    - Design guide for engineers - downloadable PDF , Webinar and workshop
    - Delivery July 2008

- Component Obsolescence Design Guide (COG)
    - IP for three existing publications
        - The Obsolescence minefield, Hardware Design and Software Obsolescence
    - Conversion into webinars by each author

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# Grand Challenges Events

- EPSRC funded project to establish the Grand Challenges in Microelectronics Design

- To take work forward:
  A series of events to –
    - expose the work conducted to a wider commercial audience and
    - encourage collaboration between academic research institutions & industry.

**Design Vision**

**Grand Challenges**
**in**
**Microelectronic Design**

a report from the initiative:
*Developing a Common Vision*
*for*
*UK Research in Microelectronic Design*

supported by the EPSRC
Network Grant EP/D054028/1

**EPSRC** Engineering and Physical Sciences
Research Council

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# Motives for these Events

- Grand Challenges to Business - Knowledge Transfer

- Academia to Business - Knowledge Transfer

- Academia to Business - Brokerage

- Business to Business - Brokerage

- Access to EPSRC Funding

- Access to TSB Funding

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# Proposed Event Programme

- **Introductory event – half day**

- **Event 2 uGC1** – Batteries Not Included – Full day

- **Event 3 uGC2** – Silicon Meets Life – Full day

- **Event 4 uGC3** – Moore for Less – Full day

- **Event 5 uGC4** – Building Brains – Full Day

Opportunities for engaging with industry and also
    for promoting selected messages to the wider public

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# Introductory Event

- **Steve Furber** – Intro to the project

- **Andrew Brown** – What did we achieve?

- **Roger Woods** – "It's good to collaborate"

- **EPSRC** – the importance of EPSRC funded research projects

- **TSB** – the importance of industry engagement with academia

- **Dan Dearing**– what's next in terms of follow up from this introduction

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# Support for Intro Event

- Sponsorship of venue and catering from EPSRC

- Co-promotion with Health Technologies KTN and Sensors KTN

- Co-promotion from NMI, IET, Intellect, Silicon Southwest

- Endorsement and promotion from ABHI

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# Themed One-Day Events

- **Introduction** – and recap of the initial event

- **Academic Presentations** – covering the research being conducted in an area related to the theme

- **Industry speaker -** industry perspective on research

- **Lunch**

- **Foothill projects workshop** – series of parallel, streamed, interactive, facilitated workshops
aimed at identifying potential research projects that develop the theme further towards the relevant Grand Challenge...

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# Calendar of Events

- **Introductory Event** – March 28th, London

- **Batteries not Included** – Mid July, Southampton

- **Silicon Meets Life** – Early Sept, Manchester

- **Moore for Less** – Early October, Cambridge

- **Building Brains** – Nov, Venue TBC

**Seeking sponsorship** from industry partners
**Wide collaboration** with other KTNs and TAs

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# Follow-Up to these Events

- Focused Groups of Commercial Participants

- Proposals for EPSRC Funded Research Projects

- Building the EKTN Community

- Initial Brokerage Discussions

- Links into other KTN and TA events on related themes

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# Un-Met Needs Programme

- Grand Challenges programme acts as a platform to recruit volunteers from participating companies

- Forum to discuss real world needs

- Feed back into Academic Research

- Increased collaboration between Academia and Industry

- Encourage "Open Innovation"

- Increased commercialisation of academic research

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# Silicon Futures Programme

- Similar, parallel or integrated series of events proposed for Silicon Futures Grand Challenges project

- Not practical for EKTN to deliver such a series

- Slightly different community (devices)

- Subject matter not so familiar to EKTN

- Closely aligned to NMI community and members expertise so offered to support NMI as delivery partners for a similar series of events

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# See us at….

national
**ELECTRONICS**
week

**medical**
**innovation forum**
25 june 2008 - olympia conference centre, london

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