



**Ultra Wide Band Colloquium**  
**IEE Savoy Place London**  
**23rd July 2002**





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***Overview of UK Approach  
To Emerging  
UWB Technologies***

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# UWB - The Agency's Objectives:

- Identify the potential benefits of UWB as a viable short range wireless technology;
- Determine the full range of possible applications;
- Examine critically the alleged spectrum advantages;
- Determine the technical compatibility issues;
- Quantify the interference risks (single source & cumulative)
- Maintain suitable protection for existing spectrum users;
- Consider the issues constructively with an open mind;
- Consult widely and reassure existing users;
- Identify and consider any other policy issues.

# The Agency's Approach so far:

- Carry out “in house” laboratory measurements;
- Sponsor independent research studies;
- Where possible, facilitate licences for private Test & Development of technology and product ideas;
- Monitor international developments;
- Work closely with other CEPT administrations to share information & determine / resolve issues.

# International context:

- UWB intended for integration into mass market consumer products;
- Individual licences would be impractical;
- UWB devices / products likely therefore to be “licence exempt”;
- Impractical for UK to regulate UWB in isolation;
- RA therefore actively participating in CEPT (and ITU) studies;
- RA Input to ERO UWB Workshops;
- Develop informed UK national position for constructive participation.

# Agency Test Programme:

- Carried out at by RA staff at our Whyteleafe Laboratories (RTCG);
- Limited number of “victim services” tested to date;
- Scope of tests agreed internationally (CEPT);
- Results shared within CEPT (Project Team SE24);
- Further work at RTCG planned in light of February 2002 FCC Ruling.

# Agency's Research Programme

- UWB studies previously commissioned:

***“An Investigation into the Potential Impact of Ultra Wide Band Transmission Systems”***

Multiple Access Communications, Feb 2000

***“Ultra Wide Band Compatibility”***

AEGIS Spectrum Engineering, Jan 2002

- Both available on: [www.radio.gov.uk](http://www.radio.gov.uk)
- Proposed new study invited to consider “UWB and 3G Compatibility”

# Today's (Agency) Objectives:

Determine and share:

- recent developments in UWB technologies;
- current industry thinking on possible applications;
- compatibility and interference concerns;
- recent & possible future international regulatory developments (US & Europe);
- future areas for RA sponsored research.

**We would especially welcome your contributions  
to the open forum this afternoon!**



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