

# UK GTEM User Group

## Minutes of the meeting held at NPL on 25th September 2002 (following GTEM Workshop )

### **1 PRESENT**

Roger Dixon (RD)	IFR Ltd [Chairman]
Ian Alderman (IA)	Secretary
Benjamin Loader	NPL
Kevin Kumar	OFGEM
Neil Coote	Nokia
Stuart Bright	Ampy Automation
Graham Blissett	AWE
Michael Davies	Measurement Technology Ltd
Richard Neyton	Apollo
Eddie Veater (EV)	UKAS
Paul Duxbury	Flomerics
Steve Cobb	EMC engineer IFR Ltd
John Erdelyi	EMC engineer IFR Ltd

### **2 APOLOGIES RECEIVED**

Harbinder Bharj (HB)	BRE[Secretary]
Andy Perkins	Schaffner
Dennis Burns	MCI
Stephen Lee	Mariner systems
John Birkett	Consultant
John Wombwell	EMC Hire
Martin Alexander	NPL

### **3 CHAIRMAN OPENS MEETING**

The Chairman (RD) opened the meeting and welcomed all attending members.

### **4 MINUTES OF THE LAST MEETING**

The minutes of the last meeting were accepted without comment.

### **5 INFORMATION EXCHANGE**

#### 5.1 Mailing List

The current list was circulated for revision and update.

#### 5.2 Phil Carter

The chairman (RD) suggested either 19<sup>th</sup> February 2003 or 26<sup>th</sup> February 2003 as possible dates for Phil Carter to speak at the next meeting tba.

[Post Meeting Note: Phil Carter has chosen 19<sup>th</sup> February.]

- 5.3 The chairman invited suggestions for possible speakers for the next meeting on 21<sup>st</sup> May
- 5.4 The chairman reported that Dave Imeson of the EMCTLA had been quite ill recently and the group agreed to send their best wishes.
- 5.5 The chairman noted that there will be a seminar on Measurement Uncertainty on 28<sup>th</sup> November.

### 5.6 Update on LAB34

Schaffner have produced a booklet on LAB 34 "EMC Measurement Uncertainty" contact D French on 0118 9770070 or email [dfrench@schaffner.com](mailto:dfrench@schaffner.com)  
EV reported that UKAS will be releasing their LAB34 publication shortly.

### 5.7 EN50022 and cables

Problems concerning EN50022 and the clamping off of cables after 1.3m. No committee agreement on this issue so draft sent back for reconsideration. It was strongly felt that correctly terminated cables are essential for consistent measurement or immunity procedures. Referring back to the talk given by Richard Marshall and subsequent discussions regarding large numbers of cables RM suggests individual clamping to 150Ohms followed by bulk ferrite clamping.

- 5.8 EMC Directive draft 8 EMCD2000.8 available on the EMCTLA website ([www.emctla.co.uk](http://www.emctla.co.uk))
- 5.9 EMC Working Party note 4.2 "Products Modified by Manufacturer" EU information regarding modified products - ruling given to the effect that "A modified product is considered a new product".
- 5.10 "Lego bricks" for the construction of jigs is becoming popular! But members should be aware that some plastics are not invisible to RF especially at >1GHz.
- 5.11 UKAS website now has a 'find a lab' facility included.
- 5.12 Stuart Bright mentioned his 12cu m Environmental Test Chamber
- 5.13 Kevin Kumar reported that OFGEM testing will now be out-sourced.

### 5.14 Italy Conference

Ben Loader attended the conference and mentioned some of the items..

- New absorber materials – magnetic field absorber response flat upto 16GHz
- New developments with the GTEM with additional septum plates
- Workshop on Aircraft EMC – Use of mobile phones and Aircraft Safety Critical hazards. The argument was put forward that if the GPS went down due to interference from mobile phones then this would involve the pilot in more work and therefore considered to be a threat to safety.

## **6 UPDATE ON 61000-4-20**

The chairman circulated a copy of the e-mail from Markus Heidman (of Hannover University) detailing the status and voting dates of 61000-4-20.

Below 80MHz and above 1GHz 1% frequency steps are not maintained and some software does not easily cope with this.

The Longitudinal field limit is still required to be 2dB below the primary Y axis, so large GTEM's must be modified. Some small EUT's are not covered by the standard. EUT's without cables only seem to be acceptable!

## **7.0 AOB**

Graham Blissett of AWE mentioned information about 'how to build a screened room' and asked the group what RF immune materials people were using for jigs and supports. The general consensus was that balsa wood (sealed) and expanded foams were good but needed to be cautious with solid plastics although Delrin was acceptable.

**8.0 Next meeting** Now arranged to be on the 19<sup>th</sup> February 2003 at NPL. Please bring your questions for Phil Carter on any issue relating to the accreditation of GTEM Cells.