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### Utilities Radio Conference 2000

JRC Ltd, in collaboration with the Water industry, held their second, highly successful, Utilities Communications Conference at the Hanover International Hotel, Hinckley on 13-14 June, together with visits to Transco's nearby National Control Centre. The keynote speech was given by David Hendon, the Chief Executive of the DTI's Radiocommunications Agency, entitled "Facilitating the transition to a more mobile workforce", while Prof. Lawrie Challis, the Deputy Chairman of the Government's enquiry into Mobile Phones and Health (the "Stewart Report") explained the potential implications for utilities' communications systems.

This year, the Conference welcomed an increased number of international speakers and delegates. Caroline Bernand (pictured) of EdF gave a detailed account of the impact of the storms that swept across France at the end of 1999.



EdF's losses included 280 pylons and some 50,000 electricity poles. At the peak, 3 1/2 million electricity consumers were off supply. Of special note is that 24 hours after the main loss of electricity supply, there were 1 million telephone lines out of action due to back-up power supplies at the telephone exchanges failing. The paper also provided a useful comparison of how the EdF PMR system performance compared to the public GSM networks, and the lessons to be learnt for the future.

JRC are currently producing a CD-ROM containing the presentations given at the Conference. If you are interested in obtaining a copy, please contact Anita Lad on 020 7963 5797 or [anita.lad@JRC.co.uk](mailto:anita.lad@JRC.co.uk)

JRC/CSS would like to take this opportunity to thank all those who attended and participated in the Conference. We are most grateful for your support. If you have any comments on the event, please let us know as we want to build on the experience to make the next Conference better than ever!



All of which brings us to UCC2002, provisionally scheduled for 11-12 June 2002. Although we don't yet know the timetable for World Cup 2002, taking place at the same time, we are ever hopeful that there will be matches with a home interest to make them worth avoiding.

### Spectrum Pricing

The Radiocommunications Agency introduced the third Stage of their spectrum pricing regime in July. The main changes affect on-site communications and microwave fixed links. If members have any problems with their licences or their tariffs, particularly if they seem rather on the high side, please contact Simon Parsons on 020 7963 5806 or [simon.parsons@JRC.co.uk](mailto:simon.parsons@JRC.co.uk)

Beyond the third stage of spectrum pricing, RA intends to extend coverage to include Scanning Telemetry and some classes of satellite terminals from July 2001. JRC expects to be included in the consultation on the extension of spectrum pricing to these types of equipment, and will keep you informed of developments.

### How would you like it?

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## **Stewart Report on Mobile Phones & Health**

The Independent Expert Group on Mobile Phones and Health, chaired by Professor Sir William Stewart, reported on 11 May (The "Stewart Report").

We were very fortunate to get the Deputy Chairman of the Group, Professor Lawrie Challis to our Conference in Hinckley to give us some background information. Subsequently, Professor Les Barclay, the radio engineering specialist member of the Group attended a JRC Operations Advisory Group meeting to address the specific issues affecting utility users. These comprise:

- Demonstrating how hand-held and vehicle mounted PMR equipment meets the required standards.
- Assessing the implications of proposed changes to the Planning Guidelines and how they might affect fixed radio equipment in the utilities.
- Obtaining more information on the potential for mobile communications systems to reduce vehicle safety through driver distraction.

## **UHF Band Re-alignment**

The Radiocommunications Agency (RA) has now formally advised all licensees that they intend to re-align the band 450-470 MHz to conform to the European Band Plan, starting in 2005 for England and Wales, and 2007 in Scotland. We are not clear yet what will happen with Northern Ireland. The intention is to overcome the long-standing problem of interference between UK-based and mainland European radio systems operating on incompatible band plans.

As currently conceived, the change-over would take about 4 years to implement, after which time there would be some "spare" spectrum in the band ready for re-assignment, possibly for private Tetra systems.

Systems affected by this realignment project include MPT 1411 Scanning Telemetry systems, together with UHF PMR. Some public networks will also be affected, mainly RAM data and VodaPage, and some de-regulated equipment.

There are also high-level issues, such as how "national" operators will change when the timescales for different parts of the UK do not align, and the need to ensure our moves are co-ordinated with the Irish Republic to ensure the problem is not simply shifted from the East coast to the West coast.

JRC sits on the RA's Industry Advisory Group. We are working with RA on a sector-specific questionnaire to ensure that the problems and costs of the transition are fully appreciated within government.

The JRC Strategy Advisory Group is steering the JRC input to this work. RA has produced an outline plan of how they see frequencies in the band being realigned, on which they will be consulting later in the year.

JRC is identifying a number of alternative scenarios that could reduce the cost and ease the transition for JRC members.

When the overall picture becomes clearer, we will work with all member companies individually to assess the impact and the appropriate response, including not just JRC systems but also public systems if necessary

## **"Joining in" with the RA**

The Radio Agency has announced their autumn series of consultation meetings under the banner "Joining in". Ten events are planned around the UK between 19 October and 23 November 2000.

Attendance is free.

Call 020 7720 4411, fax 020 7720 7719 or Email [joiningin@meetingdeadlines.co.uk](mailto:joiningin@meetingdeadlines.co.uk)

## **London Underground TETRA network**

It has now been publicly announced that the new Private Tetra Network for the London Underground will operate in the 380-400 MHz band, spectrum previously reserved exclusively for the Public Safety Radio Communications Project (PSRCP), now known as "BT Airwave" operated on behalf of BT Quadrant.

JRC has long argued that there is no regulatory reason why the operational communications of utilities should not be allowed access to this block of spectrum, as is the case in some other European countries. However, we are still awaiting a government announcement on spectrum for private Tetra systems following a review which started in December last year.

## **Sun spots**

Sun spot activity and solar flares, which were at one time predicted to have a greater impact on communications in year 2000 than the millennium bug, seem to have caused little difficulty - so far.

On 14 July, a large complex sunspot produced one of the largest solar flares and associated radiation storms seen in recent years. NASA's Advanced Composition Explorer (ACE) spacecraft was one victim.

NASA's report said that "It appears that highly energetic particles from a very strong Proton event affected, at least temporarily, one or more sensors aboard the spacecraft." ACE orbits the "Lagrange libration", or neutral gravity point between the Earth and the Sun, so perhaps it was not so surprising it was hit.

The US GOES geostationary satellites also suffered data degradation as a result of the solar storm, but we are not aware of any other satellites suffering problems (due to solar flares at least).

## **World Radio Conference (WRC) 2000**

WRC 2000 was held in Istanbul for four weeks in June this year. The purpose of these international meetings, held every two or three years, is to agree changes to the framework of international regulations governing the use of radio. A report will appear in the next Newsletter detailing how agreements reached at WRC 2000 will affect utilities now and in the future.