



# International Amateur Radio Union Region 1 2014 General Conference – Varna-Albena, Bulgaria

21 – 27 September 2014



Subject	Report of Political Relations Committee (PRC)		
Society	PRC	Country:	
Committee:	C3	Paper number:	V14_C3_08
Author:	Thilo Kootz, DL9KCE		

## Report of Political Relations Committee (PRC)

### Introduction

The Political Relations Committee was founded for the first time during the last conference in Sun City. It is the direct successor of the former sub regional EUROCOM WG and its duty is to observe any political happenings within Region 1 and - if necessary - intervene on the political level. During the last term, we had two very important European Directives rewritten, both of which have great influence on the amateur radio services. Europe is starting to gain more power over spectrum (mainly from a commercial point of view), which must be watched closely. PRC also monitors new developments as Smart Grid, which is emerging along with many promises for our future energy market.

### Work Partition

During the three years term, we were able to recruit 3 new contributors to the committee, and we can now look onto a powerful team. We are not specialists in all fields, but have our work partitioned as follows:

Thilo Kootz, DL9KCE: Chairman, EMC related topics, Policy  
Jacques Verleijen, ON4AVJ: Vice Chairman, Spectrum Topics  
Murray Niman, G6JYB: Spectrum Topics  
Seamus McCague, EI8BP: Smart Grid/Smart Metering, Translation  
Kurt Meerkötter, DL8DMA: Internet research, European policy

### Policy in Region 1 (DL9KCE)

Starting at the beginning of this term, work by the European Commission on the next edition of the EMC-Directive (EMCD) was already ongoing. Due to the New Legislative Framework Initiative, it had become necessary to rewrite all directives to fit them into the new general principle. This alone would not harm us at all, on the contrary: One of the changes was to strengthen the efficiency of market surveillance and re-trace ability. But when a directive is touched, very often something is changed, that may pose a danger to marginal groups as ourselves.

And so it was with some lawyers in the commission wanting to change the definition of an electromagnetic disturbance to also incorporate the wanted signal. This would pose a threat on our services due to lack of immunity of electronic products in the neighbourhood. Today we already have issues with this, but until now, from a legal point of view the wanted signal of an amateur radio stations cannot be considered a

disturbance, but a lack of immunity on the side of the victim. A slight change in the definition would however reverse the situation. The amateur with his transmit signal would be responsible for the disturbance and its mitigation, possibly by power reduction or stop of transmission.

Fortunately after many letters and personal consultations especially with the MEPs Birgit Sippel and Barbara Weiler, amendment 31 was included in the EU Parliament list of corrections to the draft EMCD. The directive passed the Parliament with our wanted change in Feb. 2014, containing the following definition which is now:

**‘electromagnetic disturbance’ means any electromagnetic phenomenon which may degrade the performance of equipment; an electromagnetic disturbance may be electromagnetic noise, an unwanted signal or a change in the propagation medium itself;**

In the new EMCD the former ex- and inclusions, inserted by the EUROCOM WG in 2002-2004 could be protected and are still included in full. So the preamble contains the following section giving some (legally not binding) advice to member states:

**Member States should be responsible for ensuring that radiocommunications, including radio broadcast reception and the amateur radio service operating in accordance with International Telecommunication Union (ITU) radio regulations, electrical supply networks and telecommunications networks, as well as equipment connected thereto, are protected against electromagnetic disturbance.**

The exemption of non-commercial amateur radio equipment has also been kept:

**radio equipment used by radio amateurs within the meaning of the Radio Regulations adopted in the framework of the Constitution of the International Telecommunication Union and the Convention of the International Telecommunication Union, unless the equipment is made available on the market;**

The Radio Equipment Directive (RED), which will replace the R&TTE-Directive has also been rewritten during the last 3 years. It is not yet finished fully, but the ‘trilog’ talks are already over and some very important changes were included, following PRCs written inputs. It is very likely, that those changes will survive the last discussion in the Parliament. Those are:-

**Transmitters and receivers will fall under the scope of the RED. This will potentially lead to more spectrum efficiency and better immunity of receive-only equipment, including those for general public.**

**Equipment under the RED will in future require registration, making it much less easy to put equipment on the market that is not compliant. Market Surveillance will also have the ability to trace and track down non-compliant equipment easier, so man-made noise sources will hopefully decrease.**

The exclusion of amateur related equipment is now more precise. In the old form, it led to a lot of misunderstanding in some member states. Excluded are....

**Kits of components to be assembled by radio amateurs and commercial equipment modified by and for the use of radio amateurs are not regarded as commercially available equipment.**

- (i) radio kits for assembly and use by radio amateurs;**
- (ii) commercially available radio equipment modified by and for the use of radio amateurs;**
- (iii) equipment constructed by individual radio amateurs for experimental and scientific purposes related to amateur radio.**

Members Societies in Europe should be aware the both directives must be transferred into national law within the next two years. Polity makers in some members states tend insert local interest into this transformation. This should be avoided. If you need help in interpretation, do not hesitate to contact PRC.

### **Spectrum Policy (G6JYB)**

The majority of work has been associated with the European Union Radio Spectrum Policy Programme (RSPP). This is focussed on the range 400 MHz – 6 GHz and has includes a spectrum inventory and a key study on “Analysis of Technology Trends, Future Needs and Demand for Spectrum in line with Article 9 of the RSPP “.

In addition WRC-15 and Galileo have also been covered. In the past year meetings/activities have included:-

July 2013: Regarding the RSPP Spectrum study, following previous inputs and workshops in December 2012 and February 2013, I attended the results workshop on 11 July 2013 in Brussels. PRC had previously made two inputs to the study. The results workshop acknowledged our second input on 430 MHz satellite growth, but was disappointing from our point of view for amateur service (terrestrial) issues where we face a lot of spectrum pressure. The study report did not appear to clarify a point raised in our first input regarding which of the 14 categories that the Amateur Service should be treated under (as the RSPP uses ‘applications’ and not ITU services). This continued to be a concern for the PRC.

Dec. 2013: The other meeting attended on 10 December 2013 was the Joint EC-CEPT workshop on WRC-15. This focussed on EU priorities such as AI 1.1 on Wireless Broadband, Satellite and other items affecting higher frequency bands (including AI 1.18 which affects our 78 GHz Primary Band) – It did not include AI 1.4 on 5 MHz.

Also in late 2013, the PRC submitted a letter to the commission continuing its concerns re the categories bring used for studies and inventory. The result was a meeting in February 2014 (see below)

Feb. 2014: Three meetings came close together  
Tuesday 18 February: Meeting with Andreas Geiss (DG-Connect) to discuss our concerns re the earlier study and 14-categories. This may potentially get us a presentation slot to the EU Radio Spectrum Committee.

Wednesday 19 February: Meeting with DG Enterprise re 23 cm activities and amateur compatibility with Galileo – this may lead to a formal invite to present to the Galileo spectrum group.

Wednesday 19 February: Attended RSPG#33 briefing session

## **Spectrum Policy (ON4AVJ)**

My first work was with the presentation of the RSPP study “Analysis of Technology Trends, Future Needs and Demand for Spectrum in line with Article 9 of the RSPP”.

I also proposed to have a contact with Commissioner Georgieva about emergency communications, in collaboration with Gregg Mossop, G0DUB. There is also a program about volunteers in emergency work, and whether we could take part of this program. Unfortunately this path has not been explored further.

On the RSPP, working with Murray and Thilo:-

July 2013: In the presentation of the 14 categories it appeared, that the Amateur Service was not considered anymore, although in the first drafts it was included in category “experimental”. Later on this category was limited to “radio astronomy”.

September 2013: PRC sent a letter to commissioner Neelie Kroes and Georgieva about our concerns about this study. This resulted in a formal answer and the February meeting

February 2014: I also attended the Brussels meetings together with G6JYB and DL9KCE.

## **Internet Research (DL8DMA)**

One very important point of PRC's work is to crawl through a lot of data, to find out if something interesting really is happening. Unfortunately policy makers expect interest groups to approach, rather than being approached. The jungle of information you find in the net is so huge, that several steps of filtering are necessary.

We monitor 150 synchronous feeds every day. The numbers of messages per day fluctuates between 200 and 800. Among the monitored feeds are: general international press, technical press, ministries, network agencies, Bundestag, Bundesrat, European Parliament, Commission, European Court of Justice, general legal publication, EuroLEX, COM- and Join-Documents, SEC- and SWD-Paper.

DL8DMA also keeps email-contact to the following MEP/MdBs on amateur related topics: Dr. Peter Liese (MEP, 1 Contact), Birgit Sippel (MEP, 11 Contact), Wolfgang Hellmich (MdB, 9 Contact).

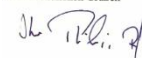
In 2012, when the EMCD was in a "hot" phase, DL8DMA used his very good contacts with German MEPs to get a very quick contact to Dr. Liese. This meeting finally lead to a number of letters from Dr. Liese to colleagues of him, helping a lot to get the amendment into the amendments list of European

Sehr geehrter Herr Dr. Liese, 

vielen Dank für Ihr Schreiben vom 30. Januar 2012 zur Begriffsdefinition „elektromagnetische Störung“ und der Position des Bundesverbandes für den Amateurfunk Deutscher Amateur-Radio-Club (DARC) e. V.

Dem Bundeswirtschaftsministerium sind die von der Europäischen Kommission vorgenommenen Wortlautänderungen bekannt und wurden bereits auf Fachebene diskutiert. Die Fachabteilung hat die Bedenken des DARC aufgegriffen und wird diese in die weiteren Beratungen des Richtlinienentwurfs auf europäischer Ebene einbringen.

Mit freundlichen Grüßen



Parliament. Another letter was also sent to the German Minister of Economics, Dr. Rösler, which was finally answered personally by him, stating that the German Ministry will carry the opinion of DARC to the European Council.

### **Smart Grid/Smart Meter (EI8BP)**

Since joining the PRC, I have focussed on Smart Grid/Smart Metering and their implications for Amateur Radio Spectrum. I contacted Irish MEP Mr Jim Higgins and he indicated to me his willingness to raise any issue I brought to his attention. Several Emails to another Irish MEP went unacknowledged – a disappointing result.

I attended the Smart Cities Workshop 2013 at ETSI, France. The purpose of the workshop was to examine the major issues that face city authorities and the enabling infrastructure providers who are building the cities of tomorrow.

Near field communications (NFC) are set to multiply dramatically over the coming years, along with longer range RFID devices. Applications can include entry to tourist attractions, smart ticketing, smart parking, and smart appliances. Developments such as smart-charging and NFC information gathering are being deployed worldwide, encompassing a wide variety of projects and variations.

Whether existing standards provide sufficient protection from interference with mass deployment of devices remains to be seen and requires monitoring particularly the work being done under M/490 (Smart Grids), M/441 (Smart Metering), and M/468 (charging of electric vehicles)

Machine-to-Machine (M2M) means no human intervention whilst devices are communicating end-to-end. This implies support of a significant number of nodes, each sending relatively small amounts of data. One technological solution is Zigbee which operates in the ISM bands; 868 MHz in Europe, 915 MHz in the USA and Australia and 2,4 GHz (2 400 – 2 483,5) in most jurisdictions worldwide and is thus susceptible to interference. In addition 802.15.4c is studying operation in the recently released 314 - 316 MHz, 430 - 434 MHz and 779 - 787 MHz bands in China.

The view was that M2M links may require dedicated frequencies and there were already approaches made to ITU to release frequencies in the TV white space. It was suggested that ETSI might have a role in this. Smart Cities will lead to the deployment of dense wireless networks in urban areas. Whether Zigbee or WiFi with attendant interference issues, lead to demands for new spectrum and require robust standards that will address EMC issues remains to be seen

At the European Conference on Smart Grid Standardization Achievements at the European Commission in Brussels Mr Pat Rabbitte, Irish Minister for Communications, Energy and Natural Resources was a keynote speaker. It is worth noting Mr Rabbitte's portfolio clearly identifies the synergy between communications, energy and natural resources. [Mr Rabbitte's department is ultimately responsible for spectrum and amateur radio in Ireland.]

What became apparent was that there was no mention of EMC issues. Experimental smart metering is low density at the present. There was discussion as to how often

the smart meter would be interrogated - once every hour, or up to every minute. This leads once more to a question as to whether existing standards are adequate to cope with the resultant high-volume distributed traffic, particularly if PLT is used.

Another new development is so-called contactless charging (induction) of electric vehicles. This has the potential to cause serious EMC issues. In addition, it is envisaged that a charged car could also be used as a storage device for electricity. This could then be connected to the home to reduce dependence on the mains. The car could be connected to the smart grid at peak times, thereby peak-logging and reducing investment in generating plant. This would require some form of high power DC-to-AC conversion which has potential EMC implications. Once again the density of these devices could be quite high in urban and suburban areas in the future.

At the European Smart Grid Conference 2013 in Brussels, once again the issue of bandwidth demand arose in the context of existing and future infrastructure. We can expect increased use of PLT for the network and potentially wireless for the last few meters to the metering device.

## **Summary**

The PRC has evolved into a stable team. We generally receive all the information we need to intervene fast enough. Some European policy (EMCD, RED) is now friendly to our services and will be stable for a few years. Spectrum policy however needs close attention now and in the next term. New technology developments are being monitored. For example Smart Grid is not (yet) dangerous for spectrum usage. Policy on wireless power transfer (for electric cars and busses) will keep us busy next term.