

LS telcom customer news magazine

LS summit 2008 13th Annual Seminar Day

Dear Readers,

It is this time of the year again: We are pleased to welcome you to the summer publication of our customer news magazine SPECTRUM and to the LS Summit 2008, taking place on the 2nd of July – both already institutions of the LS telcom community for a long time now.

Yet again, we are happy to provide you with the latest trends and information all around radio communications and services. At the same time we would like to announce that there is a new edition of our product catalogue and our training calendar available, in addition to a new brochure dedicated to military spectrum management.

We wish all the participants of the LS Summit a fruitful event and a pleasant stay – and we wish you interesting reading!



R. Götz M. Lebherz G. Schöne

CONFERENCE PROGRAM LS SUMMIT 2008

09:00 – 09:15 Welcome and Introduction to the LS Summit 2008 Manfred Lebherz, Georg Schöne, Roland Götz	12:15 – 13:30 Lunch Break
09:15 – 09:45 Spectrum Policy in the UK - Ofcom's Strategic Approach to Spectrum Management Peter Bury, Ofcom	13:30 – 14:00 Broadband Internet Access on Broadcast Frequencies Uwe Haaß, Medienanstalt Berlin-Brandenburg
09:45 – 10:15 Radio Interference as a Tool for Spectrum Trading Richard Womersley, Helios Technology Ltd.	14:00 – 14:30 Spectrum for IMT - Status and Outlook until 2020 Uwe Löwenstein, Telefonica o2 Europe
10:15 – 10:45 Urban Planning for Radio Communications (URC) and Cognitive Radio, a Solution to the Spectrum Management Challenge Yvon Livran, Thales Communication	14:30 – 15:00 Coffee Break
10:45 – 11:15 Coffee Break	15:00 – 15:30 From Maxwell's Equations to Cognitive Radio Prof. Friedrich Jondral, Institut für Nachrichtentechnik, University of Karlsruhe
11:15 – 11:45 Radio in an all-Digital Environment Walter Berner, Landesanstalt für Kommunikation Baden-Württemberg (LFK)	15:30 – 16:00 New Technique for the Localization of BTS inside Mobile Communication Network Wilfried Kalthoff, Rohde & Schwarz GmbH & Co. KG
11:45 – 12:15 Digital Dividend and Program Making and Special Events (PMSE) Wolfgang Bilz, SHURE Europe GmbH	16:00 End of Official Conference Program
	Afterwards: Ongoing Exhibition & Celebration

From the News: Ofcom launches First Stage of LS telcom Licensing System

Ofcom, the independent regulator and competition authority for the UK communications industries has successfully launched the first phase of its complex licensing programme which offers an upgraded IT solution for spectrum management integrated with core business processes such as contact and financial management.

The complex licensing system is based on SPECTRAplus software from German supplier LS telcom, a worldwide leader in specialized software solutions for spectrum management. SPECTRAplus

has been integrated with an ERP package from SAP and middleware from Siebel to build the complete solution. The system is flexible and provides the platform for future spectrum liberalization and trading. Over the next few months additional license classes such as business radio will be added.

Jill Ainscough, Chief Operating Officer at Ofcom said: 'This system is one of the most innovative spectrum management solutions available. The first stage of the programme incorporates a business change programme for the licensing of

microwave fixed links which enables effective management of our processes in house as well as giving advantages to users. Licensees benefit from a streamlined system which allows online license applications and overview of their status at any time. I would like to thank all our stakeholders for their co-operation during the system switchover and assure them that Ofcom continues to be committed to providing an efficient and effective service.'

DVB-T for Mobile TV Reception?

...has become a frequently raised question! How many programs at what quality can be watched on a mobile phone (equipped with DVB-T receiver) receiving the signal from the existing DVB-T network? The answer is not as clear-cut as one would expect. Detailed country-specific investigation is necessary, as the DVB-T networks and the used network parameters can differ quite considerably in various nations. It is important to consider numerous factors for a detailed analysis, such as DVB-T parameters, reception mode, network structure, content, free to air or pay TV and performance of available DVB-T handhelds.

DVB-H has been developed especially for mobile reception and the respective advantages of this technology are still valid, as for example greater robust-

ness, battery savings, improved mobile reception and an increased number of programs per channel. Moreover, a network rolled out particularly for DVB-T will never reach the same coverage target which is aimed for when rolling out and investing in a DVB-H network.

Nevertheless, it may well be interesting to know to what extent the existing DVB-T network fits to Mobile TV. LS telcom has a longstanding experience in DVB-T and DVB-H technology and is your partner to assist you in answering THE question: DVB-T for Mobile TV reception?

LS telcom can provide network analyses for DVB-T / DVB-H, field strength measurements, determination of subjective quality with different handhelds, comparison of network structures and costs.

Broadcast (FM and Television) Planning in Madagascar

LS of South Africa was contracted to perform FM radio and analog Television planning for several transmitter sites in Madagascar. The initial planning was performed as a desktop study using CHIRplus_BC. The main target coverage areas were identified with the assistance of the client. The aim of the desktop study was to illustrate to the client the extent of the coverage that can be achieved with combinations of mast height variation and different transmitter power levels. After finalization of the study, the site identification followed.

The site identification visits took the two teams from virtually the complete north to the extreme south. They were extremely surprised by the vastness of

the country and contrast in terrain types, which are extremely important for the coverage studies. The sites were visited by vehicle where possible and by a chartered plane for the remote areas. Most sites had access to electricity but the capacity is limited, which consequently limits the transmitter power that can be used.

Once the site visits were completed, the planning was refined. Locations of transmitter sites were updated, transmitter powers were adapted and the antenna heights were changed in accordance with the practical feasibility of erecting the most suitable mast. The planning has now been completed and the implementation of the transmitters will follow.



Spot on

CHIRplus_BC bought by ATTRACT Conseil

ATTRACT Conseil France based in Paris acquired the software CHIRplus_BC to undertake a DVB-T study for French national television. The study will support the decision making process for new site selection in order to extend the network. The French national analog television will presumably be switched off in 2011.

DVB-H is on its way...! New CHIRplus_BC DVB-H Modules

Soneacom, Portugal, leased the CHIRplus_BC DVB-H module in order to carry out its bid planning.

Portugal Telecom had a system upgrade and acquired the DVB-H extension which was complemented by expert consulting in the area of DVB-H bid planning.

NHH, Hungary, also added the DVB-H extension to their existing system.



BBC Distribution, London, goes for Maintenance Contract

Following the acquisition of CHIRplus_BC FM and T-DAB modules in 2007, **BBC Distribution** signed up for a continuous Support & Maintenance contract at the end of the warranty period. The contract includes regular updates, hotline support and bug repair. BBC Distribution use the software intensively for FM planning and coordination.

Proof of trust in LS telcom experts

NHH, the National Communications Authority of Hungary continues to rely on LS telcom Support & Maintenance. After a five year contract they have subscribed Support & Maintenance for an unlimited time period.

TETRA and Microwave Planning Tools for the Federal State of Saxony

The **Ministry of the Interior** of the Federal State of Saxony in Germany has acquired several licences of MULTIlink and xG-Planner for the planning of their BOS/TETRA network.

ITU prolongs software agreement

ITU and LS telcom did prolong their software licence agreement regarding LS telcom's BWA/Microwave (broadband wireless access) planning tool MULTIlink.

Capacity Building in Nepal

LS telcom has won an extensive consulting contract with the Nepal Ministry of Information and Communications (MOIC) for capacity building.

The project is financed by the World Bank. The main objective of the consulting services is to build capacity and enhance skills and knowledge in the Frequency Management and Technology Analysis Division (FMD) of the MOIC Nepal in order to meet the challenges in

telecom policy making, implementation, monitoring and radio spectrum management. The project includes radio spectrum policy and legal framework, economical and technical aspects of spectrum management, spectrum monitoring, inspections and law enforcement.

LS telcom is accomplishing the project with their project partners InterConnect Communications, UK and Total Management Services, Nepal.

Paraguay - Acquisition of MULTIlink

Following the successful implementation of our SPECTRA suite at CONATEL's headquarters in Asunción in spring 2007, the Paraguayan regulator decided to expand their planning and coordination engineering capabilities in the fixed services area. Consequently, CONATEL acquired our microwave planning tool, MULTIlink, including the modules for both point-to-point and point-to-multipoint microwave links, as well as the coordination and satellite extensions.

After the system installation and user training a follow up hands-on training took place at the client's headquarters in Asunción / Paraguay. MULTIlink is the most recent addition to the Paraguayan spectrum management system that also comprises our Spectrum Management solutions SPECTRAplus, SPECTRAplan, SPECTRAemc and MONITORplus. The spectrum management system is fully integrated with CONATEL's spectrum monitoring system.



Malaysia - Spectrum Management Strategic Review Project

In execution of its mandate the Malaysian regulator MCMC has embarked on a Spectrum Management Strategy Review Consulting Project ("SMSR") with the objective to improve and to develop a future framework. The contract for this significant consulting project has been awarded to our local partner and representative Wamata Solutions Shd. Bhd which is part of the joint expert team consisting of LS telcom Limited (former Spectrocan), Canada, InterConnect Communications Ltd., UK and Wamata Solutions, Malaysia.

The focus of this spectrum management consulting project is to study and assess the current market, spectrum use and allocation, pricing, management framework and spectrum management policies in Malaysia; to identify and benchmark best practice in other regions in order to identify approaches which can be adapted to benefit Malaysia; and to recommend options and plans to enhance the existing situation in Malaysia in order to support a move towards a more forward-looking framework.

Spot on

Consulting Services: TETRA/BOS Terminals

The **Ministry of Internal Affairs** in Hamburg/Germany assigned LS telcom with consulting services for the provision of terminals, their user surfaces and accessories and awarded maintenance and service orders within the future BOS digital network of Hamburg.

Polish Operator selects LS telcom Software Tools

In a highly competitive international tender, LS telcom was selected by the Polish Broadcast and Telecom Operator **TP EmiTel** to supply CHIRplus_BC to support them for future broadcast planning and MULTIlink for backbone planning.

...and again Poland

Besides TP EmiTel, the **Polish Power Transmission and Distribution Association** contracted LS telcom to supply a range of planning tools to improve their internal planning capabilities. The scope of supply includes planning tools for broadcast, microwave and TETRA services.

Austrian Air Traffic Control Centre - Austro Control - implements SPECTRAair

After doing several consulting jobs for **Austro Control**, the Austrian Air Traffic Control Centre decided to purchase several licenses of SPECTRAair_emc enabling them to further improve their aeronautical frequency management capabilities.

Digital Broadcast Workshop in Jakarta

LS telcom was invited by BPPT - Agency for the Assessment and Application of Technology in Jakarta / Indonesia to deliver a workshop on digital broadcasting.

Main topics of the workshop have been the migration concepts from analog to digital broadcast and Mobile TV.

Participants from the Ministry, regulatory authority, local and international broadcasters, telecoms and universities joined the workshop and used the opportunity to update themselves about the latest development in this market containing also a lot of practical experience of LS telcom through many reference projects worldwide. The presentation was followed by an interesting question and answer session between the participants and the LS telcom experts, which completed the successful and well-organized event.

Spectrocan is now LS telcom Ltd.

We are happy to announce that our Canadian subsidiary Spectrocan has officially adopted the name LS telcom Limited effectively April 1st 2008.

Spectrocan became a member of the LS telcom group of companies in June 2002, and after 6 years of successful joint operations the time came to proudly assert the union adopting the brand identity of the LS telcom group.

As we are very proud of our successful history, LS telcom Limited will keep the

names 'Spectrocan' and 'AFMS' as registered trademarks.



NOW - New Training Calendar Available

Our new Training Calendar with approved, revised and a lot of new seminar courses e.g. Strategies for modern Spectrum Management, Satellite Coordination, Digital Radio, Mobile TV Information Session, Radio Network Planning for TETRA Networks, WiMAX/Broadband and Wireless Access Information Session and much more courses is now available.

You can download the Training Calendar under http://www.lstelcom.com/e/files/training_seminars/Training%20Calendar_2008_2009.pdf.

If you would like to receive a paper version or for any questions please feel free to contact Ms. Sandra Lahm under SLahm@LStelcom.com or via phone: +49 7227 9535 482.

Lesotho - Spectrum Management System Migration to Oracle 11g and Extension

In 2004 LS telcom successfully delivered a turn-key spectrum management and monitoring solution to the Lesotho Communications Authority (LCA). Following years of successful operation LCA decided to migrate its spectrum management system from Oracle 8i to Oracle 11g.

The migration project was successfully completed by LS telcom in less than 4 weeks by mid March 2008. At the same time LCA initiated a project for expanding their current system with additional licences and related training services, which will be completed by mid 2008.

Visit us at our Booth...

ITU Telecom Asia, Bangkok/Thailand

The ITU Telecom Asia will take place at the IMPACT Challenger venue in Bangkok from **2nd to 5th of September 2008**. At the exhibition you will find a unique global ICT platform where leaders of business, government, regulators and visionaries will explore and decide the future trends of the industry. LS telcom will be present at **Challenger 1 booth no. B38**. For further information, please visit www.itu.int/ASIA2008.

IBC Amsterdam/Netherlands

The IBC Amsterdam will be held at the RAI Center Amsterdam from **12th to 16th September 2008**. The exhibition showcases the latest technology and foremost business ideas in broadcasting and new media. LS telcom will be present with an exhibition booth in **hall 8 stand no. E39** and is looking forward to your visit. For further information, please take a look at www.ibc.org.

Upcoming Training and Seminar Courses

We would like to inform you about the dates of the following courses:

07.-08.07.2008

Broadcast Planning Basic Seminar in Lichtenau, Germany

09.-10.07.2008

Broadcast Planning Advanced Seminar in Lichtenau, Germany

11.07.2008

Recommendation ITU-R P.1546 Seminar in Lichtenau, Germany

14.-17.07.2008

Broadcast Planning Tool – CHIRplus_BC (FM/TV, T-DAB/DVB-T) Seminar in Lichtenau, Germany

09.-11.09.2008

Satellite Coordination Training in Lichtenau, Germany

15.-19.09.2008

Technical Issues of Radio Spectrum Management Training in Lichtenau, Germany

22.-25.09.2008

Strategies for Modern Spectrum Management Training in Lichtenau, Germany

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Impressum

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