



1st Digital USERgroup 2020

General Information

Editorial

Dear customers,

We hope you all made it safely through the past difficult Covid-19 dominated months.

Current travel restrictions unfortunately still do not allow us welcoming you in person at our German headquarters. Nevertheless, we are doing our best to keep you updated about product news and roadmaps.

The fundament of LS telcom's business is long-term close partnership and collaboration with our customers. Therefore it is a true concern to us, not to interrupt the **USERgroup Conference** tradition, but to continue facilitating the valuable information exchange with and between our customers and software users. Though the **USERgroup Conference 2020** will take place in a quite different format, we trust you will find it as useful as in past years. We are delighted to welcome you at the USERgroup assembly for the 24th time, this year taking place as a live video conference.

During the five days of this year's fully digital **USERgroup Conference**, you will not only be informed by our experts about latest product news, but you will also have a platform to bring forward your ideas, to discuss with your colleagues from other organizations, and to take the opportunity to actively influence our development goals and roadmaps.

The digital format of the **24th USERgroup Conference** allows even more engagement of also smaller organizations, since the different working parties are not run in parallel but are scheduled sequentially over a total of five days. We like to encourage all of you to make active use of this new conference format and let us know your vision for the future spectrum management.

In the past always one day of the **USERgroup Conference** was dedicated to the Spectrum Summit Conference. This is difficult to realize in connection with this **USERgroup** but we are already in the process of digitalizing at least the exhibition part of the Spectrum Summit: The LS Digital Exhibition, taking place from the 1st to the 3rd of December 2020 will give you an excellent overview of LS telcom's product & service portfolio presented in four market-specific live web-seminars. We will keep you informed about further details on this special event!

Although most of us have worked considerable time from home in the recent past, LS telcom has made significant progress in developing new products, respectively upgrading and modernizing existing ones. Here only some examples:

Our new generation spectrum management system mySPECTRA has been clearly dominating our activities in software development. mySPECTRA is meanwhile part of all new and most current customer projects when it comes to spectrum management. This fully web-based platform is a cloud-hosted spectrum management system, meaning for customers less capital expenditures, less IT maintenance costs, advanced security features and dynamic performance in locally hosted, certified, cloud providers.

The LS OBSERVER concept together with our AOA antenna development and its DF Time Travel[®] technology, enabling direction finding and geolocating emitters in the past, continues to be our prime focus in complementing our spectrum management systems with "real environment" information. Among others, we significantly expanded the functional scope of our LS OBSERVER CMS, the central control software, by ITU compliant measurement modes and higher degree of automation, and we also made progress expanding the frequency range of our AOA antenna to 18 GHz.

The expansion of our LS OBSERVER monitoring system product family going airborne showed success by first sales of our AMU to different countries. Besides our measuring capability was also complemented by a drone-based platform to measure and re-calibrate ILS antenna systems at airports.

LS telcom continued its engagement with non-government customers in running "Smart Spectrum Services", a service concept that encompasses all of LS telcom's capabilities, i.e. spectrum management software, radio monitoring systems as well as profound consultancy expertise, all included in an integrated offering as a service. Despite the pandemic situation, we could complete projects in different industries and particular organizations with a need to manage their spectrum.

Our specialist consulting teams were again dealing with a vast variety of important questions, all related to the introduction of new radio technologies for the benefit of industries and people. The consulting projects and studies among others dealt with signal attenuation on trains, the relevance of GSM considering evolution to 5G, establishing a national 5G strategy and specialized communication networks for civil authorities. Besides extensive planning and project supervision jobs were accomplished in the context of security and safety relevant radio networks for public traffic services including undergrounds.

We hope you also will enjoy this year's **USERgroup Conference** and that it will, as in the past, again provide you with lots of valuable information supporting you in your daily work.

Georg Schöne, Manfred Lebherz, Roland Götz

AGENDA for the 24th USERgroup / 1st Digital USERgroup Meeting

	Broadcast Planning & Coordination	Frequency Assignment, Clearance and Coordination for Regulators	Internet and Intranet based License and Application Processing	Fixed Services & Network Planning	Integrated Monitoring Solutions
Speaker	CHIRplus_BC Dietmar Löffler Eberhard Heidrich Klaus Huber	SPECTRAemc Aleksey Burlak Juan Carlos Elipe Javier López Carrasco Norbert Klenner	SPECTRAplus SPECTRAweb mySPECTRA Marco Börger Markus Henrich Andreas Inhofer Laura Giurgea George Saliba	CHIRplus_TC Hermann Lebfromm Christian Walter	LS OBSERVER MONITORplus Daniel Kähny Philipp Abel Volker Brümmel
	Tue, Nov 3, 2020 12:00 pm – 3:15 pm (UTC+1)	Wed, Nov 4, 2020 12:00 pm – 3:15 pm (UTC+1)	Thu, Nov 5, 2020 12:00 pm – 3:15 pm (UTC+1)	Tue, Nov 10, 2020 2:00 pm – 5:15 pm (UTC+1)	Thu, Nov 12, 2020 10:00 am – 1:15 pm (UTC+1)
90 min	Welcome to the 24 th USERgroup Meeting Presentation of new features Road map and future developments	Welcome to the 24 th USERgroup Meeting Presentation of new features Road map and future developments	Welcome to the 24 th USERgroup Meeting Presentation of new features Road map and future developments	Welcome to the 24 th USERgroup Meeting Presentation of new features Road map and future developments	Welcome to the 24 th USERgroup Meeting Presentation of new features Road map and future developments
15 min	Break	Break	Break	Break	Break
90 min	Review of USERgroup topics 2019 Open USERgroup discussion Conclusion	Review of USERgroup topics 2019 Open USERgroup discussion Conclusion	Review of USERgroup topics 2019 Open USERgroup discussion Conclusion	Review of USERgroup topics 2019 Open USERgroup discussion Conclusion	Review of USERgroup topics 2019 Open USERgroup discussion Conclusion

Please note, the indicated times are UTC+1. Check your time zone.

subject to changes





Code of Conduct



Time boxing

We start on time: Open the Microsoft Teams Link before the session starts



Preparation is everything

Technology (microphone + speakers) check before the meeting



It's all about Sound Quality

Use headphones to switch off half noise, in case of bad connection videos off



Raise your hand

If you want to contribute to the discussion show it by clicking on the colored hand symbol in Microsoft Teams' function bar



Log in

Click on the Microsoft Teams link to join the meeting. If you are asked to log in with user information, please enter the following: surname, name - your company name



Be polite

Let each other finish



Distractions

Switch off distractions during the session



Microsoft Teams link

Forwarding or duplicating the Microsoft Teams link is strictly prohibited



No recording

Please observe that any image, audio and/or video recording of our web-seminars is strictly prohibited



All devices are muted

To reduce noise

LS Digital Exhibition

The LS Digital Exhibition is a digitalization of the exhibition part of the Spectrum Summit and will take place from the 1st to the 3rd of December 2020. The virtual event will give you an excellent overview of LS telcom's product & service portfolio presented in four market-specific live web seminars.

We will soon inform you about registration procedures.



Stream 01: Product & Service Portfolio for Regulation Authorities

Date and Time: Tue, Dec 1, 2020 – 09:00 am or Tue, Dec 1, 2020 – 02:00 pm (UTC+1)

LS telcom is the one stop shop for all spectrum regulation authorities worldwide. In addition to the world's leading integrated & automated spectrum management system mySPECTRA, we provide advanced spectrum monitoring and geolocation solutions based on the LS OBSERVER product family. Furthermore, our experienced consultants advise on spectrum policy, spectrum strategies, technology migration and spectrum sharing. Current focuses lie hereby on realizing 5G visions as well as on enabling digital transformation. We are looking forward to welcoming you to the presentation of LS telcom's products and services for regulation authorities.



Stream 02: Broadcast Product & Service Portfolio

Date and Time: Tue, Dec 1, 2020 – 11:00 am or Tue, Dec 1, 2020 – 04:00 pm (UTC+1)

Digitization and the introduction of more services have a severe impact on the broadcasting market. All stakeholders are competing for a piece of the scarce radio spectrum and need to make the most out of it. LS telcom offers a comprehensive broadcast portfolio consisting of radio network planning and engineering software, spectrum consulting and engineering services, radio monitoring and antenna system verification, dedicated training courses, etc. You may even benefit from full turnkey project support to deploy your optimized broadcast network. Join the Broadcast Product & Service Portfolio Session to learn more.



Stream 03: Smart Solutions for Airports, Ports & Transportation Hubs

Date and Time: Thu Dec 3, 2020 – 11:00 am or Thu, Dec 3, 2020 – 04:00 pm (UTC+1)

Ensuring a safe, interference and incident free radio environment while providing enough radio frequencies for all radio networks, services and applications is a challenge that all airports, ports and transportation hubs have to face. Today, there is a massive amount of different technologies that are already in operation or on the horizon, ready to operate (e.g. 5G or IoT). Learn more about LS telcom's integrated radio assurance solutions consisting of hardware, software and consulting services.



Stream 04: Smart Solutions for Industries, Oil & Gas

Date and Time: Thu Dec 3, 2020 – 9:00 am (UTC+1)

Wireless technologies are a key enabler for the digital transformation. Industries are confronted with challenges related to numerous communication systems. The variety ranges from narrow-band data transmission via RFID to high-end systems in which massive amounts of data have to be transported, e.g. virtual and augmented reality for production support provided by 5G. LS telcom is your reliable partner to realize Industry 4.0 while protecting wireless connectivity in your facilities.



Stream 05: Smarte Lösungen für Industrieunternehmen / Öl & Gas

Datum und Uhrzeit: Do, 03.12.2020 – 14:00 (UTC+1)

Drahtlose Technologien sind ein Schlüsselfaktor für die digitale Transformation. Industrieunternehmen sehen sich mit neuen Herausforderungen konfrontiert, die aus einer Vielzahl unterschiedlicher Kommunikationssysteme resultieren. Mögliche Szenarien umfassen schmalbandige Datenübertragung über RFID bis hin zu High-End-Systemen, in denen große Datenmengen transportiert werden müssen, z.B. Virtual und Augmented Reality zur Produktionsunterstützung mittels 5G. LS telcom ist Ihr zuverlässiger Partner bei der Realisierung von Ihren Industry 4.0 Vorhaben. Von der Beratung und Konzeption über das Antragsverfahren bei der BNetzA bis hin zur Umsetzung – erfahren Sie, wie wir Sie auf Ihrem Weg begleiten können.



CHIRplus_BC

- Smart backend processing support
- Update of wave propagation model library
- New advanced terrain profile window
- Improved BR IFIC query and import
- Rain rate maps support
- Various performance improvements (e.g. macro commands, web-map handling)



SPECTRAemc

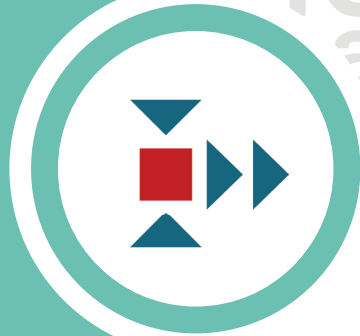
- Smart backend processing support
- Improved re-use assignment for station & areas
- Advance shortwave frequency calculation
- Update of wave propagation model library
- New result window for frequency assignments
- New function to compare area results
- Additional default antenna types



- Business process-driven
- Flexible degree of automation
- Highly configurable
- Based on service-oriented architecture
- Web-based & natively cloud-ready

CHIRplus_TC

- Update of wave propagation model library
- Safety zone calculation
- 5G NR throughput calculator
- Technology templates
- TC unit bulk creation
- Area analysis



LS OBSERVER

- New AOA DF solution up to 18 GHz
- New 50 GHz measurement front-end for microwave link monitoring
- Homing & manual direction finding
- Measurement drives
- Long term storage mode with adjustable exports
- Overview data with customizable time intervals

