

Topics dealt with by the RDS Forum

This presentation highlights the issues
currently under study

- **The RDS Forum monitors RDS implementation worldwide and the information is exchanged**
- **For Europe, the implemented RDS features in each country are collected**
- **For the USA – the RBDS vs. RDS differences are identified**
- **Broadcasters, transmission operators and regulators are contacted, if RDS features are incorrectly used**

- **Information on Digital Radio in Europe and the USA is exchanged**
- **There is monitoring of the standards for**
 - DAB/DAB+
 - DMB
 - DRM/DRM+
 - HD-Radio
- **Harmonisation has top priority where ever possible**
 - Examples: RT+ and DL+ / TTI : Announcements & TMC
- **Sharing of info on the future of FM & RDS**
 - Why and how long FM radio & RDS are needed is investigated

- **Optimise FM network receiver performance**
 - Programme Service Following is the key issue for mobile receivers
- **Help the transition to Digital Radio**
 - Focus on RDS features also used by Digital Radio
 - Make sure that well established RDS features are also used by Digital Radio
 - Consider use-cases derived from the slow transition to digital radio
- **Focus on mobile radio reception in Europe**
 - Optimise performance in broadcast networks that simulcast
 - **Simulcast** means here that the same programme service is distributed over FM radio & RDS and Digital Radio (other simulcast distribution is ignored)

- **Tunnel reception**
- **Alarm functionalities**
- **Multimedia functionalities & Hybrid radio**
 - (including those made possible through RadioDNS)
- **RDS receiver profiles**
 - Car radios
 - Portable radios
 - Smart phones and Tablets
 - Home receivers

- Implementing **Hybrid Radio (FM/RDS & Internet)** for home receivers, portable radios and smart phones - Options to consider, new developments, tests, trials, first implementations (Radio France)
 - Enhance the RDS standard accordingly
- Implementing **FM/RDS & Internet** radio reception for **car radios** - new possibilities, drawbacks, service following, enhanced traffic & travel information, identify partner organisations to collaborate with
- **Smart phones and tablets API issues** regarding the FM/RDS chip and the Operating System in question to enable 3rd party "App" developments for the ODA feature to achieve more innovations with RDS
 - Create an FM/RDS radio API Guideline specification for the mobile industry sector

- **Local/Regional Traffic Announcements** on FM/RDS using EON - Could there be an equivalent option be maintained within the DAB services already deployed?
- **Traffic and Travel services** giving a Strength/Weakness overview
 - Collaborate with TISA on the maintenance of the very successful RDS-TMC technology deployment
- **xRDS** will be able to offer new solutions for broadcasters or transmission operators that need to compatibly increase the current RDS data transmission capacity permitting to offer new data service developments and trials on FM
 - **We have the know-how; who wants to use it**
- Open **Public alarm system** developments
 - **Add these as ODAs to the RDS standard – based on experience gained by Radio France and NPR in the USA**

- **Continue study on extended RDS – xRDS**
 - Increase the RDS data capacity compatibly by a factor of three is possible if it were generally required
 - A first proposal was presented at the RDS Forum 2010
 - A progress report on this project was made at the RDS Forum 2012 & 2013: For more details see
 - <http://extended-rds.org> and http://www.rds.org.uk/2010/pdf/rdsForum_xRDS_121204_5.pdf

- **The UECP* was created by the EBU**
 - Aim: Help broadcasters save money on implementing RDS in large networks
 - RDS encoders from different manufacturers can be used in the same network
 - The encoder manufacturers in the RDS Forum fully support the UECP in its latest version
 - The RDS Forum regularly updates the UECP
 - The latest version 7.05 was issued in 2010
 - All RDS features and ODAs are supported
 - A new version, compatible with previous versions, is expected for early 2014

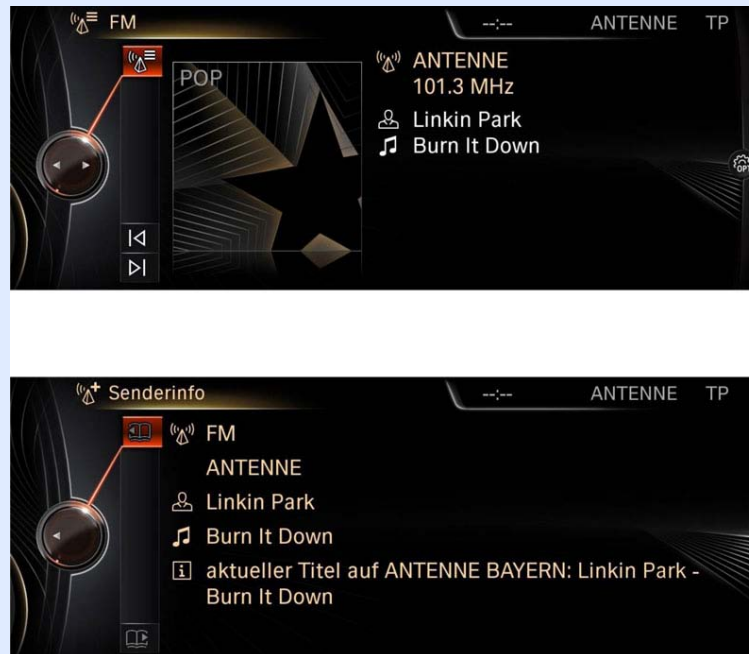
* **UECP: Universal Encoder Communication Protocol**

- **Large majority of broadcasters still use only basic RDS features**
 - There is an attitude that RDS works without any problems
 - **On the contrary – RDS can be used to offer innovative features**
 - In reality – a lot of effort is needed to achieve a perfect implementation and keep it going
- Often, programme associated data are only provided over Digital Radio
 - Sometimes that is done to demonstrate the superiority of Digital Radio
- Often, RDS can provide equivalent features

- **RT & RT+ promotion is important for the Forum**
 - Titles and Artist names can be displayed
 - Link to radio programme home page, etc can be provided
 - Pursue objective for full implementation as standardised in IEC 62106 ed.3 / Annex P
- **Broadcasters can then use Multimedia functionality with RDS on (mobile) radio receivers connected to Internet**
 - Examples: mobile phones like the Samsung's Galaxy S2 & the new Express 2 with RadioDNS; Radio France has an ongoing project to test also RDS for hybrid radio
- **Find a broadcaster interested to test eRT**
 - as now standardised in IEC 62106 ed.3 / Annex Q
 - eRT uses an **enhanced** character set suitable for all EU countries
 - See IEC 62106 ed.3 / Annex E, Table E.2
 - for Western Europe and the USA normal RT is sufficient
 - RT+ can be used with both, either RT or eRT !

Since July 2012 BMW has an FM/RDS car radio with RT+

- Now an option for most of its models:
 - The **BMW Navigation System Professional**



- **Only the upper screen with the RT+ elements Artist and Title is shown in the normal listening mode**
 - If RT+ is not implemented, then the full RT is displayed in the normal listening mode
- **The lower screen shows the full RT (which can be switched on in the Info mode)**

- **The success of RDS sometimes generates unexpected IPR or trademark claims**
 - Members of the Forum often refuse successfully such unjustified claims
 - They exchange experience over the defence arguments
 - May seek collectively legal advice
 - Example: RDS Forum won a court case regarding totally unjustified EON trademark claims

- **For broadcasters > EBU & US NRSC / NAB**
 - They set the scene for the future of radio
 - RBDS update was harmonised with NRSC – new version April 2011
- **For standards > IEC**
 - RDS Forum Office is a Member of Electrosuisse
 - RDS Forum helped updating RDS standard 62106 ed.3 - 2014
 - Contributed new IEC standard 62634 ed.2-2014 on RDS receiver measurements
- **For radio frequency usage > ITU-R**
 - RDS Forum helped to update ITU-R BS.Rec 643 dealing with RDS
 - New version BS.Rec 643-3 published by ITU-R in May 2011
 - This action required harmonization with RBDS
- **For the TMC implementation over RDS-ODA**
 - Ongoing harmonization with TISA

- **For all relevant standards**
 - RDS & Digital Radio
- **For all relevant recommendations**
- **For all relevant guidelines**
- **For all relevant publications**
- **For all relevant studies**
- **For all relevant new developments**
- **Keep everything in a data base**
 - Provide everything on **annual CD-ROM** to Forum Members
 - Maintain document index since 1999
 - Maintain list of all documents since 1999
 - **Maintain RDS Forum web site (totally re-designed in 2010)**
 - **15 000 visitors a year from 60 countries worldwide**
(source: Google statistics supplied to the RDS Forum Office)

- **Exchange information regarding the future of radio**
 - The RDS Forum represents a superb industry contact network
 - Most Members know each others well from the annual Forum meetings
 - The annual member fee is relatively low: CHF 2900.-
 - **Take coordinated action on requesting correct usage of RDS**
 - **Examples:**
 - Position paper of 2009 on Programme Service name implementation (PS)
 - TMC: Correct Location code referencing under ODA (in association with TISA)
 - BBC: Broadcasting of local traffic info
 - A reminder was sent to maintain the achievements on FM radio with RDS

- Some RDS Forum Members have teamed up to document the progress made with the much updated RDS technology
- The first public version of the ebook has been placed in August 2013 on the RDS Forum web site
 - <http://www.rds.org.uk/2010/Publications.htm>
- The eBook will be updated by the team once a year, always in August/September



- **The future of FM radio**
 - FM radio is used worldwide
 - RDS is essential for FM radio
 - Both will continue to be used for long
- **In Europe and the USA - FM/RDS radio will still be used widely in 2025**
- **in comparison Digital Radio is not yet very market-significant**
 - 2013: UK: <24%, Germany: < 5%, France < 1% radio listening is on DAB – very low indeed after 20 years of trying ...
- **The RDS Forum remains committed**
 - to continue the up-dating of the successful RDS technology
- **Your support will help us to achieve this**
 - **Why not join the RDS Forum and then be part of our network ? The annual member fee is CHF 2900.-**

- No problem – You can try us instead
- Attend the next annual RDS Forum on
- 16/17 June 2014 at Hotel Victoria at Glion/Montreux - Switzerland as a guest
- This is only one hour by train from Geneva airport
- A guest fee of 800 Swiss Franc for attending the meeting as a non-member will apply
- Contact for details:
- dkopitz@compuserve.com or d_kopitz@bluewin.ch
- Everyone is welcome if you register by 30 April 2014 at the latest