

# ***RDS Forum – the association of RDS users***

## **A few good reasons for joining the RDS Forum in 2019**

Since 25 years the RDS Forum offers to the industry, broadcasters, transmission providers and regulators a superb professional contact network. The Forum studied how to link national, regional, sub-regional and local radio programmes best in a hybrid (analogue and digital) radio landscape. Today the RDS technology is in the process of being adapted to what mobile FM/RDS radio receivers need today (e.g. linkage to Internet). Thanks to the high level of expertise of its members and cooperation with other Fora, a huge experience has been acquired. As a result guidelines have been issued and will continue to be developed as a valuable support in design and implementation for the benefit of all Forum members involved.

In 2019, the RDS technical specification already exists for 35 years. There has been success all over and billions of FM radios with RDS have been built so far. In quantities on top are smart phones, followed by car radios of which the features of RDS auto-tuning (AF), the pan-European traffic info system TA/TP and the TMC concept have had worldwide support from the automotive industry, since at least 20 years.

Worldwide, FM radio will remain a very popular radio technology and it will continue to co-exist next to digital radio.

Thus, 2015 - 2018 were the years for an adaptation of the RDS technology to RDS2 for the next 30 years, using the full experience gained in the past. Full backwards compatibility is for the Forum a very important objective to be met.

Now the focus of the RDS Forum is concentrated on RDS2, the innovative RDS enhancement developed by a number of RDS Forum members. The priority is still the adaptation of the RDS standard Part 7 (RBDS) and Part 8 (UECP). The adaptation of the UECP, Universal Encoder Communication Protocol, to fully support all known RDS2 options the UECP is vital for the future of RDS and this will be a priority task in 2019. A first proposal was already demonstrated at the second RDS2 Info Day at Radio France in November 2016.

An RDS2 station logo transmission demo was first presented in a public meeting during the first RDS2 Info Day, held in November 2015 in Berlin, where RDS Forum experts explained to 70 radio professionals from 14 countries the new developments and possibilities that RDS2 will be able to offer.

For RDS2, it was necessary to completely re-structure the worldwide RDS standard IEC 62106 into Parts 1 to 6, available since October 2018, an objective being fully achieved during 2016-2018 with the submission of the newly updated RDS/RDS2 standard draft from the RDS Forum to the IEC TC 100. In 2019 this standard adaptation will also include RBDS, used in North America. On this issue the RDS Forum closely collaborates with the NAB and the US NRSC.

The whole concept and the process for this adaptation had been agreed by the RDS Forum in 2015. This opens the door for a large number of innovations that can now be included into RDS using the Open Data Applications (ODA) feature and the new specification for RDS2 file transfers RFT, developed by the RDS Forum in 2018. All these new developments from the RDS Forum will play a pre-dominant role for RDS2 in the future. RDS2 is not only data over the air, but a complete platform that shall connect FM broadcasting with the Internet and thus offer hybrid radio. The ODA (Open Data Application) concept will be fundamental for RDS2 and form a solid foundation on which one will be able to create quickly very innovative added value services in an easy way. This may include FM radio apps for smart phones and also further support for the connected car concept.

Most important for you and your company: RDS2 is IPR free as it was jointly developed by the RDS Forum members to be an open technology just like RDS has always been.

RDS2 may offer a new boost to your business plans and set new objectives. This could be for you the right moment and the opportunity now to join the RDS Forum 2019 as a member and contribute and influence these exciting developments that continue to take place within the RDS Forum. Being part of such a motivated team is inspiring and may give fun as well.

The RDS Forum was formed 25 years ago in 1993 as a self-funded non-profit organization, formally registered in Canton of Geneva, Switzerland. As a worldwide industry association of public interest it is exempted from taxation in Switzerland.

One annual meeting of the full Forum is held, always in May, at Hotel Victoria in Glion/Montreux, Switzerland. This location can easily be reached by train from Geneva airport (see [www.victoria-glion.ch](http://www.victoria-glion.ch)). The RDS Forum has met there during the last 20 years, since 1999, as this was always considered as an excellent meeting and networking location by the Forum.

## **RDS2 milestones 2014 - 2018**

**2014-06** At the RDS Forum meeting in Glion it was decided to have a feasibility study of xRDS, a proposal from RDS Forum member Attila Ladanyi, later known as RDS2, by a small team of RDS experts during a workshop in Budapest

The objectives for the workshop:

1. Define the technical and upgradable architecture bases on agreed standards and regulations,
2. Ensure complete backwards compatibility with RDS,
3. Establish a set of high level customer requirements (PS names up to 16 characters and UTF8 coded),
4. Identify existing unused functions within RDS,
5. Identify the work items and expertise needed to integrate RDS2 into the RDS standard.

**2014-11** At an RDS Forum workshop held at Magyar Radio in Budapest the RDS experts attending recommended to the RDS Forum 2015 to give green light to standardizing RDS2 as a new option for using RDS.

**2015-06** The RDS Forum agreed to go ahead with RDS2.

**2015-11** First RDS2 Info Day held in Berlin. The innovations presented there were a first RDS2 encoder prototype developed by the US company Jump2Go and a first RDS2 receiver (a USB stick with RDS/RDS2 monitor decoder with associated data analysis software) RX014 from MacBe, a Dutch company, using a modified RDS NXP chip set developed for RDS2 decoding by Hendrik van der Ploeg from the Dutch company Catena. A test transmission with RDS2 was put on air by RDS Forum member Attila Ladanyi (T & C Holding) and Joop Beunders (MacBe) together with Seth Stroh and Allen Hartle (both from Jump2Go) demonstrated for the first time the RDS2 transmission and reception of image files of station logos and music cover art using RDS2.

**2016-11** Second RDS2 Info Day held at the Maison de la Radio of Radio France in Paris. A French RDS2 development team composed of RDS experts from Caméon, Magneti Marelli, Radio France and Worldcast Systems presented an RDS setup used to demonstrate on the radio programme FRANCE INTER how images transmitted with RDS2 could be used to enhance the listening experience. They used the same file transmission protocol previously demonstrated in Berlin and concluded that it will need to be enhanced by the RDS Forum to satisfy operational radio requirements. The RDS2 test receivers used were a car radio and a home receiver, jointly developed by Magneti Marelli and Caméon for Radio France.

**2017-12** RDS Forum experts meet at a workshop held at the TDF head office in Paris (Montrouge) with the aim to adapt the file transfer protocol to support the operational requirements of Radio France and to adapt the UECF to support RDS2.

**2018-04** Worldcast Systems announced at the NAB show at Las Vegas the world's first commercially available RDS2 encoder and its AUDEMAT FM MC5, a multipurpose FM measurement equipment permitting to decode and analyze RDS2 and to generate an RDS2 test signal and data.

**2018-05** At the RDS Forum meeting held in Glion it was decided that the file transfer protocol as worked out at the TDF workshop needed further improvement, more generic and simplified for implementation. A new working group was created to finalize the work. However mainly thanks to an intensive cooperation between David Jaillet (Caméon for Radio France) and Joop Beunders, the RDS2 File Transfer specification RFT was released in October 2018 (R18/038\_1).

**2018-12** Radio France and Caméon demonstrated in Nantes the implementation of the File Transfer specification RFT. They used the world's first commercially available RDS2 encoder from Worldcast Systems and a newly developed RDS2 home receiver prototype from Caméon. They showed the transmission of music cover art and station logo using file sizes of up to 20 KB. The time needed to receive the files was about twice as long compared with DAB, but still very acceptable to achieve an enhancement of the listening experience with FM radio. The next step of this development will be to synchronize the cover art with the music items on air.

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## **RDS Forum 2019 membership registration form**

Annual membership fee in Swiss franc per delegate for the RDS Forum is CHF 2'900.— (EUR 2600.-).

After your registration you will be invoiced in 2019-Q1. Payment is due in 2019-Q2.

**The next annual meeting of the RDS Forum is scheduled on 20/21 May 2019 at Glion / Montreux, Switzerland.**

**Please register me as a member**

..... Name

..... First Name

..... Company / Organisation

..... Address (1)

..... Address (2)

..... Telephone

..... Fax

..... E-mail

**Please return this form to the RDS Forum Office in Geneva by e-mail to [rdsforum@bluewin.ch](mailto:rdsforum@bluewin.ch)**

***You will receive a confirmation of your registration as RDS Forum Member***