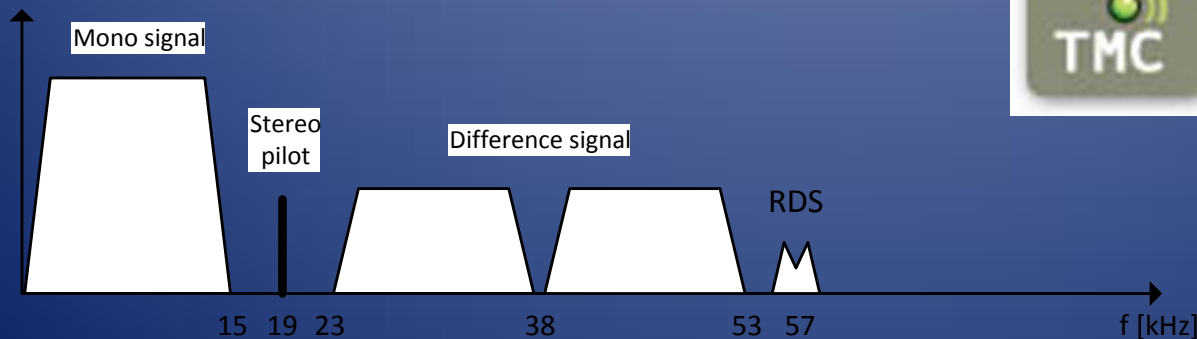


# RDS2

## Radio Data System

- is a well known, very popular technology used world-wide
- makes FM radio listening easy
- provides additional data services
- data is transmitted in the analogue MPX signal



# RDS2

RDS tech. is 30 years old, mature but has some limitations too.

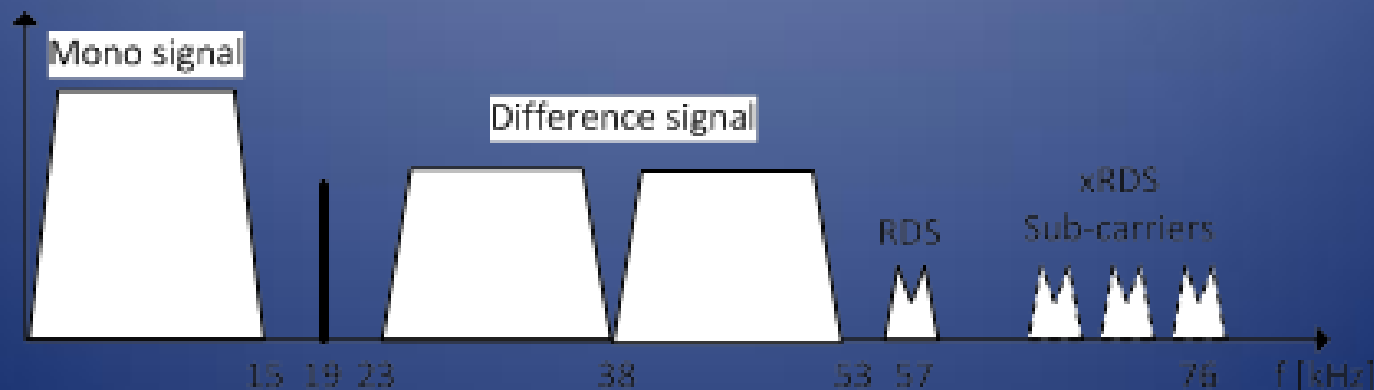
	RDS	RDS2
PS name	8 EBU-chars	32 bytes UTF-8 (NO alternating or scrolling)
Character set	EBU - 8bit	UTF8 (up to 3 bytes per character)
AF and EON	8 bits (88,5-107,9MHz)	9 bits (65-107,9 MHz)
Netto Data rate (cca.)	422 bit/s - Very low	variable max. 2337 bit/s
Single group TMC messages/min	60 (300 / 5 minutes)	900 (4500 / 5 minutes)



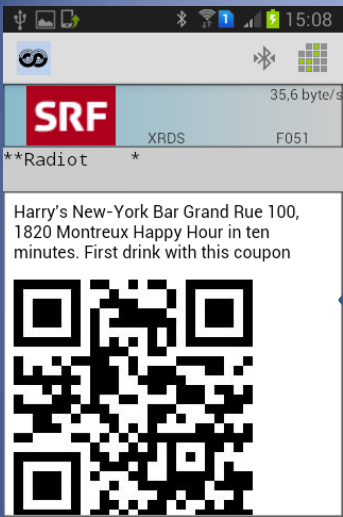
- 2011 xRDS trial transmission in Budapest (MR and Hungarian Media & Telcommunication Authority)
- November 2014 RDS Forum kick-off meeting in Budapest

# RDS2

- The structure of RDS will be completely maintained: simply three more 'pipes' are added to deliver the datastream.
- In traffic terms it's like widening a single carriageway road to 4 lanes.
- The data throughput is increased quite dramatically not just by a factor of 4, but by more, as it's not necessary to carry on the additional sub-carriers 'mandatory' RDS elements (like PI code) already in the 'main' sub-carrier.



# Application examples

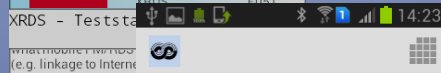
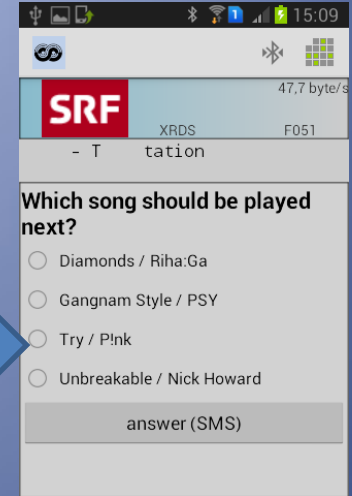


Coupons

Graphical Radio Text

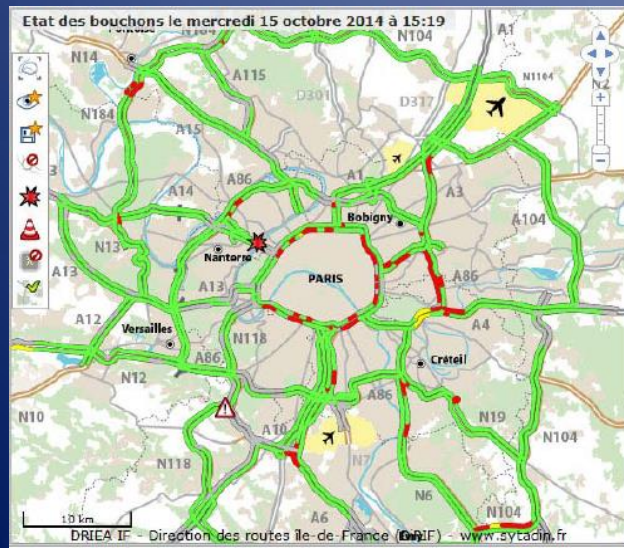


Surveying or polling

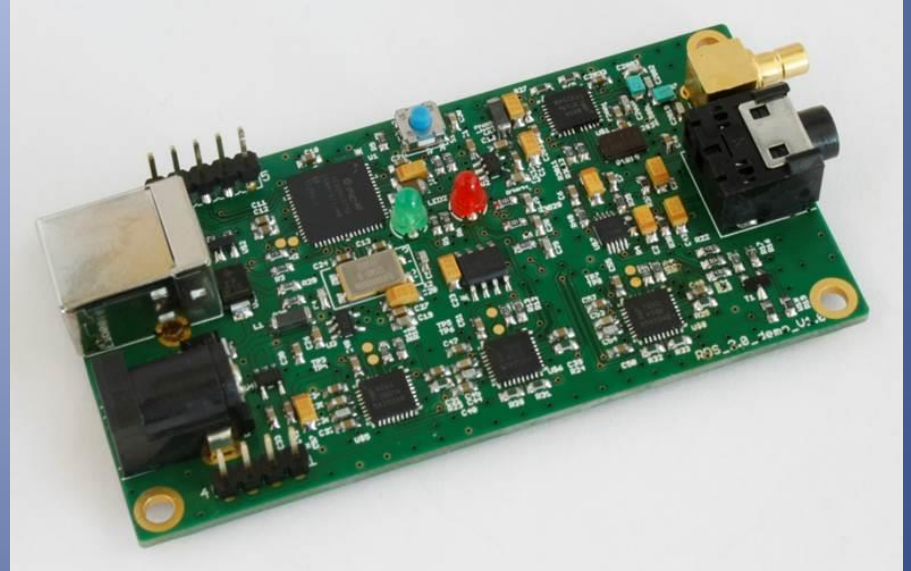
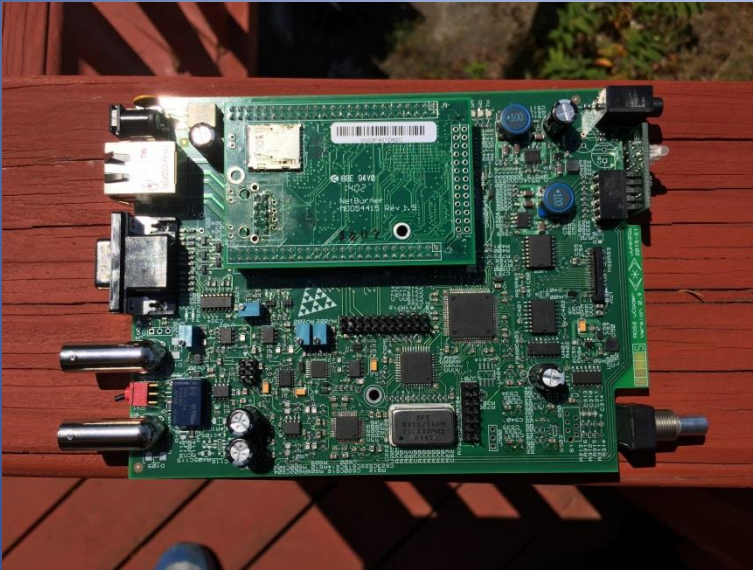


Direct linking of FM with internet streaming using IP addresses.

„City TMC“



# RDS2



Prototypes: encoder (Jump2Go Seattle/USA) and receiver (CATENA Netherlands (NXP company)).

- RDS2 recommendation will be published next week on the RDS Forum annual assembly.
- The IEC standard is due in 2017.