

What is an
ODA ?

RDS2

**A short boat trip on the data
service Ocean.**

The ODA system “open data application”

Only what reached the customer is a service.
Only what the customer has accepted is a good service.
Everything else is l'art pour l'art.

ODA Container



RDS2 Ship



Frequency Ocean



ODA Container

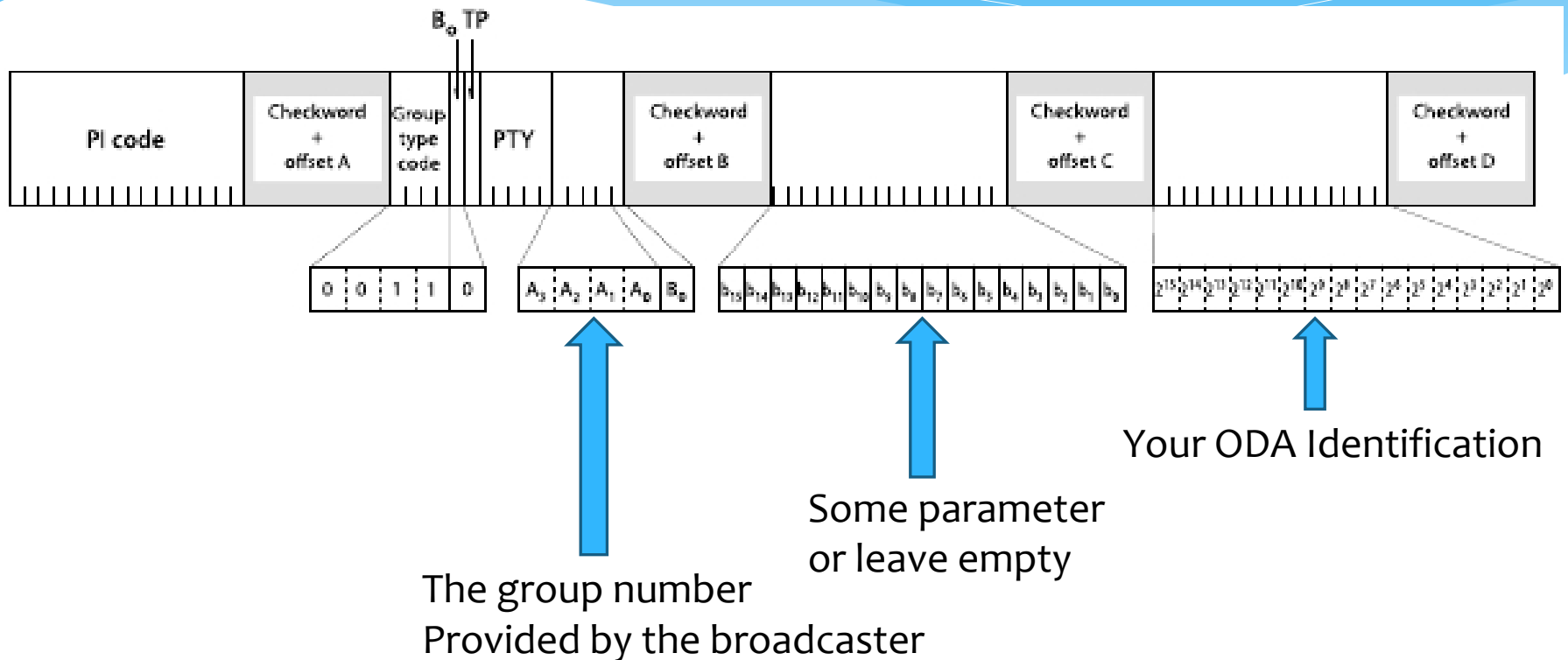
“separation of content”



Everyone can define an application and provide them with data on ODA. Whether TMC, bus schedule or advertising, each content can be transmitted.

3A Groups

“the container identification”



3A Groups are the directory of the broadcast multiplex. You must just register your service with an ODA ID at the NAB for USA or RDS-Forum in Europa and Worldwide

RDS Groups

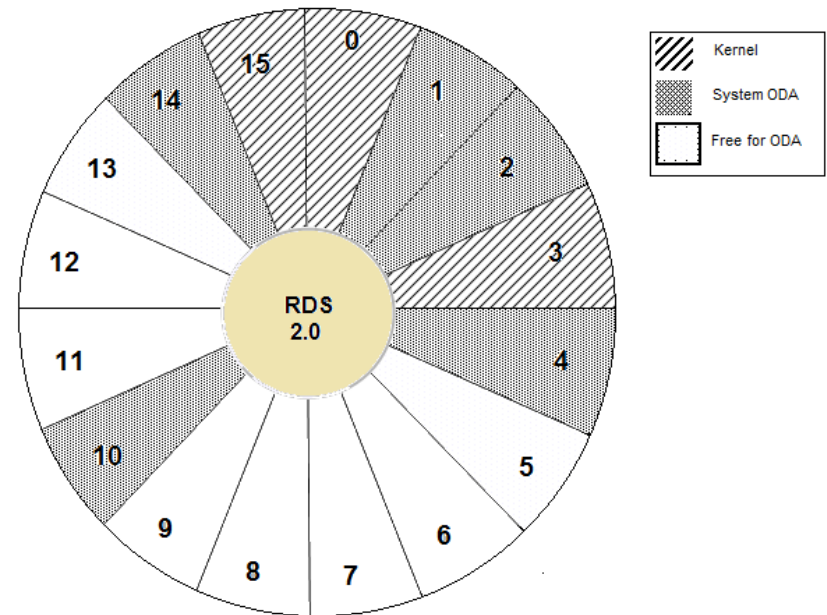
“the position of the containers on the deck”

The RDS data channel is divided into 16 groups (0-F hex). Some of them are reserved for system usage or compatibility reasons.

8 Groups are free for ODA

Some older ODA must have always the same data group, all others can be placed freely.

e.g. you should place the old TMC (CD46 hex) on Group Nr. 8. Your own new ODA can be placed between 5 and 13 (except 10, that is reserved for PTYN).



RPEG

“the packaging inside the container”

RDS Data structures:

RDS

26 bit – Block 16 bit Payload and 10 bit CRC
104 bit – Group 4 Blocks A _ B _ C _ D = 4 bytes+5 bits

RDS2

1 RPEG 8 Groups = 30 bytes payload net
..... to be continued

Why the larger block? There should to be transported more data with more securing parallel on multiple carriers. For this, one needs an independent protocol that can carry any content. Like a pallet inside the sea container.

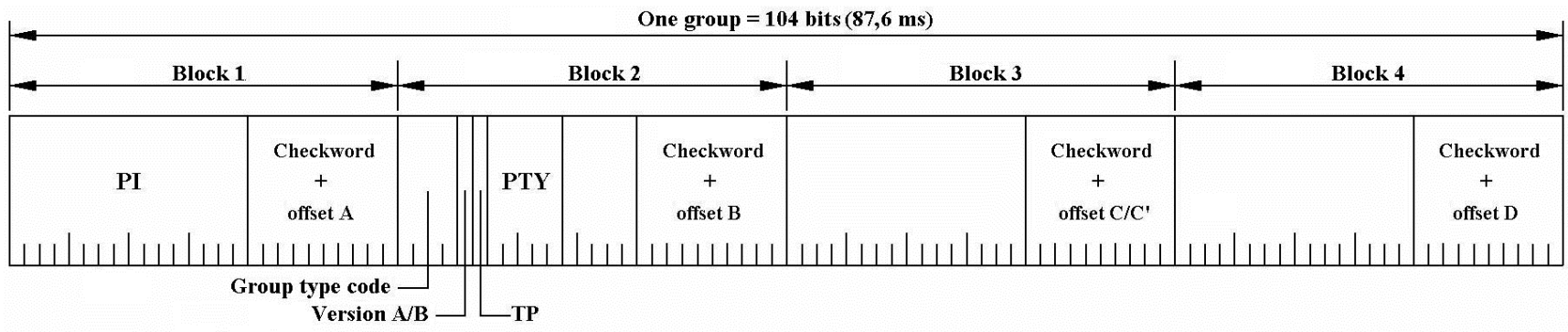
Groups

RPEG package



Datagroups “payload”

Outwardly an RDS group remains so as it always was.



Existing applications will notice no difference.

Application

“your service for the listeners”

Previously, the definition from a service was hard work for specialists.

Now:

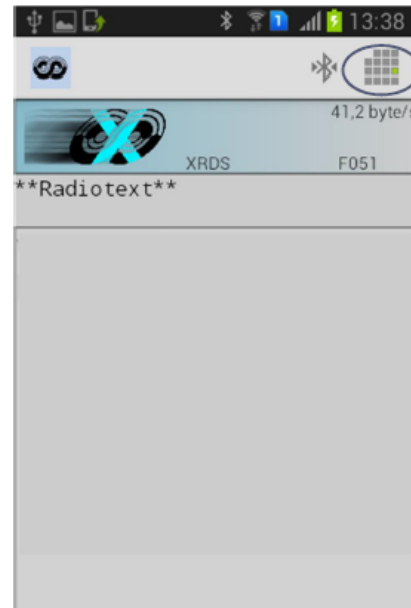
Every editor in the studio should be able to define a service. Each graphical receiver must be able to display these services in useful form.

Therefore, we define the graphical radio text. It is a Wysiwyg application and an ODA that can integrate RDS and Internet content.

Main application container:
graphical Radio Text (gRT)

Smartphone Line
App-Control
Main Channel Info
& RT / RT+

xRDS application
layout area



Content page indicator
Page 0 = RT+ and standard
RDS

Pages 0x1 until 0xF xRDS
Pages



Gray: empty
Green: available
Orange: loading

► For each PI Code is an own container possible.

Open Data Application “always the right tool”



ODA

Is the Swiss knife for the broadcaster
With **RDS2** has an endless amount
of applications and can change
dynamically from one to another.

The broadcaster needs only one App
for the radio, any newly implemented
ODA the user can install as a plug-in for
the radio.

With this technology the radio or other
receiver type can be kept up to date for
long time

Conclusion

RDS2 has a lot of capacity, but you should use with sound judgment. Mass data has to load better from Internet instead over broadcast.



Thank You