

ODR-mmbTools – Open-Source Software-Defined DAB+ Transmitter

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<http://opendigitalradio.org>

Symposium on the design of a portable and low-cost DAB/DRM+ transmitter
infrastructure in VHF band III
Landeszentrale für Medien und Kommunikation Rheinland-Pfalz (LMK)
Technische Universität Kaiserslautern
Fachhochschule Kaiserslautern
<http://www.drm-radio-kl.eu>

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About the speaker

Matthias P. Brändli

Lead developer of the ODR-mmbTools
Studied in Lausanne
Member of student radio station
Member of LIMUS



ODR-mmbTools

Contents

- ODR-DabMux
- ODR-DabMod
- fdk-aac-dabplus
- toolame-dab
- Scripts, examples, monitoring, documentation

Everything on <http://opendigitalradio.org> and GitHub.

ODR-mmbTools

History

It all started at Communications Research Centre Canada

2002 First DAB developments at CRC

2009 CRC-DABMUX open-source
Availability of CRC-DABPLUS encoder

2010 CRC-DABMOD open-source

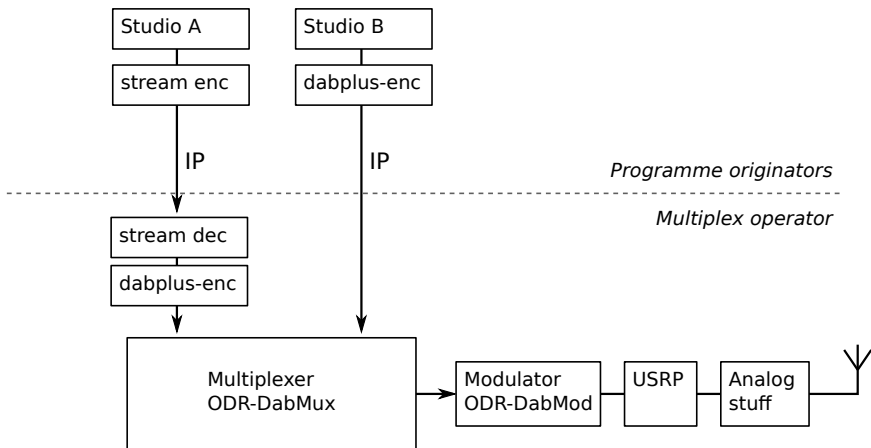
2012 Tools used in production in DK
mpb mmbtools-SFN development

2013 fdk-aac goes open-source

2014 MOT Slideshow by CSP.it
CRC involvement stops, development taken over by ODR

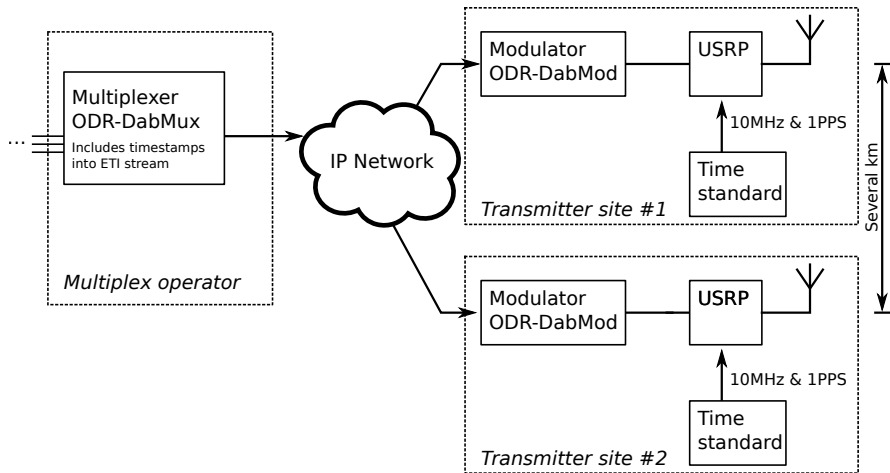
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Single Transmitter



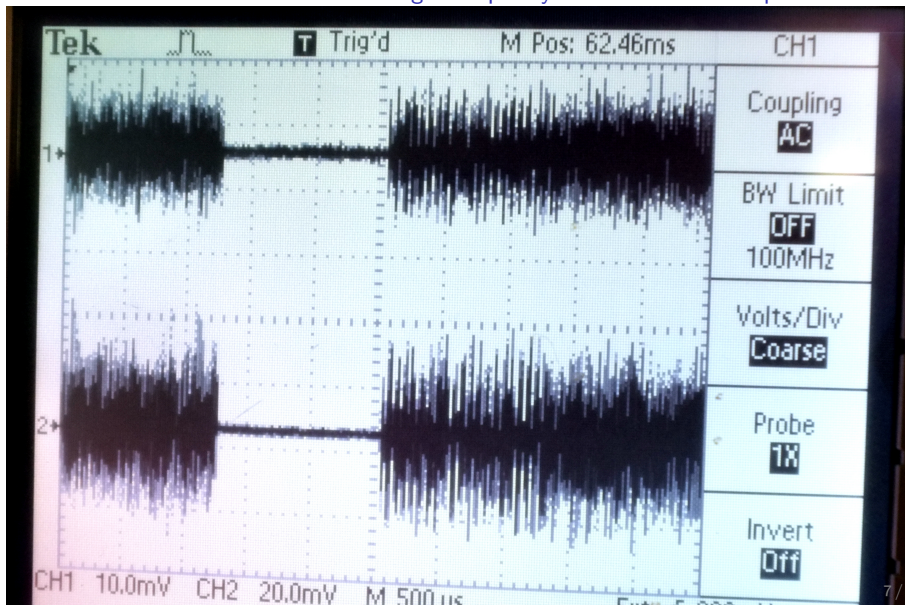
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Single-Frequency Network



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Single-Frequency Network on the Scope



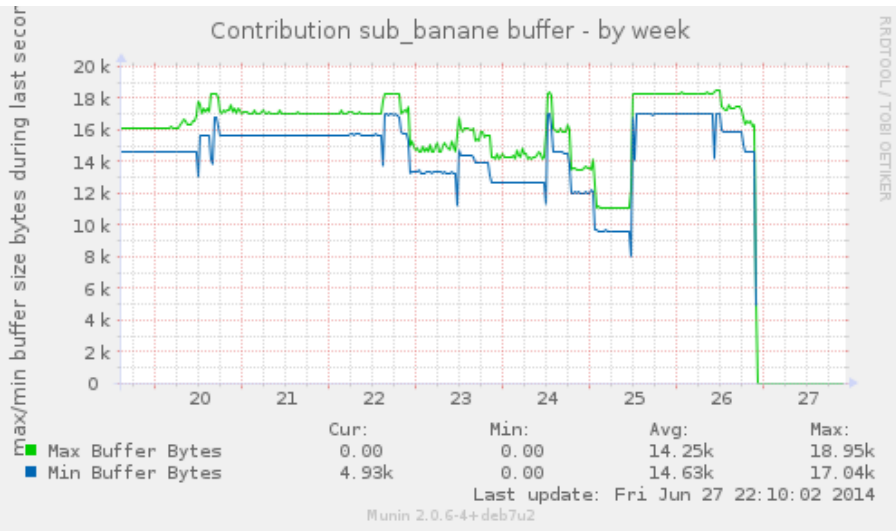
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MOT Slideshow – CSP.it & ODR



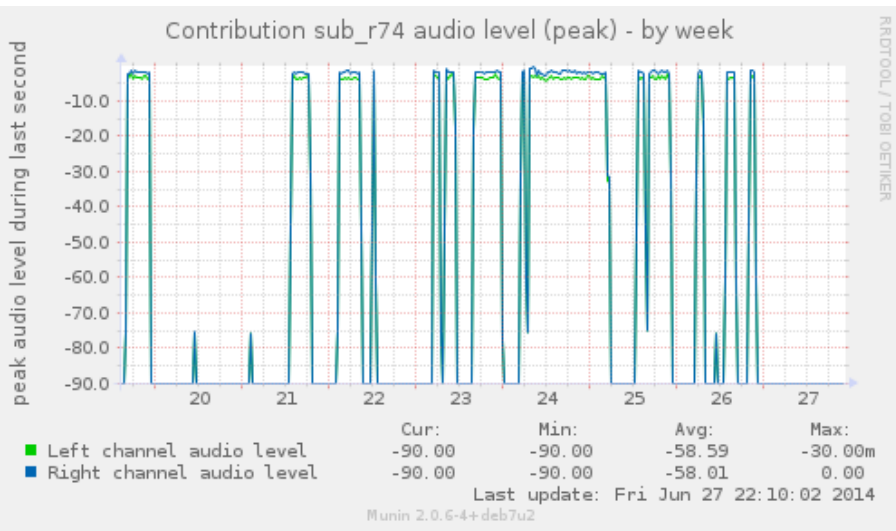
Monitoring

Buffers



Monitoring

Encoder Audio Level



Monitoring

Visualising Encoder State

Statistics for ODR-DabMux running on 'tes



Conclusions

Ongoing development

More robustness

More features

Development community starts to develop

Questions ?

<http://opendigitalradio.org>