

# **DAB+ in Norway – Lessons Learned From The FM Switch-Of**

**The Story,  
Background and  
Results (so far)  
of Norway's  
digital  
Switchover.**

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# RADIO.DSO.COM

Norway:  
The Story of  
Digital Switc

background  
results so far.





Teamwork  
essential

First - period

White  
paper

DSO- period

DAB  
launch

A little info/  
marketing

A little info/  
marketing

Info/marketing

Few, expensive  
radio sets

Some more  
radio sets

Cheaper radio  
sets

Less  
channels on  
DAB than  
FM

A couple of  
new  
channels

Real added  
value, many new  
channels

Limited  
coverage

A little better  
coverage

A little better  
coverage

Full coverage

1995 Start

- 22 years -

2011

2017 FM-shut off



# 2011

1. Coverage (Public)

2. Coverage (Comm)

3. Content

4. Consumers

5. Cars



(«Checkout» Jan 2015)

# Main recommendations in the 2011 White Paper



## **Industry-driven process**

the choice of radio  
technology should be  
made by the market  
players

## **Political support for the need to facilitate ASO**

# Criteria Analogue Switch off

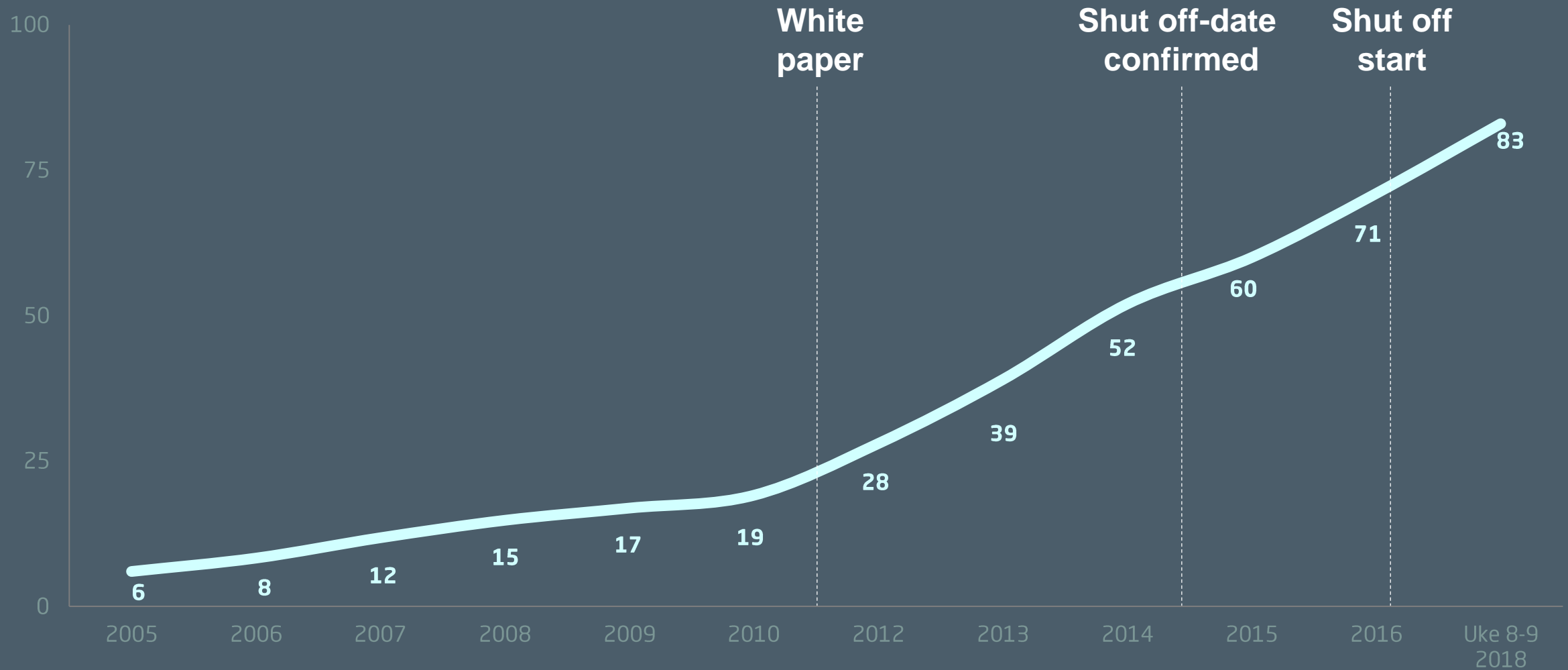
1. NRK: 99,5 % coverage
2. Commercial radio: 90%coverage
3. Added value of digital radio
4. 50% of daily radio listeners must use digital platforms
5. Technically satisfactory and reasonable solutions for radio reception in cars must be available



Why a DSO?



# SHARE OF HOUSEHOLDS WITH ACCESS TO DAB

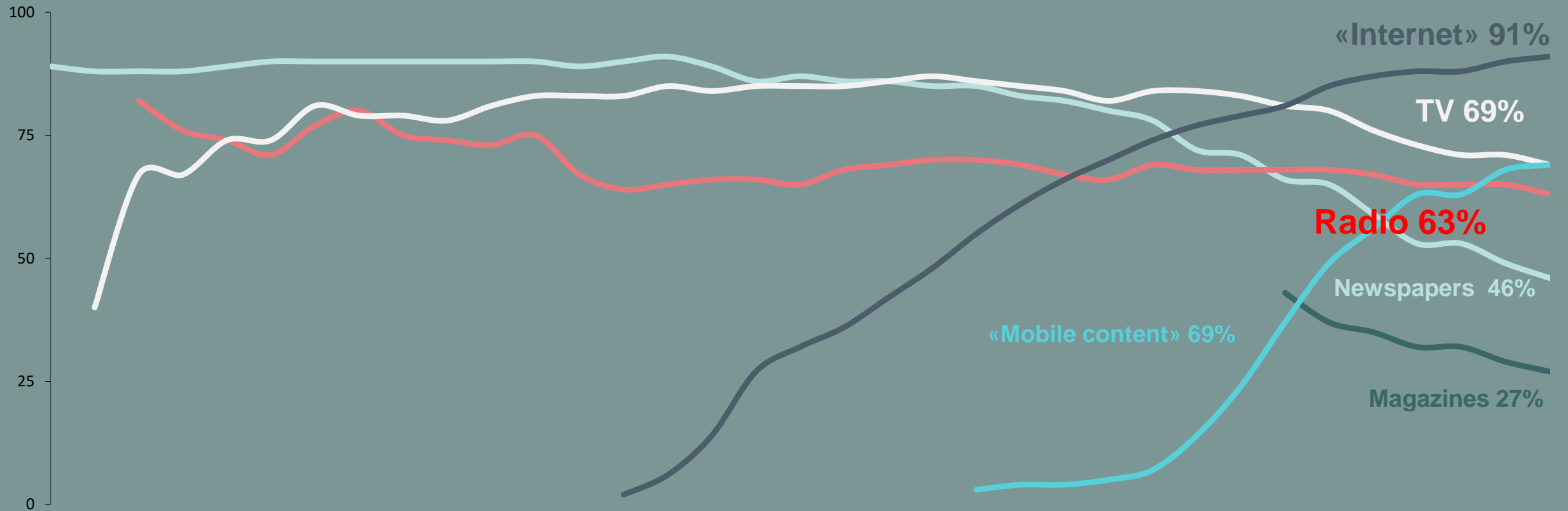


Source:

2006 – 2010: TNS Gallup / Opinion, Radio Equipment Survey, approx. 1000 telephone /web interviews in every survey

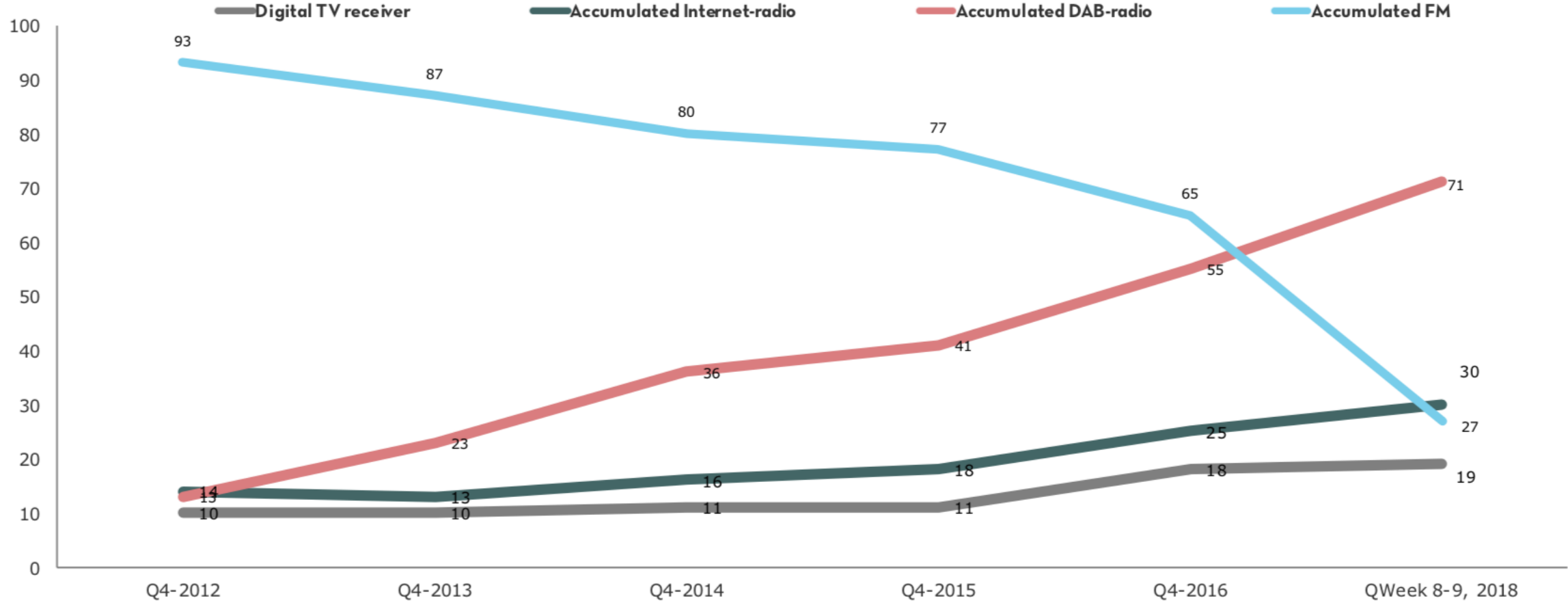
2012 – 2018: Kantar Media, Digital Radio Survey, approx. 1000 telephone interviews in every survey

# Media trends 1960 – 2016/2017



Source: Daily use of newspapers, radio, TV, text-TV and internet, 1961-2016/2017.  
Data from Consumer & Media (C&M) 1994. The Multichannel Society (Lundby & Futsæter, 1993)  
Fragmentation of the media landscape and audience sub groups (Futsæter 1998).  
Mobile content: all Norwegian mobile issues measured in C&M, incl newspapers, TV and others.

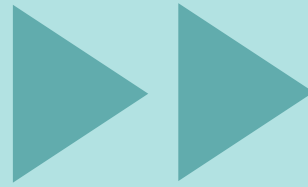
# RADIO PLATFORM IN DAILY USE



# Digitization of newspapers and television



# Digitization of radio



# Radio is...





**CONTENT**

**FREE**

**AVAILABLE**

**EASY**

A high-angle, close-up shot of a diverse group of young people, mostly teenagers and young adults, wearing large headphones. They are all smiling broadly and cheering with their mouths open, conveying a sense of joy and excitement. The background is slightly blurred, showing what appears to be an outdoor setting with some blue structural elements. The overall color palette is dominated by cool blues and greys, with the white text providing a sharp contrast.

Radio must offer  
**more**





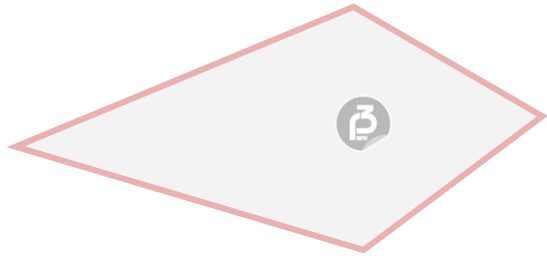
# Å in Lofoten

Before the DSO  
**3 stations**

After the DSO  
**31 stations**



# NRK radio stations 1993 -



## Key questions prior to developing new content:

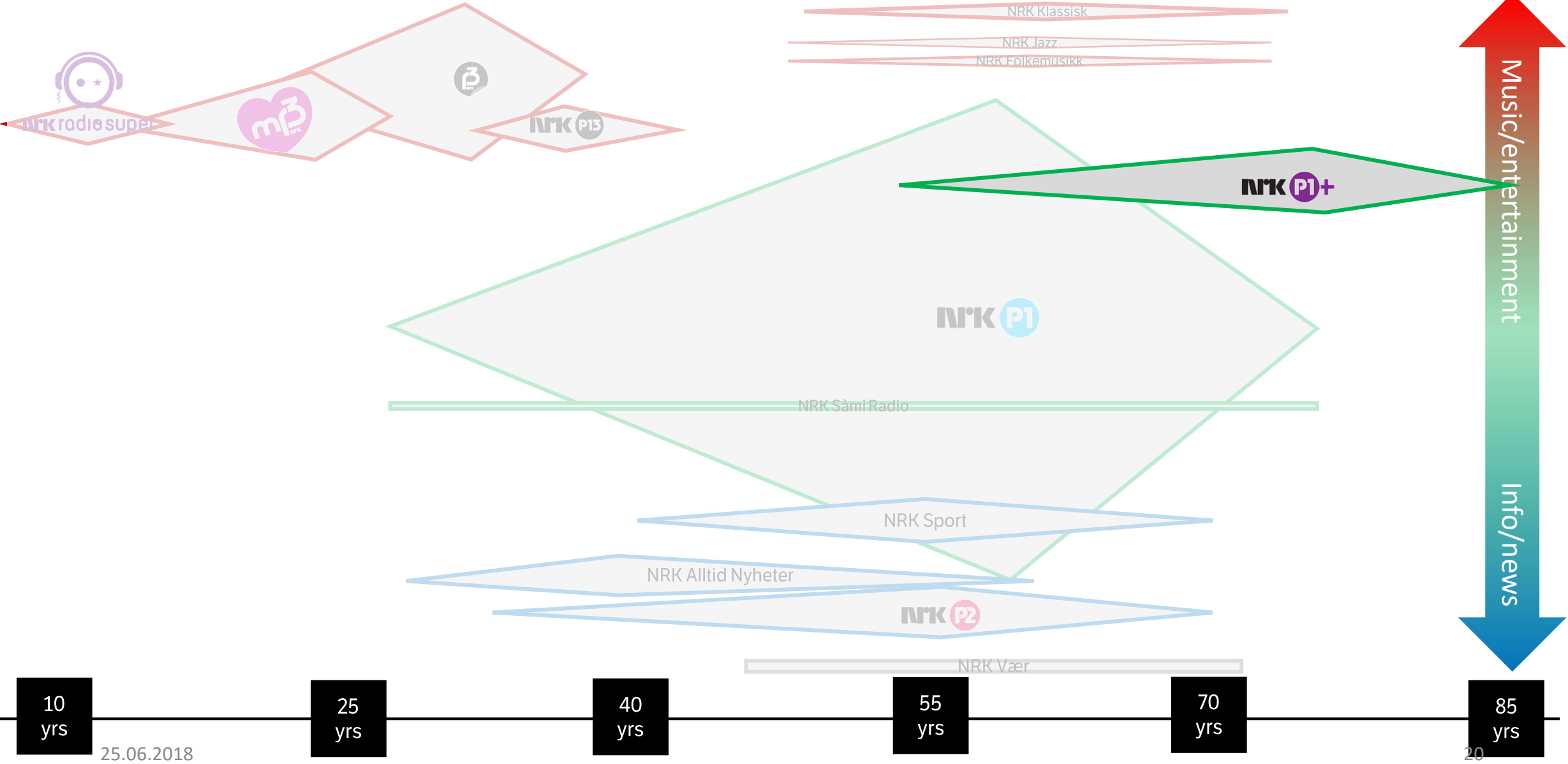
What is happening in other countries?

What is missing in the Norwegian market?

How can we create an even better public service?



# NRK radio stations 2014:



# Public radio content

- News
- Documentaries
- Music of all genres
- Entertainment
- Culture and arts
- Childrens' programming
- Content for youth and young adults
- Radio drama
- Regional programming
- Debate and conversation
- Travel news and regional service
- Sports – elite and grassroots
- Programming for minorities and minority languages
- Coverage of national and regional events

# Public radio content on FM: three stations

- News
- Document
- Music of a
- Entertainm
- Culture an
- Childrens'
- Content fo  
adults
- Radio drama



- Programming
- Conversation
- and regional
- and grassroots
- for minorities
- languages
- Coverage of national and regional events

# Schedule for NRK P1, NRK P2 and P3 in 1995

**NRK RADIO - ener i tre kanaler**

REGISTRERT FOR AVDELINGEN FOR AVDELINGEN, VÅREN 1994

**DAGSNYTT**  
Hver time  
døgnet rundt

**DAGSNYTT**  
Hver time  
døgnet rundt

**1303 Språkundervisning**  
**1330 Musikk**

To timer med  
og hilsener  
Telefaks 22 4

**DAGSNYTT**  
Hver time  
døgnet rundt

Time	NRK P1	NRK P2	NRK P3
0600	0600 Dagsnytt	0600 Dagsnytt	0600 Dagsnytt
0700	0700 Dagsnytt	0700 Dagsnytt	0700 Dagsnytt
0800	0800 Dagsnytt	0800 Dagsnytt	0800 Dagsnytt
0900	0900 Dagsnytt	0900 Dagsnytt	0900 Dagsnytt
1000	1000 Dagsnytt	1000 Dagsnytt	1000 Dagsnytt
1100	1100 Dagsnytt	1100 Dagsnytt	1100 Dagsnytt
1200	1200 Dagsnytt	1200 Dagsnytt	1200 Dagsnytt
1300	1300 Dagsnytt	1300 Dagsnytt	1300 Dagsnytt
1400	1400 Dagsnytt	1400 Dagsnytt	1400 Dagsnytt
1500	1500 Dagsnytt	1500 Dagsnytt	1500 Dagsnytt
1600	1600 Dagsnytt	1600 Dagsnytt	1600 Dagsnytt
1700	1700 Dagsnytt	1700 Dagsnytt	1700 Dagsnytt
1800	1800 Dagsnytt	1800 Dagsnytt	1800 Dagsnytt
1900	1900 Dagsnytt	1900 Dagsnytt	1900 Dagsnytt
2000	2000 Dagsnytt	2000 Dagsnytt	2000 Dagsnytt
2100	2100 Dagsnytt	2100 Dagsnytt	2100 Dagsnytt
2200	2200 Dagsnytt	2200 Dagsnytt	2200 Dagsnytt
2300	2300 Dagsnytt	2300 Dagsnytt	2300 Dagsnytt
2400	2400 Dagsnytt	2400 Dagsnytt	2400 Dagsnytt
0100	0100 Dagsnytt	0100 Dagsnytt	0100 Dagsnytt
0200	0200 Dagsnytt	0200 Dagsnytt	0200 Dagsnytt

**1450 Værmelding**  
**1455 Norgesglasset**  
fortsetter  
**1459 Trafikkradio**

**1503 Her og nå!**  
Aktuell ettermiddagstime  
med sportsbulletin kl 1556  
**1559 Trafikkradio**

**1603 Distriktsprogram**  
**1630 Dagsnytt**

**1730 Dagsnytt**  
med Verden i dag

**1803 Værmelding**  
**1808 On: Topp40** til kl. 2000  
Ma/Ti/To: **Musikkrevyen**

**1903 Ma: Musikk fra lerretet**  
**1930 Ma: Countryloftet**  
Ti/To: **På konsert med...**  
**1930 Ti: Ser du sola, du Ola?**  
**1808 On: VG - lista Topp 40**  
To: **Countrydiscen**  
**2003 Kveldskjør**

**2103 Radiosporten**  
**2115 Minitimen**  
Tlf. 815 49001  
Fra kl 0930- 1200

**2205 Værmelding**  
**2215 Ekko**  
Musikk og gjenhør med det  
beste fra P1-dagen

**2303 Nattvermere**  
**2310 To: Radioteaterets**  
krimserie

**0103 Nattensket**

**0203 Natt...**

**1403 Ma: Kritikertorget**  
Ti: Verdibørsen, On: Verdt å  
vite To: På livet laus  
**1440 On: Tittelprogram**  
**1445 To: RadiOransj** med  
Frank Nordli i Bestefarstua

**1503 Midt i musikken**  
Landets eneste nyhets-  
program fra musikklivet.

**1610 WOK**  
**1630 Dagsnytt**  
**1633 WOK**  
P2s kulørte magasin.

**1730 Dagsnytt**  
med Verden i dag

**1800 Dagsnytt Atten**

**1905 RadiOransj**  
med Barnetimen for de minste  
**1925 Teater og konserter**  
Ma: Radioteateret  
Ti: Kammerkonsert  
On: SPRUT. Toner med trøkk  
To: Klassisk konsert

**2130 Språkundervisning**

**2205 Sånn er livet**  
Ti: med Kors på halsen  
On: Helse for alle  
To: Radionettet, data  
Ring 800 30422

**2303 P2 for swingende!**  
Musikk

**0005 - 0600**  
Klassisk natradio  
Fra det minste preludium til  
operalitteraturens største  
verk. For begynnere og for  
feinschmeckere - eneste  
betingelse er at du er våken

**1500 NRQ**  
med Ti i skudd  
Ring og stem  
Tlf.: 820 49100

**1600 XL**  
Løssluppet  
ettermiddagsm  
stuntreportere  
**Telefaks 22 4**  
**1600 VG - lista**  
Onsdager - til kl

**1800 Albin**  
Ring inn dine øn  
Tlf: 73 510 600

**2000 Hovigs Ha**  
Geir Hovigs roots  
bluestime

**2100 Roxrevyen**  
med Randi Misfjor  
Musikk-magasin for  
vil følge med i rock  
trender og tendens  
intervjuer og musikk  
har hørt før!

**Søndag**

# Public radio content on DAB+: 15 stations

- News
- Document
- Music of all
- Entertainment
- Culture and
- Childrens'
- Content for adults
- Radio drama



ring  
sation  
gional

grassroots

inorities

ages

al and

regional events



**NRK P1**

**NRK P1+**

**NRK ALLTID  
NYHETER**

**NRK  
Sport**

**NRK  super**



**NRK** SÁMI RADIO

**NRK** ALLTID  
NYHETER

**NRK** JAZZ

**NRK** KLASSISK

**NRK** FOLKEMUSIKK



# 15 truly national stations





## **Lyden av Norge**



**Lyden av Norge**



**Hits**



**Rock**



**Klem**



**Pop**



**Retro**



**Country**





RADIO  
NORSK  
POP

RADIO  
NORGE

RADIO  
ROCK

1  
RADIO1

Radio  
Vinyl

P24-7  
MIX

RADIO  
TOPP

KISS



# A new radio market



# DAB+ means no gatekeepers

- Broadcasting is independent of ISPs and other middle men
- The licence fee means:
  - The content is already paid for
  - The distribution is already paid for
- Responding to local, regional and national emergencies ourselves!





An aerial photograph of a coastal town in Norway, likely Lofoten. The town is built on a peninsula with a harbor filled with boats. In the background, there are dramatic, jagged mountains under a cloudy sky. The image has a semi-transparent dark overlay.

**NORWAY**

**1067**

**transmitters**

NORWAY  
**1067**

transmitters

DENMARK

**66**

UK

**391**

SWITZERLAND

**180**

An aerial photograph of a coastal town, likely in Norway, featuring a large fjord, a small island with a lighthouse, and a range of jagged mountains in the background. The text "Distribution costs" is overlaid in white on the center of the image.

# Distribution costs



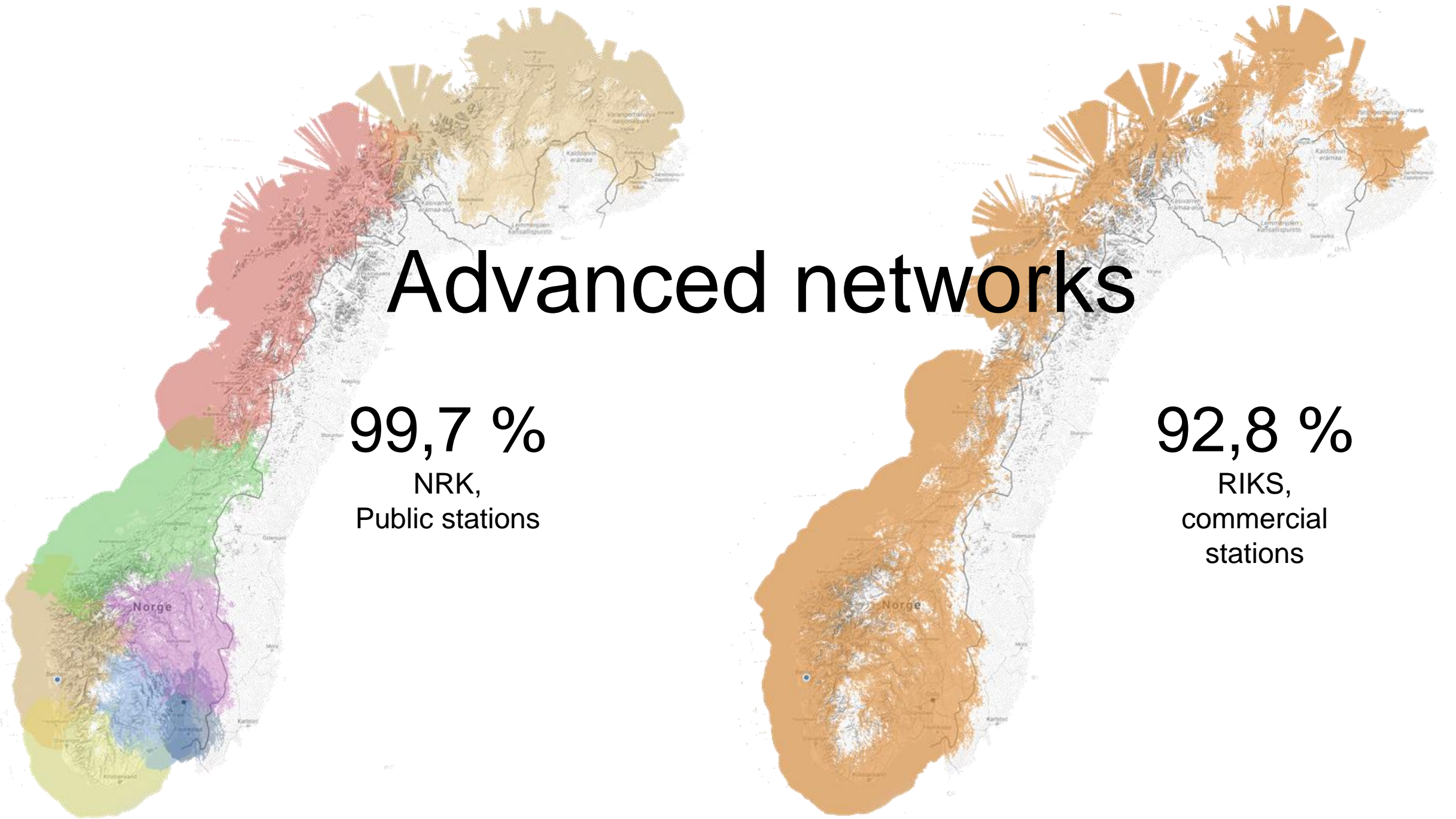
# Advanced networks

99,7 %

NRK,  
Public stations

92,8 %

RIKS,  
commercial  
stations



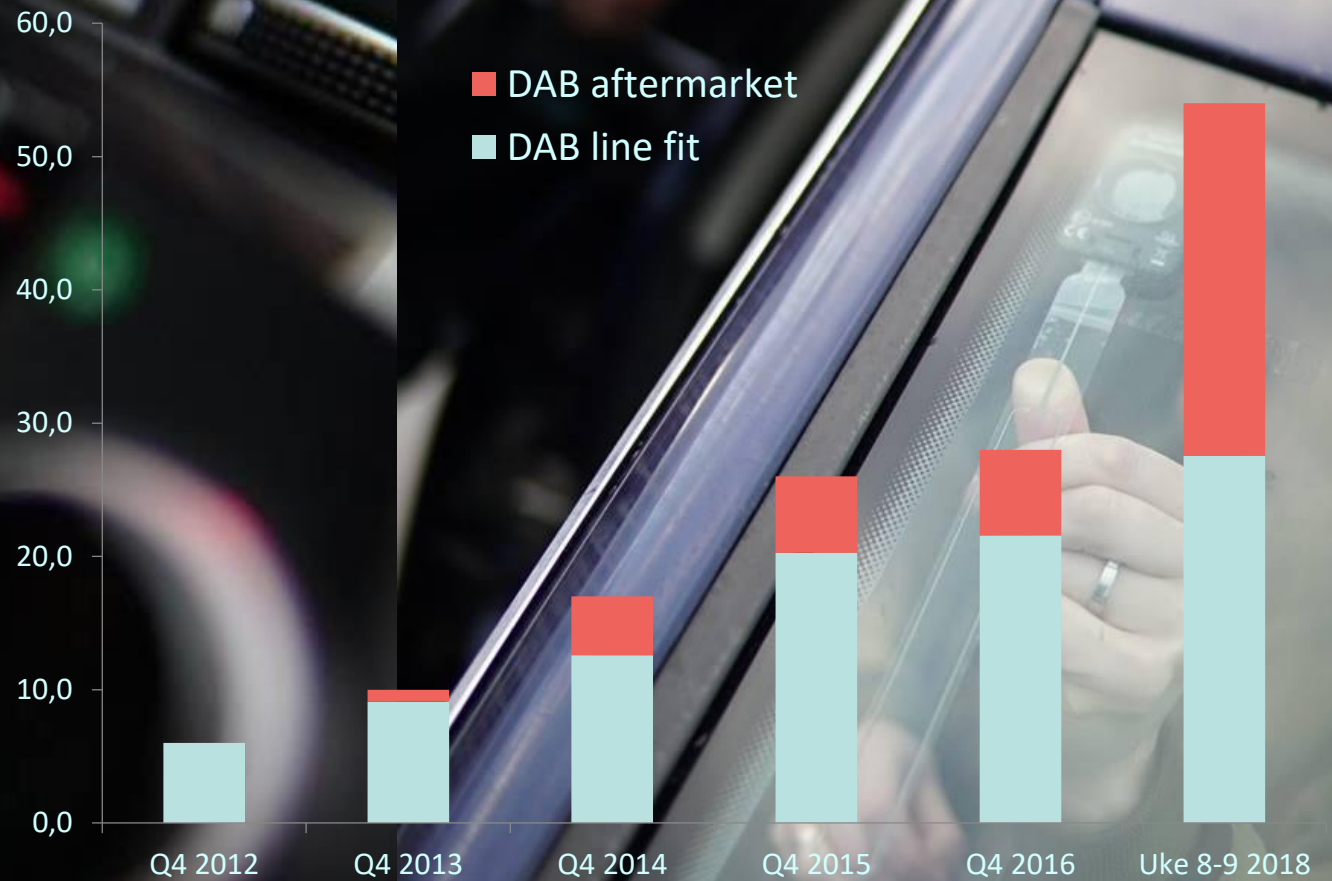




# DAB in cars

- demanding

# Aftermarket products essential

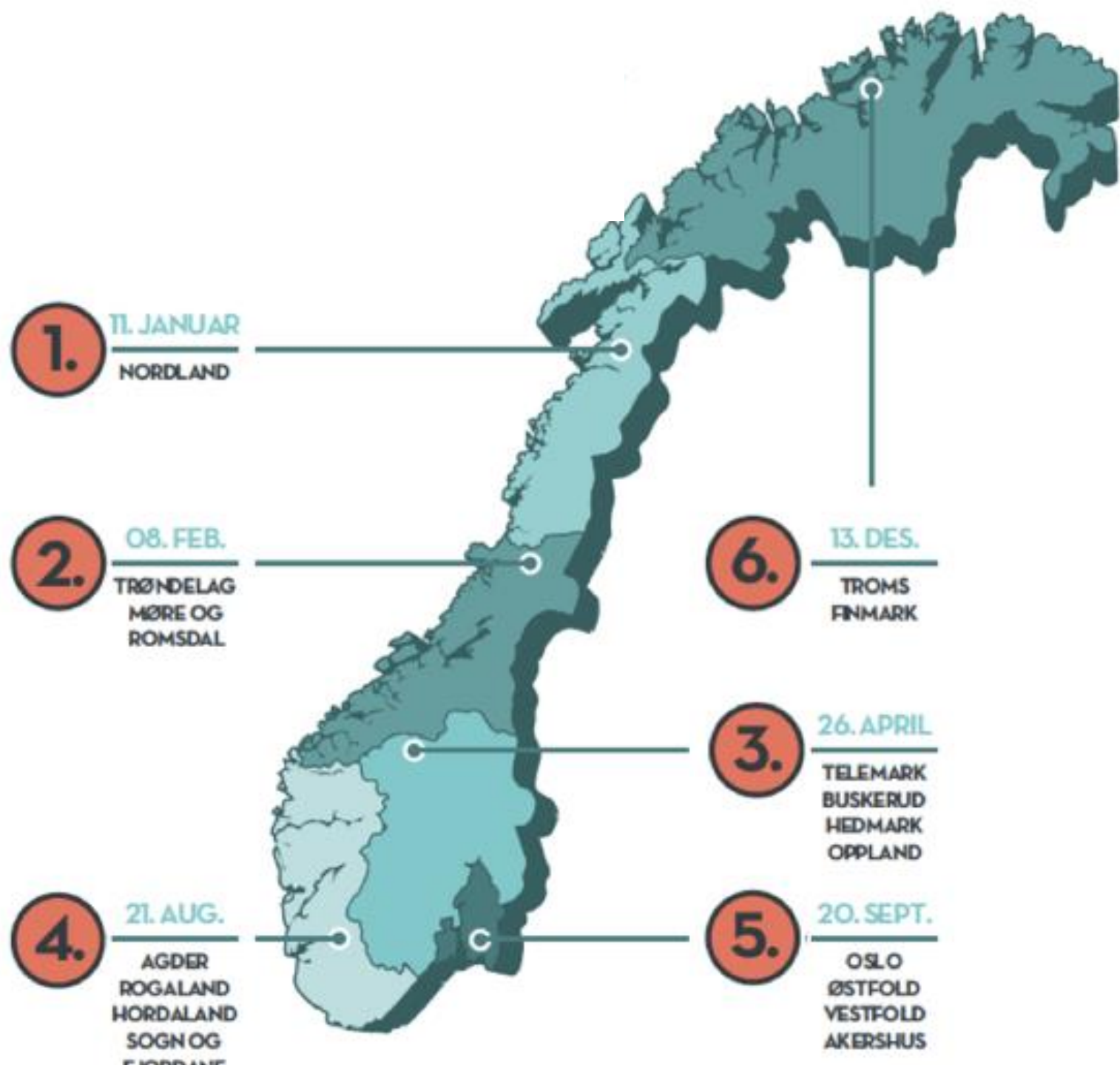


**NOT ALL LISTENERS  
ARE ENGINEERS**



# Carefully planned switch-off







**DAB a little different.**







# Results

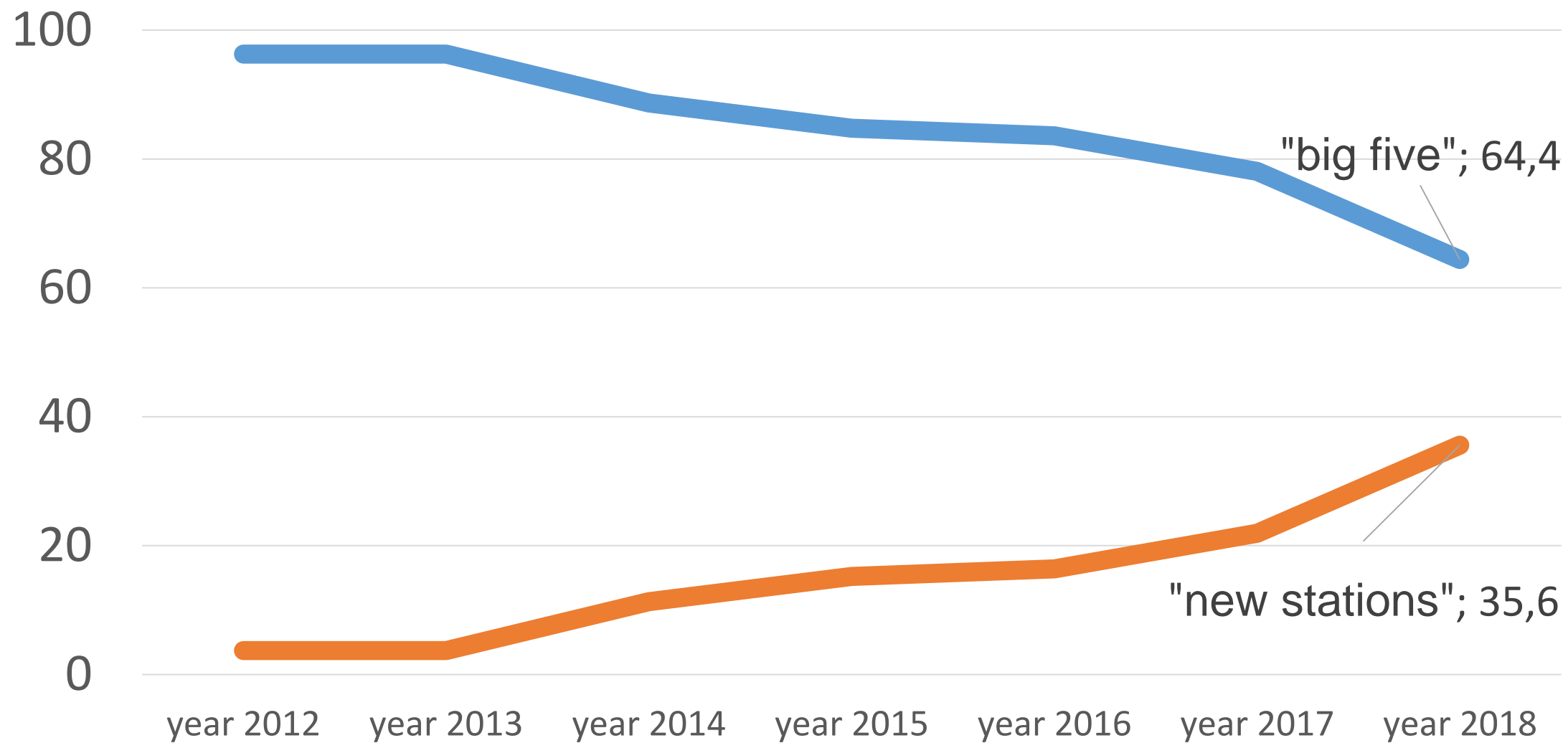
(So far)

# HOUSEHOLD ACCESS TO DAB - DEMOGRAPHICS

## SHARE OF HOUSEHOLDS WITH DAB-ACCESS



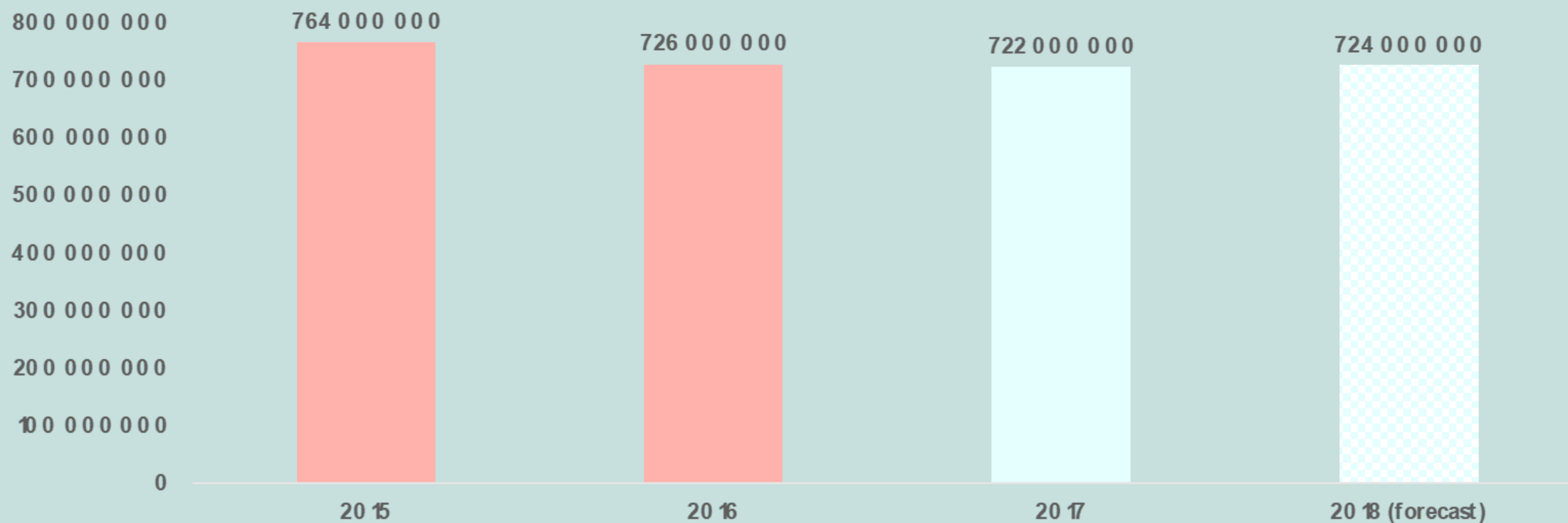
Share %



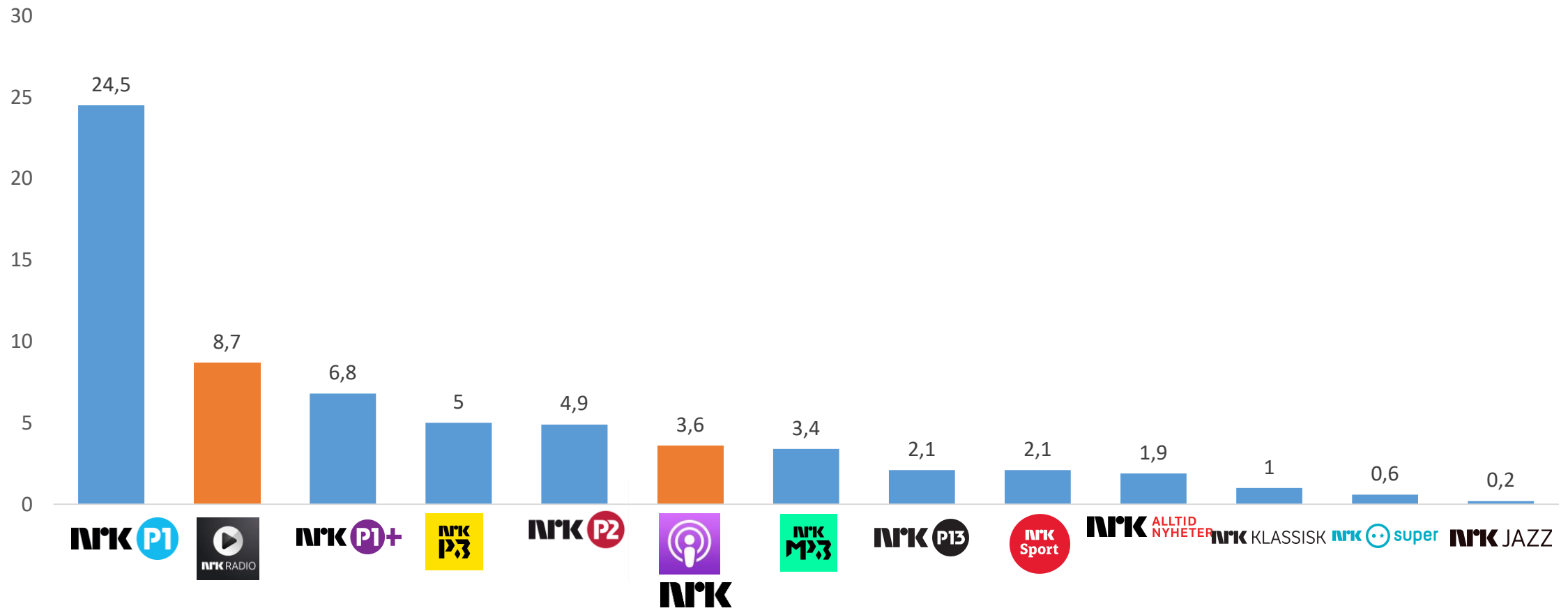
# AD REVENUES STABLE TROUGHOUT DSO

## REVENUES. NORWEGIAN RADIO MARKET

20 15 –20 17 (results), 20 18 (forecast)

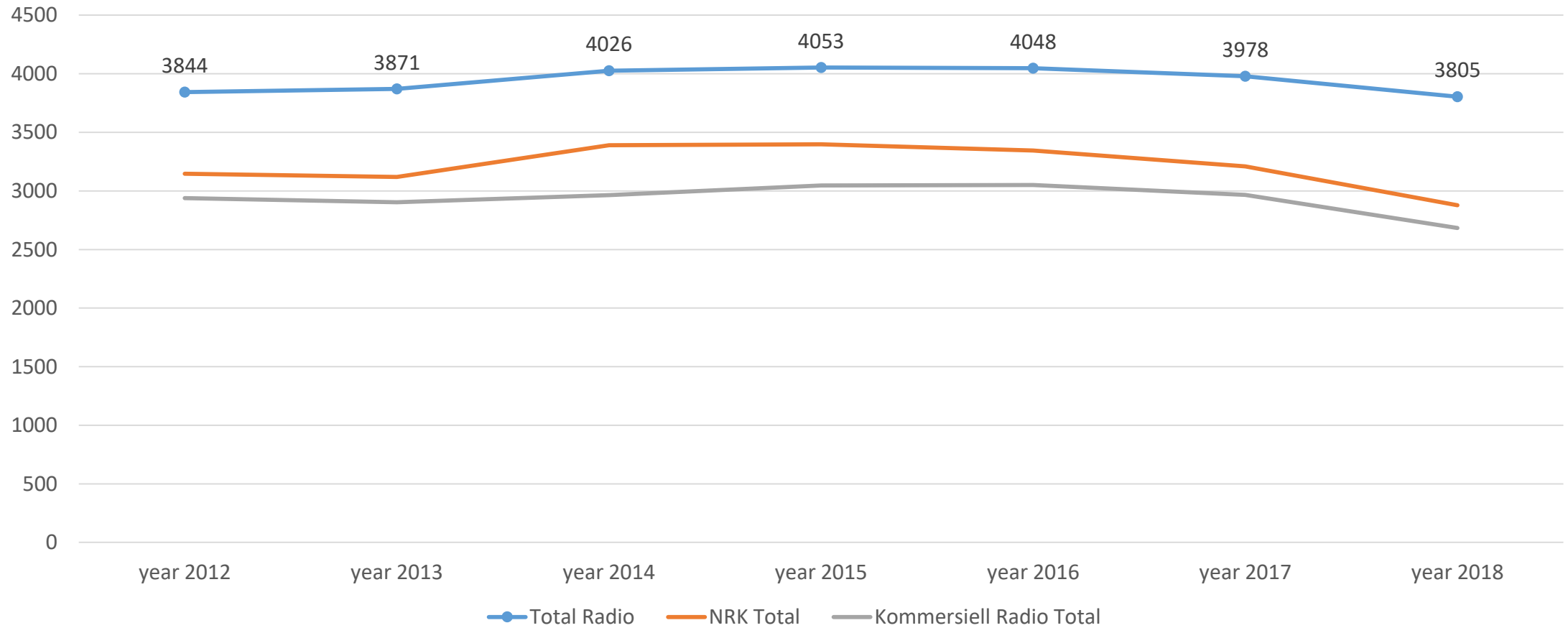


# Podcast and streaming radio

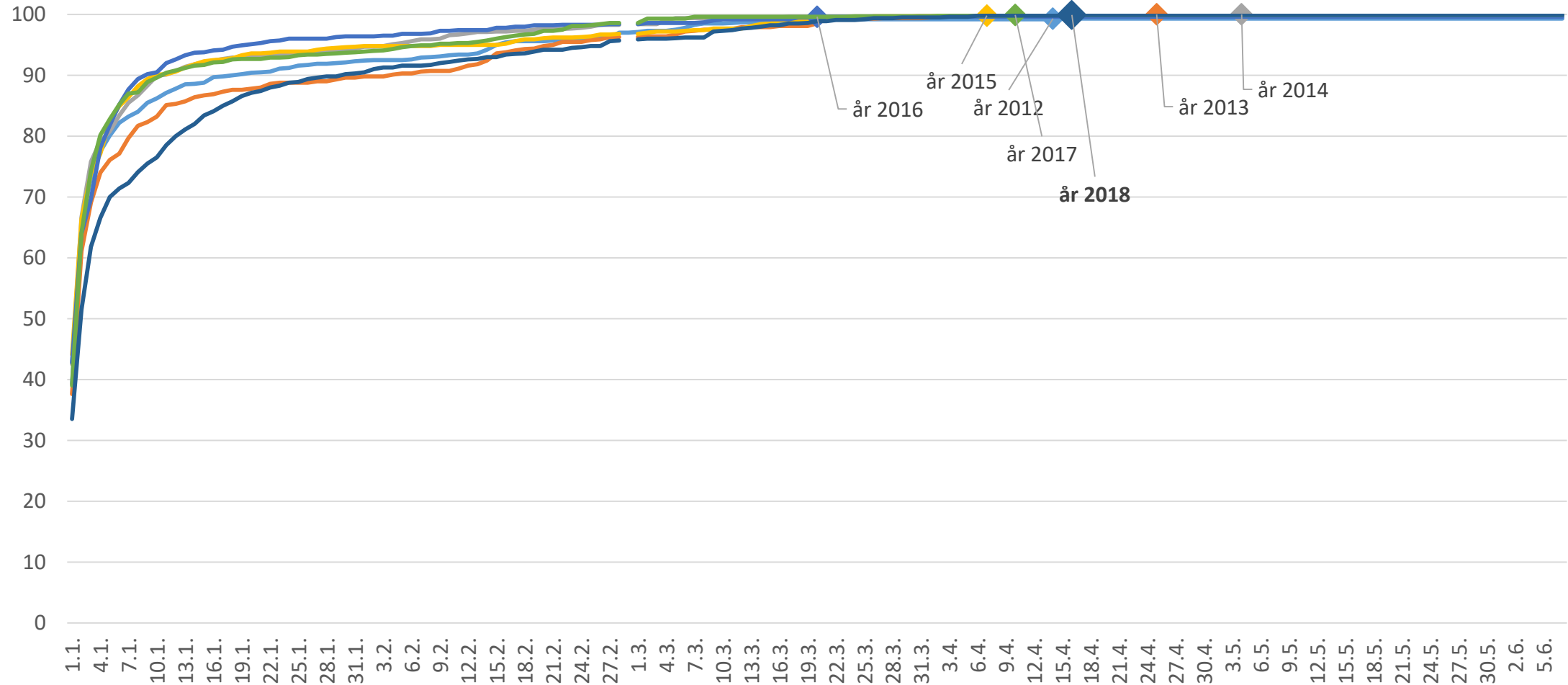


# Week 1 – 23

## Weekly reach (000)



# Acumulated reach each year up to pr 7th June. Radio total



TOPP40!

NRK P3!

RADIO ROCK!

NRJ!

Listeners  
prefer more  
chioce







Thank you

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