

# TV DISTRIBUTION FROM 2021



# Government White Paper



## Free

- Important principle that all access to NRK's TV-content is free of charge except the annual TV license, on minimum one reception-platform.
- The ministry will consider additional measures to ensure that there is no added costs, except the license fee, for TV reception on any TV-distribution-platforms.

## The DTT network and the 700 MHz band

- ...ensure that the terrestrial TV network can provide wide and attractive TV content even after 2021.
- The future of the 700 MHz band and the continuation of a DTT license should be clarified during 2016.

## Security and preparedness

NRK shall ensure that the authorities can provide essential information to the public via the broadcasting networks in times of crisis.

# Internal TV21 project

## Goal for the project:

«Make a survey that gives a basis for consecutively decisions, and which forms the foundation for a robust distribution strategy supporting NRK's preferred position in 2021 and beyond.»

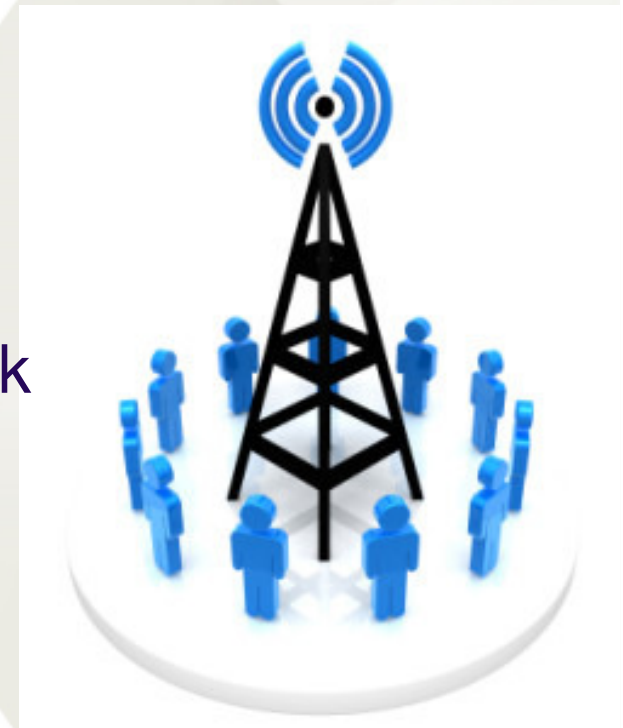
# Requirements

NRK shall be widely accessible and free *of charge*

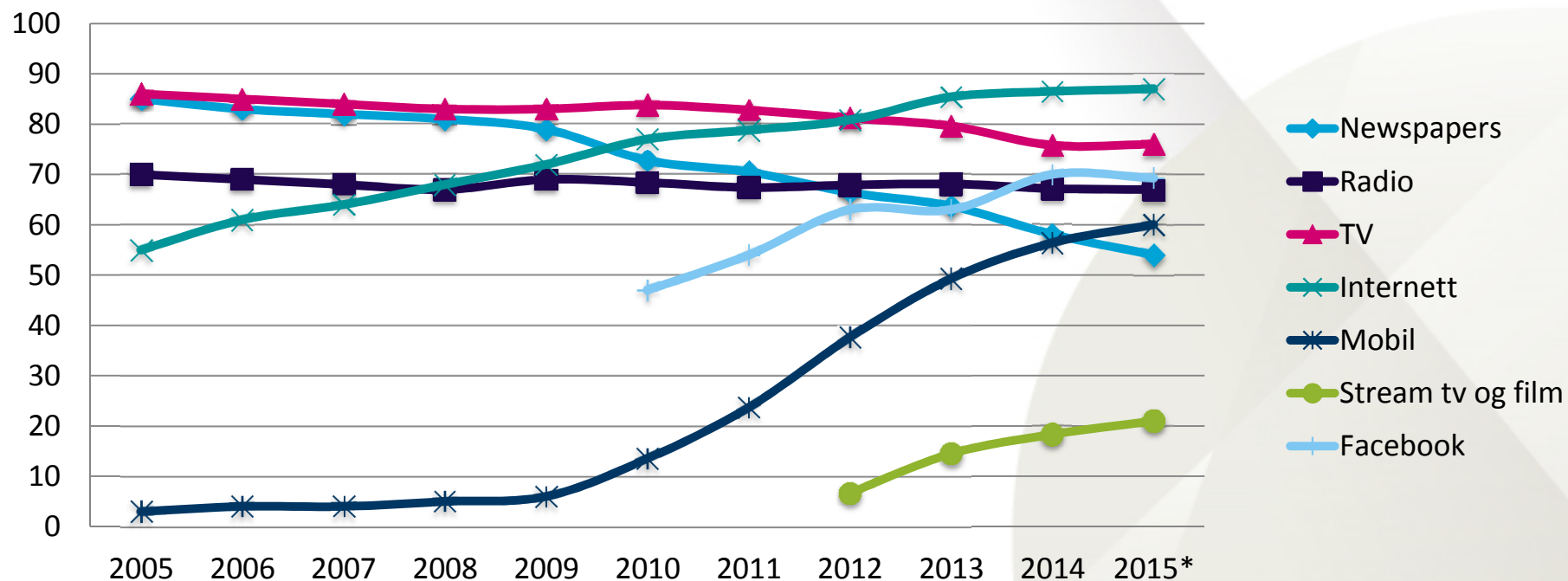
- 100% demographic coverage
- No additional subscription costs

This is today solved by the DTT network

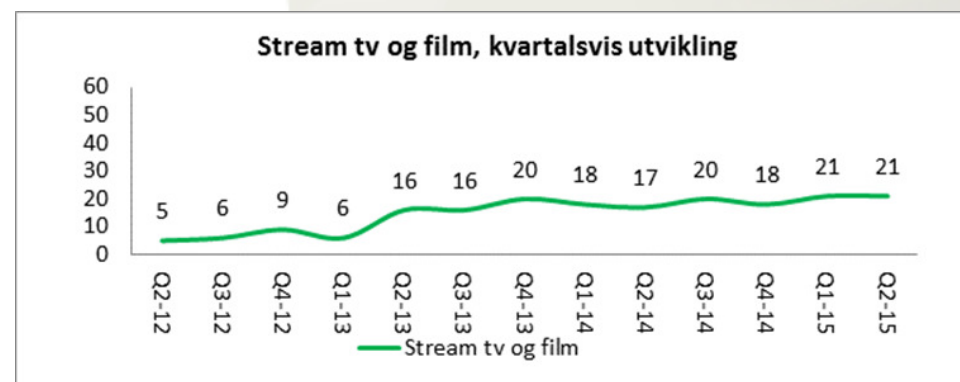
- Future-proof?
- The last 0,3% of the viewers cost 35% of the distribution costs



# The usage of big medias in Norway over time



Kilde: TNS Forbruker & Media, TNS Interbuss





# The media market

A red oval encircling logos for Google, YouTube, Apple TV, Facebook, and Netflix.

A purple oval encircling logos for NRK, TV 2, TV 3 (VIASAT), and NRK N.

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Logos for RiksTV and Get.



# Technological development



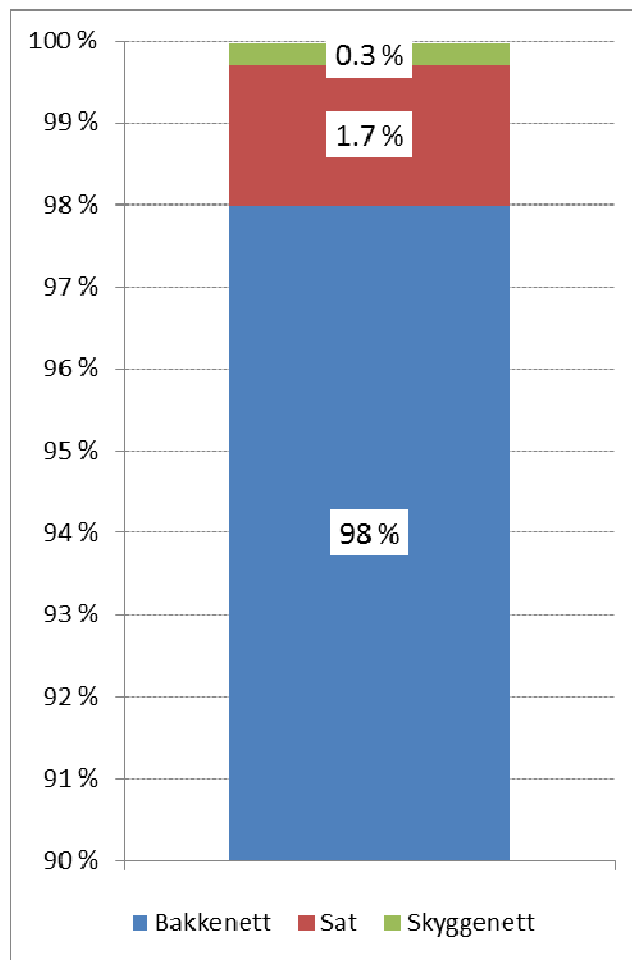
- We have little influence on consumer technology and distribution methods
- The distribution market follows the money. The money follows the consumers
  - Can NRK entrust the distribution to the market?
  - How much control of the content does NRK have on the various distribution methods?
- The consumers adoption of new technology is moving fast
- The technology choices fragments the market

# Important issues for NRK as a public broadcaster

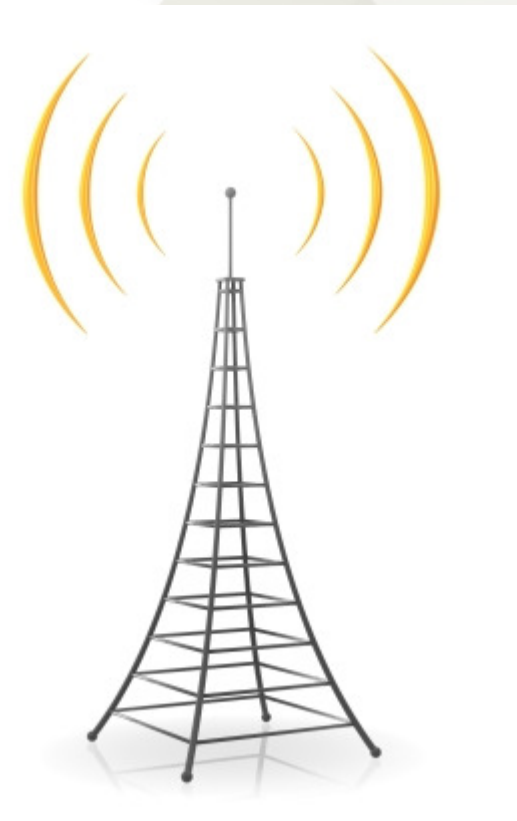
- Strong brand
- Access for everyone
- The content is free without subscription
- Editorial control without «gatekeeper»
- User data
- Preparedness; NRK shall reach the public in cases of emergency
- Robustness; high demand for availability and QoS shall be independent of the number of users and the place of residence

# The DTT network after 2021 .....

Today's solution



29.09.2015



# Task outsourced to external consultant

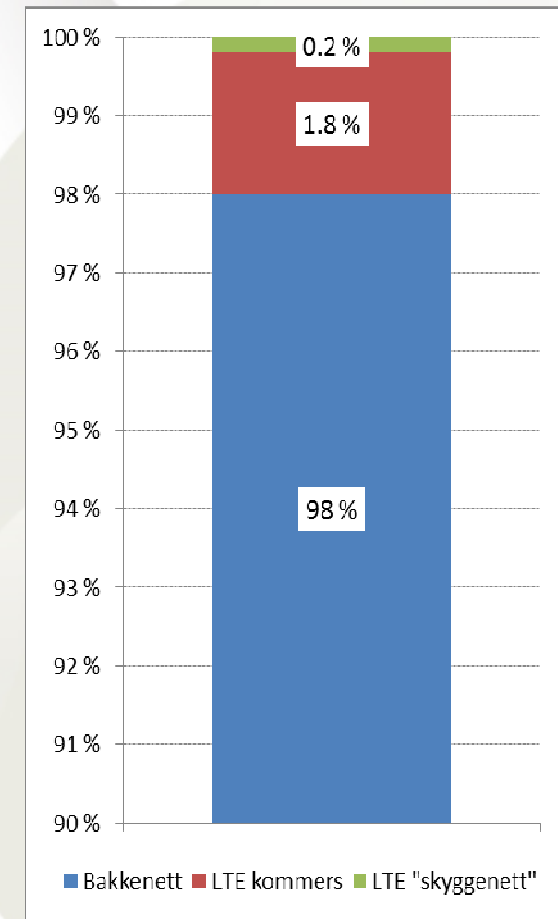
Possible distribution platforms from 2021.

- DTT
- CATV / IPTV
- DTH
- Mobile network

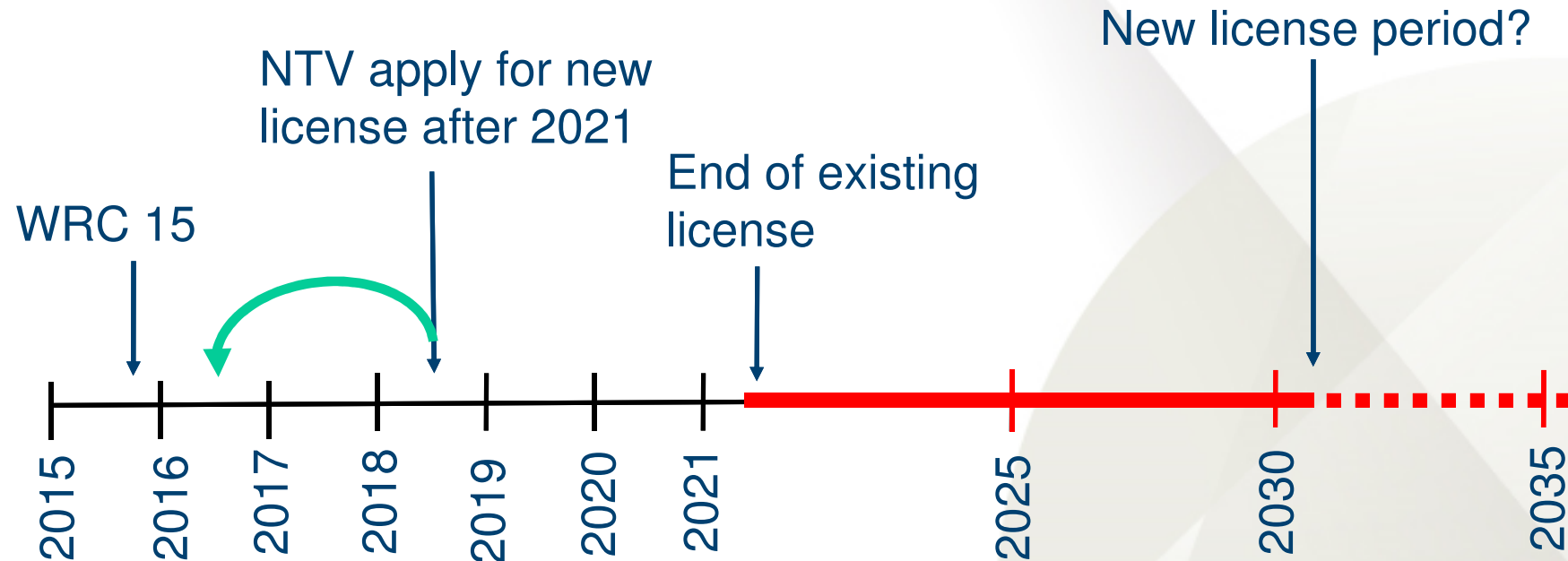
Parameters	Description
<b>Demographic coverage</b>	How large part of the population is it possible to reach on each distribution platform?
<b>Geographical coverage</b>	How large area is it possible to reach on each distribution platform?
<b>Capacity</b>	How suitable is each distribution platform (in 2021) for broadcasting NRK's TV-channels?
<b>cost effectiveness</b>	What are the investment and operational costs for each platform?
<b>Robustness</b>	Safeguard NRK's requirements for preparedness

# What about the mobile networks in 2021?

- LTE is being rolled out at high speed
  - Netcom: Min 98% by 2018
  - Capacity requirement: 2 Mbps
  - Telenor: 99,8% by 2020 (84% area)
- Broadcasting (eMBMS) is supported
  - eMBMS are available in several Tx
  - Chipsets are in the terminals, but...
  - No proof of concept yet
  - The eco-system does not include TV receivers
  - Can the demand for capacity be met?
- Can LTE be more socioeconomically in remote areas for extended services?



# New license period for DTT?



- Important with a commercial operator. NRK cannot stay alone on this platform.
- A new license period has to be predictable to defend required investments in the network.
- A new license period without the 700-band will probably require a change of technology.
- Preparations for change of technology has to start well in time of 2021.

## So far...a few possible answers

- DTT is currently the best option for primary distribution of linear-TV from 2021.
  - May follow the «Lamy-model»; 2021-2026-2031
- LTE-networks can become an optional technology for coverage in remote areas when the technology has proven well suited for the purpose.
- Both LTE-networks and DTH can potentially replace DTT as the primary technology for linear-TV, but the LTE option has uncertainties concerning technology, commercial models and costs (including principles for frequency auctions and licenses).
- A move to mobile technology is not driven by the broadcasters.
- CATV/IPTV networks are not suited as primary platform due to actual coverage and complicated business models.