



Digitalization roadmap of VOV

VOV's dicussion on Digital Radio Technologies
Hanoi, 2013

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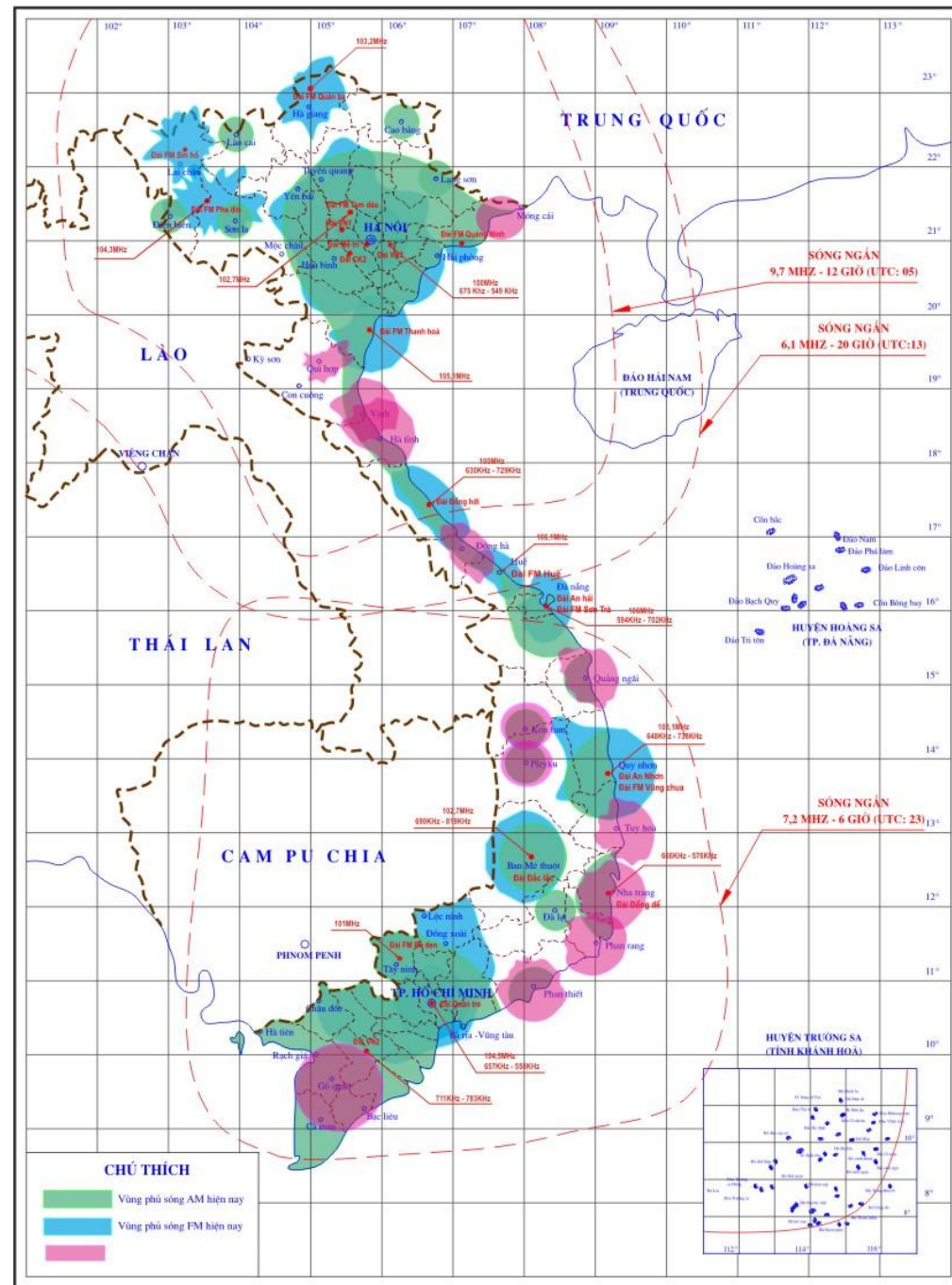
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VOV : the way of changing to digital

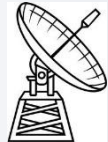
- VOV in brief
- VOV - The way of changing to digital



VOV in brief (1945 - today)



- Total number of staff: 2300
- Producers and reporter: 700
- Daily broadcasting hours: ~ 200
- Number of studios: 70
- Number of transmitting stations: >50 (FM stations: 32)
- Total transmitting capacity: 6732KW



SW,AM,
FM radios

Satelite



LISTENER

VOVTV
channel



VOV
Newspaper



BẢO CỬA ĐÀI TIẾNG NÓI VIỆT NAM

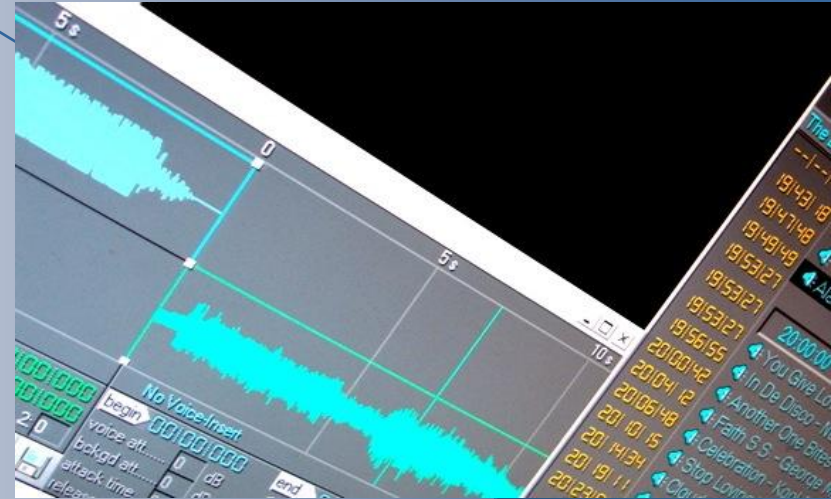
VOV Internet
(online)



Digitalization of audio productions

X-Track
(5 workstations) –
FM 100Mhz

D-Cart Basys
14 pc, 7
workstations



1994

1996

2003

2005

2008 - today

Dalet 5.1e
VOV1 – VOV2 –
VOV3

Netia System
VOV5

Digitalization of audio
archive (2008 -) and
expanding – new
broadcasting house,
studios, applying new
technology, IT
network...vv

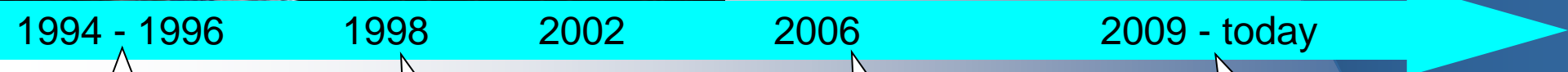


dalet 
Digital Media Systems

Developing transmission over satellite



Digital television of
VOV over DTH
satellite
(Ku band)



1994 - 1996

1998

2002

2006

2009 - today

Intersputnik
satelite (Russia)
Comstreams
system
(America)
(C-standard
band)

THAICOM 3
satelite

THAICOM 5
satelite

VINASAT-1
Viet Nam
satelite
(C-Extended
band)

Applying multimedia technology

Applying informatic and communication in 4 kinds of broadcasting

- Internet Radio and handmobile radio.
- Radio
- VOVTV channel
- VOV newspaper



VOV
Voice is boundless

DRM-
DMB

eOf
fice

Dale Ne
tia

5 kênh
PT
F
M

IPT
V
I
C

Trial digital radio standards



HARRIS



© 1998 DRM Association

2005

2009

2013

1998

Trial DAB+ in Ha noi

Trial AM – FM HD-Radio in Metri, Hanoi in 2008 - 2009.

Trial DRM Medium Wave Reception tests in Dong Hoi, Vietnam on July 2005.

Researching on digital audio carefully, with 3 projects (one national project) from 1998 – 2005.

VOV – Unify communication

Digital radio

Digital standards (DAB, DAB+, DRM, HD-Radio, DMB...)

Satelite

*WorldSpace
XM Radio
DVB-S
Global Radio?*

Telecommunication

Internet

**IP tunneling
Live streaming
Media File Transfer**

**GSM
GPRS
3G, 4G**

Cable

**DVB
DAB**

VOV – Technical conditions

- **Now:**

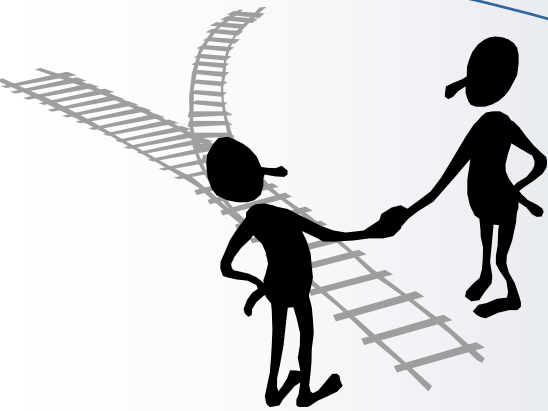
- Producing programmes ➤ **Mostly digitalized, digital archive, data exchanging network...**
- Transmitting and broadcasting ➤ **Infrastructure analog, satellite**
- Receivers ➤ **Mostly analog receivers.**
- Website ➤ **Developing VOV Websites, special radiovietnam.vn and services on tablet, mobile....**
- Others ➤ **VOVTV channel, VOVas...**

The issues of VOV today

- ❖ Broadcasting machine system is big, technology keeps pace with countries in the same area and the world.
- ❖ VOV's engineers has good ability to approach new technology.
- ❖ The Vietnamese government always support and have an interest in development of radio.
- ❖ Viet Nam's the complex and multiform terrain (deltas, mountains, sea and islands). It raise difficulties to choose a suitable and effect technology.
- ❖ Standard of living isn't high. Source of finance, investment aren't met.

VOV – Target and Planning

- Developing and expanding radio in domestic and foreign through 4 broadcasting models: radio, television, newspaper and online (Internet and mobile).
 - Expanding coverage in remote areas, developing new services on radio (FM). Expanding coverage in East sea (2009 - today)
 - ☐VOV have researched carefully a few standards and new broadcasting models since 2000: DAB, DAB+, DRM, HD-Radio, DMB, satellite ...vv. But depend on real conditions in Viet Nam, we are going to choose the official standard in the near future.
- Cooperation and assistance from other broadcasting organization and stations: DW, NHK, ABU, WorldDMB .etc..



Thank you !

