

*Progress of Digital Broadcasting  
in Japan*

15 June 2000

Digital Broadcasting Experts Group  
(DiBEG)

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- Promotion of Digital Broadcasting
- Digital Satellite Broadcasting (BS)
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# *Promotion of Digital Broadcasting(1)*

- Aim of Digitalization

- More new entrants into the broadcasting business due to multichannel services

- More viewer choice due to variation in programming and service contents

- More advanced broadcasting services due to linkage and convergence with telecommunications and computing



**DIGITAL TV.**  
**ADAPT OR**  
**DIE?**

# Promotion of Digital Broadcasting(2)

- Schedule for Digitalization of Broadcasting

	- 1998	1999	2000	2001	2002 -
Communication Satellite	PerfectTV(after merger "SKYPerfectTV!") launched				
	Digital services in June '96 (DirecTV Nov. '97)				
Broadcasting Satellite	Launch of Digital services (Scheduled Dec. 2000 by BS-4 succeeding)				
CATV	Launch of Digital services Jul. '98				
	Study on Technical Standard for retransmission of Terrestrial and BS Digital services				
Terrestrial	Main Stations		Relay Stations		Deadline of Applications in 3major metropolitan areas 2003
	Study of Establishment of Channel Allotment Plan				
	Deadline of Applications in other areas 2006				
	Channel Replacement for (some) Analog Stations				
Practical Scale Trial in Tokyo and other 10 cities					

# *Digital Satellite Broadcasting*

## *- BS Digital Broadcasting -*

- Approval of Facility Supplying Broadcaster for BS Digital Broadcasting (July 1998)
- Decision on 10 Program-Supplying Broadcasters (Nov. 1998)
- Approval of 8 Program-Supplying Broadcasters for Data Services (Dec. 1999)
- *Launch of BS Digital Broadcasting Services (Dec. 2000)*

# *Digital Terrestrial TV Broadcasting (1)*

- Report of the Advisory Committee on Digital Terrestrial Broadcasting (Oct.1998)

- Digital Terrestrial TV broadcasting

Expected to Launch the Basic-Service **by 2003**  
**at 3 major Metropolitan Areas (Tokyo, Osaka**  
**and Nagoya)** and by 2006 at Other Areas

## *Digital Terrestrial TV Broadcasting (2)*

- Legislative Action, Establishment of Technical Standards, etc. (part 1)
  - Legislative Action
    - Revision of the Broadcasting Law
    - Advanced Television Broadcasting Facility Development Promotion Temporary Measures Bill
  - Legislation of Technical Standards
    - **December 1999: Legislation of ministerial ordinances about digital terrestrial TV broadcasting system**



## *Digital Terrestrial TV Broadcasting (3)*

- Legislative Action, Establishment of Technical Standards, etc. (part 2)
  - Establishment of Channel Plan
    - January 1999: Relevant Organizations Jointly Conducted Channel Simulation
    - April 2000: Agreement the common recognition on the draft channel assignment for main stations all over Japan

## *A Part of Draft Channel Assignment for Main Stations in Japan (Tohoku Area)*

Area	Pref.	NHK1	NHK2	P.B.1	P.B.2	P.B.3	P.B.4
Tohoku	Aomori	13	16	28	30	32	
	Iwate	13	14	16	18	30	32
	Miyagi	13	17	19	21	24	28
	Akita	13	15	17	21	29	
	Yamagata	13	14	16	18	20	22
	Fukushima	14	15	25	26	27	29

: These Channels are not to allocate for the particular broadcasters.

P.B.: Private Broadcaster

# *Digital Terrestrial TV Broadcasting (4)*

- Digital Terrestrial Broadcasting Experiments

Nov. 1998 - : Launched the Digital Terrestrial Broadcasting Pilot Experiment, “Tokyo Pilot Project”

- Preparation of Open Facilities for R&D on Digital Broadcasting

Fiscal 1998 - : Preparation of **10 facilities** of a practical scale around the country

# *Digital Broadcasting Experiment Activities*

## *- Tokyo Pilot Project -*

- Outline of Tokyo Pilot Project
  - Chairman: Professor Mitsutoshi HATORI of the National Institute of Informatics
  - Date of inception: October 2, 1998
  - Membership: 73 associations (as of the end April 2000)  
Members: Broadcasters, Manufacturers, R&D Institutes and so on.

# *Digital Broadcasting Experiment Activities*

## *- Tokyo Pilot Project -*

- Contents of Major Experiments (1)
  - Experiments conducted jointly with MPT\*
    - a. Evaluation of functions and functional testing of Digital Terrestrial Broadcasting in actual practical environment.
    - b. Development and study, with checking of operation viability of broadcasting terminals for the utilization of highly developed services through their easy manipulation by the elderly, handicapped and children, etc.

# *Digital Broadcasting Experiment Activities*

## *- Tokyo Pilot Project -*

- Contents of Major Experiments (2)
  - Experiments to be conducted by the Tokyo Pilot Project
    - a. Phase 1 (from November 1998 to March 1999)  
Video transmission experiments in multi-channel broadcasting experiments, HDTV broadcasting experiments, mobile reception experiments, and so on
    - b. Phase 2 (from April 1999 to March 2000)  
Experiments in new multimedia broadcasting services of data broadcasting, EPG service, and so on
    - c. Phase 3 (from April 2000)  
Under consideration about themes of experiments for Phase 3

# *Digital Broadcasting Experiment Activities*

## *- Open Facilities for R&D on Digital Terrestrial Broadcasting -*

- Outline of Research and Development (1)

- Purpose

- a. Development of new technologies for the construction of digital broadcasting networks
- b. Development of new services technologies for realizing regionally adopted type of 2 way broadcasting, accumulated type of broadcasting, portable and mobile receiver directed multimedia broadcasting, etc.
- c. Development of new services rooted in regional characteristics by regional governments and local industries in education, welfare, distribution, publishing, etc

# *Digital Broadcasting Experiment Activities*

## *- Open Facilities for R&D on Digital Terrestrial Broadcasting -*

- Outline of Research and Development (2)

- Length of the experiment

Estimated **5 Years** From End of Fiscal Year 1999

- Government Budget

First supplementary budget: 35 billion yen

3rd supplementary budget: 11 billion yen



# *Digital Broadcasting Experiment Activities*

## *- Open Facilities for R&D on Digital Terrestrial Broadcasting -*

- Intended Locations

- First supplementary Budget (7 Areas)

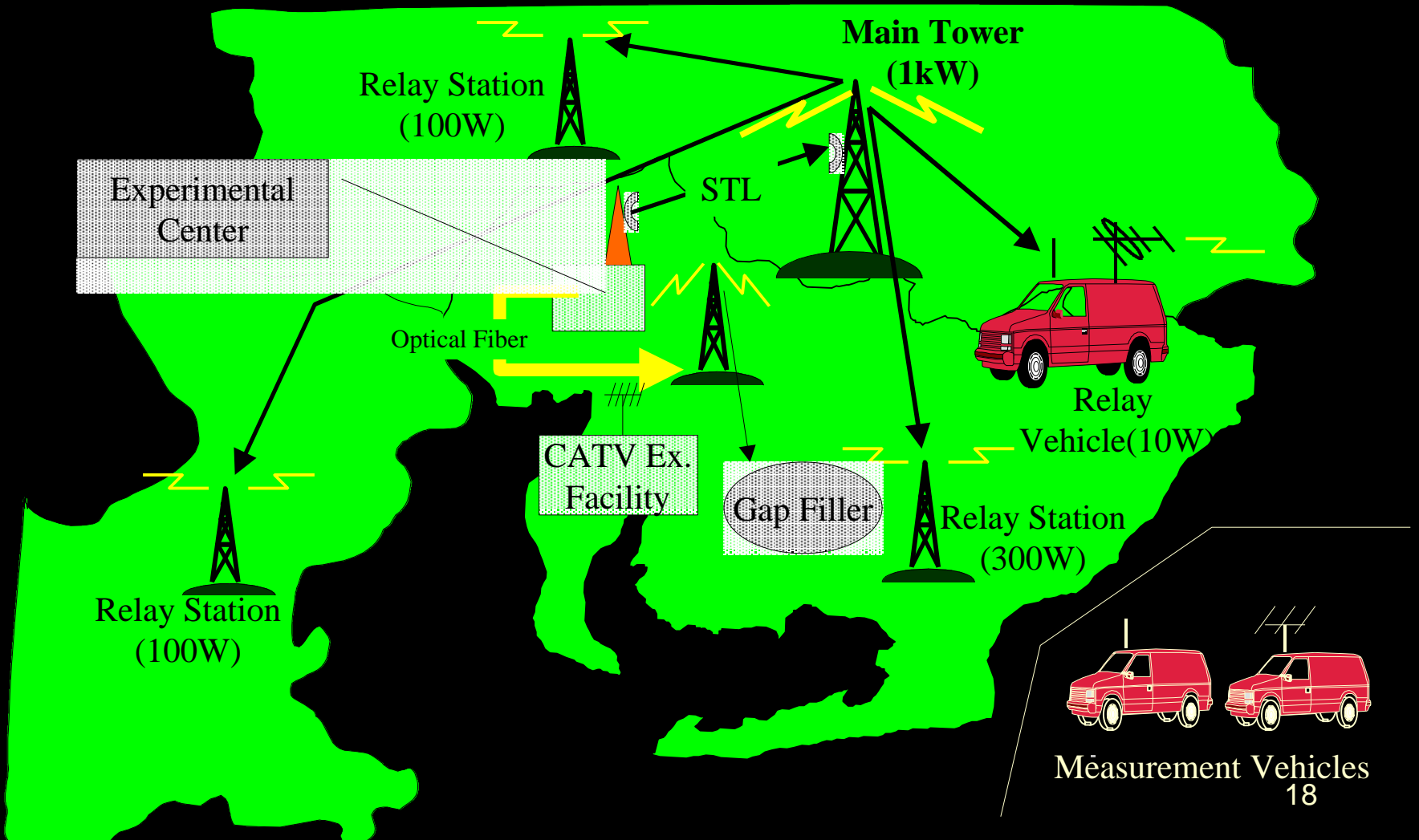
- Hokkaido, Tohoku Region, Tokai Region,  
Kinki Region, Chugoku Region, Shikoku,  
Kyushu

- 3rd supplementary Budget (3 Areas)

- Shin-etsu Region, Hokuriku Region,  
Okinawa Prefecture

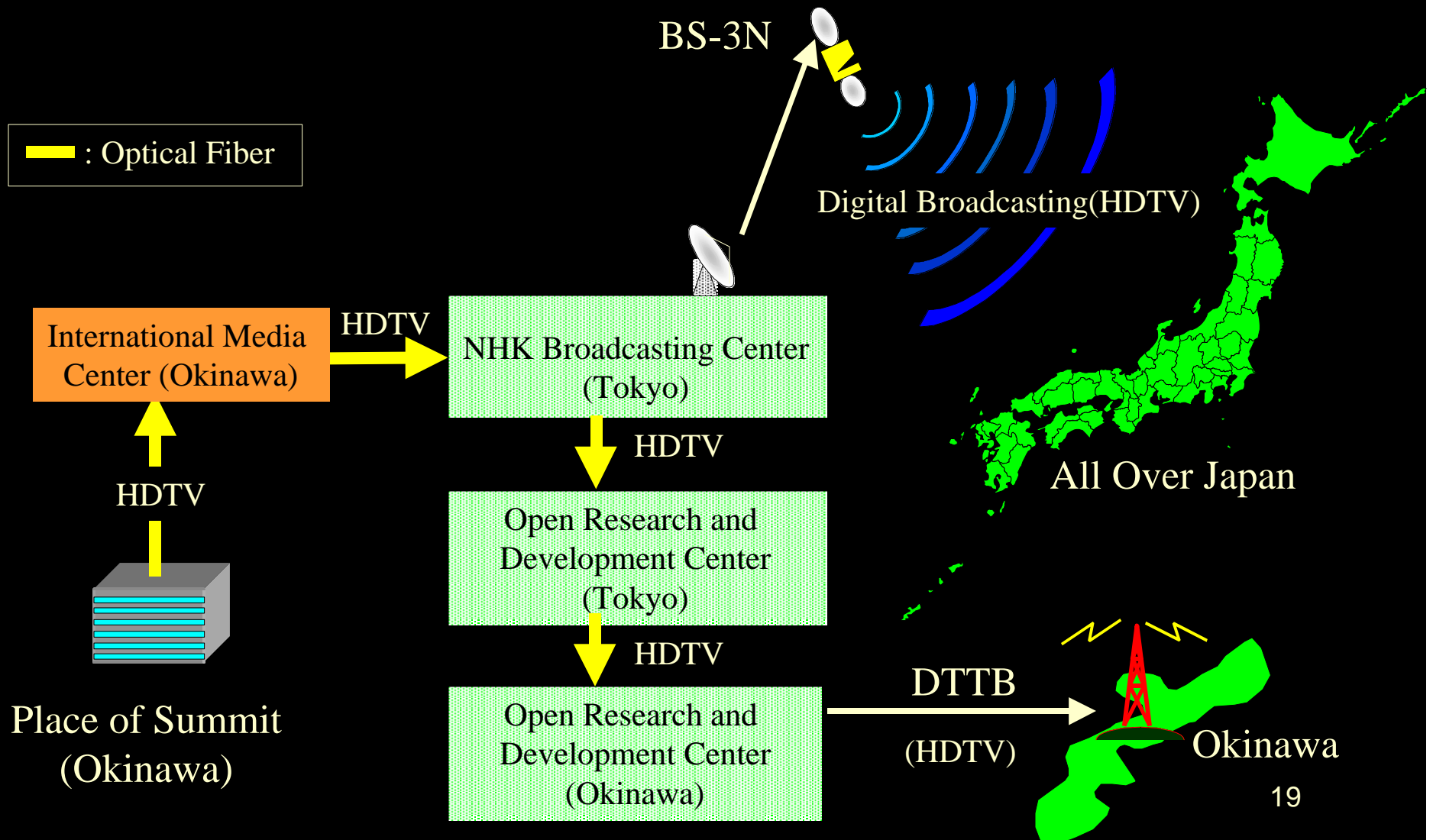
# Digital Broadcasting Experiment Activities

- An Example of R&D Network Facility (Tokai Area) -



# Digital Broadcasting Experiment Activities

- Digital Experiment on Kyushu-Okinawa Summit -



# *Digital Broadcasting Experiment Activities*

## *- DiBEG -*

- Outline of DiBEG
  - Foundation: September 1997
  - Member: 34 members (as of the end of April 2000)  
Broadcasting Equipment Manufacturers,  
Broadcasters and so on.
  - Chairman: Atsumi SUGIMOTO (NEC Networks)
  - Purpose: Contribution to introduce Digital  
Broadcasting in the World

# *Digital Broadcasting Experiment Activities*

## *- DiBEG -*

- Activities

- Field Trial

- Sep. 1998: Singapore
    - May 1999: Hong Kong
    - Jan. - Mar. 2000: Brazil
    - Feb. - Jun. 2000: China

- Seminar

Hong Kong, China, Singapore, Malaysia, Indonesia, Thailand, Australia and so on.