Doc T-26/20-6

STATUS REPORT

Organisation:	NHK (Japan Broadcasting Corporation)		
Period:	Sep.2025 - Sep.2026	Date of Report:	October 9, 2026

PART A

Technical Developments during the past year:

- System upgrades/changes to practices for improved quality/efficiency
  - **Reorganization of Audio Broadcasting (March 31, 2026)**
    To improve the efficiency and sustainability of audio broadcasting services, the existing three-channel system consisting of Radio 1, Radio 2, and FM broadcasting was reorganized into a two-channel system comprising NHK-AM broadcasting and NHK-FM broadcasting. The basic approach was to enhance listener convenience by relocating programs previously broadcast on Radio 2 to Radio 1 and FM broadcasting, while also promoting the use of online services **"Radiru★Radiru"** so that listeners would perceive tangible benefits from the transition.
  - **Full-Scale Operation of new Broadcasting Center Building (August to September 2026)**
    NHK began operating a new Broadcasting Center Building equipped with the latest IP-based technologies and AI. Key functions, including the News Center and International Broadcasting operations, were relocated to the facility, which now serves as a new hub for ensuring uninterrupted broadcasting and streaming of disaster coverage and various programs.

- New Services/new projects initiated
  - **NHK ONE (October 1, 2025)**
    - Following amendments to the Broadcasting Act that made internet-based services a mandatory business activity, NHK launched **NHK ONE**, a new internet service that integrates and renews former services such as **NHK Plus**, achieving a true convergence of broadcasting and communications. One year after its launch (as of September 2026), the number of accounts with verified contracts had reached approximately **4.47 million**.
    - During the **Milano Cortina 2026 Winter Olympics**, NHK ONE delivered its first-ever comprehensive coverage of **all competitions and events**, providing both live streaming and dedicated event pages.
    - In the event of major earthquakes, heavy rainfall disasters, and other emergencies, NHK ONE provides special simultaneous streaming and a **Disaster Information Map**, enabling anyone to access life-saving information regardless of whether they have an NHK reception contract.
  - **Recent Strategic Initiatives in AI and Governance**
    - To advance safe and innovative technology integration, NHK established the "**NHK AI Principles**" in April 2026 to ensure ethical AI utilization, transparency, and broadcasting workflow efficiency. Concurrently, NHK restructured its executive management by appointing a Vice President as Chief AI Officer (CAIO) to oversee AI governance and rule-making, alongside a CDO/CPTO dedicated to digital and AI service implementation.

- Research projects
  From NHK STRL OPEN HOUSE 2026: https://www.nhk.or.jp/strl/english/open2026/index.html
  - **Drone video transmission over a private radio link ("Flying RoboCam" / IP relay drone)**
    Antenna direction control lets drones send aerial video over long distances. Another drone sets up an IP link in the air that also carries flight-control signals.

- **Multimodal LLM specialized for TV programs**
  Further trained on program video, audio and captions. It helps production by spotting errors in on-screen text and finding scenes.
- **Content provenance (C2PA)**
  Provenance data and tamper-detection signatures are added from shooting through distribution. Checking them is built into the web browser.
- **Cloud-based integrated broadcast and streaming (ST 2110 / CMAF-ULL, software modulation, CDN edge substitution)**
  Broadcast and streaming signals are produced and sent out from the cloud. Programs can be swapped for each viewer at the CDN edge.
- **AI sign language CG (speech-to-sign translation, motion generation from video and prompts)**
  Speech is translated straight into sign language CG. Sign motions are generated without motion capture.
- **Concave curved image sensor**
  A sensor thinned to 0.01 mm is bent into a concave shape, so wide-angle shots stay sharp at the edges.
- **Color incoherent digital holography under natural light**
  Records 3D images in color under LED light or sunlight, without lasers.
- **Tactile display using light-responsive polymer**
  The material softens under blue light, which lets a touch pad change how hard it feels.
- **High-performance real-time speech recognition (proper nouns, overlapping speech)**
  Low delay, with correct spelling of proper nouns and separate recognition for each speaker. Aimed at practical captioning around 2027.
- **Light field HMD**
  A VR headset that shows 3D images the eye can focus on naturally, so it is less tiring. The thinner optical setup was achieved.
- **8K cropping avatar compositing (8K-ROI switcher)**
  CG avatars are added to video from a fixed 8K camera, and the needed areas are cropped out. Virtual production with little equipment.
- **Next-generation STL/TTL and asynchronous multiplexing (ISDB-T3 migration)**
  One relay-link channel carries several programs. Broadcasting can move to the next-generation system without new channels.
- **21 GHz band satellite with LDM transmission**
  Free-viewpoint AR content is sent via the BSAT-4a satellite. Viewing continues even when heavy rain weakens the signal.
- **VVC coding of 360-degree video (GCMP)**
  8K 360-degree video is converted into an easy-to-compress format and coded with VVC for live transmission.
- **15K 360-degree camera (two-lens folded optics)**
  Two 8K×8K sensors keep the camera thin. Footage can be checked live on site and cropped for 2K production.
- **Full-color transparent hologram (surface-relief type)**
  Tiny bumps on a glass surface show a full-color 3D image floating in the air while the glass stays clear.

From NHK TECH EXPO 2026: https://www.nhk.or.jp/techexpo/

- **AI-Assisted Sports Video Editing**
  Integrates video, on-screen text, and commentary analysis to automatically identify players and game events, streamlining video editing workflows.
- **Hybrid LED Lighting System**
  A full-color LED lighting system that combines spotlight and floodlight functions in a single unit. By integrating liquid crystal optics, it achieved a wide color gamut and high color fidelity.

- Internet and Mobile Broadcasting Services
  - **Global Distribution on Netflix (from June 2026)**
    - As part of efforts to strengthen its international reach, NHK began distributing 19 titles, including past Taiga dramas and TV serials such as *Gunshi Kanbei* and *Manpuku*, to overseas audiences through Netflix. Translation and localization to overcome language barriers are handled by Netflix.

			Radio	Television
Coverage %			**Until Mar. 30, 2026** AM Radio 1: 99.9% AM Radio 2: 99.9% FM: 98% **From Mar. 31, 2026** AM Radio: 99.9% FM: 98%	Digital Terrestrial: 98.2%
Programme Channels			**Until Mar. 30, 2026** AM Radio: 2 FM Radio: 1 **From Mar. 31, 2026** AM Radio: 1 FM Radio: 1	Digital Terrestrial: 2 Digital Satellite (HD): 1 Digital Satellite (UHD): 2
Studios (Production)	File-based Set-up	R/N/D		
	SDTV	R/N/D		
	HDTV	R/N/D		
	UHDTV			
	IP Based Set-up	R/N/D		
Transmission & Delivery	HF	R/N/D	2	
	MF	R/N/D	**Until Mar. 30, 2026** Radio1: 280 Radio2: 146 **From Mar. 31, 2026** 280	
	FM	R/N/D	532	
	TV	R/N/D		2,211
	OTT/IBB/Internet Services	R/N/D		
	Mobile Services	R/N/D		

R = Replacement/upgrade
N = New
D = Discontinued

PART B
CURRENT ACTIVITIES

	Activities	Area	Brief Details: 1. Objectives 2. Progress to date	Challenges/Problems Faced: 1. Lack of resources 2. Lack of know-how 3. Others (e.g. up-skilling)	Solutions Implemented/Type of assistance requirement from ABU
1.	Development projects/Upgrading facilities/Training				
2.	Participation in ABU Activities	Area	Level of Participation	Reasons for not participating (though interested)	
3.	Suggestions for New ABU Activities e.g. study topic projects, webinars, workshops, symposiums etc, spectrum activities,	Activity 1			
		Activity 2			

	Activities	Area	Brief Details: 1. Objectives 2. Progress to date	Challenges/Problems Faced: 1. Lack of resources 2. Lack of know-how 3. Others (e.g. up-skilling)	Solutions Implemented/Type of assistance requirement from ABU
	information exchange platform				
		Activity 3			