

STATUS REPORT

Organisation:	Radio Television Hong Kong (RTHK)		
Period:	Oct 2024 to Aug 2025	Date of Report:	25 Aug 2025

PART A

Technical Developments during the past year:

- System upgrades/changes to practices for improved quality/efficiency

- Adoption of AI Technology

1. Launch of live video transcript generator and on-demand audio transcript generators using Automatic Speech Recognition (ASR) AI modes and cloud technology to allow newsroom staff to read the transcripts in nearly real time while viewing the videos
2. Deployment of a pilot platform for automated media asset tagging, featuring capabilities such as transcription, summarization, translation, face recognition, scene detection, object detection, as well as including advanced AI search with contextual understanding and prompt generation capabilities
3. Launch of AI technology for subtitle production and automatic summarization during the production of TV programmes
4. Expansion of AI Laboratory for the development of AI tools for video and audio production, including live voice to transcript, summary and generative animated videos; photo to videos, enhanced video restoration and voice cloning
5. Deployment of an AI-powered Chatbot for the RTHK website

- Studio Upgrade

6. Upgrade of the studio facilities and broadcast network for 4K filming, live production and web streaming
7. Deployment of a large scale curved LED wall and cinematic cameras with Extended Reality TV production

- Developments in TV/ Radio production

8. Deployment of 4K microwave links for Outside Broadcast
9. Deployment of 4K Outside Broadcast Truck with full IP based broadcast systems and 5G mobile transmission for TV production
10. Deployment of super slow motion cameras and recording system for TV sports production
11. Deployment of automatic workflow for 4K and closed subtitling on RTHK website and mobile applications
12. Deployment of Cloud Editing with camera to the Cloud for field production
13. Deployment of Disaster Recovery service for TV broadcasting using cloud technology
14. Deployment of Demodulators, IRD pools and Monitoring system for 2025 China National Games

15. Launch of new DTT presentation systems for pop-up channel for China National Games 16. Launch of a new ingestion centre for TV production 17. Launch of a remote TV production systems for live TV event via dark fibre solution 18. Adoption of two-tier firewall systems for media production network 19. Adoption of Identity Access Management System to enhance the security measures and remote support services on TV production network - Enhancements in Transmission 20. Improvement of the Remote Monitoring System and Studio-to-Link (STL) System of DTT broadcast networks 21. Expansion of the population coverage of the new FM channel (CNR “The Greater Bay”) to 99% 22. Replacement of aged FM broadcast antennas at one FM transmitting station 23. Relocation of FM broadcast frequencies at three FM transposer stations for overall frequency planning optimization 24. Replacement of the aged AM guyed antenna mast and combining system at an AM transmitting station
• New Services/new projects initiated - Adoption of AI Technology 1. Development of electronic scheduling system for radio production workflow 2. Enablement of AI tools in video and audio post-production - Development of Cloud Technology 3. Adoption of cloud technology for Disaster Recovery service for radio broadcast 4. Enablement of cloud technology for studio production - Enhancements in Transmission 5. Replacement of legacy E1 links by IP links for Studio-to-Link (STL) system of radio broadcast networks 6. Improvement works for DTT Single Frequency Network (SFN) monitoring system
• Research projects 1. Research on integration of the automatically generated media asset tagging into the existing archive systems 2. Research on 4K payout and 4K transmission on DTT platform 3. Adoption of CWDM/DWDM video transmission via dark fibres between campuses 4. Research on new single headend system to support subtitling services for both DTT and OTT platforms 5. Research on Live speech/ texts to sign languages and vice-versa
• Internet and Mobile Broadcasting Services 1. Migration of the RTHK main web services from on-premises infrastructure to cloud platform 2. Deployment of DRM for TV archive playback on RTHK online platform

3. Enhancement of the RTHK TV application to incorporate playback for 4K archive programmes and caption selection
4. Consolidation of mobile apps into single mobile apps

			Radio	Television
Coverage %			99% (AM/FM)	99% (DTT)
Programme Channels			4 (FM) 4 (AM)	6 (DTT, High Definition)
Studios (Production)	File-based Set-up	R/N/D	R	
	SDTV	R/N/D		N/A
	HDTV	R/N/D		R
	UHDTV			N
	IP Based Set-up	R/N/D		N
Transmission & Delivery	HF	R/N/D	N/A	
	MF	R/N/D	R	
	FM	R/N/D	R and N	
	TV	R/N/D	N/A	R and N
	OTT/IBB/Internet Services	R/N/D	R	R and N
	Mobile Services	R/N/D	R	R and N

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	Evaluating 4K transmission on DTT platform	Improve audience experience	• Insufficient resources to enable 4K playout, headend system and archiving system • Insufficient technical manpower resources for long-term support	• Closely cooperated with suppliers and contractors in knowledge sharing • Intensive training and skill transfer for internal staff Closely cooperated with programme sections to produce more 4K contents
		Developing AI auto tagging	• Assist in analysis of video / audio / photo • Develop a smart search engine using natural language on top of traditional keywords search Integration with existing archive systems	• Insufficient expertise in providing regional specific tagging features • Insufficient experience in managing the security among multiple applications and processes • Require more knowledge and experience in building up retrieval augmented generation insufficient knowhow on effective management of the integration involving multiple vendors	• Arrange data scientists for knowledge sharing • Arrange successful case sharing • Intensive training and skill transfer for internal staff

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2.	Participation in ABU Activities	Area	Level of Participation	Reasons for not participating (though interested)	
		ABU Digital Broadcasting Symposium 2025	Attendance. giving presentations and sharing		
		ABU Technical Committee Meetings 2025	Nomination of Engineering Awards, attendance, giving presentations and sharing		
		CCBN-ABU NEXUS Event, 2025	Attendance, giving presentation and sharing		
		ABU webinar series on different technology topics	Audience		
3.	Suggestions for New ABU Activities e.g. study topic projects, webinars, workshops, symposiums etc, spectrum activities, information exchange platform	Activity 1	Provide case study / sharing on utilizing computer vision processing and complex speech decomposition using AI & Cloud technologies		
		Activity 2	Provide sharing sessions for live speech/texts to sign languages and vice-versa using AI & Cloud technologies		
		Activity 3			