

ABU TECHNICAL COMMITTEE MEETING

#ABUTC2020

Doc T-20/11

STATUS REPORT

Organization:	Doordarshan		
Period:	September, 2019 to August, 2020	Date of Report:	11.11.2020

PART A

Technical Developments during the past year:

System upgrades/changes to practices for improved quality/efficiency

- (i) 3 Satellite channels (24X7 service) DD Chattisgarh, DD Jharkhand & DD Uttarakhand have been launched w.e.f. 01.04.2020 from DDKs Raipur, Ranchi and Dehradun respectively. These channels provide opportunity to the local talent in DD-Program of local interest and culture.
- (ii) During COVID-19 pandemic, 8 DDKs (Shimla, Hissar, Panaji, Aizwal, Agartala, Shillong, Imphal & Kohima) started 24X7 satellite service.
- (iii) New channel "DD Retro" having 24X7 service started from CPC, Delhi.
- (iv) Studio centres at 20 locations modernized by providing Analog & Digital Peripherals, HD Camcorder and HD Recorder/ Deck.
- (v) New Earth station has been setup at DDK Gorakhpur. Earth station is in (1+1) configuration & equipped with state of art MPEG-2/MPEG-4 compliant SD/HD compression chain and spectrum efficient DVB-S/DVB-S2 compliant RF chain equipment.
- (vi) 'Direct View LED based Video wall' has been installed at studios in DDK Mumbai & DDK Chennai. The induction of Video Walls have enhanced the look and feel of the set and overall production quality.
- (vii) Earth stations at Mumbai modernized with state-of-the art spectrum efficient and HD compliant equipment.
- (viii) Program Service at 503 Analog Terrestrial Transmitters has been migrated from DD National/DD News to respective state Regional Service w.e.f. 15/07/2020.

New Services/new projects initiated

• Pilot Project for File Based Workflow at DDK Hyderabad

It will provide a tapeless and efficient workflow of content during production.

HDTV

Following HDTV projects are presently under implementation:

 HD up-gradation of existing technical facilities at DDK Delhi, DD News and CPC Delhi (All 7 channels from Delhi would become HD) are under various stages of implementation

DTH expansion

DD Free Dish DTH Platform has been upgraded for 112 TV Channels, using MPEG-4 DVB-S2 Technology.

Further upgradation of DTH Platform using spectrum efficient equipment to increase DTH platform capacity is under process (technical evaluation completed for upgradation of 2 compression chains). On implementation of this scheme, DD DTH platform would be upgraded from 112 TV channel to 120 SDTV channel and also be capable to uplink HDTV channels in HEVC compression format. Installation of equipment is under progress for SITC of (3+1) RF Chain.

DD Free Dish DTH platform is further planned to be expanded to 250 TV channels.

• Augmentation, Modernization & Replacement of Transmitter, Studio and satellite broadcast equipment

The various projects presently under implementation are given below:

- HPTs at Rajouri (DD National & DD News) and Patnitop, Himbotingla & Green Ridge (Strengthening of Border areas coverage) HPTs under installation at Patnitop, Himbotingla & Green Ridge. Purchase order placed for procurement of HPTs at Rajouri
- Commissioning of RF Network Planning & Optimization System to carry out coverage prediction & reception survey of transmitter.
- Commissioning of permanent HPT set up at Amritsar (Increase in Coverage areas of terrestrial transmission) balance tower work under progress.
- Modernization of Earth Station at 11 locations (Kolkata, Bhubaneswar, Lucknow, Ahmedabad, Chennai, Thiruvananthapuram, Bhopal, Jaipur, Jalandhar, Jammu & Shimla) is under progress.
- Distribution of 1,20,000 DTH receive set in Remote, Tribal & LWE areas (People in specific areas will be able to receive DD DTH signals) technical evaluation completed.

• Transmission network

For terrestrial transmission, 590 transmitters of varying power, installed throughout length and breadth of the country are in operation. Break up of these transmitters is as under:

Details of transmitters	HPTs	LPTs	VLPTs
DD National channel transmitters	5	4	19
DD News channel transmitters	26	1	6
Regional Service	110	396	
Digital transmitters (DTTs)	23	-	-

HPTs - 1kW/5kW/10kW/20kW/30kW

LPTs - 100 W/ 300 W/ 500 W

VLPTs - 10 W/ 50 W

DTTs - 6 kW

In satellite mode, the signals of Doordarshan channels are available to the entire country.

Coverage %		Radio	Television (Satellite mode)
Area wise	DD1 channel	-	100%
	DD New Channel	-	100%
Population wise	DD1 channel	-	100%
	DD News channel	-	100%
Programme Channels	Total channels	-	36
Channels	All India channels	-	7
	Regional channels (24X7)	-	20
	Regional Channels (Non 24X7)#	-	8
	International channel	-	1
Transmitters	R/N/D	-	0/0/518

[#] Presently wef 02.04.2020 as an interim measure, the up-linking of these 8 Channels are being done round-the-clock (24X7)

R= Replace/ upgrade

N= New

D= Discontinued

PART B CURRENT ACTIVITIES

	Activities	Area	Brief Details: 1. Objectives 2. Progress to date	Solutions Implemented/Type of assistance requirement from ABU
1.	Development projects/Upgrading facilities/Training	Training in digital Techniques	To train the staff for new technology being inducted in the broadcasting.	The National Academy of Broadcasting and Multimedia, NABM (formerly known as Staff Training Institute STI (T)) is premier training academy of Prasar Bharati. The prime objective of the academy is to develop & nurture the broadcast professionals of All India Radio & Doordarshan for their optimum performance in the dynamic ever challenging Broadcasting environment. Infrastructure of the academy is being upgraded regularly, to meet the world class quality of training and to keep pace with technological changes. The academy has Radio & TV Studios with latest production and post-production equipment, measurement lab, computer lab, networking lab, radio & TV transmitters and library with collection of more than 7000 technical books. The academy has very good hostel facilities with 120 rooms. During the period from September 2019 to August 2020, 10 technical courses/ Webinar were conducted which were attended by 231 participants.
		International training course	To train the staff for new technology being inducted in the broadcasting.	International Activities:- NABM collaborates with Asia Pacific Institute for Broadcasting Development (AIBD) and Asia Pacific Broadcasting Union (ABU) to organize trainings/workshops for the radio and television engineering personnel of various countries in Asia Pacific region. Every year the academy organize In-Country and Subregional training programs in collaboration with AIBD. For In-Country training program participants are invited from the host country and resource persons/trainers are provided by AIBD. For the sub-regional training program, participants are invited from host country as

Maintenance Training the staff for maintenance activities Training the staff for maintenance activities Training the staff for activities were arranged from Aug, 2020 at NABM Delhi stations. The courses covered measurements of Transmitter Computer hardware & ma operation & maintenance, and Around 300 Engineers were training and technical operations TV productions and technical operational knowledge in TV production and technical operation training proportions and technical operation trained in 17 such programmes	
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knowledge in TV production and technical operation trained in 17 such programmes	m 1st September, 2019 to 31st elhi and other Doordarshan red operation, maintenance & atter and Studio equipment, maintenance, Earth Station and Diesel Generators etc. et trained in such Programmes. c, scheduled courses could not 6 webinars were conducted 20 Engineers.
	ore than 320 Engineers were
2. Participation in ABU Area Level of Participation Reasons for not participating	ing (though interested)
Activities Technical Committee Meeting Ms Anuradha Aggarwal, Addl. Director General (Tech)	
Mid Year Technical Bureau Meeting July 2020 1.Mr C. B. S. Maurya, Engineer-in-Chief (BO) 2.Mr Sunil, Addl. Director General (GO) 3.Ms Anuradha Aggarwal, Addl. Director General (Tech)	

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Suggestions for New ABU Activities e.g. study topic projects, workshops, symposiums etc, spectrum activities, New technology information flows	Activity 1 TAS Mission	May be re-initiated after pandemic is over.	DD may provide expert in certain areas, if required.
	Activity 2 Fellowship	Fellowships for physical workshops/meetings may be re-started after pandemic is over.	