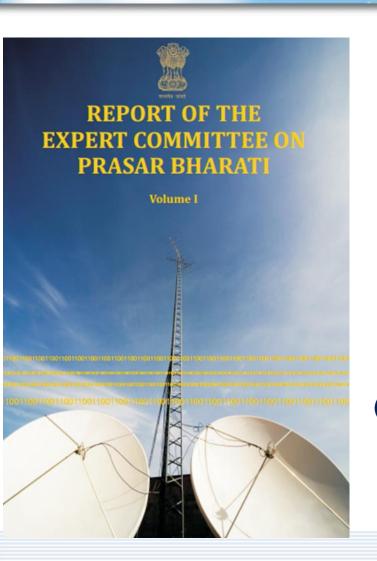




The **FUTURE** of global radio



Report of the Expert Committee on Prasar Bharati

by Sam Pitroda

24th January 2014

(Statements on DRM digital radio roll-out in India)





Pitroda Report to Minister of Information & Broadcasting



Dr Sam Pitroda Advisor to the Prime Minister of India on Public Information Infrastructure & Innovation

The Pitroda Expert
Committee, set up last
year to chart a future for
public radio and television
Indian broadcaster Prasar
Bharati.

The Report is available at:

www.prasarbharaticommittee.in/report

"We want Prasar Bharati to become a public broadcaster as compared to a government broadcaster. We need to strike a balance as far as government funding and airing content is concerned" - Dr Sam Pitroda

* Key DRM pages for consultation: part 1 – 5.2 and part 2 pages 26,28,29,44,75-85 [Our emphasis in the quoted statements]





Key Findings – summarised by DRM

- Analogue Medium Wave (1) to be converted to Digital Radio Mondiale (DRM)
 - ("This will deliver improved quality of transmission and annual saving of ~INR 185 Cr. (30 million USD) of operations towards maintenance and operations and an additional capital expenditure of INR 697 Cr. (110 million USD) planned towards developing the DRM infrastructure.") [Part 2 page 29]
- DRM to be used to increase audio quality (stereo) and content/channels
- Continue analogue and digital simulcast until 2016
 - → Shift to full digital broadcast after 2016
- Private operators (4) to be invited to share All India Radio DRM infrastructure, i.e. coverage
- Government of India to provide short-term subsidy to the industry to strengthen investment in receiver eco-system (3) for success of DRM in India
- Analogue Short Wave to continue for International coverage.
 Consider conversion to DRM once eco-system for DRM is developed in other countries
- Transition FM (2) to DRM+ after successful transition of AM to DRM30





(1) Report Endorses DRM for MW

- "MW and SW together reach 99% of the population but fail to provide stereo quality output to the listener as provided by FM. The Group understands that Prasar Bharati has adopted transitioning of AM to DRM to improve the quality of output and it endorses the transition."
 [Part 2 page 28]
- Transition to DRM MW to meet the National and Regional coverage. "This will be advantageous to the audience in terms of quality of reception, will offer operational savings and financial viability of investment to Prasar Bharati, while also freeing up some amount of the important national resource of spectrum. (the investment in DRM should be carefully evaluated and calibrated, based on availability of reception devices and their cost.") [Part 1 section 5.2 – page 21]
- "It is expected that the complete transition to DRM transmission will be done by 2016. It is suggested that AIR continues with a simultaneous broadcast of MW transmission till 2016 to consistently deliver on the social responsibility. After the complete transition, AIR should shift to Stereo transmission." [Part 2 page 81]





(2) DRM for FM

- "Given the popularity of the FM, AIR should continue to increase the coverage of FM from 43% to 65%. Once the DRM eco-system is stabilized, AIR can consider migration of FM to DRM+." [Part 2 page 29]
- In the current landscape, FM is the most popular audio transmission system as it has both private and public participation. However, FM reaches to only 43% of the population. The needs of the Public Broadcaster are met by AM through MW and SW transmission. MW and SW together reach to 99% of the population but fail to provide stereo quality output to the listener as provided by FM. (The Group understands that Prasar Bharati has adopted transitioning of AM to DRM to improve the quality of output and endorses the transition)." [Part 2 page 28]





(3) Receiver Eco-system

- "Receiver eco-system for digital broadcasting is going to play a crucial role in early absorption of this technology." [Part 1 page 22]
- "In order to produce low cost devices, it is necessary that demand is built rapidly. This demand can be built only by bringing multiple players in service delivery. It is expected that with multiple private vendors participating in service delivery, competition will bring the cost down for these receiver systems." [Part 1 page 22]
- "The Group on Technology feels that the receiver eco-system of DRM is not fully developed. Therefore, it is critical to have necessary directives and implementation strategy for transition." [Part 2 page 29]
- "Announce the sunset date for radio digitisation ... which would catalyse the industry to plan and address the demand." [Part 2 page 80 point 1]
- "Complete/Partial subsidy on DRM receivers: Government of India can provide a short-term stimulant to the industry by providing subsidy during the initial launch phase ... this option is not sustainable during medium and long-term." [Part 2 page 80 point 2]





(4) Receivers and Private Operators

- "To increase the uptake of DRM and develop the receiver eco-system, it is critical for private sector to participate. The additional capacity generated by transitioning to DRM can be utilized by the private players to provide more variety to audience." [Part 2 page 28]
- "The receiver eco-system for DRM is under-developed and therefore to foster investment in receiver eco-system, AIR should promote private participation by sharing the DRM infrastructure with Private Operators." [Part 2 page 29]
- "This move will accelerate adoption which will translate into development of DRM receiver eco-system. With participation from private players, the market for DRM receivers is bound to grow and provide the receiver cost reduction derived from the economies of scale." [Part 2 page 80 point 3]
- "Shifting to DRM from MW will generate additional bandwidth, (which can be used for the transmission of 4 Mono channels or 2 Stereo channels and allow for private participation)."
 [Part 2 page 80 point 4]
- "To promote private participation, it is suggested that AIR provides mono transmission instead of stereo transmission during the transition to DRM and share additional bandwidth for mono channels with the private players." [For options - see Part 2 pages 28 & 82]





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More Information on DRM







RM in India

The DRM Consortium have created this webpage to bring together useful information about India and All India Radio's (AIR) plans for the Isunch of DRM digital radio in the country. It should be of interest to the wider digital radio community and especially receiver manufacturers, distributors and retailers.



Digital Transmitters currently on air in India, including area and population covered (to be updated regularly)

Click here to view map of current on air transmitters of All India Radio.



All India Radio's (AIR) DRII Rollout Plan. AIR broadcasts in 23 languages and 146 dialects. AIR covers \$2 % of the Indian territory, reaching 95% of its people AIR's Migration to digital radio webpage where the Indian national broadcaster officially amounces its commitment to rolling out DRII in the country.

You can have a look at AIR final DRM coverage India



DRM Coverage in India

AIR Domestic DRM Broadcast Schedules

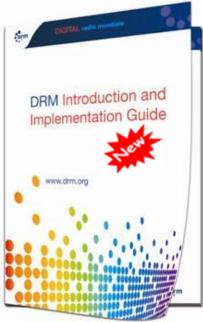
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