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ANNEXURE 1.1

**SECTIONS OF PRASAR BHARATI ACT, 1990 THAT WOULD NEED TO BE AMENDED/REVIEWED BASED ON
RECOMMENDATIONS MADE BY THE EXPERT COMMITTEE ON PRASAR BHARATI**

S. No	Section of Prasar Bharati Act	Comments
1.	<p><u>Section 11: Status of Officers and Employees</u></p> <p>(1) All officers and employees recruited for the purposes of Akashwani or Doordarshan before the appointed day and in service in the corporation as on the 1st day of April, 2000, shall be on deemed deputation to the Corporation with effect from the 1st day of April, 2000, and shall so continue till their retirement.</p> <p>(2) All officers and employees recruited during the period on or after the appointed day till the 5th day of October, 2007, shall be on deemed deputation to the Corporation with effect from the 1st day of April, 2000 or the date if their joining service in the Corporation, whichever is later and until their retirement.</p> <p>Explanation: For the purposes of the sub-sections (1) and (2), 'officers and employees recruited' means officers and employees recruited either under the proviso to the Article 309 of the Constitution or in accordance with the regulations made under the Act, but shall not include persons engaged or appointed on daily wages, casual, ad hoc or work charged basis.</p>	<p>Section 11 of the Act would need to be amended in its present form and provision made for absorption of Govt. employees in Prasar Bharati after appropriate screening process and employees being given the option to revert back to the government or become full Prasar Bharati employees.</p> <p>Further, once the employees are absorbed in Prasar Bharati, they would be governed by Prasar Bharati rules and regulations.</p> <p>The final decision in their cases (including the penalty of compulsory retirement, removal or dismissal from service) would lie with the Prasar Bharati Board.</p>

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(3) The officers and employees referred to in sub-section (1) and sub-section (2) shall be entitled to the pay and all the other benefits as admissible to an employee of the Central Government: Provided that such officers and employees shall not be entitled to any deputation allowance.

(4) Notwithstanding anything contained in any other law for the time being in force, The Corporation shall have the disciplinary and supervisory powers and full control on the officers and employees referred to in sub-section (1) and sub-section (2), including the power to transfer them from one place, post or media to another, and to suspend, initiate disciplinary proceedings and impose major or minor penalties: Provided that the power to impose major penalties of compulsory retirement, removal or dismissal from service shall be exercised by the Central government.

(5) All officers and employees recruited after the 5th day of October, 2007 shall be officers and employees of the Corporation and shall be governed by such conditions of service as may be specified in regulations.

[11A. **Section 11 not to apply to certain officers and employees –**

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4	<p>(1) The provisions of Section 11 shall not apply to officers and employees of the Indian Information Service, The Central Secretariat Service or any other service borne on Akashvani or Doordarshan before the appointed day or in service in the Corporation after that day.</p> <p>(2) The terms and conditions of service in the Corporation of officers and, employees referred to in sub-section (1) shall be such as may be prescribed]</p> <p>[11B. Transfer of posts of Akashvani and Doordarshan to Corporation –</p> <p>(1) All posts in the erstwhile Akashvani and Doordarshan other than the posts borne on the strength of the cadres referred to in sub-section (2) shall be deemed to have been transferred to the Corporation with effect from 1st day of April, 2000.</p> <p>(2) All matters relating to the posts borne on the strength of the cadres of the Indian Information Service, The Central Secretariat Service or any other cadre outside Akashvani or Doordarshan, in so far as such posts are concerned with the Corporation, shall be determined in such manner and on such terms and conditions as may be prescribed.]</p>	
2.	<p><u>Section 13: Parliamentary Committee.</u></p> <p>(1) There shall be constituted a Committee consisting of twenty-two Members of</p>	<p>There is presently only a Parliamentary Committee on IT. A dedicated Parliamentary Committee has not been</p>

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57	<p>Parliament, of whom fifteen from the House of the People to be elected by the Members thereof and seven from the Council of States to be elected by the Members thereof in accordance with the system of proportional representation by means of the single transferable vote, to oversee that the Corporation discharges its functions in accordance with the provision of this Act and, in particular, the objectives set out in section 12 and submit a report thereon to Parliament.</p> <p>(2) The Committee shall function in accordance with such rules as may be made by the Speaker of the House of the People.</p>	<p>constituted as envisaged in Section 13. This needs to be constituted urgently.</p> <p>Prasar Bharati should be accountable to Parliament through this Committee, and not to Ministry of I&B.</p>
3.	<p><u>Section 14 - Establishment of Broadcasting Council, term of office and removal, etc., of members thereof:</u></p> <p>(1) There shall be established, by notification, as soon as may be after the appointed day, a council, to be known as the Broadcasting Council, to receive and consider complaints referred to in section 15 and to advise the corporation in the discharge of its functions in accordance with the objectives set out in Section 12.</p> <p>(2) The Broadcasting Council shall consist of -</p>	<p>Section 14 which provides for the establishment of a Broadcast Council which will act as an ombudsman has not been implemented.</p> <p>It is recommended that a regulatory body be set up without any delay. This body would be a sub-committee of the Prasar Bharati Board consisting of 3 independent members who would be the final arbiter</p>

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<p>(i) a President and ten other members to be appointed by the President of India from amongst persons of eminence in public life;</p> <p>(ii) Four members of the Parliament, of whom two from the house of the people to be nominated by the Speaker thereof and two from the Council of States to be nominated by the Chairman thereof.</p> <p>(3) The President of the Broadcasting Council shall be a whole-time member and every other member shall be a part time member and the President or the part-time member shall hold office as such for a term of three years from the date on which he enters upon his office.</p> <p>(4) The Broadcasting Council may constitute such number of Regional Councils as it may deem necessary to aid and assist the Council in the discharge of its functions.</p> <p>(5) The President of the Broadcasting Council shall be entitled to such salary and allowances and shall be subject to such conditions of service in respect of leave, pension (if any), provident fund and other matters as may prescribed:-</p> <p style="padding-left: 40px;">Provided that the salary and allowances and the conditions of service shall not be</p>	<p>on any disputes with regard to unresolved complaints.</p>
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	<p>varied to the disadvantages of the President of the Broadcasting Council after his appointment.</p> <p>(6) The other members of the Broadcasting Council and the members of the Regional Councils constituted under sub-section (4) shall be entitled to such allowances as may be prescribed.</p>	
7	<p>4. <u>Section 16 - Transfer of certain assets, liabilities, etc. of Central Government to Corporation:</u></p> <p>As from the appointed day-</p> <p>(a) all property and assets (including the Non-lapsable Fund) which immediately before that day vested in the Central Government for the purpose of Akashvani or Doordarshan or both shall stand transferred to the Corporation on such terms and conditions as may be determined by the Central Government and the book value of all such property and assets shall be treated as the capital provided by the Central Government to the Corporation;</p> <p>(b) all debts, obligations and liabilities incurred, all contracts entered into and all matters and things engaged to be done by, with or for the Central Government</p>	<p>Assets of Akashvani and Doordarshan, owned by Central Government, which were to be transferred to Prasar Bharati as per section 16 of the PB Act have not been transferred till date. This needs to be done at the earliest.</p>

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	<p>immediately before such day for or in connection with the purposes of Akashvani or Doordarshan or both shall be deemed to have been incurred, entered into and engaged to be done by, with or for the Corporation;</p> <p>(c) all sums of money due to the Central Government in relation to the Akashvani or Doordarshan or both immediately before such day shall be deemed to be due to the Corporation;</p> <p>(d) all suits and other legal proceedings instituted or which could have been instituted by or against the Central Government immediately before such day for any matter in relation to the Akashvani or Doordarshan or both may be continued or instituted by or against the Corporation.</p>	
<p>5.</p>	<p><u>Section 17 – Grants, etc., by Central Government:</u></p> <p>For the purposes of enabling the Corporation to discharge its functions efficiently under this Act, the Central Government may, after due appropriation made by Parliament by law in this behalf, pay to the corporation in each financial year –</p> <p>(i) the proceeds of the broadcast receiver licence fees, if any, as reduced by the collection charges; and</p> <p>(ii) such other sums of money as that Government considers necessary, by way of</p>	<p>Section 17 of the Act would need to provide for grant-in-aid to Prasar Bharati Trust flowing from the budget and dedicated funds being raised by central Government for public service broadcaster (for instance, through levy of cess on electronic goods and share of revenue from cable and DTH operators etc.)</p>

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	equity, grant-in-aid or loan.	The changes in this section would aim at achieving financial autonomy through restructuring of the present manner in which funds are raised and diversification of the sources of funding.
6.	<u>Section 19 - Investment of moneys:</u> The Corporation may invest its moneys in the securities of the Central Government or any State Government or in such other manner as may be prescribed.	Section 19 at present allows for Prasar Bharati to invest its monies in the securities of the Central Government or any State Government or in such other manner as may be prescribed. It must incorporate a provision for approval of the investments to be made and the yearly budget by the Prasar Bharati Board.
7.	<u>Section 32 Power to make rules:</u> (1) The Central Government may, by notification, make rules for carrying out the provisions of this Act. (2) In particular, and without prejudice to the generality of the foregoing power, such	Section 32 gives powers to the Central Government to make rules relating to salaries and allowances of whole time members, allowances to part time members, conditions of service of employees, manner and conditions for establishing Recruitment board for

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10	<p>rules may provide for all or any of the following matters, namely:-</p> <p>(a) the salaries and allowances and conditions of service in respect of leave, pension (if any), provident fund and other matters in relation to the Whole-time Members under sub-section (7) of section 6;</p> <p>(b) the allowances payable to the Chairman and Part-time Members under sub-section 8 of section 6;</p> <p>(c) the control, restrictions and conditions subject to which the Corporation may appoint officers and other employees under sub-section (1) of section 9;</p> <p>(d) the manner in which and the conditions and restrictions subject to which a Recruitment Board may be established under sub-section (1) of section 10;</p> <p>(e) the qualification and other conditions of service of the members of a Recruitment Board and their period of office under sub-section (2) of section 10;</p> <p>[(f) the terms and conditions in accordance with which the deputation may be regulated under sub-section (2) of section 11 A;]</p> <p>[(ff) the manner and the terms and conditions subject to which matters relating to the posts borne on strength of the cadres of the Indian Information Service, the Central Secretariat or any other cadre outside Akashvani or Doordarshan shall be determined</p>	<p>selection of employees etc.</p> <p>This section needs amendment so as to give complete authority to Prasar Bharati handle human resource and personnel issues.</p>
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	<p>under sub-section (2) of section 11B;]</p> <p>(g) the salary and allowances and conditions of service in respect of leave, pension (if any), provident fund and other matters in relation to the President of the Broadcasting Council under sub-section (5) of section 14;</p> <p>(h) the allowances payable to other members of the Broadcasting Council and the members of the Regional Councils, under sub-section (6) of section 14;</p> <p>(i) the manner in which the Corporation may invest its moneys under Section 19;</p> <p>(j) the form and the manner in which the annual statement of accounts shall be prepared under sub-section (1) of section 21;</p> <p>(k) the form in which, and the time within which the Corporation and the Broadcasting Council shall prepare their annual report under section 31;</p> <p>(l) any other matter which is required to be, or may be, prescribed.</p>	
<p>11</p> <p>8.</p>	<p><u>Section 33- Power to make regulations.</u></p> <p>(1) The Corporation may, by notification, make regulations not inconsistent with this Act and the rules made there under for enabling it to perform its functions under this Act.</p> <p>(2) Without prejudice to the generality of the foregoing power such regulations may</p>	<p>According to Section 33, Prasar Bharati is given the power to make new regulations not consistent with the act, subject to certain requirements.</p> <p>This power given in this section of the act</p>

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<p>provide for all or/any of the following matters, namely -</p> <ul style="list-style-type: none">(a) the manner in which and the purposes for which the Corporation may associate with itself any person under sub-section (7) of section 3;(b) the times and places at which meetings of Board shall be held and, the procedure to be followed thereat, and the quorum necessary for the transaction of the business at a meeting of the Board under sub-section (1) of section 8;(c) the methods of recruitment and conditions of service of officers and other employees of the Corporation under sub-section (2) of section 9;(d) the remuneration and other conditions of service, including pension, leave and provided fund in relation to an officer or other employee of the Corporation under sub-section (4) of section 11;(e) The authority competent to make certain appointments referred to in clause (a) of sub-section (6) of section 11;(f) the services which may be provided by the Corporation under clause (f) of sub-section (3) of section 12;(g) the determination and levy of fees and other service charges in respect of advertisements and other programmes under sub-section (7) of section 12;(h) the manner in which and the period within which complaints may be made under	<p>is limited by a proviso stipulating that regulations relating to methods of recruitment and conditions of service of officers and employees shall be made with prior approval of Central Government.</p>
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	<p>sub-section (2) of section 15;</p> <p>(i) any other matter in respect of which provision is, in the opinion of the Corporation, necessary for the performance of its functions under this Act.</p> <p>Provided that the regulations under clause (c) or clause (d) shall be made only with the prior approval of the Central Government.</p>	
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ANNEXURE 1.2

PRASAR BHARATI ACT AND 'AUTONOMY' OF THE ORGANISATION

COMMENTS OF PRASAR BHARATI SECRETARIAT ON PRASAR BHARATI ACT, 1990 AND OPERATIONAL AUTONOMY

While the avowed objective of the Prasar Bharati Act, 1990 was to create an organization, which should function as a genuinely autonomous body, innovative, dynamic, and flexible – with a high degree of credibility, this objective has been negated by various provisions contained in the Act itself.

2. In particular, rule-making powers, contained in Section 32, seriously hamper the autonomous functioning of the organization as they have a very wide sweep:
 - i) Section 32(1) gives omnibus authority to Central Government to make rules for carrying out the provisions of the Act.
 - ii) Section 32(2) empowers the Central Government to make rules on a wide range of matters (the wide sweep of Section 32(2) has been elaborated at the end of this note, as Annexure 1.2[a])
3. Effective autonomy of the organisation is also hampered by the provisions in the Act regarding regulation making powers of Prasar Bharati. Though the Act gives the powers to Prasar Bharati to make regulations, such powers in relation to methods of recruitment and conditions of service of officers and other employees of the organization are subject to prior approval of the Central Government.
4. Rule-making powers, embedded in various aspects of the functioning of Prasar Bharati, have compromised the autonomous functioning of the organization in several ways:
 - i) Prasar Bharati Recruitment Board, as stipulated in Section 10, is yet to come into operation even after 16 years of its coming into being

- ii) Out of 125 Recruitment Regulations, only 7 have been notified so far.
 - iii) While on the one hand, Prasar Bharati has been delegated by the Government with financial powers of Rs. 300 crore, even routine operational matters, like sending an officer on foreign deputation, are required to be referred to the Government.
 - iv) Even small matters like payment of sitting fee to Members, which have insignificant financial implications, are referred to the Central Government.
 - v) As the Ministry of I&B is usually manned by persons belonging to Central Secretariat and general administration cadres, it becomes difficult for them to appreciate the problems and difficulties faced by Prasar Bharati. As a result, proposals referred by it are usually returned with large number of queries leading to unnecessary and avoidable explanations, paper work, and time lag.
- 5. In view of the above, it would be in order if rule making powers of the Government under Section 32 is repealed. Proviso to Section 33¹ may also be repealed. Further, existing rule making powers of the Government may be converted into regulation making powers of Prasar Bharati.**
6. Existing arrangements pertaining to annual grants by the Government, both plan and non-plan, also create operational problems. As per Section 17, the Central Government may, after due appropriation made by Parliament by law in this behalf, pay to the Corporation in each financial year such sums of money as the Government considers necessary. In actual practice, the money is released in small instalments after raising lots of queries, and personal visits by senior officers after long delays. It seriously hampers the normal functioning of the organization.

¹ Proviso to Section 33 of the Prasar Bharati Act 1990 states, "Provided that the regulations under clause (c) and clause (d) [of Section 33] shall be made only with the prior approval of the Central Government".

7. **A way out to this would be to transfer the entire appropriation made by Parliament in a particular financial year to a non-lapsable account maintained by Prasar Bharati.**
8. **As Prasar Bharati is required to deal with such appropriation with due financial prudence, it would be in order to put in place a monitoring mechanism headed by a representative of CAG of the rank of Deputy Accountant General. Such a representative, working in Prasar Bharati on deputation, will be responsible for concurrent audit of fund utilization so as to ensure complete financial propriety.**
9. Section 13 of the Act provides for constitution of a Parliamentary Committee consisting of 22 Members of Parliament from both the Houses to oversee that the Corporation discharges its functions in accordance with the provisions of the Act. This provision was never put in operation and such Committee could not come into existence.
10. **A Committee, comprising of Parliamentarians, is sine qua non for ensuring that the organization is carrying out its mandate and the objectives for which it was created. Currently, there is already a Committee, known as Standing Committee on Information Technology, which is tasked with the responsibility of oversight of the organization. This Committee may be fully authorized to function as Parliamentary Committee within the ambit and scope of Section 13 of the Act.**
11. As stated in the statement of objects and reasons for the enactment of the Prasar Bharati Act, the declared policy of the Government was to confer autonomy on Akashvani and Doordarshan so as to ensure that they function in fair, objective and creative manner. In the public mind, the touch stone of fairness and objectivity is in the broadcast of news and current affairs programmes.
12. Under current arrangements, there is virtually no control or supervision of the organization on such programmes in the real sense of the term. News and current affairs programmes are planned, edited, and managed by the officers belonging to

Indian Information Service, over which Prasar Bharati has absolutely no control. Their deployment in Prasar Bharati, along with specific place of posting, is tightly controlled by the Ministry of Information and Broadcasting, which also retains the right of calling them back. Their career progression and annual assessments are also controlled by the Ministry. Under such circumstances, these officers are bound to be guided by the instructions of the Government of the day. Needless to say that such arrangement runs counter to the very concept of autonomy and, in fact, hits it at its very roots.

- 13. It is, therefore, strongly advocated that news and current affairs programmes of All India Radio and Doordarshan be managed by professionals to be engaged by the organization at terms and conditions to be determined by the market.**
14. Above is submitted for consideration of the Government along with the main Report of the Pitroda Committee.

Annexure 1.2 (a)

Section 32(2) of the Prasar Bharati Act empowers the Central Government to make rules on all or any of the following matters without prejudice to the generality of the power conferred in Section 32(1):

- (a) the salaries and allowances and conditions of service in respect of leave, pension (if any), provident fund and other matters in relation to the Whole-time Members under sub-Section (7) of Section 6.
- (b) the allowances payable to the Chairman and Part-time Members under sub-Section (8) of Section 6;
- (c) the control, restrictions and conditions subject to which the Prasar Bharati may appoint officers and other employees under sub-Section (1) of Section 9;
- (d) the manner in which and the conditions and restrictions subject to which a Recruitment Board may be established under sub-Section (1) of Section 10;
- (e) the qualifications and other conditions of service of the members of a Recruitment Board and their period of office under sub-Section (2) of Section 10;
- (f) the terms and conditions of service in the Prasar Bharati of officers and employees under sub-Section (2) of Section 11A;
- (ff) the manner and the terms and conditions subject to which matters relating to the posts borne on the strength of the cadres of the Indian Information Service, the Central Secretariat Service or any other cadre outside Akashvani or Doordarshan shall be determined under sub-Section (2) of Section 11B;
- (g) the salary and allowances and conditions of service in respect of leave, pension (of any), provident fund and other matters in relation to the President of the Broadcasting Council under sub-Section (5) of Section 14;

- (h) the allowances payable to other members of the Broadcasting Council and the members of the Regional Council, under sub-Section (6) of Section 14;
- (i) the manner in which the Prasar Bharati may invest its moneys under Section 19;
- (j) the forms and the manner in which the annual statement of accounts shall be prepared under sub-Section (1) of Section 21;
- (k) the form in which, and the time within which the Prasar Bharati and the Broadcasting Council shall prepare their annual report under Section 31;
- (l) any other matter which is required to be, or may be, prescribed.

ANNEXURE 1.3

**REPORTS OF EXPERT GROUPS CONSTITUTED
BY THE EXPERT COMMITTEE**

REPORT OF THE EXPERT GROUP ON PRASAR BHARATI-GOVERNMENT RELATIONSHIP

Prasar Bharati was set up in 1997 by an Act of Parliament with a mandate to organize and conduct Public Broadcasting Services to inform, educate and entertain public. The Statement of Objects and Reasons of Prasar Bharati Act 1990 indicated that it was "government's declared policy to confer autonomy on Akashvani and Doordarshan thereby ensuring that they function in a fair, objective and creative manner". The intention was "that the proposed corporation should function as a genuinely autonomous body innovative, dynamic and flexible- with a high degree of credibility."

The stated objects were, however, negated by the provisions of the Act itself. Section 32 gave powers to the Central Government to make rules relating to salaries and allowances of whole time members, allowances to part time members, conditions of service of employees, manner and conditions for establishing Recruitment board for selection of employees etc.

Further under section 33 of the Act, Prasar Bharati had the power to make regulations for enabling it to perform functions under the Act. However the proviso to the Section stipulated that regulations relating to methods of recruitment and conditions of service of officers and employees shall be made with the prior approval of the Central Government.

Even the employees of Akashvani and Doordarshan, who were to be transferred to Prasar Bharati under the original Section 11 of the Act, after taking options, continue to be government servants till today. The amendment made in 2012 has provided that employees recruited up to 5th October, 2007 shall be government servants on deemed deputation with Prasar Bharati. The amendment further provides that Prasar Bharati shall have disciplinary powers over government servants, but such powers shall not include the power of removal, dismissal and compulsory retirement.

Section 17 of the Act envisages the following sources of funding of Prasar Bharati-

- The proceeds of broadcaster license fees, if any, as reduced by the collection charges, and
- Such other sums of money as Central Government considers necessary by way of equity, grant-in-aid and loan.

However the provision relating to broadcast license fees has not been implemented. As far as funding of Prasar Bharati is concerned except for the salary of the employees, which comes as non plan grant, the rest of funds have come as loans, though the accumulated loan and interest has been recently written off. Further, assets of Akashvani and Doordarshan, owned by Central Government, which were to be transferred to Prasar Bharati under Section 16 of the Act have not been transferred till date.

Section 19 of the Act provides that Prasar Bharati may invest its moneys in the securities of the Central Government or any State Government or in such other manner as may be prescribed by the Central Government.

Section 14 of the Act provided for the establishment of the Broadcasting council and Section 15 delineated its jurisdiction, which was to receive complaints from any person or group of persons, with regard to a specific program and functioning of the corporation not being in accordance with the objectives for which it was established. Further, any person (other than officer and employee of the corporation) could claim himself to have been unfairly treated, including unwarranted invasion of his privacy, misrepresentation or distortion of facts or lack of objectivity. The council was thus to function like an ombudsman/ Regulator for all programs of Prasar Bharati. The Broadcasting Council was, however, never set up.

It is in the above context that the matter has been deliberated in the group and recommendations made.

Recommendations

- Prasar Bharati's vision must be to become a genuine 'public broadcaster' as against a 'government broadcaster' or a commercially motivated 'private broadcaster'. It should be perceived as an unbiased, credible, autonomous, independent voice that makes Indians better citizens and enriches their lives with right information, quality entertainment and value education.
- Prasar Bharati has to be made administratively and financially autonomous of the Government.
- The Board of Prasar Bharati has to be manned by persons who are professionally competent and known for their integrity. It must consist of four full time members -CEO/MD, Member/Director (HR), Member/Director (Finance) and Member/Director (Operations/ Programming). Core competency levels for CEO/MD and full time members/ directors of Prasar Bharati have to be clearly specified. Apart from full time members/ directors, the board should have a chairperson and six Independent Directors consisting of eminent people with core competencies in the areas

of broadcasting, media, finance, rural development, education, arts, sciences and technology.

- DG (AIR) and DG (DD) need not be members of the board as they head subordinate offices. Also representatives of employees need not be members of the board.
- Selection of the board, in a transparent manner, is the single most crucial factor in making Prasar Bharati an autonomous board run organization. Selection of Chairperson, MD/CEO and Directors of the board should be a two stage process, wherein a search committee of eminent persons/ professionals prepares a panel for consideration and the final selection is made by a committee consisting of Chairperson of Rajya Sabha (Vice President), Leader of Opposition in the Lok Sabha, and a Judge of the Supreme Court nominated by the Chief Justice of India.
- The committee's selection has to be final and binding. To attract the best personnel the salary/ package should be linked with the market compensation.
- The tenure of full time members should be for a period of five years and for the Independent Directors for a period of three years.
- Real autonomy flows from financial independence. Budgetary flow should be like 'charged funds' as flow to constitutional bodies. Govt. must allocate resources and then follow a totally hands off policy. Alternatively, Public Service Broadcasting Trust Fund/ Corpus needs to be set up. The money for the fund/ corpus could be raised through cess on sale of TVs and media related electronic goods, part of the revenue share of DTH and Cable distribution, revenues arising out of Prasar Bharati's infrastructure etc.
- All assets of Doordarshan and Akashvani must be transferred on book value to Prasar Bharati as equity/ capital.
- Prasar Bharati board must have complete autonomy to decide-
 1. Creation of posts,
 2. Conditions of service, salary and allowances of its officers and employees
 3. Methods of recruitment for different cadres and setting up of Recruitment Boards
 4. Conditions of service, salary and allowances of whole time members/ directors
 5. Allowances to be paid to the part time members/ directors and Chairperson
 6. Approve the budget
 7. Take investment decisions
 8. Take decisions about programming keeping in view the overall objectives set out in the Act for the organization.
- An Ombudsman/ Regulator needs to be set up to consider complaints from the public/ persons regarding programs, their objectivity and also to

oversee that Prasar Bharati is performing its functions as per the objectives for which it has been created.

- The autonomy of the Public Service Broadcaster depends upon how the News is perceived by the people at large. The news channels of both DD and AIR are being manned by Indian Information Service officers, who are being posted by the Ministry of Information and Broadcasting to Prasar Bharati without determining their suitability to man these positions. News channels have to be manned by full time professional news media persons so as to establish the required credibility and objectivity in the eyes of the listeners/viewers.
- Prasar Bharati as the Public Service Broadcaster should be accountable to the Parliament through a committee rather than a Ministry.
- Prasar Bharati Act needs to be amended to take care of the recommendations suggested above.

REPORT OF THE EXPERT GROUP ON TECHNOLOGY

Acknowledgement

Expert Committee on Prasar Bharati, The Group on Technology would like to thank Shri Jawhar Sircar, CEO, Prasar Bharati and his team for their generous guidance and support and the Committee Secretariat for their logistical assistance.

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1. Executive Summary

Expert Committee on Prasar Bharati, The Group on Technology has evaluated the key audio/video transmission platforms and has recommended a strategic roadmap for DD (DD) and All India Radio (AIR). The roadmap takes a long term view of the technology direction for Prasar Bharati and has considered the recommendations earlier made by the Technical Expert Committee in 2012.

The Group on Technology understands that the prime role of Prasar Bharati is “Public Broadcasting”. Therefore, while recommending the technology changes, it has tried to create a value proposition that meets the strategic and commercial objectives of a public broadcaster. The Group on Technology also understands the importance of technology choice in meeting the changing needs of the consumer. Therefore, the group has evaluated the recommended technology choices from a user perspective. A snapshot of the objectives, changing needs of consumer and existing technology setup of Prasar Bharati and detailed approach and methodology to recommendations has been provided in Section 2 and 3.

The Group on Technology, Prasar Bharati is of the view that the in the long run, convergence will lead to a common transmission platform servicing audio, video and text formats. Thus, the current set of audio and video transmission technologies being evaluated are intermediate and will service the industry’s needs for 5-7 years only. For purpose of this evaluation, the group has undertaken a detailed evaluation of DVBT2/DVBT2 Lite/ DVB-NGH and Satellite transmission technologies for DD and DRM/DRM+ for AIR. An assessment of all the existing transmission technologies has been provided in Section 5.

The Group on Technology has presented strategic options for both DD and AIR along with pros and cons for each of the option. The Executive Board may choose the best suited option for DD and AIR based on the public service and business objectives.

For DD, the Group on Technology recommends two options. Option 1: Move to Satellite Transmission (DD Direct) as primary mode of transmission. DD currently is present on all three platforms Terrestrial, DTH (DD Direct + Private Operators) and Cable and Satellite (Private Operators).The Group on Technology recommends DD to switch off analog terrestrial and adopt DD Direct as primary mode of transmission. In addition, it should continue to transmit through private DTH and Cable and Satellite operators. The recommended move from Terrestrial to Satellite Transmission will meet all the requirements of public broadcaster and also improve the overall customer experience due to the content variety available to the customers on this platform.

In the current landscape, 92% of the TV households access television through Cable and Satellite systems (Cable and DTH). It is expected that after the completion of all the DAS phases, DTH and Digital Cable technologies will stabilize and become the most preferred

transmission and distribution platforms. Digital Cable is expected to gain a larger share of the market given its inherent advantages such as availability of return path to provide more value add services, uninterrupted signal even during rains, provision to carry internet etc. The adoption curve for transmission and distribution platforms for television is provided in Figure 4, Section 5.

There are advantages for DD in adopting satellite transmission as primary technology to meet national and regional coverage requirements and public service objectives. The primary advantage is DD's existing DD Direct+ services which are already present across the entire country. DD Direct+ carries 59 channels including the National Channels (DD1 and DD News) carried on Terrestrial. DD Direct+ meets all the critical requirements met by terrestrial transmission and offers better quality and service to the consumer.

Terrestrial network carries 4/5 hours of linguistic content as a part of National Channel in 15 states. This content can be ported onto satellite as DD already has 11 linguistic regional channels based on the language and regional homogeneity. Content that cannot be accommodated in the regional channels can be combined based on the basis of language and regional homogeneity to create new channels. DD has enough transponder space to accommodate new channels on DD Direct.

Further, the implementation of this proposed transition can be managed in a short period of 2-3 years due to the presence of the existing eco-system, i.e. affordable receivers and Prasar Bharati's established DD Direct+ services. However this may require necessary directives and implementation strategy. To further increase the affordability of the receivers, GoI can provide subsidy to reduce the cost of the receiver. The one-time cost of the subsidy would be in the **range of INR 360 – 600 Cr²**.

The switch over to Satellite is more cost effective as it will allow Prasar Bharati achieve **annual saving of ~INR 635 Cr. of opex** towards maintenance and operations and additional **notional savings of INR 1294 Cr pertaining to the** planned capital expenditure for upgradation of existing Terrestrial infrastructure in 12th Plan. In addition, transitioning would result in freeing up of spectrum in Band I, III, IV and V and other assets such as real estate.

Option 2: Create an alternate technology platform i.e. Upgrade Terrestrial to DVBT2 to meet National and Regional Coverage. The group recommends that investment in DVBT2/ DVBT2 Lite/ DVB-NGH should be undertaken purely on the basis of commercial viability. DD can opt for selected use of DVBT2/ DVB-NGH in partnership with private players in selected areas if commercially feasible. Adoption of DVBT2/ DVB-NGH will enhance DD Terrestrial transmission strength to accommodate about 8-10 channels/transmitter. This would translate into total capacity of 10 National channels per or combination of National and

² Based on estimates of Number of Terrestrial Households – 12 Mn to 20 Mn

several regional channels. To optimally utilize the additional bandwidth DD will have to transform itself into two separate companies handling content creation and managing infrastructure to allow private participation. However, if DD were to select this option, it will have to address the challenge of developing eco-system for DVBT2/ DVBT2 Lite/ DVB-NGH. In addition, DD may have to provide a subsidy to increase the affordability of the DVBT2/ DVBT2 Lite/ DVB-NGH receiver. Currently DVBT2/ DVBT2 Lite/ DVB-NGH receivers are not readily available at affordable prices in India. The details of the analysis are provided in Section 5.3.

For AIR, the Group on Technology recommends to continue with SW to meet international coverage for strategic international locations. Further, it recommends transition to DRM-MW from AM-MW to meet the National and Regional coverage.

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. However, 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.

Further 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. 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. However in the transition phase, AIR will have to provide both Analog and DRM transmission thus leaving no bandwidth for private participation. Therefore to promote private participation, it is suggested that AIR provides mono transmission instead of stereo transmission during transition to DRM and share additional bandwidth for mono channel with the private players. The technical feasibility of an independent mono private channel should be evaluated from a quality and coverage perspective. In case, it is not technically feasible to have an independent mono channel for private participation then AIR should explore time sharing mechanism with private players to increase the uptake of DRM and develop the receiver eco-system.

Decision on switching SW to DRM to meet international coverage should only be considered once the eco-system for DRM is developed in other countries. Since AIR has no control over the development of receiver eco-system in other countries, it should not migrate from SW to DRM.

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+.

Transitioning to DRM from MW will deliver improved quality of transmission and **annual saving of ~INR 185 Cr. of opex towards maintenance and operations** and an additional **capital expenditure of INR 697 Cr.** planned towards developing the DRM infrastructure. However, 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.

The details of the sharing mechanism and analysis are provided in Section 5.6.

The Group on Technology acknowledges that the current procurement process at Prasar Bharati is time consuming and has not been able to keep pace with the development of technology. The Group recommends flexibility in procurement process to reduce time to procure. The details of the proposed process are provided in Section 5.7.

The Group on Technology, Prasar Bharati recommends that the choice of technology for content production and storage should be customised based on the needs of content strategy. The content strategy would define the quality and complexity of the product design which will further define the choice of technology. However, it is critical that the technology choice for content creation and storage caters to HD content delivery, delivery across multi-platforms, allow for tapeless workflows and interactivity. The details of the analysis are provided in Section 5.7.

2. Introduction

Prasar Bharati is at a crossroads given the continuous changes in the media industry in the last decade. It faces critical questions regarding its role, its identity, the funding it receives and generates and other crucial aspects of its functioning. Therefore to address these challenges, Ministry of Information & Broadcasting has constituted an Expert Committee for the purpose of reviewing the institutional frame work of Prasar Bharati including its relationship with Government, its continuing role as a public broadcaster and measures needed to ensure technical up gradation of the organization.

The Expert Committee on Prasar Bharati - Group on Technology has prepared a technology roadmap for Prasar Bharati by:

- ▶ Studying existing technology scenario,
- ▶ Considering convergence of technologies for content creation, storage and delivery,
- ▶ Taking into account standards, interoperability, legacy assets, maintaining vendor-independence, and a way of responding to technology changes in a dynamic fashion in planning and procurement.

2.1. *Role of Prasar Bharati*

The Expert Committee on Prasar Bharati - Group on Technology understands that the primary duty of Prasar Bharati is social Broadcasting for India. It has further responsibility to meet the strategic and specific demand of the country for national and local content delivery by keeping the following objectives under consideration:

Social:

- ▶ Ensure complete geography and population reach
- ▶ Organize and conduct public Broadcasting services to inform, educate and entertain the public
- ▶ Ensure quality transmission
- ▶ Cater to the needs of the large section of the population which has less “buying power” but the same information, education and entertainment needs

Strategic:

- ▶ Ensure a balanced development of Broadcasting on radio and television
- ▶ Promote and foster the diverse culture of the country
- ▶ Define Indian standards in receivers
- ▶ Ensure access of Prasar Bharati content on digital/ mobile platforms

Commercial:

- ▶ Maximize content delivery at the lowest cost
- ▶ Ensure availability and timely procurement of best suited technology
- ▶ Optimally utilize infrastructure for commercial Broadcasting

2.2. Need for reviewing the technology adoption by Prasar Bharati

During the last decade, there have been several changes in the technological landscape across content creation, storage and delivery. These changes are driven by the rapid pace in technology innovation, changing media consumption patterns and development of new standards to store and transmit content. In addition, the increased competition from private players in both television and radio has intensified the dependence on technology to provide quality content and services to audiences.

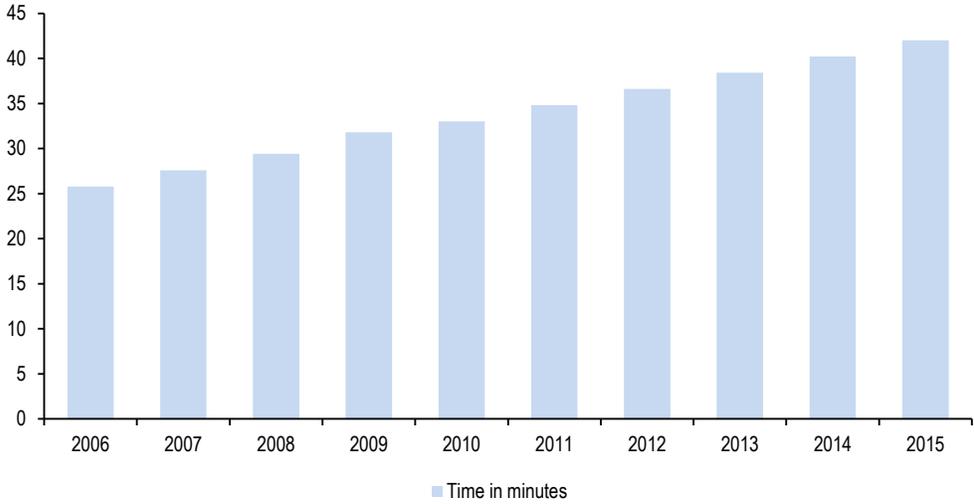
1. Technology evolution: The landscape of content distribution and transmission both on television and radio has evolved rapidly. Not only have the latest technologies enabled broadcasters to deliver high quality digital content to audiences but also have allowed greater integration of technology and content, both in the linear broadcast and online and interactive media space.

2. Changing consumer needs and media consumption patterns: The consumer needs have evolved over the last decade. Today, more and more users want to consume content as per their convenience rather than viewing as per the broadcaster's schedule. Audiences are spending more time in getting their information, entertainment and education from interactive and on demand services online through digital platforms such as mobile, PC, television, and tablet. Today's audience is more sensitive to quality of content leading to gaining popularity of HD and 3D content.

Time spent online by Indian users at 16.5 hours per month is low compared to global benchmarks, projected to reach 21 hours by 2015³.

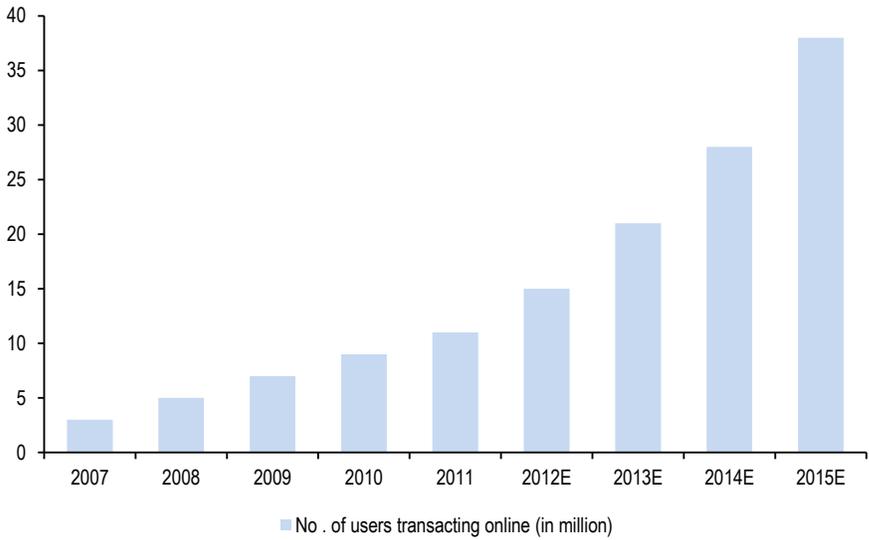
³ Source: BCG – The Internet's New Billion (September 2010)

Figure 1: Time spent online by Indian Users



Total number of users transacting online in India at 8-10 million, expected to increase to 38 million by 2015.⁴

Figure 2: Number of users transacting online



3. Increasing competition: In the current landscape, there are more than 650 operational television channels and 626 radio channels in India. Given the high competition, it is paramount that content must be developed in conjunction with the appropriate technology. Today, technology enables competitors to be adaptable, efficient and effective.

⁴ Source: "India Goes Digital", 2011

4. Convergence is forecasted to drive the consumer behaviour: Emerging technologies have brought in the convergence in the technologies used by the media industry to carry out different functions. This convergence can also be seen across the new-age media and the traditional enterprise technologies. With these changes, the sustained customer experience associated with the linear Broadcasting has become important for new-age media such as video on demand, interactive services etc. While on the broadcast engineering side, the demands generated by technology change, audience expectations and competitive pressures mean that these systems need to be increasingly flexible and able to adapt quickly to new expectations. It becomes imperative for Prasar Bharati to clearly understand and act towards the trend suggesting the convergence of networks, services, firms, and devices.

Given the changing market dynamics, there is a greater dependence on technology to provide the tools to build and distribute the content and services. Therefore, it is critical for Prasar Bharati to conduct a detailed review of its existing transmission technologies and upgrade technologies to remain relevant to its audiences.

2.3. Current technology setup of Prasar Bharati

2.3.1. Doordarshan

DD is one of the largest television broadcasters in the country with 33 channels, 67 studio centers and more than 1400 transmitters. The bouquet of channels serves multiple audiences through its portfolio of national as well as regional channels and spans categories including General Entertainment, Sports, News, Public service broadcast, Art, Music, Agriculture, Indian Diaspora, Health and Heritage.

Content creation and Storage Setup:

Major Studio centres	17
Other Studio centres	50
Total	67

DD plans to upgrade the content creation and storage infrastructure under the 11th and 12th plan. The details of the expansion plans are provided below:

- ▶ Schemes amounting to about Rs. 450 crores related to digitalisation of studios, HDTV technology, augmentation, modernisation & replacement of studio equipments and archives etc. were approved in 11th Plan
- ▶ Proposals amounting to about Rs. 518 crores related to digitalisation of remaining 4 analog studio centres, HDTV technology, augmentation, modernisation & replacement of studio equipments and archives etc. are included in 12th Plan proposals

Transmission Setup: DD currently uses two platforms for transmitting content to television households:

- ▶ Satellite Transmission
 - Free-to-air DTH through DD Direct
 - Cable and Satellite through private C&S companies
- ▶ Terrestrial Transmission

Satellite Transmission: DD transmits 33 channels (all digital) through its Satellite setup. These channels are available to consumer by private C&S companies and DTH companies or through DD's DTH platform – DD Direct+. This setup allows DD to achieve national coverage. The table below the lists the portfolio of Satellite channels:

All India Channels	5
International Channel	1
Regional Channel	11
State Networks	15
HD Channel	1
Total	33

DD transmits 59 standard definition channels through its free-to-air DTH setup. The setup allows DD to achieve national coverage both in terms of geography and population. DD plans to extend its DTH network under the 11th and 12th plan to allow a bouquet of 97 channels after completion of 11th plan and 300 channels after completion of 12th plan. The table below details the investment proposed under 11th and 12th plan:

Purpose	11 th Plan	12 th Plan
Upgradation of DTH platform from existing 59 channels to 97 TV Channels	INR 72 Cr	
Free distribution of 30000 DTH STBs		
One additional Ku-band transponder (6 th) on INSAT		
Expansion of DD Direct+ service up to 300 channels		INR 186 Cr
Up gradation of MPEG-2 DVB-S streams with MPEG-4 DVB-S2		

Terrestrial Transmission: DD transmits 1-2 channels depending on the location through its Terrestrial setup of 1415 transmitters (~57% of these transmitters are located in the tribal and border areas). The Terrestrial setup allows DD to achieve 82% geographical coverage and 92% population coverage. The table below provides the break-up of these transmitters:

DD1 (Geography-82%, Population-92%)	1243
HPTs	138
LPTs	733
VLPTs	354
Transposers	18
DD News (Geography-26%, Population-49%)	168
HPTs	73
LPTs	78
VLPTs	17
Other Transmitters (Digital HPTs)	4
Total	1415

Out of 33 TV channels, only 2 channels viz. DD1 & DD News are available in Terrestrial mode. Transmission of local/ regional content is carried through DD 1 transmitters located during the time slot allotted for the regional/ local programming.

DD plans to extend its Terrestrial infrastructure under the 11th and 12th plan. The details of the expansion plans are provided below:

Purpose	11 th Plan	12 th Plan
Increase coverage in J&K and Andaman and Nicobar	5 transmitters	
Increase coverage on Nepal Border		8 transmitters
Digital Transmitters	40 transmitters	52 transmitters
HDTV Transmitters	4 transmitters	
Total Proposed Investment	Analog: INR 196 Cr Digital: INR 349 Cr	Analog INR 231 Cr Digital INR 518 Cr

2.3.2. All India Radio

All India Radio (AIR) is one of the largest Broadcasting organisations in the world in terms of the number of languages of broadcast, the spectrum of socio-economic and cultural diversity it serves. AIR's home service comprises 376 stations today located across the country, reaching nearly 92% of the country's area and 99.19 % of the total population. AIR originates programming in 23 languages and 146 dialects. The four modes of radio transmission are:

- ▶ Amplitude Modulation (AM) transmission
 - Medium Wave (MW)
 - Short Wave (SW)
- ▶ Frequency Modulation (FM) transmission
- ▶ DRM (Limited)
- ▶ DTH

Type of transmission	No. of transmitters	Reach (Area)	Reach (Population)	Frequency range being used by AIR	Channel Bandwidth per transmitter
MW	143	91%	98.4%	526.5-1606.5 KHz	20 KHz
FM	362	31%	43%	100.00 to 103.7 MHz	200 KHz

SW	48	Not Available	Not Available	3 MHz to 26 MHz	10 KHz
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Besides the coverage shown in the table above, AIR provides 100 % coverage by area and population of the country through 21 DTH radio channels on free to air DD platform in Ku band and 6 Channels in C-band DTH.

AIR has 382 Broadcasting centers under its three tier Broadcasting model providing National, Regional and Local coverage.

Regional	119	Relay centers	172
Local radio stations	86	Community Radio stations	05

AIR adopted DRM technology to digitize the transmission in 2006. AIR plans to digitize the connectivity infrastructure by 2014 and the studios by 2017. As AIR is working towards digitization of the MW/SW transmitters and increasing the coverage through FM transmission, the relevant expenditure planned in the 11th plan is mentioned in the table below:

Scheme Components /Status of Projects	Sanctioned amount in 10th /11th plan	Expenditure incurred during 11th plan	Funds required in 12th plan for continuation of the 10th /11th plan schemes
Digitalization of 72 MW transmitters	505.91	129.06	384.46
Digitalization of 5 SW transmitters	111.46	2.12	105.00
Expansion/replacement of 329 FM transmitters	426.80	149.30	317.84
Improvement of 8 FM transmitters for better coverage at J&K	100.00*	0.68	100.00
Total	1144.17	281.16	907.3

*This includes the New DD setup at Existing AIR Setup at Rajouri and joint setup at three new sites.

The expenditure planned in the 12th plan is mentioned in the table below:

Scheme Components / Status of Projects	Amount proposed in 12th plan
Digitalization of 4 MW transmitters	43.72
Digitalization of 5 SW transmitters	7.00
FM(Expansion/replacement) - 141 New (including 102 of 100 Watt FM transmitters) - 78 Replacement (FM by FM) - 26 replacement (MW by FM)	516.29
22 FM transmitters (Under improvement of FM coverage at Indo-Nepal Border) + 1 studio at Lakimpur kheri + 2 transmitters for uplinking	128.18
Total	695.19

Currently none of the 216 Broadcasting studios is connected to each other; there is a provision to connect 98 of them in the 11th plan. Apart from the planned expenditures mentioned in the tables above, Rs.182.05 Cr has been proposed in the 12th plan for continuation of the studio schemes in 11th plan, while Rs 153.82 Cr has been proposed for new studio schemes in the 12th plan.

In order to improve the quality of MW transmission, AIR has planned to convert /or replace 72 of the 148 MW transmitters by Digital transmitters.

2.3.3. Procurement process

Current procurement process at Prasar Bharati is time consuming and has not been able to keep pace with the development of technology. Current procurement processes take a long time between choosing a technology and its actual procurement and installation and by this time, the technology moves towards obsolescence.

DG: DD and DG: AIR follows the Procurement Manual of Directorate General of Supplies & Disposal (DGS&D) for procurement of all Capital equipment. DGS&D is the central procurement agency of Govt of India. All five Zonal offices (North at Delhi, South at Chennai,

East at Kolkata, West at Mumbai and North East at Guwahati) who execute projects, follow CPWD Manual and Code.

Open / Global Tender route with two bid system is followed for procurement. Technical Specifications of equipment to be purchased are made by the concerned Design section and vetted by a committee. These are made a part of Standard Bid Document, which includes all Requirements, Terms and Conditions. Notice inviting tender (NIT) is published in Newspapers, India Trade Journal, Web site, intimation to Embassies etc for wide publicity. A minimum period of six to eight weeks is given for submission of Bids. The Tender has two parts; Technical Bid and Price Bid, which are submitted at the same time in two separate envelopes.

First, the Technical bids are opened and evaluated by a Technical Evaluation Committee (TEC) as per the laid down specifications. Bids, which do not meet the criterion, are rejected. The commercial bids of only those tenders which have qualified technically are opened. These are tabulated and the Lowest (L1) acceptable tender is arrived at. The Purchase section makes the detailed procurement proposal and sends the same to Internal Finance Division (IFD) for financial concurrence. After Financial concurrence, the proposal is sent to Director General OR Prasar Bharati Board, through proper channel, for Administrative approval and financial sanction of the Competent Authority, depending upon the value of order. After approval, the Purchase wing places the Purchase order on the concerned firm for the supply of Goods within the specified Delivery Period. **The normal time taken is six months to one year.**

2.3.4. Challenges

In the current setup, Prasar Bharati faces the following challenges from a technology perspective; Group on Technology through its recommendations have tried to address these challenges.

- A. Technology choice
 - ▶ Should digitalization of AM/FM/SW be continued and which technology should be adopted to ensure the same
 - ▶ Should digitalization of Terrestrial transmission networks/ technologies be continued
- B. Integration/ digitization of DTH, Cable TV, and Terrestrial platforms
 - ▶ What should be the degree of overlap between the two transmission platforms, Terrestrial and Satellite
 - ▶ Audio transmission channel need much less bandwidth and is an integral part of high Bandwidth Video Transmission. Will it merge into integrated services of DVBT which carries SD, HD, Radio and Text
- C. Optimal technology resource utilization

- ▶ Digitization of Terrestrial transmission will lead to generation of additional bandwidth, how will DD and AIR optimally utilise the additional bandwidth
- ▶ Can DD provide infrastructure to other players (National,Regional,Local) for supporting the and transmission
- ▶ Current procurement process at Prasar Bharati is time consuming and has not been able to keep pace with the development of technology. Current procurement processes take a long time between choosing a technology and its actual procurement and installation and by this time, the technology moves towards obsolescence

3. Methodology

Expert Committee on Prasar Bharati - Group on Technology understands that the prime purpose of Prasar Bharati is public service and therefore while recommending the technology changes it has tried to create a value proposition that meets public service objectives and also is commercially viable and sustainable. The Expert Committee on Prasar Bharati - Group on Technology has followed a structured approach to determine the best suited technological changes:



3.1. Current technology deployed by Prasar Bharati

Expert Committee on Prasar Bharati - Group on Technology has reviewed all existing Broadcasting technologies for television and radio. These technologies have been evaluated on their strengths and weaknesses, extent of adoption, development of eco-system, and cost of implementation. User experience was considered as a paramount factor while comparing these technologies.

3.2. Global technology benchmarking

The evolution of technology adoption was analyzed to specifically understand the effectiveness of technologies in addressing the changing consumer needs. Inferences from global technology benchmarking were drawn to develop a roadmap for technological transformation for Prasar Bharati.

3.3. Study of As-Is and Gaps analysis

The technology review was followed by a deep understanding of the existing technologies adopted by Prasar Bharati for Transmission. The current capabilities of the existing technologies were evaluated to determine the efficiencies and inefficiencies in the system. The capabilities of the system were compared to the needs of the audiences to determine the gaps/ scope for improvements. Also, the extent of planned upgradation under the 11th plan and 12th plan was considered while determining the gaps/ scope for improvements

3.4. Industry discussions

To develop a holistic strategic roadmap for technology, Group on technology has conducted several discussions with Industry to address the perceived challenges in implementation of

the recommendations. The group on technology has had discussions with the following discussions:

1. DRM consortium: Digital Radio Mondiale (DRM) is an international non-profit consortium designing and implementing the DRM platform. The group on technology has discussed the following key issues with DRM consortium:
 - a. Current adoption of DRM
 - b. Current eco-system for receiver system
 - c. Affordability of DRM receiver system

2. Analog devices: Analog Devices Inc., also known as ADI or Analog, is an American multinational semiconductor company specializing in data conversion and signal conditioning technology. The company is a leading manufacturer of analog, mixed-signal and digital signal processing (DSP) integrated circuits (ICs) used in electronic equipment. The group on technology has discussed the following key issues with DRM consortium:
 - a. Current eco-system for receiver system
 - b. Perspective on reduction in price of DRM receiver
 - c. Affordability of DRM receiver system

3. System integrator in Singapore (KIT): KIT digital is video management software and services company. With its proprietary OVP (Online Video Platform) and OTT (Over the Top) platform products: Cloud and Cosmos, as well as systems integration and solutions design expertise, KIT delivers complete video solutions to clients, helping to power the transformation from traditional broadcast to multiscreen broadband TV. The group on technology has discussed the following key issues with KIT:
 - a. IT enabled solution to track transmission of must-carry channels at every MSO
 - b. Exploring ways to distribute local content
 - c. Figuring out alternative options for national radio transmission
 - d. Understanding convergence of digital radio and DTT platforms
 - e. Analyzing IP based transmission and possible convergence

4. Goal statement and Recommendations

4.1. Goal statement

Expert committee on Prasar Bharati- Group on Technology has analyzed the transmission technology options from the three perspectives:

- A. Mandated technology to be provided irrespective of content to meet social objectives
- B. Building up more robust, expandable and scalable infrastructure for commercial use to meet strategic objectives
- C. Integration of both the platforms to ensure technology sustainability

4.2. Recommendations

Doordarshan

The Group on Technology, Prasar Bharati concludes that moving from Terrestrial to Satellite (DD Direct+) will not only meet all the requirements of public broadcast service but also improve the overall customer experience of TV households on Terrestrial and Analog Cable.

In addition, the switch over to Satellite is more cost effective as it will allow Prasar Bharati achieve **annual saving of ~INR 635 Cr. of opex** towards maintenance and operations and additional **notional savings of INR 1294 Cr pertaining to the** planned capital expenditure for upgradation of existing Terrestrial infrastructure. In addition, transitioning would result in freeing up of spectrum in Band I, III, IV and V and other assets such as real estate.

AIR

For AIR, the Group on Technology recommends to continue with SW to meet international coverage. and to transition to DRM from MW to meet the National and Regional coverage. This will meet the public service objective of AIR. Expansion of FM to increase regional coverage from 43% to 65% should only be carried out on the basis of commercial feasibility.

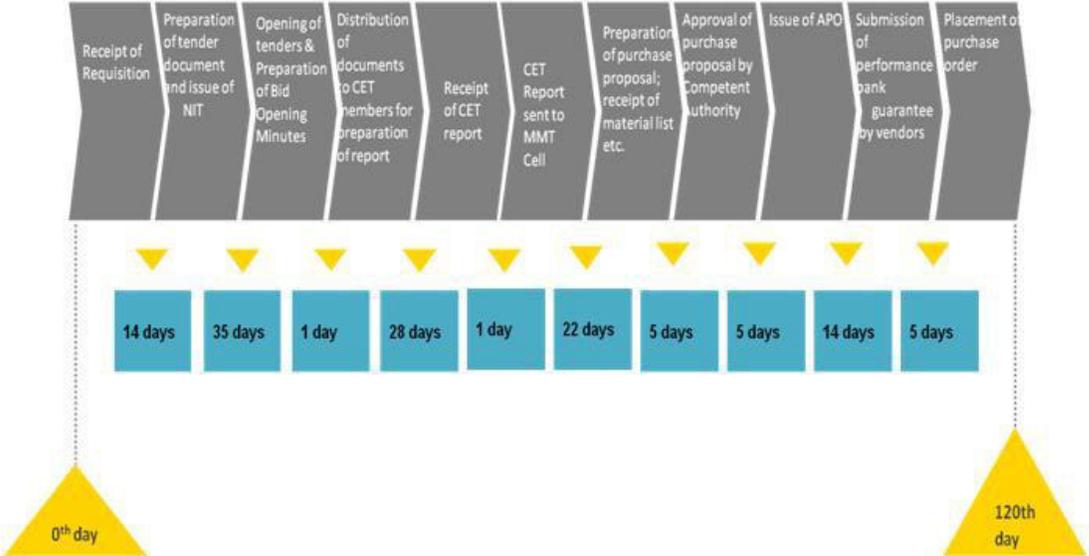
Transitioning to DRM from MW will delivery improved quality of transmission and **annual saving of ~INR 185 Cr. of opex towards maintenance and operations** and an additional **capital expenditure of INR 697 Cr.** planned towards developing the DRM infrastructure. However the receiver eco-system for 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.

Other considerations

Procurement Process

Current procurement process at Prasar Bharati is time consuming and has not been able to keep pace with the development of technology. Current procurement processes take a long time between choosing a technology and its actual procurement and installation. A snapshot of the To-Be procurement process is provided below:

Figure 3: Recommended procurement process



The technology committee, cognizant of the delay in the procurement process, recommends the following:

- A. Preparation of new procurement manual: In order to streamline/quicken the procurement process, a new Procurement Manual may be prepared for Prasar Bharati
- B. The technology committee also recommends that procurement manual should be periodically reviewed so as to be in tune with the requirements of the organization
- C. Exploring methods of procurement: The technology committee opines that it is essential to take an overall view of cost of material, time of procurement, method of procurement as well as business opportunity for any project

Content production and storage

The Group on Technology, Prasar Bharati recommends that the choice of technology for content production and storage should be customised based on the needs of content strategy. The content strategy would define the quality and complexity of the product design which will further define the choice of technology. However it is critical that the technology choice for content creation and storage caters to HD content delivery, delivery across multi-platforms, allow for tapeless workflows and interactivity.

5. Analysis

5.1. Television Broadcasting Technologies

Television transmission is mainly carried out through 3 modes- Terrestrial, Cable and Satellite. Terrestrial transmission uses radio waves for transmission and is also referred to as over-the-air television (OTA). Cable television is a system of distributing television programs to subscribers through coaxial cables or light pulses through fiber-optic cables. Satellite transmission, on the other hand, uses Satellites for transmission services through various bands allocated in different frequency spectrums. Satellite transmission, comparatively, allows long range transmission.

Medium of transmission	Mode of transmission	Key advantages	Key challenges
Terrestrial	Line of Sight	<ul style="list-style-type: none"> ▶ Digital transmission can reach to multimedia platforms ▶ Better interference and coverage performance of digital than analog transmission 	<ul style="list-style-type: none"> ▶ Limited channel offering compared to Cable and Satellite ▶ Fragile signal especially in analog transmission ▶ Limited coverage area
Cable	Coaxial cables or fiber-optic cables	<ul style="list-style-type: none"> ▶ Stable service ▶ Offers both last mile as well as long range connectivity ▶ Wide variety of content transmission possible ▶ Bundling with internet or phone feasible 	<ul style="list-style-type: none"> ▶ Monopolies in case of single Cable TV provider ▶ Privacy issues in case of bundling with internet
Satellite	Line of Sight (LOS) propagation	<ul style="list-style-type: none"> ▶ Long range ▶ Wide variety of content transmission possible 	<ul style="list-style-type: none"> ▶ Weather interference

Parts of Europe, USA, Australia and Japan have already completed analogue switch-off (ASO) and transitioned to digital. Many developing countries are following the same suit. Together, tremendous benefit can be achieved through digital switchover. These new platforms bring benefits to both viewers and broadcasters. Some of the benefits of digital platforms include:

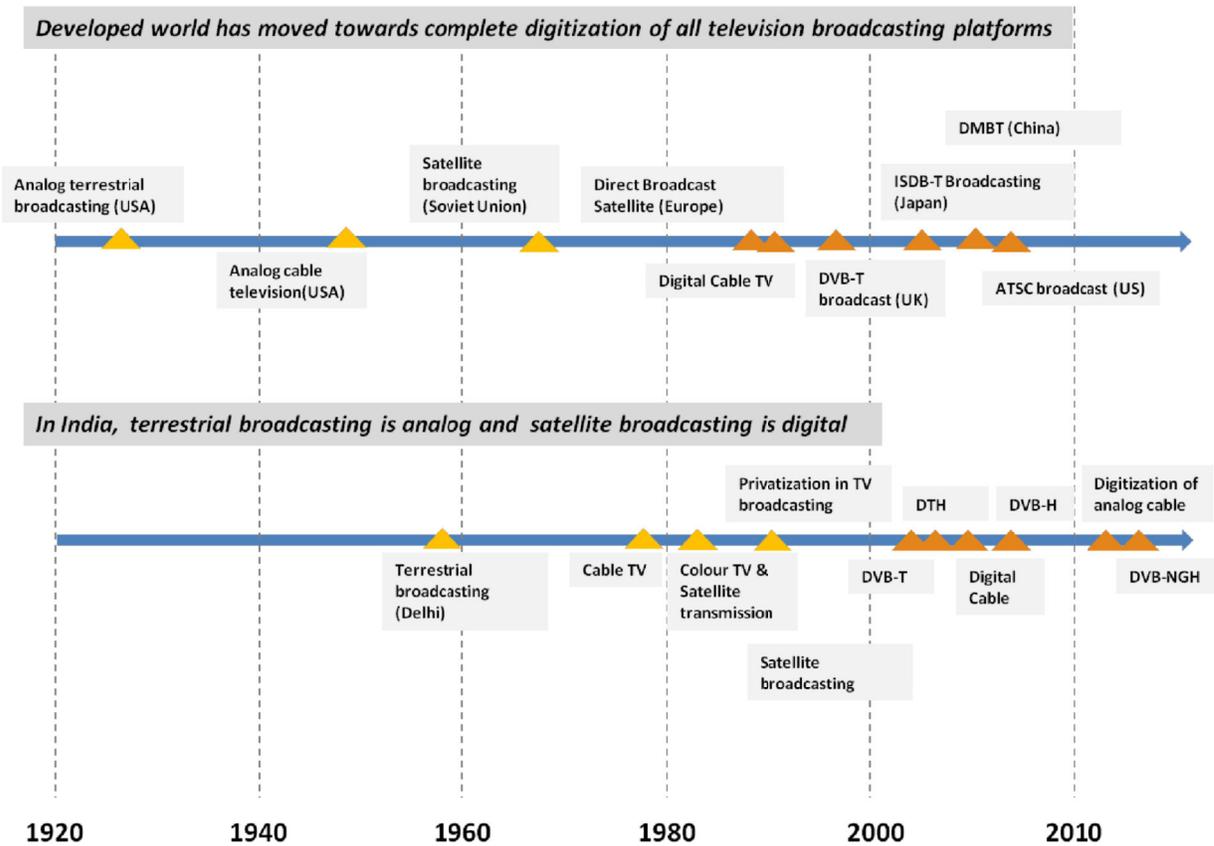
- ▶ Increase in efficiency in the use of spectrum
- ▶ Launch of new services for viewers
- ▶ Obsolescence of analog equipment

- ▶ Enhanced reception quality with added features
- ▶ Delivery on multimedia platforms

Television Broadcasting began with terrestrial transmission and it was the sole means of Television Broadcasting until Cable and Satellite Broadcasting surfaced in 1940s and 1960s respectively. Television Broadcasting remained analog until 1980s and during 1980s and 1990s digital transmission technologies for all Cable, Satellite and Terrestrial were developed. In the last two decades, developed world has primarily moved towards digitalization of C&S and Terrestrial transmissions. Direct Satellite broadcast was initiated in late 1980s in Europe. The evolution of direct Satellite broadcast led to shift from analog transmission to digital transmission given the spectral efficiency in digital transmission. First digital Terrestrial television technology was introduced in 1990s. Since then several digital standards have been developed in different parts of the world. Currently, there are 4 primary competing digital Terrestrial Broadcasting technologies, namely:

- ▶ DVB-T/DVBT2
- ▶ DMB-T
- ▶ ISDB-T
- ▶ ATSC

The adoption of digital technologies worldwide can better be understood through the following timeline:



The Technology Committee believes that these are intermediate technologies and that in the long run these will converge to a common technology platform. IP based delivery of TV and Radio is one such possible convergent platform. IP based delivery will not only enable delivery of Radio and TV on a convergent platform but also provide internet access over large areas while releasing a large amount of bandwidth.

DVB-T/DVBT2: DVB was developed in Europe to develop the digital standards for television. This system transmits compressed digital audio, digital video and other data using higher compression and multiplexing techniques. DVB-T has been further developed into newer standards such as DVB-H (Handheld), DVB-SH (Satellite services to Handhelds) and DVBT2.

DVB-H is a mobile update for the earlier DVB technology. DVB-H was created to offer a relatively cheap and efficient high-data rate downstream channel to mobile terminals. It was developed to enable new kind of video, audio and data services for handheld devices. Its substantial advantage is that it could be deployed using existing DVB-T infrastructure. For Satellite transmission of DVB-H technology DVB-SH, Digital Video Broadcasting - Satellite services to Handhelds, was developed. It is a physical layer standard, published in 2007 under DVB project, for delivering IP based media content and data to handheld terminals such as mobile phones or PDAs (Personal Digital Assistant), based on a hybrid Satellite/Terrestrial downlink and for example a GPRS uplink.

Digital Video Broadcasting - Next Generation Handheld (DVB-NGH), an update and replacement of the DVB-H standard for digital broadcasting to mobile devices, is a hybrid terrestrial-satellite standard conceived to facilitate rich media content consumption using a variety of mobile, handheld devices. It aims at offering superior performance, robustness and coverage with respect to existing solutions.

Pros	Cons
<ul style="list-style-type: none"> ▶ Superior quality than analog systems ▶ DVBT2 can use existing terrestrial infrastructure Suitable for all range transmissions ▶ Offers wide variety of multimedia content ▶ Robust against high noise levels and interference 	<ul style="list-style-type: none"> ▶ Affordability of DVB-T devices is a concern

DMB-T: It was developed by Korea. Korea initially had adopted the American ATSC as the digital television standard in 1997 but due to its certain limitations such as inability to provide real mobile or portable television reception, Korea created DMB using DAB as the basis.

Pros	Cons
<ul style="list-style-type: none"> ▶ Superior quality than analog systems ▶ DMB is more versatile and efficient than DAB ▶ Compatible with fixed reception (indoor and outdoor) and mobile digital Terrestrial television ▶ Supports high definition digital Broadcasting 	<ul style="list-style-type: none"> ▶ Offers free access to services and content without identifying users, thus, making direct charging/tracking of customers infeasible. ▶ Price and affordability is a concern. ▶ Not widely adopted

ISDB-T: It was developed by Japan to protect the Japanese electronics industry from the foreign competition. It offers up to three SDTV services within one channel and offers interactive services such as games or shopping, via telephone line or broadband internet. It caters to both television and radio Broadcasting. ISDB-Tsb is the Terrestrial digital sound Broadcasting specification while ISDB-T is video Broadcasting standard.

Pros	Cons
<ul style="list-style-type: none"> ▶ Compatible to simultaneously transmit different technical quality levels of content ▶ Robust against fading and interference ▶ Provides data Broadcasting over a wide area ▶ Provides interactive program guides 	<ul style="list-style-type: none"> ▶ Not predominantly adopted worldwide ▶ Price and affordability is a concern

ATSC: Grand Alliance, a consortium of American electronics and telecommunications companies, developed the ATSC standards in early 1990s. These standards were developed to offer HDTV services and digital television transmission over Terrestrial, Cable, and Satellite networks. These replaced the earlier existing analog NTSC standards.

Pros	Cons
<ul style="list-style-type: none"> ▶ Widely adopted ▶ More resistant to interference than NTSC ▶ Supports various display resolutions, aspect ratios, and frame rates ▶ Provides data Broadcasting over a wide area 	<ul style="list-style-type: none"> ▶ Many aspects such as coding and modulation features are patented, resulting in manufacturing and widespread adoption issues. ▶ Spectrally inefficient as ATSC requires the use of an entire channel

5.2. Comparison of Television Broadcasting Technologies

	<i>Type of Technological innovation⁵</i>	<i>Digital/ Analog</i>	<i>Coverage</i>	<i>Frequency spectrum</i>	<i>Noise/ Interference</i>	<i>Device eco system</i>	<i>Challenges</i>	<i>Extent of adoption</i>
Terrestrial	Radical	Digital and analog	Short range	VHF and UHF bands	High noise in case of analog transmissions	Fully developed	Unidirectional and no return channel	Worldwide
Satellite	Radical	Digital and analog	Long range	Various frequency bands such as C-band, K _U band, S-band etc.	Interference issues in case of overloading of bands	Set top boxes and receiver antennas available and affordable	Spectrum availability and ensure compliance with must carry	Worldwide
Cable	Radical	Digital and analog	Short, Medium and Long range (depends on fiber network)	NA	Issues of leakage and ingress	Set top boxes exist	Not suitable for national coverage	Worldwide
DVB-T/ DVBT2	Radical (based on DAB experience)	Digital	Uses Terrestrial mode of communication. Hence, reach is similar to Terrestrial.	VHF and UHF Band IV and V	Robust against high noise levels and interference	Components are widely available	Price and affordability is a concern.	Worldwide

⁵ Radical Innovation- a new technology acting as successor of existing technologies such as DAB for FM
 Modular innovation- further development of the already existing technology
 Architectural innovation- combination of already existing technologies together in a new way

DVB-H	Modular (from DVB-T)	Digital	The frequency ranges fall in the range of space or sky wave propagation.	Designed for UHF (Band IV) frequencies.	Lower than DVB-T	Components are available	Price and affordability is a concern.	Finland, Italy, Singapore, US, Vietnam, France, Spain, Austria, Morocco, Switzerland, China, Germany, etc.
DVB-SH	Modular (from DVB-T)	Digital	Long range	Frequencies below 3 GHz, supporting UHF band, L Band or S-band	Satellite form of interference expected	Components are available	Price and affordability is a concern.	Ireland, United Kingdom, Malaysia, Singapore, Spain, South Africa, US, France
ISDB-T	Architectural (DAB and DVB as base)	Digital	It provides network plan for long range	Needs VHF-band,	Better interference performance with respect to ATSC over a range of specific pulse width.	Components are available	Price and affordability is a concern..	Brazil, Peru, Argentina, Chile, Venezuela, Ecuador, Costa Rica, Paraguay, Philippines, Bolivia, Nicaragua and Uruguay

DMB-T	Architectural (DAB as basis)	Digital	Long range	Designed for the same bands as DAB (VHF & L)	Same quality of reception as wire broadcast The repeater suffers from some interference effects	Components are available	Price and affordability is a concern.	China, Hong Kong and Macau
ATSC	Radical	Digital and analog	All ranges (works for Terrestrial, Cable and Satellite transmission)	VHF and UHF band	More resistant to interference than the analog NTSC	Components are available	Mobile reception	US, Canada, South Korea, Mexico, El Salvador

A Core Group comprising of 12 members from various Government Organizations ,Broadcasters , Industries, Research Institutions etc., was constituted by the then CEO, Prasar Bharati in October 1998 to do an in-depth study of competing digital terrestrial transmission standards, viz, ISDB-T, ATSC and DVB-T and after a final meeting on 9-01-1999, recommended the adoption of DVB-T standard for Digital Terrestrial Television Broadcasting in India.

5.3. Recommended Option for Doordarshan

Introduction

In India, content access on television is available to the consumer through Cable, DTH, Terrestrial and IPTV platforms. Cable and DTH are the most dominant transmission and distribution platforms and cater to 90% of the TV household population.

2012	Number of Television HH (Mn)	%age of Television HH
Cable Analog	59	40%
Cable Digital	19	13%
DTH	54	37%
Terrestrial ⁶	12	8%
IP TV	2	1%
Total	146	100%

Source: FICCI 2012

Government's recent initiative of complete digitization of Analog Cable to Digital is further expected to increase penetration of Digital Cable and DTH as seen from the adoption curve below. Government of India has successfully rolled out Phase 1 and Phase 2 of digitisation process under which more than 30 Mn households have already been converted to Digital Cable/ DTH Households and another 33 Mn are expected to be converted in Phase 3 and 4. It is expected that after the completion of all the DAS phases, DTH and Digital Cable technologies will stabilize and become the most preferred transmission and distribution platforms. Digital Cable is expected to gain a larger share of the market given its inherent

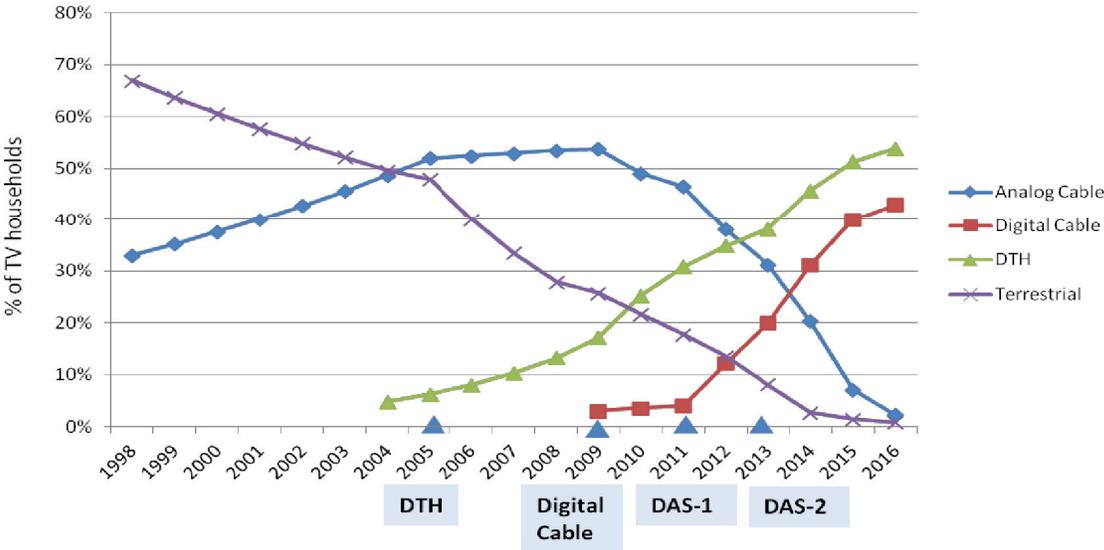
⁶ Discussion with DD Technology Division

As per TAM Base Line Survey 2012 – Terrestrial Population is 20 Mn:

http://www.tamindia.com/tamindia/NL_Tam/Overview_TV_Universe_Update-2012.pdf

advantages such as availability of return path to provide more value add services, uninterrupted signal even during rains etc.

Figure 4: Transmission and Distribution Adoption Curve



Source: Industry Reports

DD currently distributes content through Terrestrial, Cable (provides content to private MSOs through Satellite) and DTH. Both Satellite transmission and Terrestrial transmission are operated in parallel; however the cost of distribution is heavily skewed towards Terrestrial though it caters to only 8% of the unique population.

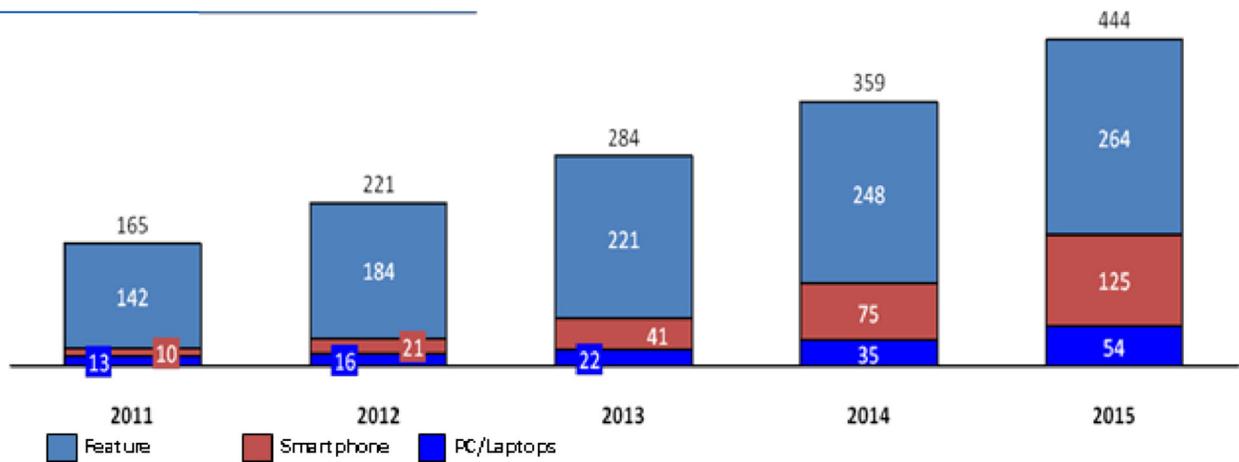
Cost of Distribution	Opex (INR Cr.)	%age of Opex	%age of TV HH
Cable (Satellite)	47	7%	53%
DTH	41	6%	37%
Terrestrial	635	88%	8%
Total	723	100%	99%

Source: Opex (FY12) is provided by DD – Technology Division and does not include production expenses

One more key trend noted by the committee is the consumption trends on the Mobile and Internet platform. Increasing penetration of broadband and smartphones/ tablets, higher affordability of 3G plans and introduction of 4G is expected to further increase the consumption of content on Mobile/ Tablets. Therefore, it is critical for a broadcaster today to reach its audience on digital and mobile platforms.

Figure 5: Internet Users Mix by form factors

Internet Users Mix by device form factors



Also, TV content consumption habits are very different on mobile as compared to television:

- ▶ Media consumption on television is based on appointment viewing while consumption on mobile is based on convenience of viewer. More and more users want to consume content as per their convenience rather than viewing as per the broadcaster's schedule.
- ▶ Media consumption is based on content preference rather than content publisher on mobile. User is agnostic of content publisher and consumes most content through content aggregators.

Therefore, it is critical for broadcasters to integrate the above factors while designing their digital content distribution strategy.

Not all Doordarshan content is available on mobile and other digital platforms through official channels. DD News live streaming is available to the user at webcast.gov.in/live/ and other third party sites.

One more key trend noted by the committee is the gaining popularity of HD content. It is expected that in future, SD content will be replaced by HD content. Several private General Entertainment Channels, Sports Channels and Movie Channels have started offering HD feeds of their channels and therefore it is critical for DD to adopt a transmission platform that is capable of HD transmission.

Recommendation

The Group on Technology, Prasar Bharati agreed that the future of the broadcast media industry was in digital content production and transmission. The group took a strategic point of view to evaluate the merit in switching off the analog transmission and moving to one

single technology platform to improve quality of service to consumers, free up national resources such as spectrum, real estate and other assets and also meet the Public Service objectives. Based on the above guiding principle the Group on Technology has shortlisted the following options:

- Option 1. Move to technology of choice (C&S and DTH) i.e. Move from Terrestrial to DTH (DD Direct+) to meet National and Regional Coverage
- Option 2. Create an alternate technology platform i.e. Upgrade Terrestrial to DVBT2 to meet National and Regional Coverage

Each of these options was evaluated in detail across critical parameters to ensure that Prasar Bharati's public service objectives are not compromised and there is enhancement in quality of service to the consumer.

Option 1: Move to technology of choice (C&S and DTH) i.e. Move from Terrestrial to DTH (DD Direct+) to meet National and Regional Coverage

With 92% of the TV households already accessing television through Cable and Satellite systems (Cable and DTH), there are significant advantages for DD in adopting Satellite transmission as primary technology to meet national and regional coverage requirements and public service objectives. The primary advantage is DD's existing DD Direct+ services which are already present across the entire country. It meets all the critical requirements met by Terrestrial and offers better quality and service to the consumer. In addition, it is a much cheaper and economical option and provides the same/ better coverage than Terrestrial.

DD Direct+ service is a free-to-air service that offers a channel bouquet of 59 channels and has all India coverage. In addition, upgradation of DTH platform to 97 TV Channels is likely to be completed by December, 2013 which will further enhance the value proposition to the consumer. Refer to Annexure for list of channels offered by DD Direct+.

Performance of Terrestrial and Satellite Transmission through DD Direct+ on critical factors is provided below:

Key Parameters	Terrestrial	DD Direct+ (DTH)
Coverage	87% of Population 92% of Geographical Coverage	All India Coverage (100%). For Andaman and Nicobar Islands DTH in C band is available
Content: Quality of transmission	Analog	Digital (allows SD and HD transmission)
Content: Variety to consumer (number of channels)	2	59 (To be increased to 100 channels by end of 2013)
Cost to consumer: Cost of receiver and subscription cost	Cost of Antenna: ~INR 500 Subscription Cost: Free	Cost of set-top box: INR 800-1200 ⁷ Subscription Cost: Free
Delivery of local/ regional content	19 hours of transmission on National Channel 14 – 15 hours of national transmission 4 – 5 hours of local content across 15 states	11 regional channels. Currently the content available on 15 state networks is not available on DD Direct+.
Scalability (addition of more channels)	Limited and very expensive	Can be easily expanded at a marginal cost
Presence on Mobile and Other Digital Platforms	Through IP	Through IP

Presence on Mobile and Other Digital Platforms: Like other private networks, DD can use IP based solutions by converting content to format suited for other platforms. The content can be customized to Live/ Video on Demand (VOD) form based on the audience needs. Currently, most private networks provide content for audience through third-party content aggregator websites or dedicated channel websites.

Migration from Existing Terrestrial transmission to only Satellite transmission would require addressing of the following key areas:

- 1. Delivery of local/ regional content that is currently not available on DD Direct+**

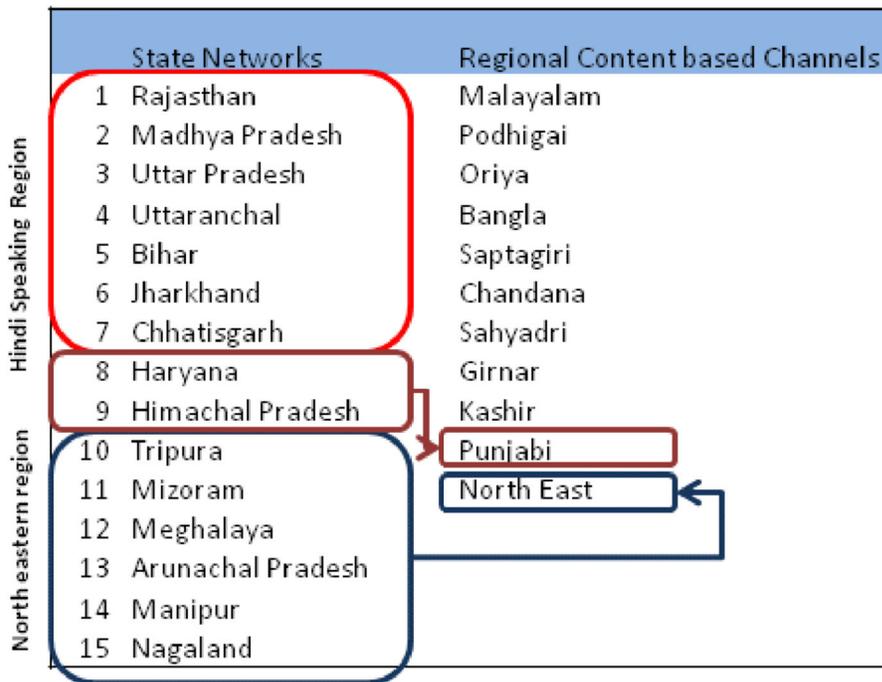
⁷ Discussion with DD Technology Department

DD Channel Bouquet	Terrestrial	DD Direct+ (DTH)
National Channel	1 – 2* (24x7 Channels)	6 (24x7 Channels)
Regional Content based Channels	Not Available	11 (24x7 Channels)
State Networks	19 hours of transmission on National Channel 14 – 15 hours of national transmission 4 – 5 hours of local content across 15 states	Not Available

*No of channels is dependent on location; Refer to annexure for DD Channel List

As seen from the figure above, content available on 15 State networks is only available on Terrestrial platform. These state networks use DD 1 transmitters located in the states to relay local content for 4 – 5 hours during the time slot allotted. In addition, the studio centres at various locations other than those from where the Regional service/ State Network produce and relay local programmes through the local transmitters for a period of about ½ hour to 1 hour. To port this content onto Satellite, DD has the following options:

- ▶ **Integrate the 4-5 hours of local programming provided by state networks into the FPC (Fixed Point Chart) of existing 11 regional channels** based on the language and regional homogeneity.
- ▶ **Create new regional channels based on language and regional homogeneity** for the content that cannot be accommodated in regional channels



As seen from the figure above, 6 state networks cater to the North Eastern Region and therefore there is an opportunity to integrate their programming into the regional channel catering to North-East. Similarly local programming of Haryana, Himachal Pradesh can be integrated into Punjabi, if feasible. This will allow strengthening of regional content and will have a positive impact on advertising revenues and viewership of existing regional channels. The content of state networks which cannot be integrated into the existing regional channels can be combined together to create new regional channels. As seen from the figure below, 9 state networks (including Haryana and Himachal Pradesh) belong to the Hindi speaking belt and therefore there is an opportunity to integrate the local programming of these states to form distinct regional 24x7 channels. For eg. local programming of Bihar, Jharkhand and Chhattisgarh can be integrated to serve that region if feasible.

2. Complete roll out plan from Terrestrial to DD Direct+

Roll-out migration plan: To achieve complete switch over from Terrestrial to C&S/ DTH, DD would need to push an initiative such as DAS that will mandate switch over from Terrestrial to DD Direct+ by setting a sunset date. This will ensure adjustment of entire traffic on Terrestrial to DD Direct.

Bring down the cost of receiver for DD Direct+: To make the price more affordable to the end-consumer, Prasar Bharati can explore the following initiatives. Roll-out of such initiatives would also create a more attractive proposition for the Analog Cable households that are mandated to convert to digital C&S/ DTH under DAS Phase 3 and Phase 4.

- ▶ Bulk procurement plan to reduce the cost
- ▶ Provide Direct subsidy to consumer
- ▶ Provide Tax benefits/ subsidy to local manufacturers

Total cost for 12 Mn Households would translate to an investment of INR 960 Cr assuming cost of installation of DD Direct+ box is INR 800. **If DD were to subsidize the cost of DD Direct box to INR 500 i.e. in line with the cost of Terrestrial antenna then the total cost of transition would translate into an investment of INR 360 Cr.**

3. Ensure compliance to must carry compliance of DD channels on Cable and DTH

It is mandated for Cable and DTH to carry 8 DD channels. It was difficult to track compliance of must carry in the Analog Cable environment. However, the digital environment gives DD an opportunity to track compliance by using IT based solutions. These IT based solutions can generate logs at each of the MSO/ DTH operators to track channel distribution.

4. Ensure compliance to DAS guidelines

DD Direct+ is a digital platform however it is not addressable. To address this issue, DEITY has tendered development of a local set top box which will be digital and addressable.

5. Create content and storage infrastructure to support HD transmission

Satellite transmission allows for transmission of HD quality content using additional transponder bandwidth. To support HD transmission, it is critical for DD to create infrastructure such as studios, studio equipment that supports creation and storage of HD quality content.

6. Disaster Management

Each of these technologies has their own vulnerabilities to disaster. Each of these technologies can be managed in their own way. To address this challenge for DTH the following two initiatives can be undertaken for disaster management:

1. Non pre-emptive Satellite backup
2. Hub replication: Multiple disaster sites can be created. These disaster sites will allow for multiple redundancies and create the ability to shift transmission in case of disaster.

7. Uninterrupted transmission

DTH transmission quality suffers during rain and humid conditions due to rain attenuation. To overcome this problem, two hubs can be created. These hubs can be at a distance of 150 kms and can be connected with fibre. This will overcome the problem of rain attenuation at hub. However if there is rain and humid conditions at the receiver end, then the consumer

may face interruption in transmission. Consumers are willing to ignore this drawback given that there are more than 50 Mn DTH households in India.

Financial Implications

Since the receiver eco-system is already developed for Satellite transmission, complete migration can be achieved quickly with low marginal investment.

INR Cr	Terrestrial	C&S (National + Regional)	DTH
Current Opex	635	47	41
Additional Capex <i>as planned in 11th and 12th five year plan</i> (5-years)	1294	229	186
Projected Opex	-	47	41
Savings in Opex	635		
Total Capex (DTH & C&S)	415 [#]		
Savings in Capex planned	1294		
National assets that will be made available for monetisation			
Spectrum	Band I (54 – 68 MHz) Band III (174 – 230 MHz) Band IV (470 – 582 MHz) Band V (582 – 646 MHz)		
Real Estate	Real Estate at Terrestrial transmission sites will be available for monetisation		

#Does not include setup cost of disaster management sites and subsidy provision for provision of DD Direct+ STB

Transitioning to C&S/ Digital from Terrestrial will result in annual saving of ~INR 635 Cr. of opex towards Maintenance and operations and additional notional savings of INR 1294 Cr. planned towards up gradation of existing Terrestrial infrastructure.

If DD were to subsidize the cost of DD Direct box to INR 500 i.e. in line with the cost of Terrestrial antenna then the total cost of transition would translate into an investment of

INR 360 Cr. which will be lower than the planned cost of up gradation of Terrestrial infrastructure.

DD presently operates its Terrestrial transmitters in Band I (54 – 68 MHz), Band III (174 – 230 MHz) and Band IV (470 – 582 MHz) and has planned establishment of digital transmitters in Band IV (470 – 582 MHz) and Band V (582 – 646 MHz). ***Transitioning to Satellite Transmission would result freeing up of spectrum in Band I, III, IV and V and other assets such as real estate.***

Digital switchover in USA allowed freeing up of analog channels, 108 MHz in the 700 MHz band. A part of the vacated spectrum was used for⁸:

- ▶ Public safety communication at time of disaster (24 MHz)
- ▶ Commercial purposes (84 MHz)

The Group on Technology, Prasar Bharati concludes that moving from Terrestrial to DTH (DD Direct+) will not only meet all the requirements of public broadcast service but also improve the overall customer experience of TV households on Terrestrial and Analog Cable. In addition, the switch over to Satellite is cost effective as it result in annual operational savings of INR 635 Cr, and also free-up national assets such as spectrum, real-estate etc.

Option 2: Create an alternate technology platform i.e. Upgrade Terrestrial to DVBT2 to meet National and Regional Coverage

DD has an option to upgrade its existing Terrestrial infrastructure to DVBT2/DVBT2 Lite/ DVB-NGH/ DVB-NGH. This transition would allow DD to transmit digital high quality signals, transmit signals that can be received by handheld devices and generate additional bandwidth. DD Terrestrial transmission strength will enhance to accommodate about 8-10 channels/transmitter⁹ which would translate into total capacity of 150 regional channels (15*10). However, this will lead to underutilization of assets as Broadcasting of private channels is not allowed through Terrestrial network. Also, adoption of this new technology will be a challenge given that the Terrestrial caters to only 8% of the TV Household population.

It is important to note that UK has adopted DVBT2 and DVBT2 Lite technologies as it is one of the most expensive Pay-TV markets in the world. There is a need to promote and provide cheaper content through other platforms. UK TV market has a bi-polar structure with 10m Free view homes paying nothing for TV and close to 10m Sky homes paying an average of £490 a year.¹⁰

⁸ Spectrum rearming: Digital Switch over of US TV Broadcast Signals

⁹ Discussions with Doordarshan Technology Division

¹⁰ <http://www.guardian.co.uk/media/2010/mar/08/ofcom-pay-tv-bskyb>

Performance of DVBT2 and DTH (DD Direct+) on key parameters is provided below:

	Terrestrial	DVBT2	DD Direct+ (DTH)
Coverage	Average 85% for each state	Average 85% for each state	National (100% coverage)
Content: Quality of transmission	Analog	Digital – Allows SD and HD	Digital – Allows SD and HD
Content: Variety to consumer (number of channels)	2	8 – 10	59 (To be increased to 100 channels by end of 2013)
Cost to consumer: Cost of receiver and subscription cost	Cost of antenna ~ INR 500 Subscription Cost: Free	Cost of set-top box: >INR 2500* Subscription Cost: Free	Cost of set-top box: INR 800-1200 ¹¹ Subscription Cost: Free
Delivery of local/ regional content	Out of 19 hours of transmission on National Channel; 4 – 5 hours of local content across 15 states	Out of 19 hours of transmission on National Channel; 4 – 5 hours of local content across 15 states	11 regional channels. Currently the content available on 15 state networks is not available on DD Direct+. This content can be easily made available.
Scalability	Limited and very expensive	1 transmitter can accommodate upto 10 channels. Addition of more channels will be very expensive	Can be easily expanded at a marginal cost

*The price of a set top box is around 45 USD, based on DVB Fact Sheet- March 2013, produced by DVB Project Office. One USD is assumed equal to INR 55, on recent market currency equivalence.

Transitioning from Terrestrial to DVBT2/DVBT2 Lite/ DVB-NGH would require addressing of the following key areas:

¹¹ Discussions with Doordarshan Technology Division

1. Cost to consumer: Cost of TV receiver

DVBT2 receivers are currently not available in India and the cost of receiver is prohibitive in the current landscape. The price is expected to remain high as C&S and DTH are expected to remain the dominant distribution platforms limiting the opportunity size for DVBT2. For successful roll-out of DVBT2, GoI will have to highly subsidize the cost of receiver to the consumer and locally develop a DVBT2 compliant converter which can receive DVBT2 signals on non-DVBT2 compliant TV sets.

2. Variety to consumer

Adoption of DVBT2 will enhance DD Terrestrial transmission strength to accommodate about 8-10 channels/transmitter¹². Therefore, a viewer will have access to 10 channels instead of 1-2 channels currently available. However, the choice availability will still be low as compared to choice availability on C&S/ DTH platforms. Also, DD will have to attract popular private channels on Terrestrial to create an attractive value proposition for the viewer.

3. Presence on Mobile and Digital

Adoption of DVBT2: DVBT2 Lite/ DVB-NGH provides broadcasters to transmit signals that can be received by handheld devices using Terrestrial infrastructure. No country in the world has yet deployed DVBT2 Lite/ DVB-NGH. Also, the content available on DVBT2 will have the following challenges which will slow down the adoption of technology as users buy technology for content and convenience.

- ▶ Consumer cannot consume content as per choice and convenience as content transmitted through DVBT Lite is unidirectional
- ▶ Content availability will be limited. At most 10 channels will be available to consumer. Content available on content aggregator websites will not be available

¹² Discussions with Doordarshan

	DVBT2 Lite	3G/ 4G
Pros	<ul style="list-style-type: none"> ▶ Better QoS and is not constrained by bandwidth ▶ One-time cost of device and no recurring subscription/ rental cost 	<ul style="list-style-type: none"> ▶ Well-developed eco-system ▶ Integrated with mobile and tablets ▶ Active private participation in device eco-system and enhancing transmission technology ▶ Wide variety of content availability
Cons	<ul style="list-style-type: none"> ▶ Under-developed receiver eco-system ▶ Can provide only uni-directional content ▶ Limited content offering 	<ul style="list-style-type: none"> ▶ Constrained by bandwidth ▶ Quality dependent on bandwidth availability ▶ Regular subscription/ monthly rental cost for access

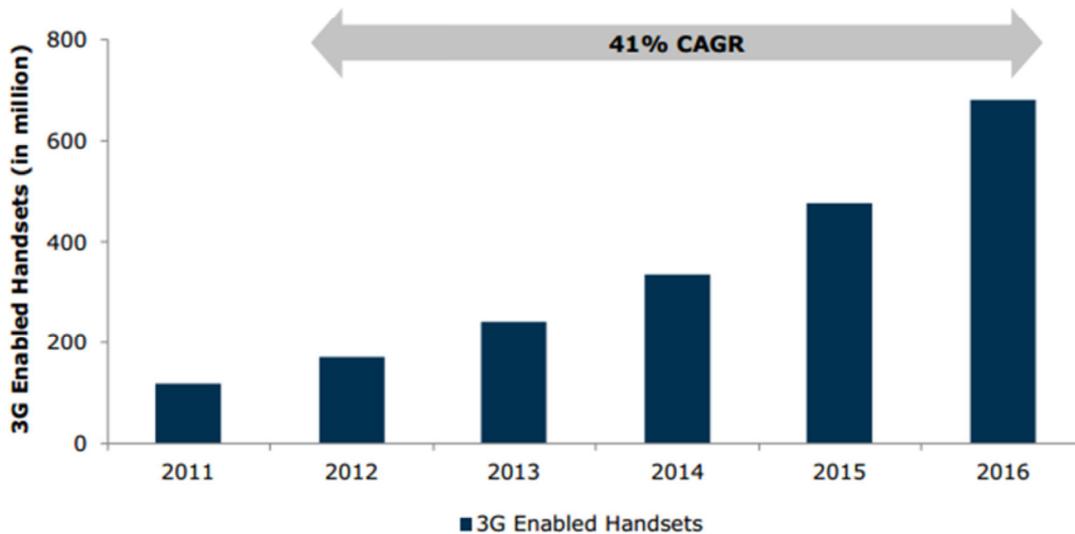
Cost of receiver for handheld devices: DVBT2 Lite was introduced in 2011 as an extension of DVBT2 to support mobile and portable TV. Its receiver ecosystem is still underdeveloped and price point is expected to remain high in near future. Tata Elxsi developed a DVB-H (earlier DVB version for handheld devices) enabled device priced in the range of \$80-\$100¹³. Similarly, rollout of DVB-NGH devices is expected around 2015.¹⁴ But it could not be deployed in market due to demand constraints and lack of content offering. Adoption for such technology will face several challenges from existing IP technologies which have a developed eco-system and significant private participation and investment.

As per Evalueserve estimates, 3G-enabled handsets (active installed handset base) in India are expected to grow at a compound annual growth rate of 41% between 2012 and 2016, to reach 680 million. Such wide-spread adoption of 3G handsets will present a challenge for adoption of DVBT2 enabled handsets.

¹³ Based on discussions at Seminar on DVBT2, held in New Delhi, 27-28 May 2013

¹⁴ <http://en.wikipedia.org/wiki/DVB-H#DVB-NGH>

Figure 6: Number of 3G Enabled Handsets



4. Utilization of additional bandwidth

Adoption of DVBT2 will enhance DD Terrestrial transmission strength to accommodate about 8-10 channels/transmitter¹⁵. This would translate into total capacity of 10 National channels per or combination of National and several regional channels. To optimally utilize the additional bandwidth created by adoption of DVBT2, DD has the following options:

1. **Increase channel bouquet:** To fill the additional bandwidth, DD would be required to generate additional content for new channels. This option would require significant investment in scaling up the existing content creation and storage capability of DD.
2. **Transform DD into a content and infrastructure company:** To fill the additional bandwidth, DD can explore sharing of Terrestrial infrastructure services with private broadcasters. This may require DD to form two-separate entities for content generation and transmission services. The entity managing the transmission services would follow a similar model as adopted by the telecom tower companies.
Provision of Terrestrial Broadcasting services will only be attractive to private players if:
 - ▶ Cost of transmission be significantly lower than the existing cost of transmission through C&S
 - ▶ There is a critical mass of audience base available on Terrestrial; establishing a critical mass will be a challenge as the channel bouquet available to a customer will be limited to only 10.
 - ▶ Presence of a viable receiver eco-system

¹⁵ Discussions with Doordarshan

3. Create content and storage infrastructure to support HD transmission

DVBT2 transmission allows for transmission of HD quality. To support HD transmission, it is critical for DD to create infrastructure such as studios, studio equipment that supports creation and storage of HD quality content.

Financial Implications

Since the receiver eco-system for DVBT2/ DVBT2 Lite/ DVB-NGH is not well developed in India, DD will have to operate both analog and digital transmission in parallel till the cost of receiver is affordable. The table below provides a snapshot of financial implications if both the systems were to run in parallel.

Case 1: Both analog and digital Terrestrial operations run simultaneously (First 3-5 years)

INR Cr	Terrestrial DVBT2	C&S (National + Regional)	DTH
Current Opex	635	47	41
Additional Capex (As planned in 11 th and 12 th plan)	1243*	229	186
Projected Opex	635	47	41
Savings in Opex	-		

Case 2: Complete transition to digital Terrestrial (After 3-5 years)

INR Cr	Terrestrial DVBT2	C&S (National + Regional)	DTH
Current Opex	635	47	41
Additional Capex for complete transition	1797*		
Projected Opex	420	47	41
Savings in Opex	215		

Transitioning to DVBT2/ DVBT2 Lite would not generate any operational savings in the transition phase of 3-5 years. However after transition, there will be operational savings of INR 215 cr. per annum.

The Group on Technology, Prasar Bharati concludes that moving to DVBT2/ DVT2 Lite is not a feasible option to meet the public service objective. Investment in DVBT2/ DVBT2 Lite/ DVB-NGH should only be considered if there is active participation from Private Sector to utilize the additional bandwidth.

Comparative evaluation –

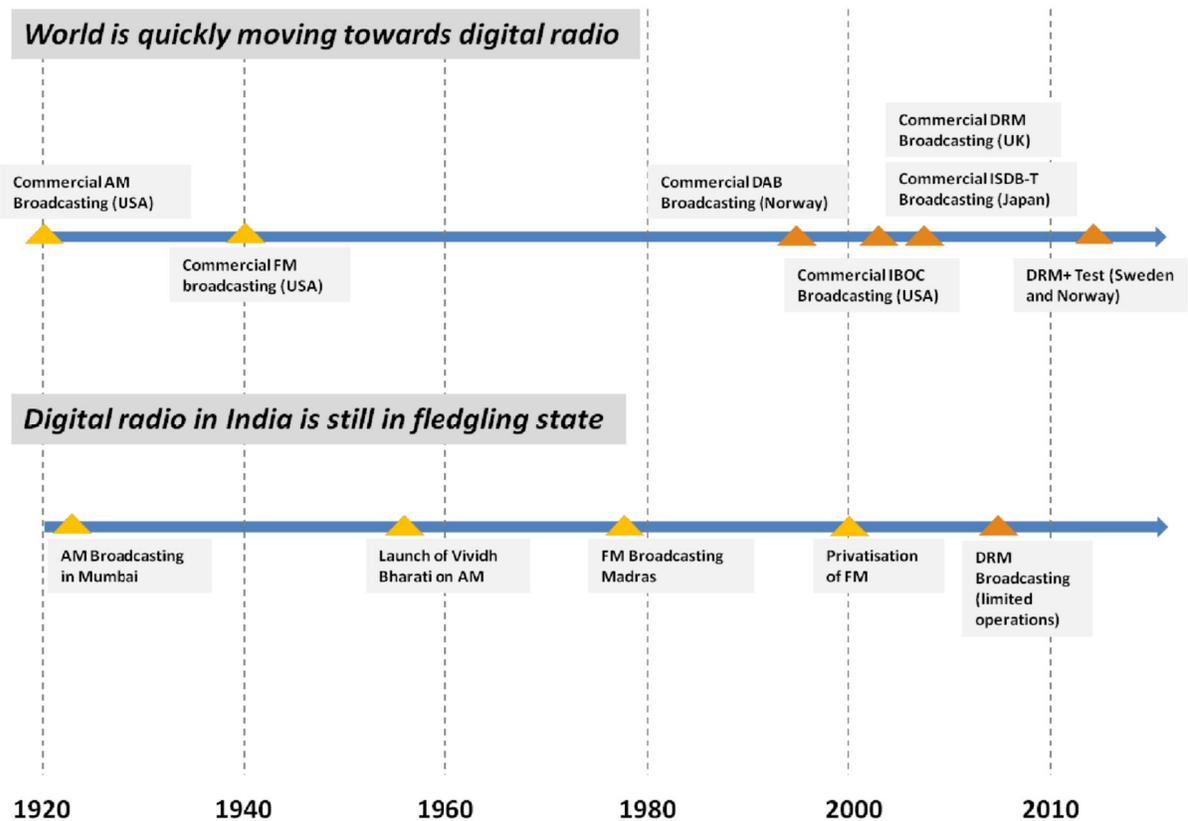
	Ability to meet public service objectives	Cost to consumer – Cost of receiver	Investment viability	Current penetration of Technology	Presence of Private Players	Quality of Service to Consumer
<u>Option 1</u>	National Reach	DD Direct+ @ INR 800 – 1200	Marginal investment that can be easily recovered through savings in opex	92% HH access television through C&S	Private Broadcasting is allowed	More variety and digital quality
<u>Option 2</u>	National Reach	>INR 2500	Significant investment of INR 3000 crores with no significant operational savings to recover the capex	8% HH access television through Terrestrial	Currently private Broadcasting is not allowed	Less variety and digital quality

5.4. Radio Broadcasting Technologies

As discussed in the earlier section, there is an increasing global trend of moving from Analog transmission technologies to Digital transmission technologies. Digital Radio transmission technologies provide benefits to both consumers and broadcasters. Some of these benefits include:

- ▶ Increase in efficiency in the use of spectrum
- ▶ Enhanced potential for public private partnership
- ▶ Launch of new and additional services for viewers
- ▶ Enhanced reception quality with added value added features
- ▶ Delivery on multimedia platforms

The adoption of digital technologies worldwide can better be understood through the following timeline:



1920-1980s was primarily the period of analog transmission via AM and FM transmission. Europe initiated the development of new digital radio transmission technologies in 1980s. Since then several digital standards have been developed in different parts of the world. Currently, there are 4 primary competing digital radio Broadcasting technologies, namely:

- ▶ DAB and DAB+
- ▶ DRM and DRM+

- ▶ IBOC
- ▶ ISDB-Tsb

DAB and DAB+: DAB is the European technology for digital radio and it was developed as a research project, EUREKA-147, for the European Union with the objective of imparting the European electronics industry a competitive advantage in digitalization of radio. DAB was originally developed for radio Broadcasting and later tailored for mobile reception. The system has been further upgraded to DAB+ that offers advanced coding and compression formats, leading to spectral efficiency.

Pros	Cons
<ul style="list-style-type: none"> ▶ Superior quality than analog systems ▶ Users can select available stations through a simple text menu ▶ Reduces interference ▶ Covers wide geographical areas with an even, uninterrupted signal ▶ Offers wide range of value added services such as text and data 	<ul style="list-style-type: none"> ▶ Not suited to serve the interests of local community radio ▶ Not forward compatible with DAB+, i.e. DAB-only receivers are not able to receive DAB+ broadcasts

DRM and DRM+: DRM Consortium, a group of European broadcasters and manufacturers, developed a digital system, DRM (Digital Radio Mondiale), in late 1990s to enable digital Broadcasting in AM bands. DRM is suitable for both local and national transmissions. It has been further upgraded to DRM+ to cater to the digitalization of FM. While DRM has already been adopted in many countries, DRM+ is still in trial phases in Scandinavian countries.

Pros	Cons
<ul style="list-style-type: none"> ▶ Superior quality than analog systems ▶ Suitable for both local and national coverage ▶ Better quality reception to AM listeners ▶ Robust to noise and other forms and interference in all bands ▶ More audio content and choice ▶ Extra multimedia content 	<ul style="list-style-type: none"> ▶ Underdeveloped device ecosystem ▶ Affordability of devices

IBOC: IBOC (In-band on-channel) or Hybrid digital (HD) radio is equivalent to the digital supplement to the existing analog FM radio. It is a United States standardized technology. IBOC, initially, was developed with an attempt to fight the digital challenge of Satellite and Internet radio and at the same time to preserve the existing economic structures and power relations of US Broadcasting industry. IBOC has the provision to add more channels and

services by Broadcasting one digital and one analog sound radio programs from the same FM transmitter.

Pros	Cons
<ul style="list-style-type: none"> ▶ Allows hybrid transmission ▶ Existing analog radios can be used ▶ More resistant to noise than analog systems ▶ Only digital system functional in AM bands 	<ul style="list-style-type: none"> ▶ Night time interference with other stations ▶ Reduced AM coverage at night ▶ Diminished building penetration ▶ Spectrally inefficient

ISDB-Tsb: It is a Japanese digital Broadcasting system and caters to both television and radio Broadcasting. It has several technical commonalities with European DAB and Digital Video Broadcasting (DVB). The basic motives of the Japanese authorities and electronics industry for developing their own digital Broadcasting system were not only to improve the European DAB and DVB technologies, but also to protect the Japanese electronics industry from the foreign competition. ISDB-Tsb is the Terrestrial digital sound Broadcasting specification while ISDB-T is video Broadcasting standard.

Pros	Cons
<ul style="list-style-type: none"> ▶ Compatible to simultaneously transmit different technical quality levels of content ▶ Robust against fading and interference ▶ Capable of providing CD-quality sound ▶ Offers data services 	<ul style="list-style-type: none"> ▶ Not predominantly adopted worldwide ▶ Price and affordability is a concern

The following section presents the comparative analysis of the radio transmission technologies.

5.5. Comparison of Radio Broadcasting technologies

	Type of Technological innovation	Digital/ Analog	Coverage	Frequency spectrum	Noise/ Interference	Device eco system	Challenges	Extent of adoption
MW	Radical (led to inception of commercial radio Broadcasting)	Analog (primarily)	Medium-Long range – National/ Regional Coverage	Operates in Medium Frequency, MF(300 kHz to 3 MHz)	Higher than FM	Fully developed	Quality and spectral efficiency	Worldwide
SW	Radical (emerged from limitations of MW)	Analog (primarily)	Long range– National/ Regional Coverage	Operates in High Frequency and upper MF	Higher than FM due to atmospheric interference	Fully developed	Audio quality inferior to FM	Worldwide
FM	Radical (emerged from limitations of AM)	Analog (primarily)	Short range – Regional/ Local Coverage	VHF	Less than AM	Fully developed	Limited coverage	Worldwide
DAB (Digital Audio Broadcasting)/ DAB+	Radical (digital successor of FM)	Digital	Long range – National Coverage	VHF and L-band spectrum.	Overcomes the interference problem experienced in AM and FM broadcast	Components are widely available	Not suitable for local and community broadcast	UK, Germany, Finland, Denmark, China, Canada, Ireland, Hungary, Hong Kong, Greece

DRM (Digital Radio Mondiale)/ DRM+	Modular (based on digitalizing AM and FM)	Digital	Can cover very large areas	DRM operates on AM band frequencies (till 30 MHz), DRM+ operates on FM band frequencies (>30 MHz)	Robust against fading and interference	Not fully developed; Components are available; however affordability and price are a concern.	Availability of inexpensive receivers	Brainchild of the EBU (European Broadcasting Union)
IBOC (In-Band, On Channel)	Modular (based on AM and FM utilization, similar system to DAB)	Digital and analog (hybrid model)	Coverage range and service areas depend on station class	Works on AM and FM frequency bands	Potential interference with adjacent channels	Developed - Components are widely available	Spectral efficiency	France, Germany, Indonesia, Jamaica, Mexico, New Zealand, Switzerland
ISDB-Tsb (Integrated Services Digital Broadcasting-Terrestrial Sound Broadcasting)	Architectural (DAB and DVB as base)	Digital	Provides network plan for long range	Needs VHF-band	Robust against fading and interference	Components are available	Price and affordability is a concern.	Brazil, Peru, Argentina, Venezuela, Paraguay, Philippines, Bolivia, Nicaragua and Uruguay

The Planning Commission's Sub Group on "Going Digital" evaluated the digital technologies for adoption in Indian scenario and recommended adoption of DRM for digitalization of radio in India. As on date, DRM+ standard has also now been developed and approved by ITU last year.

While most developed countries have adopted digital radio transmission technologies, India is still Broadcasting through conventional technologies viz AM and FM Broadcasting. India decided to adopt DRM in 2007 after trials. However, no substantial implementation towards digitalization of radio through DRM has been done.

5.6. Recommended Option for AIR

AIR currently reaches to 99% of Indian population through AM (MW and SW) and FM transmissions. To reach to international audiences AIR uses AM SW transmissions. AM allows delivery of regional/ local content across states/ regions, while FM is more localized and offers content across cities. Therefore, AM transmission helps deliver on public service objective by providing maximum reach. FM reaches out to only 43% of the Indian population and therefore should be evaluated only from a commercial objective.

Though AM transmission covers 98.4% of the Indian audiences, however the transmission quality remains an issue. AM allows for only mono-quality sound as compared to FM which provides stereo- quality sound. Therefore, it is critical for Prasar Bharati to consider new transmission technology for AM to remain relevant to its audiences. Since the future of the broadcast media industry is in digital content production and transmission, the transmission technology choice for AM should allow for digital transmission. The technology choices available to AIR are:

Type of transmission	Current extent of coverage	Quality		Commercial availability of technology	Availability of receivers	Private player participation
		Analog/Digital	Consistent/Inconsistent			
MW	National	Analog (Mono)	Consistent	Yes	Yes	No
SW	International	Analog (Mono)	Inconsistent	Yes	Yes	No
FM	Regional	Analog (Stereo)	Consistent	Yes	Yes	Yes
DRM	NA	Digital	Consistent	Yes	No	No

The group took a strategic point of view to evaluate the merit in switching off MW transmission and moving to digital platform to improve quality of service to consumers and to meet the other Public Service objectives. The option of transitioning to SW for National or Regional coverage has not been considered because of the fading issues which do not deliver consistent quality to user. The Group on Technology recommends maintaining a status-quo on SW to meet International reach by using SW. To further enhance the international reach, AIR can lease SW relays in Europe to reach to locations such as USA etc.

To meet the national and regional coverage the Group on Technology has shortlisted the following options:

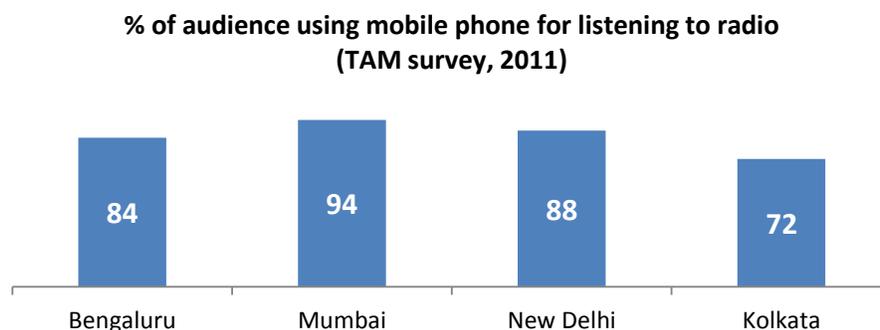
- Option 1. Move from MW to FM
- Option 2. Move from MW to DRM

Each of these options has been evaluated in detail across critical parameters to ensure that Prasar Bharati's public service objectives are not compromised and there is enhancement in quality of service to the consumer.

Option 1: Move from MW to FM

AIR currently reaches to 43% of the Indian population through regional FM transmission. Given that FM provides significantly better quality than MW, AIR can consider transmitting

through FM for national coverage. Apart from the quality, the growing popularity of FM in India, because of widespread use of FM following the integration of FM in the mobile phones, presents a case for transitioning to FM for complete AM coverage given that mobile phone is the most popular device for accessing radio, as per the table below.



Performance of FM Transmission on critical factors is provided below:

Key Parameters	MW	FM
Coverage	98.4% of Population Coverage 91% of Geographical Coverage	43% of Population Coverage 31% of Geographical Coverage
Content: Quality of transmission	Analog (Mono)	Analog (Stereo)
Content: Variety to consumer	Low, private players not present	High, presence of private players
Cost to consumer: Cost of receiver	Cost of Receiver: ~INR 200	Cost of Receiver: ~INR 200
Presence on Mobile handsets	No	Yes

Presence on Mobile handsets: FM broadcast can easily be received on mobile handsets as most of these devices have an in-built FM capability. It gives FM a distinct advantage over MW transmission as Mobile handsets are expected to drive the content demand in the future.

Financial Implications

INR Cr	MW	FM
Current Opex	800	543
Additional Capex	-	7000
Projected Opex	-	2073
Savings in Opex	-	-1273
Break-even (Years)	-	NA

Transitioning to FM from MW is not commercially feasible. The transition process will require additional capital expenditure of INR 7000 Cr. to expand the current FM infrastructure. In addition the annual maintenance and operational expense will increase to ~1273 cr per annum. Even though FM offers better quality than AM it does not allow for digital transmission and therefore the transitioning to FM for national coverage should not be considered.

Option 2: Move from MW to DRM to meet National coverage while using FM for Regional coverage

The Group on Technology, Prasar Bharati recommends that AIR should transition to DRM from MW to meet requirements of national/ regional coverage and can continue to reach out to the local audiences through FM. DRM will offer significantly better quality as compared with AM and FM because of its digital transmission. DRM has been proven to be particularly good for rural coverage and listeners on the move, providing digital quality on efficient AM transmissions.

Performance of DRM and MW on key parameters is provided below:

Key Parameters	MW	DRM
Coverage	98.4% of Population Coverage 91% of Geographical Coverage	It will provide the same coverage as from the MW transmission
Content: Quality of transmission	Analog	Digital
Content: Variety to consumer	Low, private players not present	Will generate additional bandwidth which can allow private participation and therefore variety to consumer will increase
Cost to consumer: Cost of receiver	Cost of Antenna: ~INR 200	Cost of receiver: ~INR 2000
Presence on Mobile handsets	No	No

Transitioning from MW to DRM would require addressing of the following key areas:

1. Cost to consumer: Cost of DRM receiver

To create an attractive value proposition for the user, it is critical to build an eco-system that provides affordable receivers to ensure uptake of DRM. DRM receivers are currently not available in India and the cost of receiver is prohibitive in the current landscape. Globally there has been a reduction in the cost of DRM receiver; however the cost of DRM receiver is still not affordable. The cost of receiver has reduced from INR 40,000 in 2005 to INR 6,000 in 2012¹⁶. Assuming a similar decline in the prices, the DRM receiver price will remain over INR 500 till 2022.

However, adoption of DRM as primary mode of transmission can accelerate the price reduction given the opportunity size India presents. There are approximately **275mn static AM and FM receivers, 175mn FM phones in India**. As per the below analysis conducted by the DRM consortium, as the demand for DRM receivers increases from in hundreds to in millions, the price of the receiver will reduce at least 10 times.

¹⁶ DRM Consortium

Cost (Estimates)	In Millions	In 100s
eBOM	\$x	\$8x
Shipping, Insurance & Clearance	\$0.03x	\$0.5x
Tooling and moulds	\$0.2x	\$5x
Manufacturing	\$0.1x	\$5x
Overheads	\$0.1x	\$5x
Others	\$0.07x	\$2.5x
Total	\$1.5x	\$26x
End-market price	\$3x	\$30x

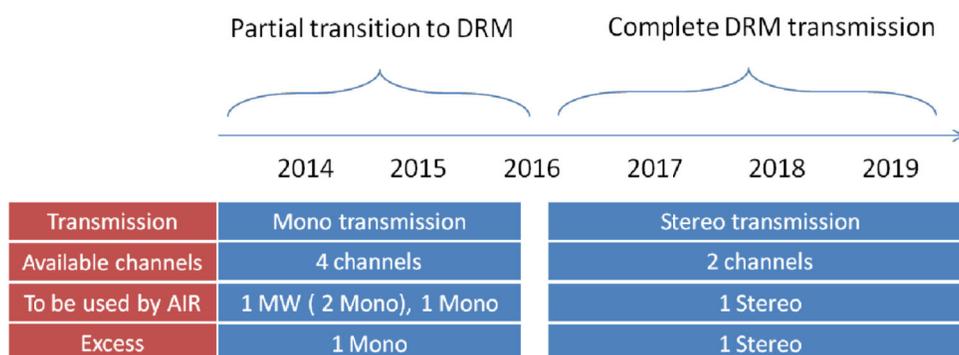
If the current 275 million AM and FM static receivers in India are to be upgraded to become DRM enabled, the demand of DRM receivers will provide a significant reduction in the DRM receiver cost. However, to successfully achieve price reduction the following steps are suggested:

- 1. Announce the sunset date for radio digitization:** It is critical to signal to Industry the adoption of DRM. Announcement of a sunset date would catalyze the industry to plan and address the demand.
- 2. 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. After launch, Government of India can provide partial subsidy for the short term to drive the initial adoption of the technology. However, this option is not sustainable during medium to long term.
- 3. Invite private players to provide DRM transmission:** To increase the uptake of DRM 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. DRM provides more audio content and choice as it offers up to four programmes on one frequency. The new digital transmissions can also co-exist with the current analog broadcasts. Digital radio transmissions can carry more than pure audio content. Through DRM, digital radio listeners can get multimedia content including audio, text, images and in future even small-scale video. This move will accelerate adoption which will translate into development of DRM receiver ecosystem. 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.
- 4. Optimal utilization of bandwidth**

Shifting to DRM from MW will increase the bandwidth which can be used for the transmission of 4 Mono channels or 2 Stereo channels. Though AIR can provide the

Stereo transmission, but as the devices ecosystem needs private participation, it is suggested that AIR provides the Mono transmission during the transition to DRM, as this will provide additional bandwidth which can be shared with the private players.

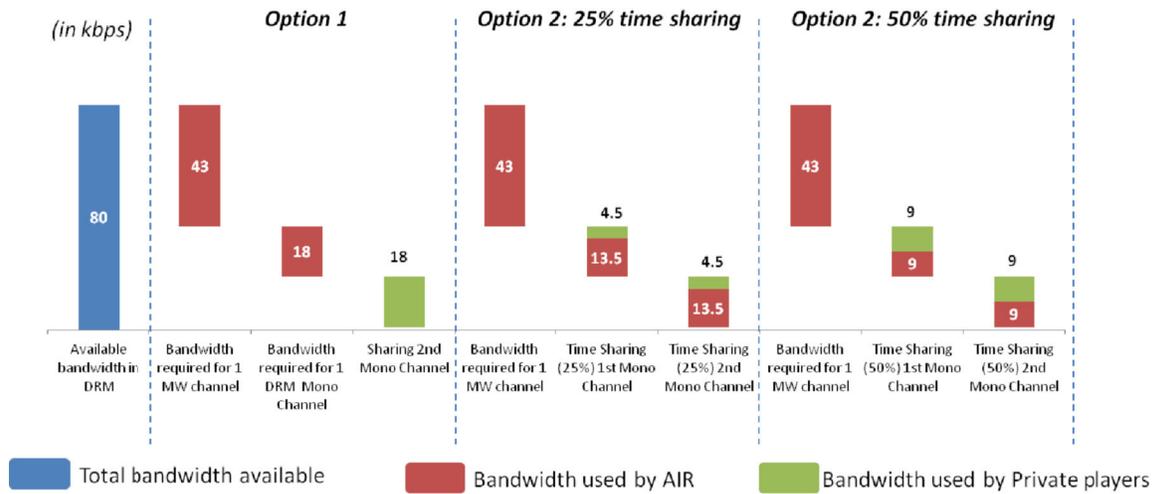
It is expected that the complete transition to DRM transmission will be done by 2016. It is suggested that AIR continues with a simultaneous broadcast of MW transmission till 2016 to consistently deliver on the social responsibility. After the complete transition, AIR should shift to Stereo transmission.



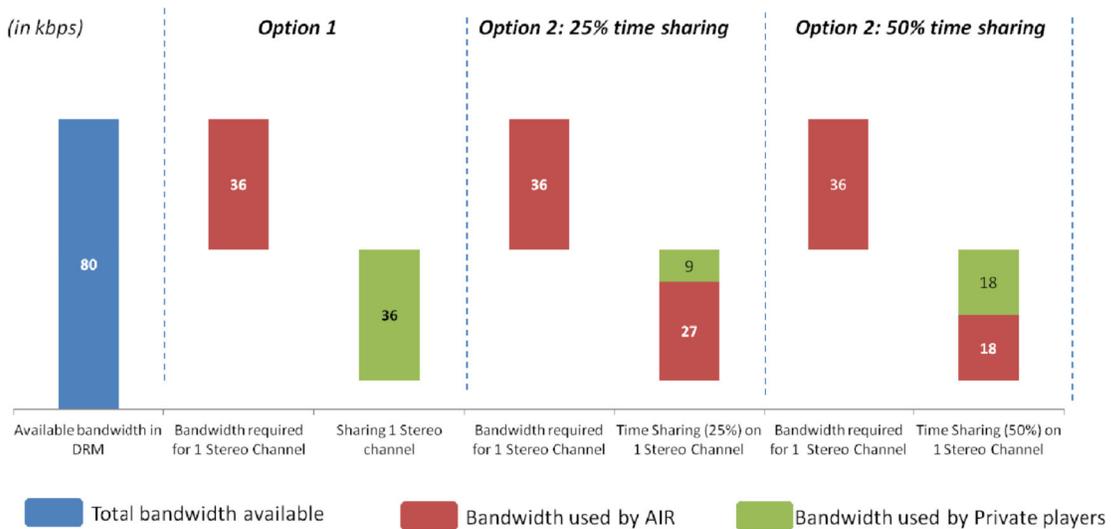
Transforming AIR into a content and infrastructure company

To fill the excess capacity of 1 mono channel during transition and 1 stereo channel after the transition, AIR can explore sharing of DRM infrastructure with private broadcasters. This may require AIR to form two-separate entities for content generation and transmission services. The entity managing the transmission services would follow a similar model as adopted by the telecom tower companies. The entity managing the transmission services will have the following options:

During the transition to DRM: AIR would have the excess capacity of 1 mono channel, given that it will continue to transmit MW until complete transition to DRM is achieved. AIR has two options of sharing this additional bandwidth with the private players as shown in the chart below:



After complete transition to DRM: At this stage, AIR would have an additional bandwidth of 1 stereo channel given that AIR will be providing stereo transmission for National coverage after 2016. AIR has two options of sharing this additional bandwidth with the private players as shown in the chart below:



5. Develop Indian standards: As the market for DRM receivers is in a nascent /evolving phase, there is an opportunity to create Indian standards for DRM receivers as AIR shifts to DRM. Given that the worldwide adoption of Digital radio will only increase in the future, India can take a lead in the DRM receiver market by creating Indian standards. This initiative will drive the production of DRM receivers in India and hence would positively contribute in developing the DRM receiver market in India and subsequently, in reducing the cost of the receiver.

- 6. Presence on Mobile handsets:** Currently, DRM is not available on mobile handsets. However, as DRM is launched country-wide, it is expected that a fully-integrated solution to provide DRM on mobile devices will be available at a low cost to consumer.
- 7. Assess the business case of shifting to DRM+ for Regional coverage:** As DRM+ provides digital transmission, shifting to DRM+ from FM would further enhance the consumer experience. Prasar Bharati can analyze the business case of shifting to DRM+ for Regional coverage once the transition to DRM is complete for the National coverage, the private participation has been established and the standards for DRM+ are operational. Prasar Bharati should not shift to DRM+ from FM for Regional coverage at this juncture because the standards for DRM+ were defined in 2012 only and it would not be operational before 2018, as per an industry estimate.

Financial Implications

Case 1: Without infrastructure sharing with the private players

INR Cr	MW	DRM
Current Opex	800	-
Additional Capex	-	697
Projected Opex	-	615
Savings in Opex	-	185

Transitioning to DRM from MW will result in annual saving of ~INR 185 Cr. of opex towards Maintenance and operations and an additional capital expenditure of INR 697 Cr. planned towards developing the DRM infrastructure.

Case 2: With infrastructure sharing with the private players as described in the section above

AIR can recover the Capex and Opex while shifting to DRM by allowing the private players to use the excess infrastructure and levy a fee based on the usage of the bandwidth.

(in INR Cr.)	Option	During transition to DRM			Post transition to DRM		Total	No. of DRM transmitters planned	Cost per transmitter to the private player per year
		FY13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18			
% Infrastructure sharing with private players	Option 1	25	25	25	50	50			
	Option 2 (25% time sharing)	12.5	12.5	12.5	12.5	12.5			
	Option2 (50% time sharing)	25	25	25	25	25			
Revenue to AIR from Infrastructure sharing	Option 1	189	189	189	377	377	1320	110	2.4
	Option 2 (25% time sharing)	94	94	94	94	94	472	110	0.9
	Option2 (50% time sharing)	189	189	189	189	189	943	110	1.7

The assumptions for the above analysis can be found in the Appendix 7.4

As can be seen from the above analysis, the cost to the private player for using the infrastructure would be under INR 2.4 Cr. per transmitter per year. Given the attractive pricing for the private player, sharing infrastructure would attract the private players and would result in development of the DRM receivers market.

Given the favourable financial implications, along with the digital quality signals to the end consumers, it is a progressive option which would need active participation from the private players to be efficiently delivered. Also, as Prasar Bharati has planned to expand the regional coverage by FM from 43% to 65%, the Group on Technology recommends that this expansion should only be carried out if found commercially feasible.

Overall Recommendations/ comparative evaluation –

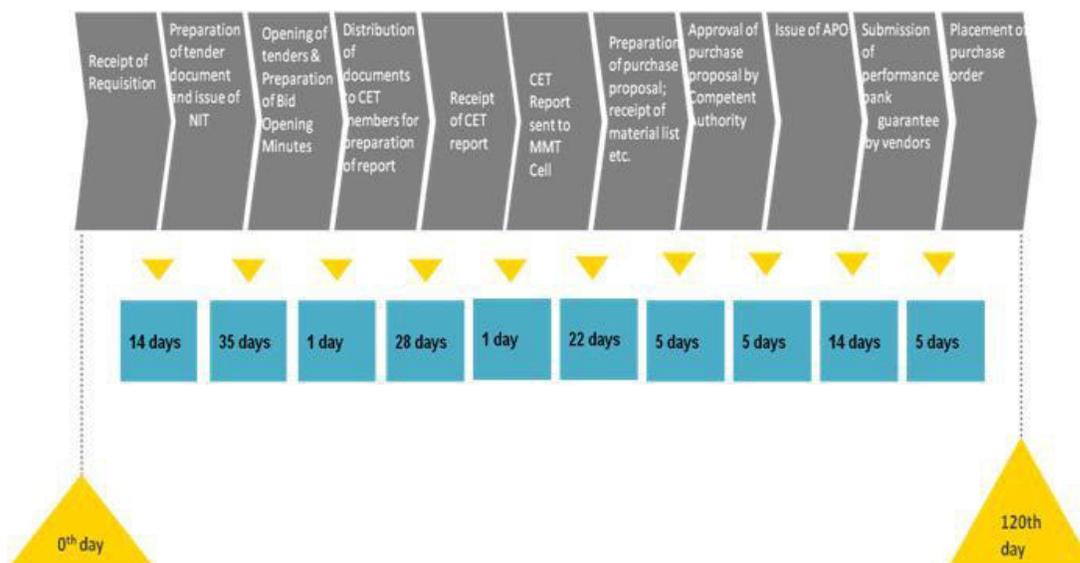
	Ability to meet public service objectives	Cost to consumer – Cost of receiver	Investment viability	Current penetration of Technology	Presence of Private Players	Quality of Service to Consumer
<u>Option 1</u>	National Reach	FM ~ INR 200	Significant investment of INR 7000 crores with no operational savings to recover the Capex	43%	Yes	More variety and better quality
<u>Option 2</u>	National Reach	DRM ~INR 2000, FM ~ INR 200	Investment of INR 697 crores with operational savings of INR 185 crores to recover the capex in 2.5 years	NA	NA	Significantly high variety and digital quality

Given the advantages to consumer, operational savings, financial viability of investment and freeing of up national resources in Option 2, the Group on Technology, Prasar Bharati recommends adoption of Option 2 as a strategic roadmap for AIR's transmission strategy.

5.7. Procurement process

Current procurement process at Prasar Bharati is time consuming and has not been able to keep pace with the development of technology. Current procurement processes take a long time between choosing a technology and its actual procurement and installation and by this time, the technology moves towards obsolescence.

A snapshot of the To-Be procurement process is provided below:



The technology committee, cognizant of the delay in the procurement process, recommends the following:

- A. Preparation of new procurement manual: In order to streamline/quicken the procurement process, a new Procurement Manual may be prepared for Prasar Bharati to achieve the following:
 - ▶ To cover all activities such as forecast of material to be procured, procurement process, methodology of procurement and vendor rating system etc.

- ▶ To lay down the timelines for various activities in the procurement process
- ▶ To benchmark the procurement process against other PSUs and other similar organizations

The Group committee also recommends that procurement manual should be periodically reviewed so as to be in tune with the requirements of the organization.

B. Exploring methods of procurement: The Group opines that it is essential to take an overall view of cost of material, time of procurement, method of procurement as well as business opportunity for any project. The following procurement methods may be adopted on a situational basis:

- ▶ Open tender route
- ▶ Limited tender route
- ▶ Expression of interest route
- ▶ Negotiations route

5.8. Content production and storage

The Group on Technology, Prasar Bharati recommends that the choice of technology for content production and storage should be customised based on the needs of content strategy. The content strategy would define the quality and complexity of the product design which will further define the choice of technology. Based on the current industry landscape and broad requirements of consumers, The Group on Technology has determined the following key themes that will influence the choice of content creation and storage technology independent of content strategy:

1. Increasing popularity of HD content
2. Multiplatform delivery - Increasing consumption of video and audio content on mobile and other digital platforms
3. Tapeless workflows
4. Interactivity

It is expected that in future SD content will be replaced by HD content. It is observed that expensive content such as sports, movies, reality shows and event based shows have already transitioned to HD production and several private General Entertainment Channels, Sports Channels and Movie Channels have started offering HD feeds of their channels. Therefore it is critical for DD to setup infrastructure for HD production, storage and transmission. Consumption of content on digital platforms is increasing manifold. Content genres such as News and Entertainment have high affinity on digital platforms. Entertainment content especially in HD quality has high uptake. Therefore it is critical for DD to adopt technology solutions that allow for digital content production, storage and transmission.

To address the impact of these key themes, the following audience facing touch points along with the technology/ enterprise platforms been evaluated in the table below:

Audience facing	Technology/ enterprise platforms impacted
Online streaming	<ul style="list-style-type: none"> ▶ Digital production system, end-to-end digital workflow that dynamically moves media through the production process ▶ Integrated post production systems that allow simultaneous publishing of content on all platforms ▶ Storage and file management systems that will allow integration of multiple workflows and formats – news, sports, feature programming, VOD, archives in SD and HD – under one system to enable play out, editing, archives, web or mobile ▶ Planning, commissioning & scheduling systems ▶ Desktops and enterprise portal
On-demand	<ul style="list-style-type: none"> ▶ Development platforms such as enterprise search solutions and server ▶ Archiving systems ▶ Highly flexible and cost-effective IP networks ▶ Media Asset and metadata management
Online interactive	<ul style="list-style-type: none"> ▶ Publishing systems ▶ Content acquisition ▶ Media Asset and metadata management ▶ Data centres & technology accommodation platforms ▶ Marketing, Communications and Audiences Tools
Mobile (consumer) platforms	<ul style="list-style-type: none"> ▶ Common framework for easily adapting and distributing TV services for any platform or device ▶ Archive management ▶ External collaboration and storage systems
High definition content	<ul style="list-style-type: none"> ▶ Digital cameras (tape-less) ▶ HD enabled cameras ▶ Post production systems such as finishing tools, inc: video editing, graphics, grading, dubbing ▶ Field production facilities ▶ Competent business systems and networks ▶ HD enabled studios, multi-cam setup ▶ HD playout facilities
Tapeless Work-flow	<ul style="list-style-type: none"> ▶ Fiber-connectivity among studios, production houses etc. ▶ DAM – Digital Asset management System

However adoption of these technologies should be evaluated considering the following key considerations:

1. Identification of content/ genres that will have high uptake on digital

2. Identification of content/ genres that will require HD production
3. Selecting content/ genres that will be produced in-house
4. Value proposition in producing the selected content in-house
5. System integration – All phases content production, storage and transmission should be integrated
6. High rate of technology obsolescence – Investment in technology should be considered keeping in view the high rate of technology obsolescence

Please note that the detailed study of Content archival is out of the scope of this study and therefore, has not been analysed.

Annexure

6.1. List of TV channels available on Doordarshan's DTH "DD Direct+"

Name of TV channel	Language
1. DD-1	Hindi
2. DD News	Hindi
3. DD Sports	Hindi
4. DD India	Hindi
5. DD Bharati	Hindi
6. DD Bangla	Bangla
7. DD Chandana	Kannada
8. DD Girnar	Gujarati
9. DD Kashir	Kashmiri
10. Shri News	Hindi
11. Aastha Bhajan	Hindi
12. B 4 U Movies	Hindi
13. Disha	Hindi
14. DD North East	Assam.
15. DD Oriya	Oriya
16. DD Podhigai	Tamil
17. DD Punjabi	Punjabi
18. DD Sahyadri	Marathi
19. DD Saptagiri	Telugu
20. DD Malayalam	Malyalam
21. Lok Sabha	Hindi
22. Rajya Sabha	Hindi

23. Sanskar	Hindi
24. Dhangal	Hindi
25. Sadhna National	Hindi
26. DD Bihar	Hindi
27. 9X	Hindi
28. 9XM	Hindi
29. Time TV	Punjabi
30. Vyas TV	Hindi
31. News 24	Hindi
32. Aastha TV	Hindi
33. ETC Bollywood	Hindi
34. What's on India	Hindi
35. TV 24	Hindi
36. Zee Jagran	Hindi
37. Cinema TV	Hindi
38. P-7 News	Hindi
39. Day & Night News	Hindi
40. Gyandarshan-1	Hindi
41. Kaatyayani	Hindi
42. News Express	Hindi
43. Mangal Kalash	Hindi
44. DD Urdu	Urdu
45. Star Utsav	Hindi
46. Smile TV	Hindi
47. B4U Music	Hindi

48. Gyandarshan-2	Hindi
49. DW TV	English
50. News X	English
51. NHK World	English
52. Sahara Aalami	Urdu
53. India News	Hindi
54. Russia Today	English
55. Sahara Samay	Hindi
56. Enter 10	Hindi
57. Divya	Hindi
58. News Nation	Hindi

6.2. List of Doordarshan Channels

<u>DOORDARSHAN CHANNELS</u>			
	All India Channels		Language
1	DD-1	National Channel	Hindi
2	DD News	News Channel	Hindi/ English
3	DD Sports	Sports Channel	Hindi/ English
4	DD Bharati	Enrichment / Cultural Channel	Hindi
5	DD Urdu	Urdu Channel	Urdu
6	DD HD		
	Regional Channels		
7	DD-4	Malayalam	Malyalam
8	DD-5	Podhigai	Tamil
9	DD-6	Oriya	Oriya
10	DD-7	Bangla	Bengali
11	DD-8	Saptagiri	Telugu
12	DD-9	Chandana	Kannada
13	DD-10	Sahyadri	Marathi
14	DD-11	Girnar	Gujarati
15	DD-12	Kashir	Kashmiri
16	DD-13	North East	Assamese
17	DD-18	Punjabi	Punjabi
	State Networks		
18	DD-14	Rajasthan	Hindi

19	DD-15	Madhya Pradesh	Hindi
20	DD-16	Uttar Pradesh	Hindi
21	DD-17	Bihar	Hindi
22	DD-19	Himachal Pradesh	Hindi
23	DD- 20	Jharkhand	Hindi
24	DD-21	Chhatisgarh	Hindi
25	DD-22	Haryana	Hindi
26	DD-23	Uttaranchal	Hindi
27	DD-24	Tripura	Kokborok/ Bengali
28	DD-25	Mizoram	Mizo
29	DD-26	Meghalaya	Khasi/ English
30	DD -27	Arunachal Pradesh	Hindi/ Mixture of local dialects
31	DD – 28	Manipur	Manipuri/ Mixture of other tribal dialects
32	DD – 29	Nagaland	Nagamese/ English
	International Channel		
33	DD India		Hindi/ English

6.3. Details of Financial Analysis for Doordarshan

Capex planned for Terrestrial (11th and 12th Plan)	
<i>11th Plan</i>	INR Lakhs
Analog	19570
Digital	34900
<i>12th Plan</i>	
Analog	23060
Digital	51840
Total Capex	129370

Capex planned for Satellite (11th and 12th Plan)	
<i>12th Plan</i>	INR Lakhs
Upgradation of uplinking facility-hardware, software for teleport, playout systems etc	15900
Connecting DDKs, HPTs, Earth Stations, CP&S, DMCs, Zonal offices and its Godowns and DG	500
Connecting all Doordarshan Kendras with RNUs, CPC: DD, DTH Todapur, PGFs with narrowcasting facilities, and Terrestrial transmitters with narrowcasting facilities	6500
Setup of disaster recovery site	NA
Total Capex	22900

Capex planned for DTH Service (11th and 12th Plan)	
<i>12th Plan</i>	INR Lakhs
Expansion of DD Direct+ service up to 300 channels	
Up gradation of MPEG-2 DVB-S streams with MPEG-4 DVB-S2 to accommodate additional channels	
Total Capex	18600

Capex planned for complete transition to DVBT2/Lite		
	Number of Transmitters	Cost/ Transmitter (INR Lakhs)
HPT Existing Sites	130	800
LPT	400	100
HPT New Sites	100	1600
Total Capex		304000

Cost of operations for Doordarshan (Terrestrial)		
<i>Cost of operations for DD1</i>	INR Lakhs	Number of transmitters
Maintenance & bandwidth cost for HPT	87	138
Maintenance & bandwidth cost for LPT	44	733
Maintenance & bandwidth cost for VLPT	8	354
Total Cost DD1	47090	
<i>Cost of operations for DD News</i>		
Maintenance & bandwidth cost for HPT	87	73
Maintenance & bandwidth cost for LPT	44	78
Maintenance & bandwidth cost for VLPT	8	17
Total Cost DD News	9919	
Spectrum Charges	6500	
Cost of Operations DD	63509	

Cost of operations for Satellite Transmission (National Channels)	
<i>Uplinking Cost</i>	INR Lakhs
CPC New Delhi	145.72
DDK Delhi	593.51
HPT Pitampura	593.51
Total Cost	1332.74
<i>Maintenance</i>	
Average maintenance cost of an Earth station	158
No of earth stations	3
Total Maintenance Cost	474
Total Cost of operations	1806.74

Cost of operations for Satellite Transmission (Regional Channels)	
<i>INR Lakhs</i>	11 channels
Operational expenditure per channel	148
<i>Total Operational expenditure</i>	1632
Maintenance expenditure per channel	118
<i>Total maintenance cost</i>	1293
Total cost of operations	2924

Cost of operations for DVBT2	
<i>Maintenance and Bandwidth</i>	INR Lakhs
CPC New Delhi	145.72
DDK Delhi	593.51
HPT Pitampura	593.51
Total Cost	1332.74
<i>Maintenance</i>	
Average maintenance cost of an Earth station	158
No of earth stations	3
Total Maintenance Cost	474
Total Cost of operations	1806.74

Cost of operations for DVBT2		
<i>Cost of operations for DBVT2</i>	INR Lakhs	Number of transmitters
Maintenance & bandwidth cost for HPT	87	230
Maintenance & bandwidth cost for LPT	44	400
Maintenance & bandwidth cost for VLPT	8	-
Total Cost DD1	37496	
Spectrum Charges	4600	
Cost of Operations DD	42096	

6.4. Details of Financial Analysis for AIR

Cost of operations for FM for National coverage	INR Cr
Operational expense per transmitter	1.5
Spectrum expense per transmitter	0.03
<i>Current no. of transmitters</i>	355
Current Opex	543.15
<i>No. of additional transmitter for National coverage</i>	1000
Additional Opex required	1530
Projected Opex	2073.15

Assumptions for the financial analysis for Case 2: With infrastructure sharing with the private players:

1. The total available bandwidth with DRM is 80 kpbs. Out of this, 40kpbs will be required for MW transmission during the transition; 20 kpbs will be required for a DRM channel by AIR. Hence, till 2016, only 20 kpbs can be shared with the private players. After 2016, 60kpbs can be available to the private players.
2. The additional infrastructure can be given to the private players in two ways:
 - a. Complete sharing: The private player uses 100% of the bandwidth for a channel
 - b. Time-sharing: The private player uses the bandwidth of a channel for some time during a day (for example, 50% time-sharing would indicate that the private player can use the channel for 12h in a day)
3. Additional Capex for DRM: Rs.697 Cr.
4. Additional Opex for DRM: Rs.615 Cr. per year
5. It is assumed that private players would pay a fraction of Capex and Opex as per the bandwidth used

REPORT OF THE EXPERT GROUP ON BUSINESS DEVELOPMENT

This report was developed after 5 meetings on different days at IIT Delhi. The members present for discussing, analyzing & developing this report were as follows:-

1. Dr C Muralikrishna Kumar, Senior Advisor, Planning Commission
2. Ms. Vibha Desai, former Executive Director, Ogilvy and Mather
3. Mr. V K Jain, Additional Director General, Doordarshan
4. Dr. Mahim Sagar, Associate Professor, Department of Management Studies, IIT Delhi (Convener)

The other members of the group namely (i) Dr Sunil Kapoor, Educational entrepreneur and Member Prasar Bharati (ii) Mr. Ajay Khanna, President, Jubilant Expert Group and former DDG, Cofederation of Indian Industries (CII) and (iii) Dr. Jai Menon, Director, Global Innovation & IT and Expert Group CEO, Bharati Enterprises, were unable to attend any meetings of the Group. The group acknowledges the contribution of Shri R.K. Gupta, Advisor Planning Commission as he was specially invited for the deliberations. The Group also acknowledges all the experts who have shared their thoughts with the Group. The Convener Dr. Mahim Sagar will send a formal letter acknowledging their contribution.

(Dr. C. Muralikrishna Kumar)
Member

(Ms. Vibha Desai)
Member

(Mr. V. K. Jain)
Member

(Dr. Mahim Sagar)
Convener

1.1 INTRODUCTION

An Expert Committee has been set up to review the functioning of Prasar Bharati by the Ministry of Information and Broadcasting. The committee during the first meeting on 4th February 2013 decided to set up Expert Groups consisting of domain experts and key stakeholders to look at specific issues related to the Prasar Bharati. Accordingly, an expert group on Business Development has been set up with the following members:

1. *Dr Sunil Kapoor, Educational entrepreneur and Member Prasar Bharati*
2. *Dr C Muralikrishna Kumar, Senior Advisor, Planning Commission*
3. *Ms. Vibha Desai, former Executive Director, Ogilvy and Mather*
4. *Mr. V K Jain, Additional Director General, Doordarshan*
5. *Mr. Ajay Khanna, President, Jubilant Expert Group and former DDG, Cofederation of Indian Industries (CII)*
6. *Dr. Jai Menon, Director, Global Innovation & IT and Expert Group CEO, Bharati Enterprises*
7. *Dr. Mahim Sagar, Associate Professor, Department of Management Studies, IIT Delhi (Convener)*

The expert group coopted Shri R K Gupta, Advisor Planning Commission as a special invitee to the Group.

The Terms of Reference of the group are:-

To reexamine the business model of the Prasar Bharati and suggest measures to augment existing revenues and create new revenue streams, from both domestic and foreign markets, with the aim of making the organization financially autonomous in its operations.

The group held five meetings and finalized its report. In the following sections the major findings are given.

1.2 BACKGROUND

Prasar Bharati had a deficit of Rs. 925 crore in 2011-12, after receiving a grant of Rs. 1269 crore. While as a public service broadcaster, its mandate goes beyond profit, such losses year-on-year, have led to an accumulated deficit of Rs. 13,500 crore in 2011-12, which makes it increasingly unsustainable.

Doordarshan and AIR have not been profitable since the inception of Prasar Bharati. In today's competitive channel scenario they have got increasingly marginalised. Their programming has become less and less attractive to the audience leading to a downward spiral in viewership, advertiser confidence and revenue share. The once healthy TRP's now struggle to be greater than 1.

This downward spiral is in the context of a booming Media & Entertainment Industry. FICCI-KPMG Study 2013 has projected a total industry growth from Rs. 82,000 crore last year to Rs. 1,66,000 crore by 2017, a CAGR of 15.2%. Within this, the TV advertising revenue is projected to grow at 14% p.a. from Rs. 124.8 billion in 2012 to Rs. 240.3 billion in 2017. Radio advertising is expected to grow at 16.6% p.a. from Rs. 12.7 billion in 2012 to Rs. 27.4 billion in 2017.

It is critical for Prasar Bharati to join this growth trajectory and not be left a bystander. If it is unable to do so, it will not be adequately able to fulfill its public sector broadcasting mandate as the viewership and listenership will be grossly inadequate to deliver on its objectives.

It is therefore, essential for Prasar Bharati to take the path towards viability by being self-sufficient. It will have to find the tricky balance between its public service broadcaster mandate and financial autonomy. What follows is an attempt to try and map a recommended path to this end.

1.3 METHODOLOGY ADOPTED

ANALYSIS SECTION:

1. Prasar Bharati financials today and in the last three years.
2. Other international public service broadcasting TV Channels and their revenue models.
3. Analysis of the Broadcasting Industry today along with future projections.
4. Competitive channels in India in terms of revenue generation and their revenue models.
5. Mapping the Terrestrial and Cable & Satellite reach today and in the future.
6. Available TV & Radio rating research, their methodologies, limitations and strengths.
7. Advertiser spend and usage analysis and qualitative feedback from them.
8. DD and AIR share of total TV and Radio Revenue.

In addition, presentations were made by Mr. Paritosh Joshi, Head of Technical Committee at MRUC (Media Research users Council), on the subject "Research Methodologies in use today and plans for the future". Mr. Satyajit Sen, CEO Zenith Optimedia, presented his view points on how DD and AIR fare in terms of ratings today and Advertiser feedback. A team from E&Y had presented to us on Situational Analysis of DD and AIR and scope for Revenue generation.

1.4 GOAL STATEMENT

- Prasar Bharati, after fulfilling its public service broadcasting mandate, should be financially self-reliant to meet its operational expenditure by 2018.

1.5 ANALYSIS SECTION

Key Highlights:-

1. In 2010-11 and 2011- 12, after grants of Rs. 1517 crore and Rs. 1270 crore respectively, Prasar Bharati made losses of Rs. 945 crore in 2010 – 11 and Rs. 925 crore in 2011 -12.
2. Prasar Bharati had accumulated losses of Rs. 13,556 crore in 2011-12.
3. If we want no shortfall in a 5 year period, Prasar Bharati would have to almost double its revenues.

4. Prasar Bharati does not earn any license fee, which is the source of funding for almost all international public service broadcasters. BBC earns 70% of its revenue from a license fee.
 5. Prasar Bharati does not earn any subscription revenue, which accounts for 36% of revenue for all commercial TV channels in India today. This is projected to grow to 48% by 2017.
 6. In 2008-09, Star TV and Zee TV had 40% of their revenues coming in from subscriptions. Expect a much higher figure today.
 7. Terrestrial reach which is DD's strong suit has dropped to about 13-15 million households.
 8. Television Audience Measurement (TAM) and Radio Audience Measurement (RAM) usage has adversely affected Prasar Bharati revenues, as their coverage is entirely urban.
 9. DD / AIR Audience Research Data, which have a much more representative sample size, have not been adequately promoted among advertisers. Hence, today they are not acceptable and cannot be used as a counter point to TAM/RAM.
 10. Advertiser usage and confidence on an all-time low
 11. Doordarshan share of total TV advertising revenue has dropped from 16% in 2006 to 8% in 2012. AIR as a share of total radio advertising has dropped from 45% in 2006 to 18% in 2012.
- Detailed analysis section is attached in the annexure.

1.6 THE DILEMMA

Without a license fee and any revenue from subscription, and with TRP's and terrestrial reach dropping how does Prasar Bharati improve its financial standing?

1.7 STRATEGY SECTION

Two pronged approach for revenue enhancement:-

1. Increase realisation from existing revenue streams
2. Identify new revenue streams

1.8 RECOMMENDATIONS

1. **Need to separate public service broadcasting and commercial role of Prasar Bharati.** Have a multi brand and multi channel strategy with 2 key channels having a PSB mandate and the others running on commercially viable architecture. While the 2 PSB channels will be free-to-air, the others will run on a subscription fee, making them therefore, not free-to-air. Regional channels will continue to be free-to-air with a PSB mandate. The decision on which channels should be on a PSB mandate and which should be on subscription should be decided by the programming group.
2. **Asset Leveraging** – Prasar Bharati has a number of assets which can be monetised, like the vast archives which exist, prime real estate and the technical facilities that can be leased out.
3. Create a **Dedicated Marketing Division** in the Prasar Bharati manned by marketing professionals/ experts with performance linked incentives.
4. Operate 1 channel each of DD & AIR on pilot basis by **outsourcing** its marketing/ sales of commercial slots.
5. **Actively target advertisers** who seek to reach rural and semi-rural audiences. Build rural packages across DD and AIR on their terrestrial/ semi- urban/ rural strengths.
6. Create success stories and market them. Identify 1-2 focus channels, 3-4 key programmes, 1-2 time slots and 2-3 languages to create success stories. Surprise the market by **launching a 360 degree cross-channel marketing campaign** talking about these in a disruptive, catchy manner by revamping the Publicity & Media division for DD & AIR separately.
7. **Tie-up with leading International independent marketing partners** for DD India which is Doordarshan's International channel in key markets with large Indian Diaspora to earn significant revenue from International markets.
8. Launch **DD Direct Plus on a commercial platform** and increase the number of channels offered.
9. Have **more simulcast programmes** like Satyamev Jayate, Saraswatichandra as they bring in good revenue.
10. Have a **strong Marketing Strategy for selling archival products** by working out a revenue share model with National & International Marketing Houses & E-Commerce Sites.

1.9 OTHER IDEAS

1. Give further push to Development Communication Division (DCD) to increase share of PSU/ Government revenue. Have an incentive scheme to enhance motivation.
2. Enhance the focus on narrow casting agriculture.
3. Relook at DD Sports. Possible to run films when prime sports are not being telecast.
4. Like the telecom sector, clamp a USO levy (for public service broadcasting mandate) on non-public service broadcasting channels or they provide fixed time slots for public service broadcaster airing.
5. Post digitization; launch VOD/ AOD/ Content on the net. Also exploit mobile technologies for providing additional services
6. Launch a tele-shopping channel in non-prime time. Zee earns Rs. 60 crore from tele-shopping.
7. Tie up with a leading international research agency to improve DD/AIR research data, so that it is more acceptable to advertisers.
8. For AIR, focus on events, as up to 25% of FM channels revenue comes from events.
9. Launch advertising on Community Radio

1.10 SUMMING UP

The path towards financial autonomy will not be an easy one. Programming will play a critical role in working towards this goal. Good programming supported by a Marketing Campaign can help regain lost viewers, enhance TRPs and attract back advertisers.

By recommending a subscription fee Prasar Bharati will have the resources to invest in good programming. Simultaneously, the identified public service channels would fulfill Prasar Bharati's public service broadcaster mandate.

Along with this, a whole range of smaller measures will have to be implemented, to bring Prasar Bharati back on the path of regaining lost ground.

ANALYSIS SECTION**1. Prasar Bharati Financials : 3 Year Analysis****Prasar Bharati Income &Expenditure:**

(Rs in crore)

Income/Year	2009-2010	2010-2011	2011-2012
Income from sales /services	1001.6	1174.2	1192.9
Grants/Subsidies	1169.3	1517.7	1269.8
Fees/Subscriptions	0.9	8.9	3.1
Interest Earned	31.5	44.0	104.5
Other Income	100.3	138.4	179.3
Total	2303.8	2883.3	2749.7

Expenditure:

(Rs in crore)

Establishment Exp.	1736.1	1563.9	1660.6
Other Admin Expenses	668.3	684.9	746.1
Program Related Exp.	532.7	827.2	488.6
Interest	508.2	540.6	600.0
Depreciation	650.2	212.4	180.1
Total	4095.6	3829.0	3675.4

Expenditure-income	-1791.7	-945.7	-925.6
Add prior period Adjustments	-5.6	-58.4	-9.7
Balance brought forward from previous year	-9820.0	-11617.3	-12621.4

Balance being deficit carried forward to balance sheet	-11617.3	-12621.4	-13556.7
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Highlights

- While income increased by a significant Rs. 500 crore in 2010- 11 over the previous year, in 2011-12 there was a small dip. This increase in income was largely due to the increase in grants by Rs. 348 crore in 2010-11.
- Establishment expenses dropped by Rs. 172crore in 2010-11 over previous year but it increased by Rs. 100crore in 2011-12.
- There is a gradual drop in total expenditure year on year.
- The shortfall in 2009-10 was Rs. 1791crore which dropped significantly in 2010-11 to Rs. 945crore. In 2011-12 no further significant drop took place.
- Almost Rs. 1000crore is being added every year to accumulated losses resulting in an accumulated loss of Rs. 13,556crore in 2011-12.

Implication for Prasar Bharati:-

- The losses being made in 2010-11 and 2011-12 are almost 80% of income from sales. If we want to not have any shortfall in the short to medium term, we have to double our revenues.

2. Other International Public Sector Broadcasters & their revenue models

<u>Country</u>	<u>Public Broadcaster</u>	<u>Funding System</u>
Australia	ABC, SBS	Annual appropriation from the federal government
Austria	ORF	License Fee
Belgium	VRT, RTBR	75% through public funding
Denmark	DR	License Fee

Finland	YLE	License Fee
Germany	ZDF, ARD	License Fee
Ireland	RTE	50% from License Fee
Italy	RAI	License Fee
Japan	NHK	Receiving system fee
New Zealand	TVNZ	Govt. Funding
Norway	NRK	License Fee
Spain	RTVE	License Fee
Sweden	SVT	License Fee
Switzerland	SFDRS	License Fee
UK	BBC	70% from License Fee
US	PBS, NPR, PRI	Government Funding

Implications for Prasar Bharati :-

- Majority of the countries fund their Public Sector Broadcasters through a License Fee. The balance fund is provided through Government funding
- Majority of Public Sector Broadcasters earned under 33% of their revenues through commercial activities
- Prasar Bharati earns nothing through a license fee, however, it get government grants
- The Sengupta Committee had recommended a revival of the Broadcast Receiver License Fee for TV sets. It had also recommended a 10% license fee on TV and Radio manufactures to raise additional funding

3. Broadcasting industry today with future growth projections

Source : FICCI-KPMG 2013

Media Entertainment Industry

Year	INR Crore
2012	82,000
2017	166,000
CAGR	15.2%

High growth projected for the industry.

Analysing the TV and Radio Advertising spend projections

All figures in INR billions

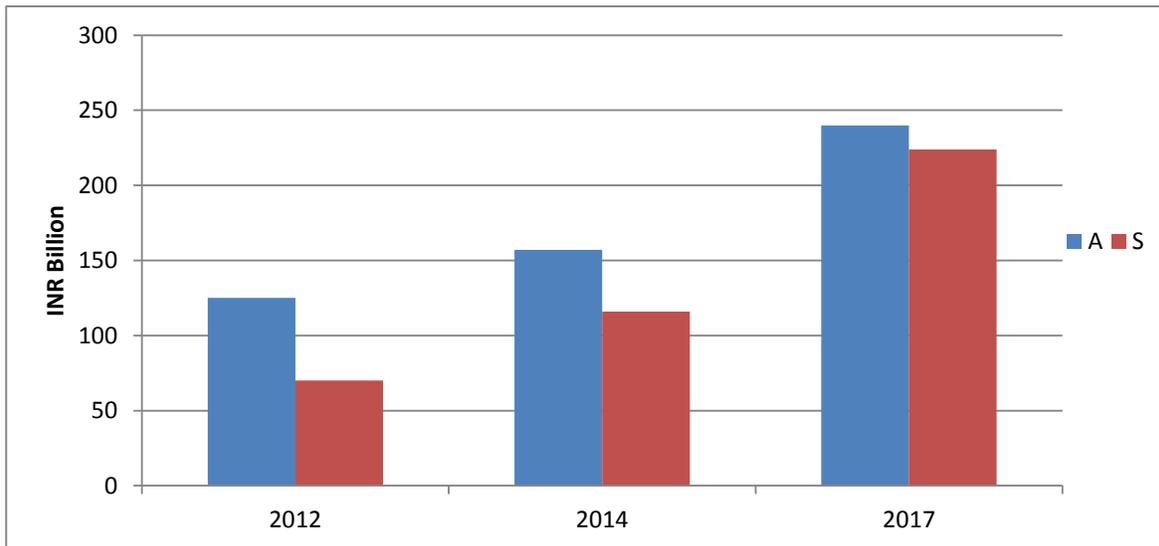
Medium	2012	2015	2017	CAGR
TV	124.8	180.1	240.3	14%
Radio	12.7	18.7	27.4	16.6%

- In 5 years TV advertising revenue is projected to double
- Radio is expected to grow faster than TV after 2014 when Phase III cities are going to commence

Implications for Prasar Bharati:-

- In a fast growth market, Prasar Bharati revenue shows no growth. This is a huge opportunity loss.
- Unless programming improves and attracts viewership, Doordarshan revenues will not grow in tune with the market

Subscription (S) & Advertising (A) Revenues of Total Broadcasting Revenues



- Subscription gaining share versus advertising. Expected to increase from 36% in 2012 to 48% in 2017

Implications for Prasar Bharati :-

- Given that Prasar Bharati is entirely reliant on advertising revenue, this is a huge limitation as Prasar Bharati has no share in the Rs. 70 billion subscription pie
- Also subscriptions are growing faster than advertising, which puts pressure on Prasar Bharati revenues, as it is competing for share in a shrinking base

4. Competitive Channels Revenue Models

2008-09				
Share	Zee TV		Star TV	
	Rev in INR cr	%	Rev in INR cr	%
Subscription	904	42	850	39
Advertising	1059	58	1350	61
Total	2177	100	2200	100

- Latest figures not available. from 2007-08 to 2008-09 Star TV subscription revenue increased by 55% from Rs. 550 crore to Rs. 850 crore
- If we project the same trend it is possible that today for these leading channels subscription revenue is greater than advertising

Star TV Profits - 2008-09	
Revenue	2200 Cr
Costs	1800 Cr
Profits	400 Cr

- In 2012, Zee claimed a 50% increase in operating profit to Rs. 233 crore with a revenue growth of 21%
- Where regional channels are concerned they are growing at 20-25% per annum, compared to an industry growth of 12-15%
- Regional channels account for 33% of all Cable & Satellite TV viewership. Top advertisers focusing here, e.g. Hindustan Lever, ITC, Cadbury and Coke
- Sun TV alone had an advertising revenue of Rs. 945 crore in 2011-12

Implications for Prasar Bharati:-

- Prasar Bharati at a disadvantage, as it only has advertising as a source of revenue
- Prasar Bharati costs are too high in comparison to networks like Star and Zee. Need to have a plan to critically evaluate all costs

Prasar Bharati needs a strong bouquet of regional channels, to take advantage of the boom in regional viewership. Here, too, programming is the key.

5. Mapping the Terrestrial and Cable & Satellite Reach today & Future Projections

2013 (Figs in millions)				
Households		% Growth	Urban HH's	Rural HH's
Total	234		80	154
TV	153	4	71	82
Cable & Satellite	140	11	66	74
Digital	59	40	25	34

- 66% of total households are in rural areas
- 53% of TV households are in rural areas
- 53% of Cable & Satellite households are in rural areas and 57% of digital households are in rural areas
- There were 13 mn terrestrial households in 2012-13

Source: TAM estimates

PWC 2013 Projections

Total TV Households	142 mn
Cable & Satellite	127 mn
Terrestrial	15 mn

Cable & satellite penetration is increasing at 10-12% and is eroding the DD Terrestrial base.

Implications for Prasar Bharati :-

- Terrestrial reach, which was the strong suit in the Doordarshan armoury under severe threat. One can expect a sharp reduction in Terrestrial reach in the next 5 years, which will be accompanied with advertisers reducing usage of Doordarshan
- Unless programming improves dramatically the revenue earned by Doordarshan will be under pressure. Holding on to revenues will be impossible, let alone trying to increase them.

6. Available TV and Radio Rating Research

Television Research

- Nielson TAM is used universally for TV ratings. It has a 9,600 sample size with only 1,000 out of this sample in below 1 lac population towns in Maharashtra. This is a severe limitation as we have seen that 53% of TV households are in rural areas
- TAM has blindly been used by advertisers, which has led to a vast reduction in the share of the advertising pie coming to Doordarshan
- BARC (Broadcast Audience Research Council) is expected to come out with its TV ratings by summer of 2014, with a more robust and representative sample

- Doordarshan Audience Research is also coming out with its ratings, but it is not being used by advertisers
- IRS comes out with quarterly figures on TV reach. It has a large sample size but is not used as weekly programme ratings are not reported

Radio

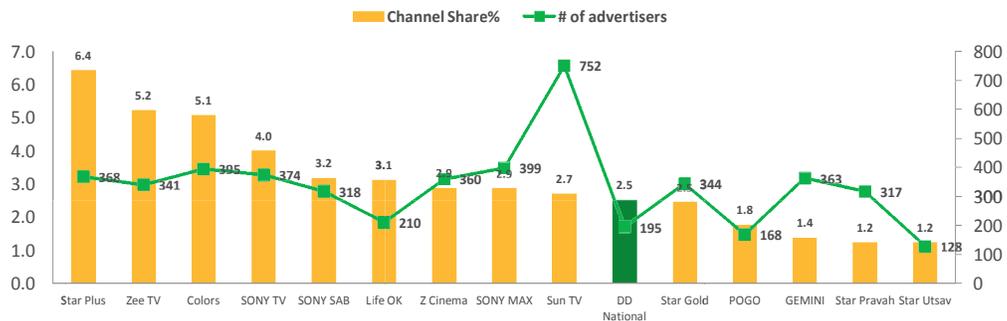
- RAM (Radio Audience Measurement) used by most advertising agencies and advertisers
- It has a limited sample of 500-600 spread across 4 centres – Delhi, Bombay, Calcutta, Bangalore
- AIR Audience Research data is available but again not being used
- IRS also covers Radio and provides state-wise data on a quarterly basis across channels. Again not used as programme specific topical ratings are required

Implications for Prasar Bharati :-

- Doordarshan/AIR have lost large revenues due to the rampant usage of TAM/RAM. The battle for a fair rating measure should have been fought a decade back when it started hurting Doordarshan and AIR.
- There was, and probably still is an opportunity to promote the Doordarshan and AIR Audience Research Data as a counter point to TAM and RAM

7. Advertiser Usage Analysis and Qualitative Feedback

Channel Share Vs # of Advertisers



Source:

Channel Share - TAM, TG: 4+, All Hhs, Period: 8-11 wk 2013

of Advertisers - MAP, Period: Jan-Dec 2012

13

ZenithOptimedia
The BCI Agency

Implication for Doordarshan:-

- DD National has only 195 advertisers for 2.5% channel share. Star Gold and Sun TV with similar channel share have 344 and 752 advertisers.

Clients: Mood board

FMCG advertisers will look at reach as long as the distribution mandates that reach...
We have seen success on smaller packs and smaller prices

If the distribution demands active visibility in 50,000 pop strata...
DD works ... data supported by HH panels
... however today marketers are looking at 24 key markets...
Whole east which was DD monopoly has been taken up by individual market specific channels...
Superia, leader in economy segment was created on DD alone in Orissa.. However today runs a 50: 50 on DD vs. C&S. High unit cost on DD

Clients: Mood board

Shrinking audience base... from 20% of our budgets to 12% today...
If only UP/ Bihar ...
AIR... we used to have commissioned slots... today only FM
No data cooperation on DD Direct

We have tried UP specific price offers...
We do not know whether it has been successful...
But for the sake of safety – we will repeat it if necessary

Implications for Prasar Bharati

- Clear drop in advertiser confidence
- Used essentially for reach and that too, in limited markets. With the drop in terrestrial reach, this will be under pressure
- DD rates need to be looked at
- DD direct an opportunity

8. Doordarshan and All India Radio revenue share analysis

	INR crore	
	2006	2012
TV Advertising Revenue	6000	12500
Doordarshan Revenue	968	954
% Revenue Share	16%	8%

- In 6 years Doordarshan revenue share has halved
- No growth in Doordarshan revenue while total advertisement revenue has doubled

	INR crore	
	2006	2012
Radio Advertising Revenue	490	1270
AIR Revenue	223	239
% Revenue Share	45%	18%

- No change in All India Radio revenue in 6 years
- Radio Advertisement revenue grows 159 % during this period

Implications for Prasar Bharati:-

- Doordarshan and All India Radio are being increasingly marginalised
- With such sharp drops in revenue share, if nothing is changed, Prasar Bharati could see a dramatic drop in revenues

REPORT OF THE EXPERT GROUP ON FINANCE

Acknowledgement

We would like to express our thanks to all the officers of Prasar Bharati for providing us the necessary information and data to prepare the report. Specifically, we would like to acknowledge the significant contribution of Mr. Jainender Nigam. He not only helped in data analysis but also functioned as secretary to the committee and kept track of the discussions in the meetings.

1. EXECUTIVE SUMMARY

The funding needs of any organization are contingent on the strategy and business plans of the organization. It was therefore necessary to wait till there was some clarity about the recommendations of the sub-committees set up to examine various aspects of functioning of Prasar Bharati. After extensive deliberations, the report was finalized on the basis of analyses of the past performance of Prasar Bharati, the information on the prevailing funding patterns for public broadcasters in a few other countries, the draft recommendations of the relevant sub-committees set up for transformation of Prasar Bharati and discussions with management on their vision of Prasar Bharati. The two key principles that guided the recommendations were: a) achieving as early as possible substantial autonomy from the government (for funding as well as work) since that is highly desirable to create truly independent public broadcaster, b) diversification of sources of funds, with a substantial part of funds being derived from autonomous sources so that the organization can take up activities that are in the larger interest of the society and the nation without having to be unduly concerned about availability of funds for such activities.

A summary of the recommendations contained in the report are as follows:

1. The government must waive the amount due from Prasar Bharati to the government as a result of funds provided in the past for capital expenditure as well as to meet the operating expenses which are due for repayment. As on March 31, 2013 the total amount due to the government was INR 13,641 crore. A waiver would ensure that the organization starts with a clean slate and without the burden of this huge liability arising from the legacy of the organization.

2. The sources of funding of Prasar Bharati should be diversified. It is recommended that in addition to government, Prasar Bharati should generate funds through autonomous sources and through commercialization of a part of its activities. The pattern of funding from the three sources respectively should be approximately 20%, 40% and 40%.
3. The nature of commercial activities and the autonomous sources have been identified in the report. The management has concurred with the feasibility of the nature of commercialization that has been suggested.
4. The conservative assessment (Scenario 1) of requirement of funds for Prasar Bharati is pegged at about INR 17,412 crore in terms of present value. Under this scenario, Prasar Bharati would reach operating breakeven by 2021 and self-sufficiency including capital expenditure by 2024.
5. The less conservative assessment (Scenario 2) of requirement of funds for Prasar Bharati is pegged at about INR 12,844 crore in terms of present value. Under this scenario, Prasar Bharati would reach operating breakeven by 2018 and self-sufficiency including capital expenditure by 2019.
6. The funding from the government should preferably be provided as a corpus rather than through annual allocation of funds. The corpus may be created through use of either equity or interest free perpetual bonds as instruments.

2. BACKGROUND

Government of India set up a committee under chairmanship of Mr. Sam Pitroda to examine the functioning of Prasar Bharati with a view to recommending major restructuring of the organization and its functioning so that it is transformed into an organization that delivers effectively as a public broadcasting organization that serves the cause of the largest democracy in the world. Several sub-groups were constituted to work independently on different aspects and different issues that needed to be examined and addressed in the process of transformation.

The sub-group on finance, called as the Expert Committee on Finance was mandated to examine the funding needs of the organization for such a transformation. The Committee lost some members through resignations and some through not attending even one of the meetings of the Committee. Since it will be inappropriate to ascribe the authorship of the report to anyone who did not participate in the deliberations, the list of members includes only names of those individuals who participated in the deliberations and helped in framing the recommendations of the report. The Committee met five times. The Terms of Reference

of the Committee and the names of individuals who participated in the deliberations are provided in Annexure 1.

3. GENESIS OF PRASAR BHARATI

The Constitution of India guarantees to citizens the right of free speech and expression. This includes the right to receive and impart information and as any asymmetry in information can lead to asymmetry of opportunity which makes this right critical. Hence there is a need to have a public broadcaster in broadcasting eco-system with adequate competition to provide a bouquet of free and paid services. With this in view, Prasar Bharati was established in 1997 on implementation of the Prasar Bharati (Broadcasting Corporation of India) Act, 1990 whereby 'Akashvani' and 'Doordarshan' that were under the Union Ministry of Information and Broadcasting were transferred to the corporation. As per the charter contained in the Act, Prasar Bharati is expected to function as a public broadcaster to serve the varied needs of a democratic nation. There is a need therefore for a robust, efficient and competitive Prasar Bharati to fulfil this role.

To function as an effective public broadcaster, it is imperative that Prasar Bharati has adequate autonomy. This would not be possible if it is entirely dependent on budgetary support. The argument that there are a number of organizations like the judiciary which are dependent on government funding but at the same time independent, does not work in practice as the character of the judiciary, which has independence and autonomy due to constitutional protection, is wholly different from that of a public broadcaster. At the same time any public broadcaster fulfils a constitutional mandate and, therefore, it has to be supported from public funds though it should be its endeavour to become financially self-reliant over the years. In such circumstances, it becomes extremely critical to define an appropriate funding mechanism which balances the requirement of autonomy and at the same time enables it to fulfil its mandate.

4. EXTANT FUNDING OF PRASARBHARATI

Prasar Bharati is funded through Budgetary Grant and I&EBR (Internal and External Budgetary Resources). The Plan funds for Prasar Bharati are allocated by the Planning Commission and included in the Demand for Grants passed by the Parliament. The projects of Prasar Bharati for content creation and procurement of equipment are met from Plan funds as well as its own resources. The Plan funds used by Prasar Bharati requires furnishing of Utilization Certificates in Form 19-A. The non-Plan funds that essentially cover the deficit in revenue expenditure (such as employee salaries) are provided by Ministry of Information & Broadcasting as grants-in-aid.

In the recently concluded 11th Plan, the Plan expenditure budgeted for Prasar Bharati in was INR 2245 crore. The actual expenditure by Prasar Bharati however was much lower at INR 1439 crore for the Plan period. The organization could not fully utilize the Plan funds

provided to it for a variety of reasons including the rigidities in the process of utilization and release of funds.

In addition to Plan funds for capital expenditure, every year since inception Prasar Bharati has received financial assistance from the government to cover a substantial part of its operating expenses. These funds are provided as grants-in-aid to the organization. The amount received under this head in the years 2010, 2011, 2012 & 2013 were INR 1170, 1518, 1270 and 1730 crore respectively.

As a result of the above dependence on the government for meeting its capital expenditure as well as operating expenses, which are provided partly as loan to the organization, Prasar Bharati owed the government INR 6325 crore and INR 7316 crore as capital loan and current liability(including interest on balances outstanding) as of March 31, 2013.

5. IMPACT OF OVERARCHING RELATIONSHIP WITH THE GOVERNMENT

It is not just that Prasar Bharati is dependent on the government for funding its capital expenditure and operating expenses but a substantial portion of its revenue too is derived from the government, from the programmes it creates and broadcasts for different ministries of the government. It is likely that since these transactions are seen as between two arms of the government, the programmes and the services provided are not at arm's length, market determined prices.

It is also likely that the preference enjoyed by Prasar Bharati in being awarded such 'government' assignments leads to complacency and deterioration in the quality of programmes and services provided by the organization. The cost of programming and services too may have risen unduly over time in the absence of true competition. It is also evident that Prasar Bharati has not pro-actively worked to become more independent of government for funding by consciously increasing revenue and profit from non-government work.

The heavy dependence on the government not just for funds but even for work is inimical to the charter with which Prasar Bharati was set up, namely to create an independent public broadcaster for a democratic nation that would provide objective assessment and commentary on national issues that reaches all segments of people. The debilitating impact of such thick relationship with the government has to be recognized while framing recommendations not only for finance but all other aspects of functioning of the organization. As a result, the organization has not perhaps realized its potential as effective public broadcaster. A complete transformation of the organization alone can create the kind of organization envisaged in the Prasar Bharati Act, 1990.

6. REQUIREMENT OF FUNDING FOR PRASAR BHARATI

Before considering the requirement of funds in detail we need to enter an essential caveat. The need of funds will depend upon a number of assumptions such as growth rates in revenue and expenses, the level of ambition and the choice of technology for Prasar Bharati. These are being examined by other sub-groups. Ambition will define the scale and quality of production facilities; the capacity for content creation resulting in creation of studios, expert teams for production and ability to buy or commission the best creative resources; transmission infrastructure and the extent of its footprint and ability to beam programmes down to the village level. It will also define human resource issues including opportunities for redeployment/re-skilling of staff, new hiring for understaffed core functions, and facilitation of multi-skilling of existing staff. In addition, the decision on globalization or reaching out to the Indian diaspora or expanding content beyond current areas addressed, will also impact the requirement of funds. Technology will determine whether Prasar Bharati will go in for the state-of-the art digital facilities or continue with the present or a mix of both. In addition, decision to have or not to have DTH and/or cable arms for Doordarshan and FM network for AIR will also have an impact on both capex and opex.

7. SOURCES OF FUNDING

Most international public broadcasters fulfill their mission using a mix of external resources and own resources. Public broadcasters worldwide use different levels of public and own funds and there is no universal model available. BBC, for instance, depends upon licensing fee for its entire revenue and with no share from advertisements. Australian Broadcasting Corporation (ABC) gets 85% of its funding from government and 15% is self-generated, mostly from merchandising. Al Jazeera too is financed mostly from government grants with limited advertisements. Other public broadcasters use a different mix of government support and its own sources with the maximum proportion of funds being generated from the latter.

A similar approach as above to funding is recommended for Prasar Bharati. Major dependence on government certainly abridges the autonomy and the basic principle of keeping the public broadcaster at arm's length from the government. This mandates a more self-reliant financial situation. Extensive dependence on commercial sources such as advertisement and sponsorship revenue, while perhaps increasing efficiency in utilization of resources however may compromise the purpose of Prasar Bharati as a public broadcaster. A method of funding therefore needs to be found that is more autonomous, neither dependent on the annual budgetary cycle of the government nor on the commercial sources. Only such a judicious mix of sources, government, commercial and autonomous, would create the funding environment whereby Prasar Bharati would be able to fulfill effectively its role as a public broadcaster, an organization that is autonomous and yet produces programmes and provides services as public good to serve the cause of democracy.

Given the existing situation, in the next few years the proportion of funds from government will have to be high as the organization requires time to transform itself. However, over a period of the next several years a large proportion of the funding is envisaged to come from autonomous and its own sources such as commercial revenue from advertising and sponsorship, sale of audio and video programmes, pay channels, infrastructure sharing and leveraging of owned assets. Prasar Bharati has huge opportunities in the area of digital/terrestrial transmission infrastructure sharing, revenues from sale of TV and radio programmes, renting out studios and production facilities and royalty from archival material. In addition, it should leverage its capacity as a national broadcaster to raise advertisement and sponsorship revenues.

The possible sources of funds for Prasar Bharati could include the following:

Government

- a) Grants from government from the annual budget of the Ministry of Information & Broadcasting;
- b) Funding of programmes by different Ministries of Government of India like multi-media campaigns devoted to literacy and right to education, population education and sanitation, public health messages and others.

Own Sources

- c) Income from sharing of infrastructure like transmission network, production studios;
- d) income from assets like real estate;
- e) income from creative resources like fees on sharing of programmes/content, royalty from archives etc.;
- f) equity from private promoters through joint ventures for specific purposes like international operations, and sports channels;
- g) revenue from advertisements and sponsorship;
- h) private donations subject to tax exemption.

Autonomous Sources

- i) Licence fee on TV sets sold through a one-time cess payable at the time of purchase of TV sets;
- j) Annual licence fee from private channels including DTH broadcasts, cable TV revenues etc as a percentage of the aggregate gross revenue on the lines of licence fee charged from telecom operators;
- k) Share of funds from the sale of spectrum in the 700 MHz band to be vacated by digitalizing Doordarshan's terrestrial transmission network in a time bound manner (digital dividend on the lines of US and European countries);

- l) Contribution from a Universal Services Obligation Fund (USOF) to be set up on the lines of the USOF for telecom services; the corpus for this non-lapsable fund could come from the levies mentioned in (i) & (j) above.

8. ASSESSMENT OF FUNDING NEEDS OF PRASAR BHARATI

As pointed out earlier, the total amount owed by Prasar Bharati to government is very large. It is also increasing by the day as these funds have to be provided as loans to the organization and therefore accumulates interest with passage of time if they remain unpaid. The first step in the proposed financial restructuring would have to be waiver of the amount currently owed by the organization to the government. The funding needs have been worked out on the basis of this assumption.

Capital Expenditure

The record of Prasar Bharati shows that the organization has never been able to use the budgets allotted for capital expenditure. One of the key reasons for such under-utilization has been the rigidities in the process of utilization of funding provided through annual cycles of allocation and use, whereby unutilized funds lapse at the end of each year. The projections of capital expenditure are based on the assumption that the organization would be able to step up its capacity to incur capital expenditure substantially. It has also been assumed that the funds provided would be non-lapsable on an annual basis and would be provided to support expenditure over a longer period of time of say 3-5 years.

The budgeted expenditure in the 12th Plan for the organization is INR 5,583 crore based on the proposals submitted and already accepted by the Planning Commission (about one half of the amount pertains to projects approved in the 11th Plan that will continue to be implemented in the 12th Plan period). In addition, based on the recommendations contained in the draft report of other sub-groups, the management submitted a plan for additional capital expenditure needed by Prasar Bharati for transformation. These amounts have been built into the projection of funding needs for capital expenditure. The details of the items on which management would like to invest are provided in Exhibit 1.

Operational Expenditure

The accounting statements for Prasar Bharati for 2008-2012 are presented in Exhibit 2. The growth rates in operating revenue and operating expenses are presented in Exhibit 3. Based on this analysis and discussions with management, it was agreed to project a revenue growth at the rate of 15% per annum and growth in operating expenses at the rate of 6% per annum. A differential growth rate implies increasing efficiency of utilization of resources

over time. The projected cash flows under this Scenario 1, from 2014-2024 are provided in Exhibit 4.

Since the capital expenditure desired by management to give effect to restructuring of Prasar Bharati is the basis for projection of investment needs of the organization, the management was asked to make an assessment of the growth rates that would be commensurate with the higher investments. It was recognized that while achieving a higher growth in revenue, the expenses would also increase at a faster rate than the rate assumed in the first scenario. After deliberations, it was agreed to project a revenue growth at the rate of 25% per annum and growth in operating expenses at the rate of 8% per annum. The larger differential growth rate implies even higher efficiency of utilization of resources over time in view of the appropriate investments made by the organization. The projected cash flows under this Scenario 2, from 2014-2024 are provided in Exhibit 5.

The present value of deficits has been computed for both the scenarios using a discount rate of 8% that is derived from the yield at which the ten year government of India bonds are currently quoted in the market. The present values provide a mechanism for comparing the situation under the two scenarios.

Under Scenario 1, the present value of the funding needed is estimated at about INR 17,412 crore. The organization is expected to reach operating breakeven by 2021. Complete self-sufficiency in financing, including capital expenditure is expected to be achieved only by 2024.

Under Scenario 2, the present value of the funding needed is estimated at about INR 12,844 crore. The organization is expected to reach operating breakeven by 2018. Complete self-sufficiency in financing, including capital expenditure is expected to be achieved by 2019.

9. THE METHOD OF FUNDING

The possible sources of funding have been elaborated upon in an earlier section of the report. The mix of source should be such as to substitute the initial high proportion of government funding by increased funding from autonomous and own sources. The source mix should be chosen so as to keep the government funding (in terms of present value) to less than 15-20%. The funding from its own source (essentially commercial activities) should preferably be kept below 40%. The balance of funding should come from autonomous source. The diversity of sources is being advocated so as to ensure that Prasar Bharati does not remain too dependent on any one source of funding and thereby retains its ability to become a truly independent public broadcaster. There would be several ways of achieving this pattern of funding. The details of the same should be worked out in consultations with the management based on the process to be followed for transformation of the organization.

The funding from the government should preferably be provided in the form of corpus that is made available to Prasar Bharati at the earliest, at the beginning of the transformation process. The government could choose either equity or interest-free perpetual bond as the instrument for creating the corpus.

EXHIBIT 1: ASPIRATIONAL CAPITAL EXPENDITURES OF PRASAR BHARATI

A. Doordarshan

(Figures in INR crore)

S. No.	Name of sub-scheme	Cost	Major Activities Planned as per EFC Memo	Major Activities Proposed Originally	Additional Amount Reqd.
1	Strengthening of Border coverage	176.00	(i) Setting up 8 analog HPTs along Indo-Nepal border (Rs.156 Cr.) (ii) Increasing height of TV tower Dwarka from 100 to 300 Meters (iii) Strengthening 300 Meter TV Tower at Rameshwaram		
2	Modernization, Augmentation & Replacement of Transmitter & Studio equipment	340.00	(i) Providing studio equipment at major Kendras (Rs.11.50 Cr.) (ii) Modernization of CPC (Rs.40 Cr.) (iii) Augmentation of essential services such as power supply, ac plant etc. in studios (Rs.47.50 Cr.) (iv) Strengthening of DD News (Rs.121 Cr.) (v) Disaster management/Emergency requirement (Rs.8 Cr.) (vi) OB Van at DDK Trivandrum (Rs.12 Cr.)		
3	High Definition TV	86.00	(i) Upgradation of existing studio facilities into HDTV format at Kolkata & Chennai (Rs.72 Cr.) (ii) HDTV satellite uplink at Mumbai, Kolkata & Chennai (Rs.6 Cr.) (iii) 2 Nos. HDTV DSNG	(i) HDTV production facilities, post production, field production, preview facilities at DDK Delhi, Mumbai, Chennai, Kolkata, Srinagar & Guwahati	684.00

			units (Rs.5 Cr.)	(ii) HDTV production facilities for News at Delhi (iii) HDTV transmitters at Kodaikanal, Mussoorie, Srinagar, Guwahati & Aurangabad (iv) Upgradation of earth stations at 8 locations (v) HD DSNG Vans (06 Nos.) (vi) Replacement of existing SD DSNG units with HD DSNG vans at 6 locations	
4	Modernization, Augmentation & Replacement of Satellite broadcast equipment	200.00	(i) Upgradation of 15 earth stations (Rs.80 Cr.) (ii) Repl. Of compression eqpt. Etc. (Rs.79 Cr.) (iii) C/o Earth station buildings at 5 places (Rs.5 Cr.) (iv) Centralized monitoring station for E/S & DSNG (Rs.10 Cr.) (v) VPN for sharing contents (Rs.5 Cr.) (vi) Repl. Of 6 DSNG units (Rs.15 Cr.)		
5	Civil Infrastructure augmentation and Misc. works	34.60	(i) Reinforcement of existing TV towers (Rs.10 Cr.) (ii) Augmentation of security infrastructure etc. at DD locations (Rs.22 Cr.) (iii) C/o hostel type accommodation at Rajouri & SQ at		

			Chandigarh (Rs.2.60 Cr.)		
6	Expansion of DTH	186.00	Expansion of DTH platform capacity to accommodate upto 300 channels		
7	Narrowcasting from Transmitters	32.00	Sharing of content for telecasting between studios & transmitters		
8	New Media Technologies	20.00	Webcasting/live streaming of DD channels through internet on consumer devices.		
9	Complete digitalization of Doordarshan network	645.40	(i) 15 Nos. digital ready HPTs (Rs. 135 Cr.) (ii) 45 Nos. digital HPTs (Rs.368 Cr.) (iii) Digitalization of 4 studios (Patiala, Coimbatore, Kozhikode & Warangal)-Rs.40 Cr. (iv) Digitalization of Archiving facilities (Rs.87 Cr.) (v) Central monitoring of transmitters (Rs.8 Cr.)	(i) 190 digital HPTs (ii) 400 digital LPTs	2260.00
10	R&D facilities / Outsourcing facilities	05.00	Develop composite set top box for receiving DTH as well as DTT transmission		
11	OFC connectivity	65.00	Connectivity between DD Kendras, DTH Todapur & PGF for narrowcasting facility		
12	Expansion of Mobile TV	0.00	NIL	(i) 3 HPTs & 8 LPTs to expand coverage in NCR (ii) 3 HPTs & 86 LPTs for introduction of Mobile TV services in Kolkata, Chennai & Mumbai.	150.00

13	Global coverage of DD International channel	100.00	Generate facility to carry the channel on different platforms such as DTH, cable, fiber cable and C-band for providing last mile connectivity.		
14	Broadcast Museum	20.00	Doordarshan proposes to set up a museum to display broadcast technologies used in the last 50 years or so, vintage radio and television equipment, state of art equipment, hall of fame for outstanding broadcasters, collection of books and magazines, archival content, auditorium for educational and entertainment purpose, gift shop offering broadcast items including books on sale etc. Broadcast Museum is planned to be set up in the existing AIR building in Delhi.		
	TOTAL	1910.00			3094.00
Total Requirement of DD = Rs. 5004 crore (1001 crore per annum)					

B. All India Radio

Year	Continuing scheme			New scheme			Total		
	Capital	Recurring	Total	Capital	Recurring	Total	Capital	Recurring	Total
2012-13	146.32	0.00	146.32	0.00	0.00	0.00	146.32	0	146.32
2013-14	430.69	0.50	431.19	20.00	0.00	20.00	450.69	0.5	451.19
2014-15	557.51	5.34	562.85	209.26	7.50	216.7	766.77	12.84	779.61
2015-16	24.60	15.36	39.96	566.12	36.89	603.0	590.72	52.25	642.97
2016-17	17.52	16.02	33.54	160.12	36.90	197.0	177.64	52.92	230.56
Total	1176.64	37.22	1213.86	955.50	81.29	1036.7	2132.14	118.51	2250.65

EXHIBIT 2: PRASAR BHARATI FINANCIALS

(Figures in INR crore)

Balance sheet

Corpus/capital fund and liabilities	2008	2009	2010	2011	2012
Earmarked/Endowment Funds	2339.69	2565.30	2722.58	2897.27	3221.65
Secured Loan	0.00	0.00	0.00	0.00	0.00
Unsecured Loan	8426.74	9147.34	5684.34	6099.17	6324.16
Deferred Credit Liabilities	0.00	0.00	0.00	0.00	0.00
Current Liabilities and Provisions	1258.79	1411.00	5962.11	6662.90	7315.16
TOTAL	12025.23	13123.64	14369.02	15659.34	16860.97

Assets	2008	2009	2010	2011	2012
Fixed Assets	1904.89	1388.84	839.33	742.08	790.62
Capital Work-in progress	481.94	580.41	642.78	702.29	798.04
Current Assets, Loans and Advances	1317.32	1334.46	1269.60	1593.56	1715.59
Miscellaneous Expenditure	0.00	0.00	0.00	0.00	0.00
Deficit as per Income & Expenditure Account	8321.08	9819.93	11617.32	12621.41	13556.71
TOTAL	12025.23	13123.64	14369.02	15659.34	16860.97

Income Statement

Income	2008	2009	2010	2011	2012
Income from Sales/ Services	936.78	933.72	1001.65	1174.26	1192.87
Grants /subsidies	832.42	993.33	1169.32	1517.65	1269.85
Fees/subscriptions	1.35	11.23	0.93	8.96	3.19
Interest Earned	61.17	100.16	31.56	44.04	104.54
Other Income	112.62	113.88	100.38	138.42	179.31
TOTAL A	1944.34	2152.32	2303.84	2883.33	2749.75

Expenditure	2008	2009	2010	2011	2012
Establishment Expenses	876.2	1390.7	1736.1	1563.9	1660.6
Other Administrative Expenses	566.5	580.6	668.4	685.0	746.1
Programme related Expenses	443.6	492.0	532.7	827.2	488.7
Expenditure on Grants & subsidy	-	-	-	-	-
Interest	512.6	489.0	508.3	540.6	599.9
Depreciation	0.0	643.2	650.2	212.4	180.1
TOTAL B	2398.87	3595.49	4095.58	3829.02	3675.38

<i>Deficit/Surplus</i>	<i>-454.53</i>	<i>-1443.18</i>	<i>-1791.74</i>	<i>-945.69</i>	<i>-925.63</i>
<i>Add: Prior Period Adjustments</i>	<i>-27.03</i>	<i>-6.20</i>	<i>-5.65</i>	<i>-58.41</i>	<i>-9.67</i>
<i>Add: Balance brought forward from previous year</i>	<i>-7155.20</i>	<i>-8321.08</i>	<i>-9819.93</i>	<i>-11617.3</i>	<i>-12621.4</i>
<i>Balance being carried over to balance sheet</i>	<i>-8321.08</i>	<i>-9819.93</i>	<i>-11617.3</i>	<i>-12621.4</i>	<i>-13556.7</i>

EXHIBIT-3: GROWTH RATES IN REVENUE AND OPERATING EXPENSES

(Figures in INR crore)

Operational Revenue (Excluding grant) : Prasar Bharati			
Year	2011	2012	2013
Income from Sales Services	1174.26	1192.87	1429.23
<i>% Growth</i>	<i>17.23%</i>	<i>1.58%</i>	<i>19.81%</i>
Fee/Subscription	8.96	3.19	8.37
<i>% Growth</i>	<i>861.72%</i>	<i>-64.43%</i>	<i>162.65%</i>
Other Income	134.28	172.34	54.77
<i>% Growth</i>	<i>37.06%</i>	<i>28.34%</i>	<i>-68.22%</i>
Interest on fund management (FD)	44.04	104.54	60.53
<i>% Growth</i>	<i>39.53%</i>	<i>137.38%</i>	<i>-42.10%</i>
Total	1370.70	1472.59	1552.90
<i>% Growth</i>	<i>21.08%</i>	<i>7.43%</i>	<i>5.45%</i>

Operational Expenses : Prasar Bharati			
Year	2011	2012	2013
Employee Expenses	1563.28	1660.58	1825.78
<i>% Growth</i>	<i>-9.92%</i>	<i>6.22%</i>	<i>9.95%</i>
Admin Expenses	685.55	746.13	709.32
<i>% Growth</i>	<i>2.47%</i>	<i>8.84%</i>	<i>-5.87%</i>
Program & content related	344.74	399.56	442.69
<i>% Growth</i>	<i>-24.47%</i>	<i>15.90%</i>	<i>16.88%</i>
Total	2593.56	2806.27	2977.79
<i>% Growth</i>	<i>-9.34%</i>	<i>8.20%</i>	<i>6.73%</i>

EXHIBIT 4: SCENARIO 1 CASH FLOW PROJECTIONS

(Figures in INR crore)

Funding of Prasar Bharati: Scenario 1												
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Revenue	1552	1785	2053	2360	2714	3122	3590	4128	4748	5460	6279	7221
Operational Expenditure	2977	3156	3345	3546	3758	3984	4223	4476	4745	5030	5331	5651
Surplus/Deficit	-1425	-1371	-1292	-1185	-1044	-862	-633	-348	3	430	947	1569
Total Aspirational Capital Expenditure: DD (A to E)	625	1501	1501	1501	1501	1501	625	625	625	625	625	625
A. Complete digitization of DD network	N/A	581	581	581	581	581						
B. High Definition TV	N/A	154	154	154	154	154						
C. One time Fund for Software creation (DD)	N/A	500	500	500	500	500						
D. Expansion of mobile TV	N/A	30	30	30	30	30						
E. Others (from 12th Plan)	N/A	236	236	236	236	236						
Aspirational Capital Expenditure : AIR	448	147	451	780	643	231	448	448	448	448	448	448
Total Aspirational Capital Expenditure : PB	1073	1648	1952	2281	2144	3233	1073	1073	1073	1073	1073	1073

Funds (Deficit) Surplus	-2498	-3019	-3245	-3466	-3188	-4095	-1706	-1421	-1070	-643	-126	496
PV (Support) @ 8%	-2313	-2588	-2576	-2548	-2170	-2581	-995	-768	-535	-298	-54	197
Total PV of Financial Support Required	-17425.4											

Revenue growth	15%
Operational Expenditure growth	6%
Discount factor	8%

EXHIBIT 5: SCENARIO 2 CASH FLOW PROJECTIONS

(Figures in INR crore)

Funding of Prasar Bharati: Scenario 2												
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Revenue	1552	1940	2425	3031	3789	4736	5920	7401	9251	11563	14454	18068
Operational Expenditure	2977	3215	3472	3750	4050	4374	4724	5102	5510	5951	6427	6941
Surplus/Deficit	-1425	-1275	-1047	-719	-261	362	1196	2298	3740	5612	8027	11126
Total Aspirational Capital Expenditure: DD (A to E)	625	1501	1501	1501	1501	1501	625	625	625	625	625	625
A. Complete digitization of DD network	N/A	581	581	581	581	581						
B. High Definition TV	N/A	154	154	154	154	154						
C. One time Fund for Software creation (DD)	N/A	500	500	500	500	500						
D. Expansion of mobile TV	N/A	30	30	30	30	30						
E. Others (from 12th Plan)	N/A	236	236	236	236	236						
Inspirational Capital Expenditure : AIR	448	147	451	780	643	231	448	448	448	448	448	448
Total Aspirational Capital Expenditure : PB	1073	1648	1952	2281	2144	3233	1073	1073	1073	1073	1073	1073

Funds (Deficit) Surplus	-2498	-2923	-2999	-	-	-	123	1225	2667	4539	6954	10053
PV (Support) @ 8%	-2313	-2506	-2381	-	-	-	72	662	1334	2103	2982	3992
Total PV of Financial Support Required	-12851.5											

Revenue growth	25%
Operational Expenditure growth	8%
Discount factor	8%

ANNEXURE-1: EXPERT GROUP ON FINANCE

Term of Reference

The Expert Group on Finance would suggest a self-sustainable financial model to secure financial autonomy and to this end, identify ways of mobilizing additional financial sources, including through leveraging of natural resources, infrastructure, archives etc.

The composition of the expert group on Finance is as follows:

Composition of the Committee

Convenors

1. Mr. Samir Kumar Barua, Director, IIM Ahmadabad
2. Co Convenor, Mr. J. S. Deepak, Former Joint Secretary, DoT/ Additional Secretary, D/o Commerce

Member

3. Mr. B. B. Pandit, Member (Finance), Prasar Bharati

Guest Members

4. Mr. Tripurari Sharan, DG (DD)
5. Mr. P. C. Gupta, DDA (Finance), AIR
6. Mr. R. K. Saxena, ADG (E), ADG (A/Finance), AIR

Link Officers

7. Mr. J. P. S. Chawla, ADG (B and A), Prasar Bharati
8. Mr. P. Manoharan, Deputy Director(Finance), Prasar Bharati
9. Mr. Om Prakash, OSD, Prasar Bharati

PBC Staff

10. Mr. Jainender Nigam, Research Associate, Prasar Bharati Committee

REPORT OF THE EXPERT GROUP ON HR & ORGANISATION

1. INTRODUCTION

Prasar Bharati is probably the largest Public Broadcasting Service Organisation in the world in terms of its reach through its terrestrial and satellite networks of AIR and Doordarshan, as well as in the number of fulltime employees that it has – 31,500. It has grown from its origins in April 1930 as the Indian Broadcasting Service, under the Department of Industries and Labour and with the commencement of TV broadcasting in 1959. Today All India Radio with a network of 376 broadcasting stations is accessible to almost the entire population of the country and nearly 92% of the total area, broadcasting in 23 languages and 146 dialects to meet the diverse needs of the people of India. Doordarshan broadcasts 35 channels – 8 all-India, 11 Regional, 15 state and one international channel.

Prasar Bharati's workforce has expanded over the years to meet its increasing programming, transmission and logistical support needs. Yet today it faces challenges on many fronts

- nimble private TV and radio channels seeking out consumers and garnering advertising
- a multiplicity of new devices (PCs, tablets, mobile phones) and new means of accessing content (broadband/wireless internet)
- a legacy of a huge terrestrial network requiring sizeable human and financial resources for its operations and maintenance

But to this must be added perhaps its most critical challenge of transforming its workforce, structures and processes to meet the requirements of a creative, technology and values driven media organisation achieving its mandate of informing, educating and entertaining the public through the individual's choice of content, time and device on which to consume it.

This issue of transformation of the human resources and the related organizational issues is what the Expert Group has focused on.

2. METHODOLOGY FOLLOWED

The Group benefitted from the knowledge, experience and expertise of the members consisting of senior officers of the Government, private sector, academia and Prasar Bharati. The methodology followed was of:

- o Collection and analysis of data relating to the organizational structure, size and detailed profile of the work force
- o Identification of the main issues faced by the employees and the management through discussions with internal stakeholders
- o Preparation of base papers for facilitating discussions of the Expert Group
- o Discussions of the Group as a whole as well as separately with some Members (who could not attend the Group meeting)
- o Visits to some AIR and DD stations to understand their working and HR challenges
- o Ascertaining the lines of thinking of other Expert Groups particularly some of those whose suggestions could be of relevance for the Groups
- o Benefitting from knowledge of the best practices in the HR function of a very large private sector technology firm
- o Narrowing down the areas of focus and preparing an initial set of suggestions including the use of work-force models and getting the Members views thereon

MANAGING HUMAN RESOURCES

3. STATE OF THE ORGANIZATION'S HUMAN RESOURCES

Almost exactly 13 years ago (on 20th May 2000) The Review Committee on the Working of Prasar Bharati (commonly known as the Shunu Sen Committee) graphically described the state of the programming cadres and the human resources of Prasar Bharati in the following words:

7.1.2 The programming content and production service, particularly in Doordarshan, is in a state of disarray. The system does not reward creativity and the most creative elements in the organization are not able to come to the fore. There has been no direct recruitment of PEXs [Programme Executives] since 1990, TREXs [Transmission Executives] since 1994. No regular promotion or new induction at the Station Director and Assistant Station Director level has taken place since 1991. There is overall

stagnation and there has been no fast track promotion based on merit. This has resulted in enormous frustration amongst the programme cadre. As a result, the entire organization lacks élan, creative vigour and vital energy.

.....

10.3 Human resources have been sorely neglected in Prasar Bharati. The result is an aging, inefficient, demoralised, bureaucratic overstaffed organisation, without capability in certain critical areas. If the organisation is not in an even worse state the credit must go to a few gifted individuals and to the overall growth of the broadcasting industry.....Most important of all, there is a crying need to develop a creative modern, understanding, yet ambitious work culture. A culture that would demand the very best for the organisation

Not much has changed since then. Sporadic recruitments added about 2000 persons against an estimated 7700 vacancies which arose over the decade 2001-2010. The position of critical cadres for both the engineering and programming side remained unchanged with no recruitment at all made to the Group A posts or even for those of the Programme Executives, thus aggravating the already weak position of the programming wing.

A number of factors contributed to this state of affairs. The Indian Broadcasting (Programming) Service was created in 1990 with officers inducted from the programming wing. But after this initial constitution of the service (which was supposed to provide the leadership for the programming wing) no further recruitment has taken place. The passage of the Prasar Bharati Act, 1990 delayed policy decisions (including those on recruitment) since the Act was to come into force from the date of notification - which eventually happened only years later on 15 September 1997. From that date onward the UPSC stopped recruitment to the services it was responsible for since Prasar Bharati had become a statutory body. Along with the virtual halting of fresh recruitment, regular promotions of different cadres slowed down and eventually stopped for many cadres partly due to disputes, partly litigation and certainly because of the non-constitution of the Prasar Bharati Recruitment Board and an increasingly ineffective personnel function.

The problem was compounded by the huge expansion in the network of AIR and DD over the past two decades. For example,

- in 1990, AIR was broadcasting through 100 stations using 186 transmitters, today, this has increased to 376 stations broadcasting through 546 transmitters,
- in 1992, Doordarshan was broadcasting through 535 transmitters and now through 1415.

The problem is not only one of number and vacancies of posts alone. It is also of the staffing structure and composition of the different wings. Almost 80% of the posts are concentrated in the categories of Group C and D which perform support functions. Table 2 shows the number of posts of different levels in the Administration Wing which is responsible for personnel, finance, office supplies, other administrative support and security functions of the organisation. Out of a total of 11654 filled up positions only 33 are for Group A officers and 426 for Group B officers. Most of the other posts are for UDCs, LDCs, drivers, multi-tasking assistants, security guards etc. This shows a very bottom heavy structure consisting primarily of clerical-level staff with a negligible number of posts at the management and leadership levels. There is no clear vertical separation of the core functions of HR and Finance.

Table 2 – Employees in the Administration Wing

Group	AIR/DD	Sanctioned Strength	% of the Sanctioned Strength of Respective Organisation	Filled Up	% Filled Up of Respective Organisation	Vacant
Group A	AIR	32	0	13	0	19
	DD	29	0	20	0	9
Group B	AIR	370	3	264	4	106
	DD	262	5	162	4	100
Group C	AIR	6618	58	4312	60	2306
	DD	3165	56	2644	59	521
Group D	AIR	4537	39	2581	36	1956
	DD	2188	39	1658	37	530
Total	-	17201	-	11654	-	5547

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	DD	3165	56	2644	59	521
Group D	AIR	4537	39	2581	36	1956
	DD	2188	39	1658	37	530
Total	-	17201	-	11654	-	5547

One important aspect which needs to be factored in is the full time equivalent size of the casual workers engaged both by AIR and Doordarshan for a variety of functions including as announcers, presenters etc. Table 3 below gives details of the number of casual employees in AIR (excluding about 1000 casual labourers/workers). It may be noted that most of them work on a part-time basis.

Table 3 - Casual Employees of AIR

Cadre	No. Of Employees
Announcer / Compere	4271
Instrumentalists	1773
News Reader-Cum-Translator	611
Transmission Executive ¹	369

Cadre	No. Of Employees
Production Assistant / OAC	113
Music Composer	94
General Assistant	34
Library Information Assistant	4
Total	7269

If we turn to the composition of the Human Resources (Table 4) we find that 44.4% of the employees work on the Engineering aspects¹⁷, 36.9% in Administrative support services and only 18.7% in the core function of Programming. Or, about 11000 staff are engaged in supporting the functioning of the remaining 20000 - roughly 1 support staff for every 2 staff members engaged on the programming or transmission work – a ratio not likely to be found in any broadcasting organisation. The severe shortage of programming staff is being met by outsourcing content development to the extent of 80% in the case of DD and about 20% in the case of AIR. The state of art production facilities are either unutilized or marginally utilized for want of programming staff while the organization is investing significant human resources in maintaining the setup.

Table 4 - Composition of the Work Force

	Engineering Wing (including CCW)	Programming Wing (including News)	Administration Wing
Total Filled Up Posts	14049	5918	11654
% of Total Filled Up Posts	44.4%	18.7%	36.9%

The ineffectiveness of the HR function can be gauged from the 956 court cases related to service matters pending in different courts (CAT, Lower Courts, High Court and the Supreme Court), as shown in Annexure 1. Regularisation of contractual appointments account for the largest number (202), followed by promotions (113), pay and grant of ACP/MACP (145) and 60 related to postings.

The personnel function in Prasar Bharati, AIR and DD is built on the foundations of a rule based system of management of people which is at the core of the method of managing Government employees. It does not provide for the flexibility to meet unforeseen situations where grievances or errors of policy or decisions create disputes leading to litigation which continues for many years affecting many cadres and resulting in a situation of de-motivation and frustration among employees.

It is only over the last year that concerted efforts have begun to sort out the HR problems faced by the organisation by obtaining Government approvals for recruiting about 1150 personnel (of the overall 3452 critical vacancies) belonging to critical cadres such as those of Programme and Engineering Officers (Group A), Programme Executives, Transmission Executives, Engineering Assistants, Technicians, Cameramen etc. The process for recruitment of four of these cadres has been initiated. Parallel exercises have

¹⁷ Majority of these are retired Transmission Executives

also been taken up to clear the backlog of pending promotions. A separate proposal for the constitution of the Prasar Bharati Board has been submitted to the Government and its approval is awaited. These are but the beginnings of a long process required to be undertaken to radically alter the manner in which the employees are managed.

4. TRANSFORMING HR – VISION OF PRASAR BHARATI

A 21st century media organisation needs a highly creative, technologically savvy work-force capable of adapting to rapidly changing technologies for production and distribution of content as well changing consumer interests and ways of consuming it. Yet the type of the workforce required, its size, structure and composition, the specific knowledge and skills needed are all critical aspects which have to be known for work-force planning to be meaningful. But this vital information can only be derived once the vision and strategy of Prasar Bharati is articulated. If Prasar Bharati continues as a vertically integrated organisation itself handling the entire gamut of operations involved in programming and broadcasting its work-force requirements will be vastly different from that of being a platform focused only on the core function of creating content for different channels with other parts being catered to through service level agreements and other modes of contracting. It is therefore extremely important that Prasar Bharati has clarity on the direction that it is taking particularly on some of the kinds of issues outlined in the section on work-force planning below. Unless this is done in a realistic manner, accurate and timely work-force planning and implementation cannot be done.

For Prasar Bharati to achieve its vision it has to be able to attract, retain, nourish and develop talent in the organisation. It has to provide an environment which encourages creativity, innovation and productivity. To do this it needs to transform the way it manages its people which requires changes in the HR function, structures, processes, and the working culture. The intention would be to adopt applicable best practice from the private sector to create a modern appropriately structured and staffed function.

5. CREATION OF A SEPARATE HR FUNCTION

A distinct vertical for managing the HR function has to be created. The existing system of HRM being one of many functions looked after by the Administration wing simply will not do.

While the exact nature, size and competencies required for staff at different levels of the vertical would need to be worked out separately, its broad contours can be indicated at the corporate, regional and business unit level. The table at Annexure 4 shows the detailed Group wise distribution of the work-force in AIR and Doordarshan across the different wings of Engineering, Programming, Administration, News and Civil Construction.

At the corporate level the functions would essentially be of formulating policies, monitoring and reviewing the implementation of the policies and the HR function at sub-ordinate levels and succession planning.

With the constitution of the Prasar Bharati Recruitment Board, recruitment for all posts will be done by the PBRB. The role of the sub-ordinate Prasar Bharati units would be reduced to providing details of vacancies, rosters etc as well as placement/transfer and posting of fresh recruits.

The level below that of the corporate headquarters, would be headed by the vertical business heads at AIR and Doordarshan where the same four functional areas would be replicated for these two business units. They would holistically look after the manpower needs of their organisations as well as monitor the HR function of their sub-ordinate units. The difference would be that they would not be formulating policies or doing recruitment but would manage the cadres under their control for purposes of transfer and posting, discipline and appeal, pay and allowances, training and employee relations.

At the Zonal/State Level similar functions to those at the vertical business heads would be performed though for a smaller size of staff and lower level cadres.

At the Station/Kendra level the functions would largely relate to the day to day management of personnel including matters related to discipline and appeals, pay and allowances and employee relations.

6. EMPOWERING PRASAR BHARATI TO FRAME SERVICE REGULATIONS FOR ITS EMPLOYEES

There are a range of issues which inhibit the effective discharge of the HR function. The rules based system of personnel management provides very little flexibility to reward or penalize individuals. Over a period of more than 50 years relationships between different cadres have been created in terms of the pay scales of different posts. Any change in the pay of a particular level in a cadre can result in cascading demands for parity from other cadres. The same rules also lead to long procedural delays. For example, even after Prasar Bharati was set up it took a number of years for the pay scales of the Personnel and Finance Members of the Board to be finalized. A major reason for Prasar Bharati being created as a statutory body was to give autonomy to AIR and DD and maintain an arm's length from the Government of the day. Yet Prasar Bharati continues to be dependent on the Government in a variety of ways.

In order to provide Prasar Bharati greater flexibility in prescribing the conditions of service of its own employees and for it to be better able to attract the talent that it needs and to respond to changing market conditions, it needs the power to frame regulations for its employees without seeking prior approval of the Central Government. Thus the proviso to Section 33(2) of the Act which states

“Provided that the regulations under clause (c) and (d) shall be made with the prior approval of the Central Government”

should be deleted. This may also require corresponding deletions in Section 32 of the Act.

Employees of Prasar Bharati are categorized by Section 11 of the Prasar Bharati Act into those appointed on or before 5th October 2007 [who are treated as on deemed deputation to the Corporation] and those who are appointed after that date [who will be treated as employees of Corporation to be governed by its regulations]. Those appointed on or before 5th October 2007 would continue to be governed by the Central Civil Service regulations i.e. in the same manner as regular Government employees including for pay, benefits and conditions of service.

The number of Prasar Bharati employees (as distinct from the Government employees in Prasar Bharati) is very low at present. But any fresh direct recruitment will now add to the size of Prasar Bharati employees while the number of Government employees will decline with retirements over time. There will virtually be a generational gap between the fresh recruits and existing Government employees. Prasar Bharati will need to take special care to ensure a smooth integration of the younger employees into the system and harmonious career development opportunities for both sets of employees by outlining a clear work-force transition plan.

7. HUMAN CAPITAL AND WORK FORCE PLANNING

A well run organisation needs to plan for the type of work force it needs in the future. The broad composition of the present work force has been indicated in Table 4. While its strongest capabilities lie in its engineering strength of terrestrial broadcasting, its weakness - on the programming side - is a critical constraint on its content and production capabilities. It is also extremely weak in core enabling functions of managing people, finances, using information technology, procurement and managing its land assets. It has yet to build adequate capacity in the new emerging areas of social media, interactive broadcasting on mobiles and the internet. At the same time, it also needs to build capability in procurement, outsourcing, contracting service level agreements, legal expertise and remodelling of content for newer media to meet emerging needs.

As Prasar Bharati ventures into new emerging media and changes to come in the next few years, it needs to plan for bridging competency gaps. Unlike most other statutory bodies, Prasar Bharati has to compete with private sector broadcasters in carrying out its mandate. It also has to compete for talent in the market and hence needs to adopt new workforce models with greater flexibility.

Review of Work-Force Requirements

There has been no systematic, independent, professional review of the norms, staffing and structure of the existing work force and the requirements of Prasar Bharati for the medium or long term. Such planning cannot be done without clarity on the vision of Prasar Bharati for the next 5 or 10 years. For instance, policy decisions on modes of transmission – terrestrial, satellite, mobile and/or internet will profoundly impact the type, knowledge and skill sets of the work force required. So also will decisions on what kind of content is to be created, how, by whom. A comprehensive review of the work force today and that required over the next 10 to 15 years should be undertaken. This could be done partly in-house and partly by engaging professional consultants who are proposed to be engaged for the job-redesign and process review as recommended in section 17.

A detailed analysis of the constituents of the current work-force is the first step that would have to be undertaken. This profile would cover the number of different posts, types of functions performed, classification of posts, geographical dispersion, expertise, demographic profile, permanent, contracted, part-time and casual employees, etc. It would then be necessary to know what direction Prasar Bharati was taking in terms of production and broadcasting, after factoring in possible impacts of selecting a particular mix of technology. Only if this is clear would it be possible to make assessments of the gaps in the competencies that would be required and do not exist in the work force presently. An assessment of how these gaps would be met – by training of existing staff and/or recruiting persons with the requisite skills (either permanently or on contract) or entering into service level agreements – would have to be made. Other important considerations could be the possibility of entering into service level contracts for some existing or new functions, engaging individuals for certain work on medium term (3-5 year) contracts, allowing some functions no longer required to phase out as present employees retire.

Prasar Bharati also needs to define its core functions and competencies as distinct from non-core functions which can be performed through different options such as employing individuals on short or medium term contracts, entering into service level agreements or outsourcing. This would help in assessing how best to meet the capacity and competency gaps that are likely to emerge over time. In addition support functions of maintaining facilities and manning security which are presently done in-house can simply be outsourced.

Example –Technology Impact on Work-Force

To illustrate the implications of the impact of changes in use of broadcast technology on the type of work-force required Table 5 considers three scenarios based primarily on assumptions related to the mix of broadcasting technology used. The assumption made is that the core functions (illustrated in the next paragraph) would remain the same in all cases but that changes would be required in the work-force for the operation and maintenance

of the broadcasting infrastructure. A more detailed illustrative elaboration of the impact of such changes on the work-force requirements is given in Annexure 3.

Illustrative Core Functions:

- Channel Management
- Designing, sourcing and managing new formats for new delivery mediums
- Applications development for these mediums
- Network maintenance and operations¹⁸
- Production facility management
- Finance, HR Management, legal and Service Level Agreement building, Administrative Support and Procurement
- Programming workforce

Table 5 - Scenarios for Changing Broadcast Work Force Requirements

Technology Options of Broadcast	Explanation of Option	Workforce Required
1. Add New Technology	Stay in terrestrial and upgrade it to digital Continue satellite Broadcasting Add broadcasting in mobile and IP based delivery mediums	Technical workforce for operations will be required in all locations ¹⁹ and new specialised workforce will be needed for emerging media
2. Shift Partly from Existing Terrestrial Network while Adding New Technology	Withdraw from legacy networks of LPTs and VLPTs, Digitalise and retain HPTs ²⁰ , Increase channels broadcast by satellite, Enter transmission to mobile devices Start broadcasts through internet (streaming/interactive etc.) Withdraw from AM (except for areas of strategic importance) Digitize and expand FM	Technical workforce for operations will be required in all AIR locations, DDKs, HPTs and new specialised workforce will be needed for emerging media

¹⁸ Operation of Maintenance free transmitters like FM and digital TV transmitters could be outsourced provided there is a mobile team to manage maintenance of all transmitters in 200 kms area. Not possible with AM transmitters operation, given the intricacies required, necessity of regular maintenance and non availability of expertise in the market. Alternatively, for complete outsourcing of operations AMCs could be contracted to original equipment manufacturers.

¹⁹ AIR locations about 263 (MW Tx-143, FM Tx- 355, SW Tx-48), DD DMCs 127, HPT 215, LPT 811

²⁰ Digital technology allows broadcast of multiple channels and business models can be developed to relay a bouquet of private and public channels. Digital transmission can also be received on mobile phones by using

<p>3. Withdraw From Terrestrial and Add New Technology</p>	<p>Withdraw from legacy technology like AM in Radio and Withdraw from Terrestrial TV Broadcasting Expand Digital FM network to get full coverage; TV Broadcast only through Satellite; Strong presence on the internet and mobile space with new applications, content customised to suit these delivery mediums.</p>	<p>Technical workforce for operations will be required only in FM stations, DDKs, and Earth stations and new specialised workforce will be needed for emerging media</p>
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8. RECRUITMENT

Acquisition of talent is among the most vital functions. As monopoly broadcasters, AIR and Doordarshan were able to attract the best of talent. With the entry of private channels on radio and TV, Prasar Bharati no longer has a monopolist's advantage and has to compete with private sector compensation packages for talent. Most people who join Prasar Bharati will be seeking long term employment and the security of working in a statutory body. But the organisation's needs may also require people on shorter duration contracts for meeting specific needs or for out-sourcing some functions. The Recruitment Board, to be constituted, has a very important role in ensuring that it is able to recruit the best people from among those who seek employment.

Prasar Bharati Recruitment Board

The Prasar Bharati Act 1990 provides for the creation of one or more Recruitment Boards. The Board needs to be constituted at the earliest as the absence of this statutory body is one of the principal causes for virtually no recruitment having taken place since Prasar Bharati came into being in 1997. An Expert Committee recently constituted (March 2013) by Prasar Bharati has been tasked to submit a detailed report on the modalities for setting up the Recruitment Board and its functioning.

The Board would need to be a lean organisation, utilising technology and outsourcing so as to function in a highly efficient manner keeping the time taken and costs to the minimum necessary. While the Board will be responsible for recruitment and promotion of all Prasar Bharati employees, it should also be entrusted with handling the promotions of employees who joined before 5th October 2007. This would help in facilitating the timely completion of the promotion processes whose delays have been one of the main causes for de-motivation and frustration among the employees. This change would require the approval of the UPSC and the Department of Personnel and Training.

dongles. Such broadcasts would come at no cost and would not consume any cellular bandwidth.

9. COMPENSATION AND BENEFITS

The employees of Prasar Bharati, as Government employees on deemed deputation, receive pay, allowances and benefits basically in accordance with the recommendations of Central Pay Commissions. For this category this system would continue in the future as their pay and benefits, under the Act, are to be the same as admissible to Central Government employees.

Prasar Bharati works in a very competitive environment where changing consumer preferences and technology have profound impact on it. In such a scenario, it needs to have the ability to adapt more flexibly both to changes in technology as well as in consumers' interests. This would also involve being able to recruit candidates with the required knowledge and skill sets which it may not possess but whose need is critical for it to move into new areas. It may also need to attract creative talent to manage specific functions of production of content. But without better pay packages especially for the most creative functions it may not be easy to get the kind of talent required. It needs to be able to offer competitive packages to attract talent for those highly creative or specialised technical skills that it does not possess but which are critical for its functioning and future. It is in order to facilitate such flexibility that we have suggested deletion of the proviso to Section 33(2) above.

It also needs to put into place an appropriate scheme of incentives for its employees so that there is some recognition and reward given to teams and individuals whose outstanding performance has significantly benefitted the organisation.

10. PERFORMANCE MANAGEMENT

Government organisations are known for their diffused systems of managing performance. Yet an organisation which is to function on commercial lines has to objectively evaluate and incentivize excellent performance. While there is presently no system of incentivising performance, creating one is likely to start the process of valuing good performance. Such incentives need not be provided to individuals only, they could be meant for defined business units, teams within them as well as for individuals. The teams could share a percentage of revenues accrued that would not have accrued had it not been for the team work. However, objective performance evaluation criteria would need to be developed for such teams. Other initiatives for incentivizing performance could be recognition through symbolic awards such as certificates or medals etc.

But for this to happen, the performance appraisal system must work. No overall review of the functioning of the performance appraisal system has been undertaken. This would need to be done to ascertain whether the current forms and procedures needed any changes, were being followed correctly, and assessments made were in time and fair. And, in case

remarks were made requiring remedial measures to be taken for the person being reported on, whether such measures have been taken.

The review could also look at the option of adopting a system such as that of Balanced Business Score cards (which has been adopted by BSNL and some private firms) for linking performance with incentives.

11. EMPLOYEE RELATIONS

Any organisation has to ensure a diverse and inclusive environment free from any hostility or harassment with an effective speedy system for remedying grievances. Many of the HR problems facing Prasar Bharati today have their roots in the organisation's inability to provide remedial measures to resolve employee grievances at the stage at which they arose. Whether it is a matter of seniority, appraisal reports or promotion or any form of harassment, the issues need to be resolved at the first stage or at the level above that. Failure to solve grievances results in disputes which can lead to long, protracted cases in different courts. There is presently no organisation wide system of monitoring grievances. An internal tiered structure should be created to address such concerns with clearly defined grievance redressal frameworks to ensure consistency in enquiry procedures. If efforts fail at lower levels, employees should have access to place their concerns at higher levels. The entire procedure should be time bound and closely monitored at the higher levels.

Cases of harassment in particular, would need a special structure in view of the need for ensuring sensitive and expeditious handling. Officers dealing with such cases would need to be specifically selected, trained and sensitized.

12. TRAINING AND CAPACITY BUILDING

Training plays a vital part in ensuring that employees of an organisation have the required knowledge and skills and are suitably oriented for the positions that they hold and the work that they do. Its importance has increased with the rapid changes in technology which impact the way media content is produced, distributed and consumed.

Integrating and Upgrading Staff Training Institutes

The Staff Training Institutes (STIs), particularly those at Delhi, Bhubaneswar, Lucknow and Shillong play an important part in designing and conducting courses for employees of the different wings and levels under Prasar Bharati. The absence of regular recruitment to most posts for more than a decade has meant that very few induction level training programmes have been conducted. Similarly the absence of formalised cadre training programmes has meant that there is no systematic periodic need based training of different cadres.

There are separate Staff Training Institutes for the Training of Programming and Technical Staff as well as one for Doordarshan (in Lucknow). The STIs can play an important role in

breaking down the silos between different wings and cadres. Greater synergies in use of facilities, faculties and in teamwork among different wings could be achieved by combining the institutes for Programming and Technical institutes under a common head.

A review of the infrastructure facilities and faculty which the STIs need to meet the projected training requirements over a five year period, should be undertaken and upgradation taken up accordingly.

Induction Training and Cadre Training Plans

A separate exercise should be done to assess the training needs of different cadres and to draw up appropriate cadre training plans. This would ensure that every fresh recruit goes through a formal training to induct him/her into the organisation and to orient him/her to his/her responsibilities and specific training for enabling him/her to do their job.

The priority now should be to take advance steps to design comprehensive need based induction training programmes of an appropriate structure, curriculum and duration for the Engineering Assistants, Technicians, Programme Executives and Transmission Executives for which the recruitment processes have begun. These programmes must have components for jointly training the Engineering and Programming staff so that they understand the need to work together even in the course of training and to inculcate team spirit among the fresh recruits.

Middle and Senior Level Training

At the middle levels, cross-functional training should be arranged so as to broaden the knowledge and expertise of officers so that they can take up different responsibilities at the higher levels as well as to break down barriers between the cadres and verticals and encourage team-work.

Greater opportunities should be provided to enable concerned officers to attend conferences and seminars at national and international levels for learning about new and emerging technologies, newer formats of programming, innovations and best practices adopted by other public/private broadcasters. Similarly, to encourage deeper levels of learning relevant for the organisation's needs, a liberal view should be taken to allow officers to attend longer term degree/diploma courses in India or abroad on study leave or deputation.

Evaluation of Training

Simultaneously, there has to be an external evaluation of the courses presently being conducted by the STIs to assess their quality and impact. The institutes need to put in place rigorous systems of assessing the quality of their programmes so that there is a continuous process of improving the programmes.

13. RESOLVING EXISTING EMPLOYEE PROBLEMS

As indicated earlier there are many problems which have accumulated over the years and which need urgent resolution. Among the most important of these are those related to promotions. For various reasons, DPCs were not held for prolonged periods of time. This has had grave implications on the motivation and morale of employees. To alleviate this problem efforts have been made to give ad hoc promotions and employees have started to benefit from this. But in some cases employees have been on ad hoc promotions for more than a decade without being regularized. There are also a huge number of pending court cases related to service matters.

It is recommended that specific empowered teams be constituted to resolve such issues at the earliest. The Ministry of Information and Broadcasting should take a flexible approach on the basis of the merits of the case to relax rules wherever needed, if this will meet the ends of justice. The importance of expeditiously resolving these matters cannot be understated.

14. BUILDING A HR INFORMATION SYSTEM

No significant improvement in the HR system will be possible unless there is a comprehensive Human Resources Information System (HRIS). At present there are some databases having varying data of some employees located at zonal offices and data maintained in excel sheets elsewhere. There is no enterprise-wide data of all employees. Thus there is no way of accessing accurate up to date data on any category of employees or being able to use such data for policy formulation or even far more basic matters such as identifying the most suitable employee for a particular posting.

While the work on developing such a system has begun it needs to be completed as soon as possible. Systems have to be built in so that it is widely used and the data is constantly updated.

ORGANISATIONAL ASPECTS

15. STRENGTHENING SENIOR MANAGEMENT

The Shunu Sen Committee (2000) had suggested the setting up of a Management Council reproduced below

“4.18 A Management Council should be constituted, chaired by the Chief Executive, Prasar Bharati with the senior executives who are either profit or function responsible, as members. We recommend that the membership comprise: DG:AIR, DG:DD, heads of proposed new Transmission and New Business functions, heads of Strategic Planning and Technology and heads of Personnel and Finance. Thus there will be 8 members. The Management Council should be responsible for all operational and management matters.”

In addition, the Management Council should discuss and make recommendations to the Board on policy issues, and oversee the implementing of the decisions of the Board and the Council. “

Though this recommendation was not accepted/implemented, there is a need for an explicitly constituted Management Committee under the CEO for providing greater effectiveness, unity of purpose and command. It would be chaired by the CEO and have the following Members:

- Members (Personnel and Finance)
- DGs of AIR and Doordarshan
- Engineers-in-Chief of AIR and Doordarshan
- DGs of News of AIR and Doordarshan
- Heads of New Verticals to be Created

The mandate of the Managing Committee would be:

- To support CEO and the Board
- To carry the collective responsibility for
 - strategic recommendations to the board,
 - operational oversight of Prasar Bharati,
 - operational decisions which require collaborative execution.
- To carry individual accountability to the CEO and the Management Committee for their respective operational portfolio of responsibilities.

The suggestions made in this report as well as the likelihood of major changes that Prasar Bharati will undergo in the coming years require a structure to manage the process of change.

A Project Management Office should be created under the CEO for driving, enabling and implementing the change management process in a strategic and coordinated manner. This small team will need to consist of the “best & brightest” resources with cross-functional, cross-domain experience, preferably from within Prasar Bharati. The Head of the PMO would need to be to be a member of the management committee to be able to play his/her role effectively. The purpose, nature of accountability and monitoring of the working of the PMO would be as follow:

- Purpose – To drive, enable and deliver the Transformation Plan

- Accountability – To make the road map for the Transformation Plan into phases of implementation based on guidance from the Board, CEO and Management Committee and to mobilise resources from within the organisation for implementation of the plan
- Monitoring and Review – By the CEO and the Management Committee at least every quarter. After the first 18 months a review and recalibration of the Transformation Plan would warrant a review of the Project Management Office as well

16. CREATING VERTICALS FOR IT AND FINANCE

In spite of being a huge technology intensive organization the absence of a distinct vertical in IT remains a puzzle. The result is there are no administrative enterprise wide applications – access to data is very limited and hardly any data mining/analysis is done. For example there is no database of employees and the only way to get updated information is to resort to collecting it from the Zones/Regions or and/or Stations/Kendras.

Building IT capabilities is essential for automating HR, administrative and finance related functions to make them more efficient. Unless the core support functions operate smoothly they can create problems on the programming or transmission side thereby impacting the quality of the content delivered to viewers or listeners.

The Engineering Wing has an extensive pool of professional Electrical/Electronics and Communication Engineers. There is an increasing convergence in the use of computers and communications. Yet the state of use of IT particularly for functions such as Finance, Personnel and Procurement is dismal. Unless the use of IT on a wide scale is brought to the forefront there is little hope for improving the functioning of the core areas of Finance and Personnel or for internal communications.

IT is also essential for enabling building of huge scalable libraries of content created by the different Stations and Kendras which could be sourced by other Stations or Kendras or even by the public at large through the internet. The only feasible way of enabling search from such libraries would be through programmes which could enable sampling of the results so that the content actually sought can (if available) be accessed.

- o A strong IT vertical is therefore, vital for the very functioning of the organisation.
- o A similar case can be made out for the Finance function as well as for Marketing and

Land Resources

- o One other area for which a separate vertical could be created is for the New Media which is likely to grow very fast and becoming increasingly important for delivery of the content.

17. IMPROVING PERFORMANCE IN THE WORKPLACE

Adopting Technology, Re-designing Jobs and Improving Processes

There has been no organised effort made in re-designing jobs. While there are about 126 cadres and more than 300 designations in use, the actual range of work done is even more varied. The Administrative structures for example, which Prasar Bharati inherited, emerged from the origins of AIR and Doordarshan as being a part of a Government Department. Thus they contain the multi-layered complement of LDCs, UDCs/Head Clerks, Assistants, Section Officers, Assistant/Deputy Directors, etc. The processes that are followed are also those of a Government Department/Office and have hardly changed over the last 60 years or more.

A 21st century broadcaster has to be at the forefront in its use of technology – not only for its broadcasting but also in other supporting and complimentary areas where its use can simplify and speed up processes, improve productivity and free up human resources for higher level work.

Re-designing jobs, adopting technology in the work place and improving processes are interconnected. In adopting IT, formats and procedures necessarily have to change and so also the way in which work is done. The principles of job management such as of job enlargement, job rotation and job enrichment would need to be incorporated to break the monotony of work, increase motivation and efficiency. These would mean doing things differently and also changing the nature and way of working.

This complex task of re-designing jobs requires specialised skills and tools for analysis as well as extensive real-world experience of having carried out such work in large organisations of a similar or comparable type. It would be best to outsource this work to a suitable firm with the requisite competencies, manpower and experience.

Territorial and Functional Re-organisation

There are 5 Engineering zones, 12 Programming zones and 15 Administration zones. They do not have the same territorial jurisdiction and their present jurisdictions have evolved over time. There is a need to have a common jurisdictions of the Zonal/Regional Offices of all three wings so that there is integration of functions and co-ordination at that level. Similar arrangements are required at the state level for the major states so that the specific needs of each state can be attended to better and there are clear lines of responsibility and accountability for all functions in a state.

It could be desirable to set up an offshoot of Prasar Bharati under Section 25 of the Company's Act, 1956 for certain specific functions largely related to procurement and contracting so that there is a specialized Agency which can create efficiencies and economies in entering into Service Level Contracts, procurement for IT, contracts with individuals etc.

Synergising the Engineering Operations of AIR and DD

There is significant duplication in the engineering operations in AIR and DD. Separate parallel structures exist at different levels unnecessarily duplicating manpower requirements, administrative and logistical support, land use and even stocks of spare parts. All engineering resources in all cities (except those with Capital Stations) should have a single head overseeing their functioning.

Greater efficiencies can also be derived by placing mobile maintenance units under the DMCs to maintain equipment for both AIR and DD under their jurisdiction. Operations at smaller locations can be manned by junior level employees or outsourced. This would result in economies of operation and requirements of manpower.

Strengthening the Prasar Bharati Secretariat

The Prasar Bharati Secretariat has been functioning mainly with staff borrowed from AIR and Doordarshan. It does not have its own posts. The Secretariat should have a flat structure with posts for specialists in different fields partly drawn from those within the organisation so that it has the benefit of the experience and expertise of individuals who have worked in the required areas and know ground realities and partly direct recruits with required special skill- sets which the organisation needs but does not have. It has to make extensive use of IT from the beginning so that internally modern processes are used, databases are created, analysis becomes possible and communication is simplified.

Unless this is done it will not be able to perform its role of policy formulation, monitoring of implementation and strategic planning.

18. TRANSITION PLAN

For the organisation to make the change from the existing structures and processes to the ones being proposed there will need to be a well thought out transition plan whose implementation would have to be closely monitored. Some of the kinds of steps involved in such a plan are outlined in Annexure 2

A. ON HR MANAGEMENT

Separating the HR Function [section 5]

A distinct vertical for managing the HR function has to be created. The existing system of HRM being one of many functions looked after by the Administration wing simply will not do.

Framing Service Regulations [section 6]

In order to provide Prasar Bharati greater flexibility in prescribing the conditions of service of its own employees and for it to be better able to attract the talent that it needs and to respond to changing market conditions, it needs the power to frame regulations for its employees without seeking prior approval of the Central Government. Thus the proviso to Section 33(2) of the Act which states

“Provided that the regulations under clause (c) and (d) shall be made with the prior approval of the Central Government”

should be deleted. This may also require corresponding deletions in Section 32 of the Act.

Human Capital and Work Force Planning [section 7]

There has been no systematic, independent, professional review of the norms, staffing and structure of the existing work force and the requirements of Prasar Bharati for the medium or long term. Such planning cannot be done without clarity on the vision of Prasar Bharati for the next 5 or 10 years.A comprehensive review of the work force today and that required over the next 10 to 15 years should be undertaken. This could be done partly in-house and partly by engaging professional consultants who are proposed to be engaged for the job-redesign and process review as recommended in section 17 below.

Expediting Recruitment [section 8]

Acquisition of talent is among the most vital functions.....

The Prasar Bharati Act 1990 provides for the creation of one or more Recruitment Boards. The Board needs to be constituted at the earliest as the absence of this statutory body is one of the principal causes for virtually no recruitment having taken place since Prasar Bharati came into being in 1997.

..... While the Board will be responsible for recruitment and promotion of all Prasar Bharati employees, it should also be entrusted with handling the promotions of employees who joined before 5th October 2007.

Compensation and Benefits [section 9]

Prasar Bharati works in a very competitive environment where changing consumer preferences and technology have profound impact on it. It needs to be able to offer competitive packages to attract talent for those highly creative or specialised technical skills that it does not possess but which are critical for its functioning and future.....(and) to put into place an appropriate scheme of incentives for its employees so that there is some recognition and reward given to teams and individuals whose outstanding performance has significantly benefitted the organisation.

Employee Relations [section 11]

An internal tiered structure should be created to address [grievances]with clearly defined grievance redressal frameworks to ensure consistency in enquiry procedures. If efforts fail at lower levels, employees should have access to place their concerns at higher levels. The entire procedure should be time bound and closely monitored at the higher levels.

Cases of harassment in particular, would need a special structure in view of the need for ensuring sensitive and expeditious handling. Officers dealing with such cases would need to be specifically selected, trained and sensitized.

Training and Capacity Building [section 12]

There are separate Staff Training Institutes for the Training of Programming and Technical Staff as well as one for Doordarshan (in Lucknow). The STIs can play an important role in breaking down the silos between different wings and cadres. Greater synergies in use of facilities, faculties and in teamwork among different wings could be achieved by combining the institutes for Programming and Technical institutes under a common head.

A review of the infrastructure facilities and faculty which the STIs need to meet the projected training requirements over a five year period, should be undertaken and upgradation taken up accordingly.

A separate exercise should be done to assess the training needs of different cadres and to draw up appropriate cadre training plans. This would ensure that every fresh recruit goes through a formal training to induct him/her into the organisation and to

orient him/her to his/her responsibilities and specific training for enabling him/her to do their job.

Resolving Existing Employee Problems [section 13]

It is recommended that specific empowered teams be constituted to resolve issues [such as those involving court cases or related to promotions] at the earliest. The Ministry of Information and Broadcasting should take a flexible approach on the basis of the merits of the case to relax rules wherever needed, if this will meet the ends of justice. The importance of expeditiously resolving these matters cannot be understated.

Building a HR Information System [section 14]

No significant improvement in the HR system will be possible unless there is a comprehensive Human Resources Information System (HRIS)..... While the work on developing such a system has begun it needs to be completed as soon as possible. Systems have to be built in so that it is widely used and the data is constantly updated.

B. ON ORGANISATIONAL ISSUES

Strengthening Senior Management [section 15]

There is a need for an explicitly constituted Management Committee under the CEO for providing greater effectiveness, unity of purpose and command. It would be chaired by the CEO and have the following Members:

- Members (Personnel) and Finance
- DGs of AIR and Doordarshan
- Engineers-in-Chief of AIR and Doordarshan
- DGs of News of AIR and Doordarshan
- Heads of New Verticals to be Created

A Project Management Office should be created under the CEO for driving, enabling and implementing the change management process in a strategic and coordinated manner. This small team will need to consist of the “best & brightest” resources with cross-functional, cross-domain experience, preferably from within Prasar Bharati.

Creating Verticals for IT and Finance [section 16]

In spite of being a huge technology intensive organization the absence of a distinct IT vertical in IT remains a puzzle. The result is there are no administrative enterprise wide applications – access to data is very limited and hardly any data

mining/analysis is done. A strong IT vertical is therefore, vital for the very functioning of the organisation. A similar case can be made out for the Finance function as well as for Marketing and Land Resources.

One other area for which a separate vertical could be created is for the New Media which is likely to grow very fast and becoming increasingly important for delivery of the content.

Improving Performance in the Workplace [section 17]

(a) Adopting Technology, Re-designing Jobs and Improving Processes

This complex task of re-designing jobs requires specialised skills and tools for analysis as well as extensive real-world experience of having carried out such work in large organisations of a similar or comparable type. It would be best to outsource this work to a suitable firm with the requisite competencies, manpower and experience.

(b) Territorial and Functional Re-organisation

There are 5 Engineering zones, 12 Programming zones and 15 Administration zones. They do not have the same territorial jurisdiction and their present jurisdictions have evolved over time. There is a need to have a common jurisdiction the Zonal/Regional Offices of all three wings so that there is integration of functions and co-ordination at that level.

(c) Synergising the Engineering Operations of AIR and DD

There is significant duplication in the engineering operations in AIR and DD. Separate parallel structures exist at different levels unnecessarily duplicating manpower requirements, administrative and logistical support, land use and even stocks of spare parts. All engineering resources in all cities (except those with Capital Stations) should have a single head overseeing their functioning.

(d) Strengthening the Prasar Bharati Secretariat

The Prasar Bharati Secretariat has been functioning mainly with staff borrowed from AIR and Doordarshan. It does not have its own posts. The Secretariat should have a flat structure with posts for specialists in different fields partly drawn from those within the organisation so that it has the benefit of the experience and expertise of individuals who have worked in the required areas and know ground realities and partly direct recruits with required special skill-sets which the organisation needs but does not have.

Annexure 1 - Cases Related To Service Matters

Main Issue of Case		AIR	DD	Total
1.	Regularization ad-hoc contractual	75	127	202
2.	Miscellaneous	74	77	151
3.	Promotion	87	26	113
4.	Pay Parity/ Pay Scale	50	26	76
5.	Grant of ACP/MACP	55	14	69
6.	Transfer/ Posting	31	29	60
7.	Compassionate Appointment	29	20	49
8.	Recovery of Payment- Arbitration	0	47	47
9.	Seniority related disputes	28	10	38
10.	Disciplinary Proceeding	14	20	34
11.	Service Matters	24	9	33
12.	Recovery of Payment	7	21	28
13.	Non-Payment	8	18	26
14.	Pay scale related	0	19	19
15.	Penalty	6	6	12
16.	Recruitment Rule matters	6	2	8
17.	Pension Matter	4	3	7
18.	Education Qualification Challenged	5	0	5
19.	Staff Quarter	3	2	5
20.	Merger of Cadres Multigrade	2	0	2
21.	Special Duty Allowances	2	0	2
TOTAL		510	476	986

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Annexure 2 – HR Transition Plan

Where We Are	Where We Want to Move To	Transition Plan - Action Points
Structure		
1	Separate critical functional areas	New verticals Required for HR, Finance, IT and New Media
		Prepare structure of each vertical, Design staffing pattern, Design work processes for each (more automated, web oriented).
2	Hierarchical Multi-tiered	De-layer structures at each level Directorate, Zonal office, Stations
		Create new work processes and increase the use of IT to simplify and reduce workloads
4	Separate training institutes for Programme and Engineering	Common Better Equipped Training Institutes for all cadres
		Modernise training infrastructure/facilities Re-assess faculty requirements Improve Training Quality through Rigorous Training Evaluations
5	Ad hoc structured and staffed Prasar Bharati Secretariat	An efficient responsive Secretariat with clarity of purpose and drive
		Identify the competencies required for carrying out the strategic functions Assess the requirements of manpower Staff to be recruited (on contracts) or transferred from AIR/DD – as required
6	No recruitment board	Establish functional Prasar Bharati Recruitment Board
		Obtain Government Clearances for Establishment of Board Recruit and Orient/Train Staff
7	Create Synergies in Engineering Operations of AIR and DD	Single Heads of Engineering functions at the City level
		Appoint common Heads of Engineering Operations at City Level
Processes and Systems		
Training		
8	Traditional Continuing Training Programmes	Need Based Assessment of Course with suitable designs and faculty
		Prepare cadre training plans for each cadre, Use HRIS for identifying and nominating staff for training Re-designed Training Programs using revised curricula and appropriate training methodologies
9	Routine Induction Training	Need based re-designed induction training programmes Greater Emphasis on Teamwork and common objectives Socializing new employees to organizational culture
		Redesign cross functional training program with Substantive field exposure Preparation induction training courses in sync with the recruitment plans Continuous assessment of effectiveness of programs and redesign of courses

	Where We Are	Where We Want to Move To	Transition Plan - Action Points	
<p>Annexu</p> <p>Model</p> <p>What it implies</p> <p>Functions</p>	<i>Employees</i>			
	10	Nominal Opportunities for Learning	Greater use of Learning Opportunities	Tie up with world class institutes for specialised training Develop online training modules Liberal Policy for Study Leave/Deputation
	11	Archaic job design and competencies	Re-designed Jobs Clarity on competencies Required	Redesign jobs based on current day requirements, Identify competencies needed, Train employees or hire expertise Make each job unit interesting by incorporating principles of job rotation, enrichment, enlargement.
	12	Promotions based on Seniority	Incentivise Performance Objective Appraisal Systems Clearer Accountability	Team based working models Creating incentives so that profits over costs are shared with team members (this will also inculcate cost austerity in employees) Clearly define Roles and Responsibilities Key deliverables to be defined in consultation at the beginning of year, Regular performance assessment and feedback to be built into the system.
	13	Archaic rule based processes	Simplified processes Greater use of automated forms and IT	Redesign administrative processes Much greater use of IT on the job for varied purposes
	<i>Systems</i>			
	14	No employee database	Modern Comprehensive HRIS	Create Application Software Enter and Validate Data Move Personnel related Transactions online Use HRIS data for monitoring the effective functioning of the HR system
	<i>Workforce</i>			
	15	Permanent and Casual Employees	Work-Force Combination of: Permanent Contracted (short and medium term) Service Level Agreements Casual	Work Force Planning Identify Future Skill, Knowledge, Competency Gaps Assess modes of Bridging Gaps through Re-training /Re-Skilling, Contracting, Service Level Agreements

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Presently DD is telecasting 16 channels

els on Digital Video Broadcast Handheld (DVBH); It is broadcasting channels as they are to DVBH, but this format may work only for some genres of content such as cricket. It has to be reformatted as far as other entertainment content is concerned. Secondly DVBH receivers availability is limited. Technology that facilitates reception on any smart phone using data networks/dongles needs to be used for deeper penetration. Similarly new models for delivering content through the internet are to be developed.

⁶ Operation of maintenance free transmitters such as FM and Digital TV transmitters can be outsourced. For the other transmitters mobile teams will have to be set up to manage maintenance of transmitters each for covering an area of about 200 kms area. This system will not work for AM transmitters given the intricacies required for their maintenance. Alternatively, for complete outsourcing of operations AMCs could be contracted to original equipment manufacturers.

Annexure 4 – Data on Posts in AIR and Doordarshan

Group	AIR/DO	Engineering Wing				Programme Wing				Administration Wing				News Service Division				Civil Construction Wing				Total									
		Sanctioned Strength	% of the Sanctioned Strength	filled Up	% Filled Up	Vacant	Sanctioned Strength	% of the Sanctioned Strength	filled Up	% Filled Up	Vacant	Sanctioned Strength	% of the Sanctioned Strength	filled Up	% Filled Up	Vacant	Sanctioned Strength	% of the Sanctioned Strength	filled Up	% Filled Up	Vacant	Sanctioned Strength	% of the Sanctioned Strength	filled Up	% Filled Up	Vacant	Sanctioned Strength	% of the Sanctioned Strength	filled Up	% Filled Up	
Group A	AIR	741	12	314	7	427	1006	14	185	6	811	32	0	13	0	19	124	60	69	55	55	98	7	48	4	50	2001	8	639	4	1362
	DO	648	5	320	4	328	430	11	93	4	337	29	0	20	0	9	137	72	87	90	50	0	0	0	0	0	1144	6	520	3	724
Group B	AIR	1379	23	1110	25	269	2468	36	1343	41	1125	370	3	264	4	106	74	36	54	43	20	277	19	213	19	64	4668	18	2984	19	1584
	DO	2844	23	2412	28	432	1085	29	519	21	566	262	5	162	4	100	52	28	10	10	42	0	0	0	0	0	4243	20	3103	20	1140
Group C	AIR	3483	59	2703	62	780	3422	50	1724	53	1698	661.8	57	4312	60	2306	9	4	0	0	9	657	44	587	53	70	14189	54	9326	58	4883
	DO	6599	55	4683	54	1936	2131	57	1717	71	414	3165	56	2644	59	521	0	0	0	0	0	0	0	0	0	0	11895	54	9024	58	2871
Group D	AIR	371	6	244	6	127	0	0	0	0	0	453.7	40	2581	36	1956	2	2	2	2	0	460	30	271	24	189	5370	20	3098	19	2272
	DO	2072	17	1164	14	908	118	3	105	4	13	2188	39	1658	37	590	0	0	0	0	0	0	0	0	0	0	4378	20	2927	19	1451
Total		18137		13930		5207	10660		5696		4964	17201		11654		5547	398	222		176	1452		1119		373	47888		31621		16267	

REPORT OF THE EXPERT GROUP ON PROGRAMMING AND CONTENT

Following the constitution of the Expert Group on Programming & Content, the group comprising the following members met six times and broadly focused on the role of a Public Service Broadcaster in a fast changing society & a fiercely competitive market:-

Mr. Muzaffar Ali, (**Convenor**), Filmmaker and Member Prasar Bharati

Mr. Tripurari Sharan, DG, Doordarshan

Mr. L. D. Mandloi, DG, AIR

Mr. Fayyaz Sheheryar, ADG (P) (Link Officer)

Mr. Jawahar Wattal, Advisor (Min of I & B)

Ms. Sevanti Ninan, Media Critic, Researcher and Editor of TheHoot.org

Mr. Rajiv Mehrotra, Managing Trustee, Public Service Broadcasting Trust,

Mr. Sunit Tandon, Director General, Indian Institute of Mass Communication

Prof. Kiran Seth, Faculty IIT Delhi and Founder Spic Macay

Ms. P.N.Vasanti, Director, Centre for Media Studies

Mr. Brij Kothari, CEO, Planet Read India & Faculty, IIM

Dr. K. Vageesh, Head, Music, AIR

Mr. Shekhar Kapur, Filmmaker

Ms. Shabana Azmi, Actor and Social Activist

Secretariat:-

Ms. Ramna Walia, Research Associate, Prasar Bharati Committee Secretariat

PROLOGUE AND OBJECTIVES

The members unequivocally acknowledged the challenges before AIR and DD, especially in the digital age.

Broadcasting as a worldwide phenomenon has been an evolution of not just research and development of technology, but a focused strategy of defining higher social goals keeping human resources a step ahead of the Research & Development process. The philosophy and vision of international broadcasting and its operation in free economies is deeply linked with their vision of both the dialectics of society and foreign policy of their respective nations.

It is therefore imperative that Doordarshan and All India Radio evolve a vision to face the challenges of a burgeoning democracy and a buoyant economy. The key to this quantum leap forward is development of creative and technical expertise and talent to face the challenges of the future with clearly defined communication objectives, which are:-

A. VISION AND COMMUNICATION OBJECTIVES

- To present and project the ethos of one of the world's largest secular democracies.
- To present this living philosophy and culture both within the country at the regional and national levels and at international forums.
- To understand and address the socio-cultural aspirations and the developmental concerns of rural India.
- To understand and address the urban mind and milieu and help evolve a syncretic culture, a compassionate and humane temperament, in a rapid hybridization process.
- To forge and create a bridge between broadcasting and art forms that reflect the spirit of society.
- To address the burgeoning mind of a child growing up in this democracy.
- To create in corporate publicity, a sense of social and cultural responsibility to support national public service broadcasting.
- To promote excellence and quality in broadcasting. Prasar Bharati should lead and set standards for the Broadcast industry with a focus on quality and innovation.

B. CONTENT

The content has to emerge from the aforesaid outlined vision.

- Define and describe the scope and reach of the broadcasts, DTH, satellite and terrestrial through an ideal channel mix.
- To analyze the current mix and adjust it with the ideal composition.
- Define and determine the purpose, image and thrust of each channel and determine its design content accordingly.
- Create a comprehensive content grid allowing for natural overlaps in areas of theme, target groups, and regional variations.
- The overarching objective of national integration would be only achieved if one community or one part of the nation understands the character and aspirations of the other part by enhancing the quality of content.
- Develop a fervour that will emanate from 'Content Excitement' and will run across the entire gamut of marketing and promoting viewership.
- Prime time content treatment for each channel becomes the focus of all broadcasting creativity.

A continuity of such production should run through the week.

Content can vary from channel to channel and become its identification factor.

This is the most detailed time-consuming process that can truly result in a makeover for the National Public Service Broadcaster. As we are dealing with public funds, value for money becomes paramount. Concept, treatment, production design and values, cinematography and all else that comes with it to create 'Content Excitement', has to be our primary concern.

- Create a practical and doable short term plan of action which can seamlessly dovetail into the long term content grid.

C. HUMAN RESOURCE

There is a dire need for excellence in education in filmmaking and communication arts which is directed this way. We therefore need a laboratory where the heart, mind and the medium meet.

The evolution of communication education is directly linked with both what the society feels it needs, and what we feel the society needs. It is therefore important to have a band of youth charged with knowledge, concerns and compassion to create a powerful secular and balanced

democracy. Issue-based orientation and sensitivity is necessary to shape the future of a country poised for a major breakthrough in the 21st century, where environmental and cultural problems looking at us in the face are colossal.

A training plan will work both with training new talent and also upgrade Prasar Bharati cadres. Most international channels evolve through a regular training of their personnel which brings them abreast of new trends and technology in programming and production. This will help integrate the many disciplines that constitute the language of moving images and address a wide range of applications in areas like information technology, entertainment, communication, tourism, craft, fashion, environment, ecology and rural development. It will be the answer to the challenge and needs of globalization of modern India, in keeping with the country's economic growth and spur the evolution of a healthy and secular political system.

When Prasar Bharati was conceived, the sine-qua-non was that the content of AIR and DD should be free of the shackles of the government of the day and the creators, the presenters, the gatherers and those having editorial control on it should be committed to objectivity, a balanced approach and fair play in the process of dissemination of information. To ensure this, Prasar Bharati must have its own news cadre, answerable to the broadcaster insofar as content, service conditions and postings are concerned.

Audience Research

To bridge the gap between citizens and DD, more research needs to be used. DD & AIR exists because of tax payers money therefore, it is important to both listen, address what public think and understand their priorities. Research can be effective tool to reinforce this understanding of viewer interest and requirements.

To inform all program decisions and strategies, its important to commission independent research, both qualitative and quantitative in nature. Besides, efforts like Public Consultations, Audience Panels, Annual Tracking Studies, etc will complement the commissioned studies. These studies and audience interactions will provide valuable insights on program, theme, format, character, genre, relevance, understanding and likability.

Research enables to understand the strength of views across the Indian population, as well as allowing to appreciate any differences between diverse groups of people. The results of all the research should be available on DD / AIR website, to ensure openness and transparency in decision making.

Audience feedback (even SMS or phone calls) and letters (emails and postcards) are important source of information on what is appealing to audience. Also, such interactions are strong medium of engagement with the audience. In the current media ecosystem, such engagement is essential to attract and maintain audience interest.

There is an urgent need to revamp Audience Research Unit (ARU) and reconnect with audience priorities. Research and audience studies need to be used strategically in program development and also in promotion. New media initiatives can be aligned with compiled viewer feedback from respective programs to engage and further build viewership.

METHODOLOGY

The expert group on Programming and Content derived some benefit from various media studies and reports on the existing content of Prasar Bharati from organisations such as The Media Foundation and Centre for Media Studies (CMS), reports of previous committees such as the Technical Expert Committee (TEC), as well as various discussions, presentations and deliberations made during the meetings of the expert group. Copies of the inputs received are reproduced for the perusal of the Sam Pitroda Committee as Annexures to this report.

RECOMMENDATIONS

The deliberations of the members and discussions on individual presentations made by some of them helped evolve a consensus on the following recommendations:-

1. Vision and Strategy:

It is necessary to evolve both overall vision statements for AIR and DD, as well as channel/station specific vision statements from which the content strategy, roadmap or mix would have to be evolved.

2. Personnel for Content Production / Procurement / Management:

To implement these, it would be essential for each channel/station should have a duly empowered Channel Head/Manager from within the organization who would provide administrative and financial supervision. Further, each channel / station should have Content, Technical and Packaging Heads, who can be either from within the organization or outsourced, after conducting an appropriate HR Audit. It is essential to set high criteria for the process of selection of these heads and their teams. Also, there is a need to set up a specific mechanism for this process of selection through evaluation of existing personnel within the organization. This is of vital importance as it is strongly felt that currently DD and AIR do not have sufficient human resources to deliver the quantity and quality of programming and content expected of a public service broadcaster .

3. Training for Content Production / Procurement / Management:

Regular training and skills up gradation programmes for content and programming staff have to be incorporated at the level of each channel/station, with sufficient funding ear-marked for

these. The existing training facilities within Prasar Bharati must be upgraded so as to constitute a world class Training Institute for Prasar Bharati personnel.

4. Audience Research:

Each channel/station should be required to undertake audience research with regard to needs of audiences, content analysis, as well as impact, for which ear-marked budgets should be provided to each channel/station. Each channel/station should have a Research Head with a dedicated research cell, which can provide content, market, audience research inputs.

5. Programme Outsourcing and Selection:

For outsourced programmes, flexible systems of selection of programme providers and negotiations of costing, duly supervised by oversight committees which should include outside experts, would be required in order to improve the quality of content, rather than tendering and bidding systems at present in place, which do not attract the best talent in direction, screenplay, scripting, etc.

6. Funding and Expenditure:

Since at present, PB's expenditure on content creation is extremely low, it was strongly felt that a far larger proportion of total expenditure than at present has to be devoted for this purpose. Also, financial flexibility should be permitted in order to provide the ability to spend quickly and efficiently for the creation of quality content.

7. Monetization of Public Service Value:

Since there are major concerns about the conflicting needs for the revenue generation and the public service, non-revenue generating roles of Prasar Bharati, it is strongly urged that there is a need for a clear demarcation between Prasar Bharati's commercial and non-commercial properties in terms of programme and time bands. A notional monetized value must be assigned for the public service value of the public service properties / elements delivered by Prasar Bharati on each of its channels / stations and this must be included in the accounting and assessment of the overall revenue + value generated/contributed by Prasar Bharati.

8. Reviewing and Re-organization of Stations and Channels:

There is a need to review the present configuration / bouquet of stations and channels at both DD and AIR to assess if any re-organization would better enable the fulfilling of the role of a public broadcaster, e.g. in the case of DD, splitting of DD News into separate Hindi and English news channels, having channels targeting specific audience components such as children, women, youth, rural/agricultural, environment, health, culture, etc. This is particularly important for the bouquet of channels on DD Direct Plus, since much of India's rural audience has migrated to DTH. In the case of AIR, the number of stations could be reviewed, along with their content, reach, and cost-benefit.

9. **Phasing out of Terrestrial Broadcasts:**

The growth of Prasar Bharati over the last three decades has seen a heavy preponderance of expenditure on infrastructure for terrestrial broadcasting, at the expense of expenditure on content. With the growth of satellite, cable, DTH and broadband internet access, there is a need to phase out terrestrial broadcasts (except for FM Radio, which needs to be expanded) over a period of time in consultation with the other Expert Groups (say five years or so), thereby releasing considerable funds that could be used for strengthening the content of Prasar Bharati, as well as releasing permanent assets for monetization.

10. **Funding:** Prasar Bharati's requirement of funds especially for defrayal of expenditure on content creation and channel packaging should not be made subservient to IEBC. It should be funded by the government in the same manner as other completely autonomous bodies that provide public services such as the courts, are funded.

11. **Public Participation:** Today, with digital tools at our disposal, it is feasible to create platforms for greater 'public' participation and engagement. For example, can a folk singer from any part of the country simply leave a voice/song sample on a toll free number, and, if meeting quality standards, be invited to record in a proper studio? Can a group of young, talented film makers create a sample episode and simply upload it, with the confidence that their creativity will be judged in a transparent manner by a variety of people, and, if good, have a chance of being selected for further commissioning?

12. **Social Media:** Doordarshan and All India Radio have to utilize with greater precision the craftsmanship of social media platforms to propagate and popularize India among young generations as well as the tech-savvy.

13. **Channel Specific Recommendations:**

In the first instance, the group advocated structural overhaul of the organizations operating under the aegis of Prasar Bharati:-

13.1 In terms of programme/content strategy, it was suggested that there should be a programme matrix detailing themes versus audiences. This is crucial to help fulfil the mandate of providing diversity of content and addressing all segments of the population (specially children, the hearing impaired, tribals, etc) and producing programs on issues / regions that others ignore (such as the environment, farming, legal issues, public services, J&K, etc). This is also important so as to check the quantity of programming to be done in each matrix cell.

13.2 Some suggestions made during the discussions included allowing for a 'citizen journalism' segment in all major news bulletins. These stories can be editorially curated on an ongoing basis. Another suggestion was to use famous personalities to endorse DD News to build credibility.

13.3. Most members favoured the split of the DD News channel and the creation of separate English & Hindi news channels, both 24x7.

13.4. Award- winning art films, NSD productions, TV adaptation of theatrical presentations should be procured to enrich DD Bharati.

13.5 There is a need for collaborative arrangements and syndications to get programmes from other niche channels like Discovery Channel, History Channel, etc.

13.6 Introduction of business news in Hindi apart from English. 13.7 Worldwide and in India, education is an important PSB mandate. Given the unique need of our country (non literates, neo literates and burgeoning students across primary, secondary and tertiary streams) further experimentation (including Entertainment Education strategies) and innovation is required to fulfil this critical mandate. Creating time bands or launching exclusive educational television services with greater contribution (which could include partial funding) by central and state universities to fight the menace of increasing illiteracy in rural and hinterland India.

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REPORT OF THE EXPERT GROUP ON ARCHIVING

1. Introduction

Radio Broadcasting started in India in the 1920s. What started out as private enterprise, gathered momentum quickly and led to the foundation of the Indian State Broadcasting Service in 1930 and All India Radio (**AIR**) in 1936. The name Akashvani was adopted in 1956, nearly a decade after independence. Television broadcasting began in Delhi from 1959, but was given a separate identity as Doordarshan (**DD**) in 1976. The Prasar Bharati Act, 1990 came into force in 1997 to grant statutory autonomy to the national public service broadcaster and now Prasar Bharati (**PB**) comprises the Doordarshan and Akashvani networks. Together, it is one of the largest audio and audio-visual broadcasting networks in the world, with over 370 radio stations and 60 television centres.

The centrality of AIR and DD to the political, social and cultural life of the country can hardly be overestimated, particularly in the post-independence decades. The national broadcasting services have been a sphere of striving and aspiration, the principal conduit of information and entertainment in the country. With its unparalleled reach and influence, it has enabled the people of the country to be participants of the making of modern India. It has also, historically, been the site of cultural activity, with the greatest artistic talents of the country priding themselves on their association with AIR and DD.

The archives and libraries of AIR and DD stations across the country bear witness, in however fragmentary a fashion, to this extraordinary history. The archiving sensibility itself is relatively new in our country; in earlier decades, much has been lost though lack of awareness, neglect, natural decay and technological obsolescence. However, even what survives would constitute by far the largest repository of audio and audio-visual material in the country. In terms of social significance, historic value and cultural worth these collections would constitute one of our greatest national treasures.

However, the heritage material with Prasar Bharati, having great cultural and educational value to the present and future generations is at the risk of loss and eventual destruction if preservation measures are not taken up forthwith. In an age when the importance of archival preservation is widely recognised, it is imperative for us to preserve this material for future generations; it is their inheritance and it is up to us to perform our role as custodians to the best of our ability.

In this context, this report seeks to examine the issues relating to the survey, documentation, preservation and re-purposing of the Prasar Bharati archives as a public organisation, in the light of new technological options available today. It also addresses the scope of a more open dissemination of archival content, without compromising physical availability, IPR and security. Finally, it makes a set of recommendations may help in the adoption of a more focussed and concerted approach for the preservation of this priceless heritage.

Names of the Members of the Group are at [Annexure I](#).

2. Methodology Adopted:

The following resources/methods were adopted by the Group to formulate their views and reach their conclusions:

- Personal experience, knowledge and expertise of the Members of the Expert Group and pooling of the issues raised in discussions by them.
- Examination of libraries and collections and study of the methods of preservation adopted till date;
- Consultations with Radio and TV personnel having long experience of handling older content;
- Study of the deliberations of the Technology and Options Committee set up by Prasar Bharati in 2012;
- Visits to regional Radio and TV stations;

- Information posted on websites of major audio and audio-visual archives in other countries.

2. Vision and Goal Statement:

A living and vibrant archive is the backbone of any media organisation. Both AIR and DD possess some of the richest audio and audio-visual programmes, which is a national heritage that has to be preserved, utilised and disseminated. The content available is of immense historic, cultural, artistic and sociological value. Therefore, the necessity and importance of creating a world class archive for Prasar Bharati (PB), with the best available technology and practices, is self-evident.

The goal is to create state-of-the-art digital archives of international standards for Prasar Bharati at Central and Zonal levels, with most of the content being accessible to the people. Such an archive would be of great significance to broadcasters, producers, music lovers, historians, journalists, sociologists, scholars, researchers and aesthetes in general. Many performers are happy to freely disseminate their work, and while drawing up the contract, the option of free access could be built in. However, along with accessibility, the monetisation of archived material would bring in revenue for the organisation and will be a step towards sustainability. The Group suggests that the Prasar Bharati Archives may be named as the **National Broadcast Archives of India.**

In the pursuit of this goal, the Group has made two sets of recommendations. The first set relates to those areas that can be taken up immediately and completed within a period of 12 months; implementation of the second set of recommendations may need a longer period, ranging from 2 to 5 years. Inevitably, there will be some degree of overlap between the two sets of recommendations, but it may be stressed that both work towards the same goal. The basis of these recommendations are given in greater details under the heading “Analysis”.

3. Core Recommendations:

The Group recommends that the following activities should commence without delay and be completed within a period of 12 months:

(1). The task of creating the PB Archives has necessarily to be taken up in a Mission Mode in the 12th Plan. The term 'mission mode' signifies that all activities for achieving the goal should be covered under a single unified project with defined time-lines, full budgetary support and concrete milestones, under the leadership of a designated Project Director assisted by a qualified core team of professional archiving and marketing experts, supported by an Archives Cadre. **While the Project Director should be appointed as early as possible, all necessary approvals for the Mission from all concerned agencies should be obtained within the financial year 2013-14.**

(2). The PB Archives should have physical facilities only at the Central and Zonal levels with the infrastructure and resources for safe housing, preservation, digitisation, security and dissemination, linked to all Stations/Kendras with fibre optic connectivity. While the complete requirement of facilities will be built into the project, **the Zonal Centres (which have been identified) should be made operational within 3 months, with whatever infrastructure is possible.**

(3). Once the Zonal centres are functional, all existing archival material should be surveyed, identified, categorised and preserved in an air-conditioned, dehumidified, dust free and secure environment in accordance with established international norms. Simultaneously, all current recordings should be done in accordance with accepted international standards and a uniform work flow chart should be followed by all centres without missing any links. **These tasks should be completed within 6-12 months.**

(4). A complete survey of legacy equipment, both within PB and in the open market should be undertaken, along with transfer of all such machines to Zonal centres, calibration and repair of existing machines and launching a concerted drive for acquisition of working equipment and spare parts. **This task should be completed within 6 months.**

(5). All archival material, without exception, should be digitised in accordance with international digitising standards with the same file formats and uniform metadata sets being adopted at all Centres. The policy of migration to future technologies should be built into the digitisation programme. **Suitable directions should be issued by PB within 2 months.**

(6). Multiple copies with Linear Open Tape (LTO) backup and disaster copies should be made and preserved. **All Zonal Centres should be provided with servers and LTO drives, to be linked with the Central Archives, within 6 months.**

(7). Automated ingestion of digitised and born-digital content into Asset Management Systems should be undertaken, with link documents for all content. **Suitable action should be taken to start this process within 3 months.**

(8). A thorough review of the existing policy relating to agreements and adoption of a common, comprehensive IPR policy is essential, along with appointment of standing legal consultants and a small but permanent IPR cell. **This activity should be completed within 6 months.**

(9). There should be a separate Archive website as well as facilitation of access through digital devices that would enable both free accessibility and optimum monetisation of material. **Creation of the dedicated website should be completed within the next 12 months.**

(10). A panel of domain experts both at the Central and Zonal levels should be constituted to comprehensively assess the material. **The panel may be appointed within a period of 3 months.**

4. Longer Term Recommendations:

The following recommendations are made for a 2-5 year period, although it may please be noted that some of these activities would have commenced simultaneously once the short term recommendations start getting implemented.

(1). After receiving all approvals, the Archives Mission should be implemented from the financial year 2014-15 onwards and should be completed in all aspects within 5 years, say by 2019-20.

(2). From the day the Zonal centres begin functioning, digitisation should start on a factory mode in three shifts converting analogue and digital tapes into file format with minimum required meta-tagging. If this is done, a 'no backlog' status can be achieved in 4-5 years.

(3). The Central Archives at Delhi should be housed in a dedicated state-of-the-art building with its own technical and other specialised staff.

(4). A strong Archive Cadre fully trained in various aspects of archival activities should be in place within the next 3-5 years.

[5]. As much as possible, the content should be available free of cost to the people. This would be in keeping with Prasar Bharati's mandate as a public service broadcaster.

[6]. For other types of content, the archive website content should be enhanced with user friendly facilities for downloading through payment gateways. The website should also have a section on thematic webcasting and a high quality clip bank for international sales should be available.

(7). The Archives should work towards releasing at least 100 CD/DVD's of some of its best archival material of mixed genre, particularly of the earlier years, within the next 2 years.

(8). PB should put in place a progressive and settled IPR policy for revenue share with artistes and participants. As a public service broadcaster, the policy should not only adhere to all the legal requirements but should also provide support and encouragement to artistes. In five years, PB should have collected and obtained full rights for all the iconic and popular programmes broadcast by it over the years, for which it does not have IPR.

(9). Both AIR and DD should have dedicated slots for running archival content that would be of interest to viewers/listeners. This would also create public awareness about the archives. Later, once the mission is substantially implemented, running a separate 'Archive Channel' could be explored by AIR and DD based on the content supplied by the archives.

(10). Interactive training programmes, skill up-gradation and motivation of the Archive personnel on all facets of archiving should be a priority area by way of lectures, seminars, exhibits, international exposure to best practices and discussions. Special training for generating digital files and metadata has to be designed.

(11). The possibility of using Cloud technology should be carefully explored, at least for low resolution content with meta-data, after addressing any security concerns that may arise.

(12). The products of PB Archives should be visible and available in all stores, e-stores and all digital platforms. All archival material should be linked for access within the country and made available on all possible social media networks.

(13). A fool-proof and proper disaster management system should be put in place with copies from all the Zones and Central Archives stored safely at the designated locations.

(14). A modern and upgradable system of wire connectivity should be established for accessing and retrieving high resolution content within the DD and AIR network.

(15). It is necessary for PB to set up rigorous security systems so that archival material is not misused by unscrupulous elements within and outside the organisation.

(16). There would be a number of interested people who would like to participate in a project of this nature by way of identifying content, contributing time and material to the archives on a voluntary basis etc. Therefore, it would be advantageous to give wide publicity to this project through the media so that maximum public participation can be ensured. A suitable policy for receiving fee archival content from people who wish to contribute it should be devised.

6. Analysis:

Both sets of recommendations of the Group are based on the facts and circumstances as analysed below. To achieve these objectives successfully and within an aggressive time line, the Expert Group considered a number of critical initiatives required to be taken immediately, which are summarised below.

Mission Mode: While archiving is a critical activity of any broadcast organisation, it has not received the importance it deserves in PB. Given the fragile nature of the archival holdings and the vast quantity of perishable content, archiving activities cannot be undertaken in a 'business as usual' manner. The Group found that a number of senior officials currently tasked with archiving had multifarious responsibilities and were able to devote very little time to this activity. This mind-set has to be changed and the significance of creating a world class archive has to be recognised across the organisation. As Governmental procedures are cumbersome and time consuming, the Group is of the view that the task of setting up the National Broadcast Archives of India has to be approached and implemented in a mission mode with a clear vision and strategy, earmarked budgets, dedicated human resources, specific milestones/targets and within a definite time frame. Piecemeal, open-ended, un-coordinated and half-hearted efforts will not yield the desired results. A Detailed Project Report should be drawn up and all requisite approvals for the Mission from various Ministries/Agencies should be obtained at one time and not on a year-to-year basis. The Mission has to be led and driven by a qualified professional to work as Project Director (PD), who should have jurisdiction over both AIR and DD in all archiving matters and should report directly to the CEO. The PD, who would be responsible and accountable for all archiving activities, will have to be provided with a core team of experts/professionals, to be employed by PB. To oversee and monitor the Mission, there should be a standing National Archiving Advisory Committee, consisting of eminent persons from appropriate disciplines to advise the project team as well as to oversee and monitor the project, till it is completed. This Committee should also include representatives of the Ministry of Finance and the Planning Commission.

A Detailed Project Report (DPR) that comprehensively covers all physical and financial aspects of archiving at the Central and Zonal levels (some of which are outlined below) has to be drawn up and all necessary approvals obtained so that the project becomes a part of the 12th Five Year Plan with earmarked funding. The DPR should also include the human resource requirements, as this aspect is often left out in Government funded projects, resulting in the project being a non-starter. The DPR can either be prepared in-house or through a specialised agency. Substantial inputs for the DPR can be provided by the Technology & Options Committee already set up by PB for revamping its archives. The DPR should be prepared and the approval process completed by end of the financial year 2013-14. **The Group would like to**

emphasise that getting the Mission approved in totality is paramount for the success of this entire exercise.

Organisational Setup: The entire organisation would be headed by the Project Director. (Once the project is fully implemented, the nomenclature of this functionary can be suitably amended). The Central Archives of PB would be located at Delhi. The Central Archives would be common for both AIR and DD. Below the Central Archives, there would be separate Zonal Archives for each organisation, which would support the Central Archives. The Zonal Archives of AIR would be at Mumbai (WR), Hyderabad (SR), Kolkata (ER), Jalandhar (NR) and Guwahati (NER). The Zonal Archives of DD would be at the same places, except the WR Zonal Archives, which would be at Ahmedabad. Each Zonal Archive should be headed by a senior officer of the rank of ADG or DDG. The Central and Zonal Archives would be linked through optic fibre connectivity for transmission of archival material. As of today, the Zonal Archives are not operational. Shortage of staff and requisite infrastructure in the Zones are the main reasons for this. While the DPR will cover all aspects required for the Central and Zonal Archives of both AIR and DD with dedicated space, vaults, equipment, connectivity, budgets and staff, a start should be made to make the Zonal Archives operational with the available infrastructure and without waiting for the project to be approved.

Central Archives Infrastructure: The present housing of the Central Archives is unsatisfactory. The facilities are spread over different floors/buildings in Akashvani Bhawan and even elsewhere. The space available is very inadequate and the working conditions need considerable improvement. There are absolutely no facilities for the public to view/listen to archival material. The security is also quite rudimentary. As part of the Archives Project, a dedicated building with sufficient space, integrating both DD and AIR, should be constructed with state-of-the-art facilities, so that the work places of the archive personnel, vaults, legacy equipment, digitisation equipment, connectivity with Zonal archives, transmission of archived material to broadcast centres, public viewing/listening areas and all other activities are under one roof. The DPR should include this aspect, so that PB can have a world class archive that will be a source of national pride. The NHK Archives in Japan is a good model and it would be worthwhile to study their layout while preparing the DPR. The Group also felt that, if technically feasible, the possibility of converting the present Broadcasting House, which is a heritage building and a landmark of Delhi, as the Central Archive should be considered.

Survey of Holdings: A survey of all holdings at the Central and Regional level should be immediately carried out. At present, about 67 Programme Generating Facilities of DD and over 300 Stations of AIR have libraries set up over many decades which have been storing programmes over the years on different formats and various media. There is no accurate estimate of even the numbers, let alone the details of the programme content. A rough estimate of holdings in the Central Archives, as provided to the Group, is as follows:

Audio:

- Analogue format 17,77,500 carriers
- Digital CDs 9,55,000 (including born-digital material)

Video:

- Analogue formats: 2,36,020 carriers
- DVC carriers: 16,000

File format:

- Audio: 11.009 GB
- Video: 1500 hours ingested in Media Asset Management Systems

It is obvious that the amount of holdings is extremely large, even without quantifying the regional holdings. This survey would provide an accurate estimate of content in each type of format which in turn will assist in identifying the requirements of safe housing infrastructure, equipments for digitisation and storage and financial and human resources for inclusion in the DPR. This survey should be started immediately and should be completed in a period of 6 months. Most of the archival recordings prior to mid 1990 are already in the Central Archives of AIR and DD. It would be advisable if the Central Archive circulates the list of recordings under various domains to all centres so that duplication can be avoided at the local level. The Group would also suggest the creation of a comprehensive national register which lists and catalogues archival records as an integrated electronic database with uniform standards and benchmarks pertaining to audio and video content.

Survey of Legacy Machines: This survey should cover the availability of legacy machines (to run various types of formats that are no longer in use) and their operational condition. Given the fact that a wide range of formats were used over the years and still survive, it is imperative

to conduct a country-wide survey of working equipment – both for audio and video. A special drive to repair non-working equipment, calling in experts from outside would be advisable. Equally, a drive to acquire working machines from the market that are capable of handling obsolete formats would be useful. This survey can also be started immediately and should be completed in three months. Availability of legacy machines in the market should be ascertained within six months through appropriate publicity campaigns.

Safe Housing: The holdings of PB are in varying states of preservation. Degradation of various analogue mediums like tapes is taking place at an alarming rate. Some of the oldest tapes are already damaged irretrievably. Lack of optimum storage conditions, obsolescence, dearth of working equipment, erroneous methods of retrieval of content, lack of trained personnel, frequent recycling of tapes and even destruction of obsolete media are the main causes for such a state of affairs. Therefore, safe housing of analogue material in accordance with internationally accepted parameters is a essential. All analogue carriers must be preserved in a 24/7 dust free, air-conditioned and dehumidified environment (Air conditioning at 16 degrees and humidity at 45-55% is the accepted international norm). The temperature and humidity parameters should be set bearing in mind the need for sustainability and stability. Temperature and humidity should be checked twice a day and the vaults should not be used as offices for the staff. All legacy material must be preserved even after digitisation. Based on the DPR, state-of-the-art safe housing infrastructure has to be created at the Central and Zonal levels within the next one year.

Digitisation: The Group strongly feels that along with safe housing, digital preservation is the other most critical activity to be undertaken, before the existing content is lost forever. Presently, this activity has been patchy at best, with no fixed standards, random selection and in variable formats. Born digital material follows no fixed protocol and is stored in diverse forms. While digitisation is being done in some measure at the Central level, very little is being done at the Zonal level. In order to preserve the holdings for posterity, all resources without exception have to be digitised and converted to file formats following the policy that the most endangered material should be digitised first. All audio and audio-visual material should be digitised in accordance with current international standards following a single file format. While essential cleaning/restoration can be done along with the digitisation process, it has to be ensured that the inherent content is not jeopardised. Any large scale and substantive

restoration should only be done later under the scrutiny of experts. The essential requirement is to digitise in an assembly line or factory mode.

If in-house facilities are inadequate to achieve digitisation within a reasonable time frame and once the full magnitude of the task is established by the survey, the work should be outsourced to reputed companies through a transparent process and under stringent security conditions. The process of digitisation should be completed in the next 5 years, so that no backlog remains. A Committee of artistes, scholars and archivists can review the status of the present day 'digitised' archival possessions in the Central Archive. Though it is a difficult proposition to revisit all the digitised material, a review of the present day digitised archive can be considered to ensure both quality and uniformity in order to ensure adherence to international standards,.

Choice of Digital Technology: Even though digital preservation of analogue material is the most urgent requirement currently, it is pertinent to note that the rate of obsolescence of digital technology is very high. It is imperative therefore that the software and hardware adopted now should comply with international requirements and standards, such as those set by the International Association of Sound and Audio-Visual Archives. At the same time, a policy of allowing migration to newer technological platforms needs to be worked into the long term preservation strategy and included in the DPR.

The details of the technology/equipment required are given at [Annexure II](#).

Current Recordings: For archiving of current recordings, a systematic and detailed work flow should be immediately prepared and followed without missing any link in the flow chart. It is also necessary to ensure the quality of content being generated. Any loss of quality at the recording stage affects the quality of archiving. As the transmission is through servers, a file copy of the transmitted content should be taken on a Linear Tape Open (LTO) drive for preserving in the Central Archives. After broadcast a copy should go immediately to the Zonal and Central archives. The transmission cue sheet could supply the basic data on which metadata could be built. A copy of the contract with the artiste should also move with the recording to the archive for future reference. At stations/kendras which are using digital technology, the analogue equipment at such stations should be removed so that it is not used for the sake of convenience. The work flow chart should be prepared and made operational

within the next six months across all stations/kendras. The mindset of reaching out to a medium based content like CDs or Tapes has to change. AIR has already shifted substantially to tapeless content creation. Doordarshan also will have to do the same very soon. If archiving processes and procedures are not framed and strictly complied with, we are in danger of losing born-digital content every day.

Metadata: Creating accurate and detailed metadata and proper categorisation is imperative for quick retrieval and is at the core of digitalisation. Digitised content is intangible and has no physical form; metadata thus becomes crucial for retrieval. A metadata set for each individual file following a standardised Dublin Core Metadata Set should be uniformly followed across the DD and AIR. Uniformity of metadata fields is essential for efficient retrieval. All digitised material must be ingested into Content Management Systems. Standardisation of the system, both centrally and regionally, is necessary. Multiple hard disk backups with LTO tape backup have to be kept. A set of disaster copies should be preserved at a different location.

Human Resources: The Group appreciated that while PB is facing an overall crunch in respect of human resources with many vacant posts, the situation is abysmal in the area of archives. Archiving requires both commitment and skills, which demands the presence of a dedicated work force. The current practice of archiving being a 'side activity' among other responsibilities assigned to the staff has to cease.

Apart from the PD and his core team, the Central and Zonal archives would require media professionals, technicians and marketing experts, including retired personnel who have institutional memory and those technicians who understand old formats, domain experts, language experts, young archive assistants, legal professionals, marketing executives and data entry operators. These persons should be part of an Archive Cadre, who will not be assigned other duties. Universities, institutes of technology, institutes of management, media schools and design/art schools can be the hunting grounds for fresh recruitment. A comprehensive training programme would have to be devised through public/private organisations for training the existing and new personnel. Interactive training programmes, skill up-gradation and motivation of the Archive personnel on all facets of archiving should be a priority area by way of lectures, seminars, exhibits, international exposure to best practices and discussions. Special training for generating digital files and metadata has to be designed.

A detailed analysis needs to be done within PB to estimate the requirement of archival personnel at the Central and Zonal levels. This will have to be done as a part of the project preparation exercise and included in the DPR.

The Group would also take this opportunity, through the Expert Committee, to suggest to the Government to consider introducing a Diploma in Archiving as a discipline with clear career paths for those opting for such a course. Incentives need to be built in to make the process of archiving a lucrative career option for young professionals who wish to take this up full-time. Exposing the staff to the best practices world-wide in the field of Archiving and keeping them abreast with the latest technological advancements in the field is quintessential if the process has to scale up and remain contemporary.

Need for a comprehensive IPR Policy: There is presently very little awareness of IPR issues within PB. As both a major rights holder and a user of rights, there is an urgent need to take stock of the existing IPR policy of DD and AIR and structure a common comprehensive IPR Policy that takes in to account international best practices and recent changes to the Copyright law regarding protection of technological measures and Rights Management Information. The Policy should sufficiently balance strong copyright protection including digital rights with straightforward access to copyright material where appropriate. It should comprise of a 'positive' and a 'defensive' strategy. The positive strategy will leverage the value of the archived materials having IPR, through generation of revenue, whereas defensive strategy will be an effective risk management to mitigate the risk of probable legal challenges.

Such a policy should also give contractual comfort to the other contracting party. Further, the standard agreement forms in both DD and AIR should be revised to reflect the stated policy and include all present and future rights across all mediums. In case of a work wherein any software program or other methods having an IPR is used, there should be a warranty with details by the supplier that he is the lawful owner or the licensee. The objective is to make the archive available to the nation through a mix of public service and commercial activities.

This is an activity that cannot be delayed and PB should engage a reputed legal consultant for this purpose and complete the work within three months. A small IPR Cell will be required as a permanent measure. Prasar Bharati can think about a view about creative commons wherever it is possible. It will be a new beginning. Some important material that belong to the nation as

a bequest to humanity—let us say, the “*Tryst with destiny*” speech or the post-prayer speeches of Mahatma Gandhi—need to be made accessible to all.

Accessibility: Archives are not museums. The content of an archive becomes living and meaningful only when it can be accessed by people. Both AIR and DD have large volumes of material that would be of significant interest to citizens. A comprehensive access policy should be framed taking into account the rights and restrictions on the extent of access to information under various applicable statutes. PB Archives can consider putting select IPR free content on its website for cost free viewing, which would also add value as a branding exercise. Creation of a separate Archive website is an activity that should be undertaken immediately. The Archive website can also offer catch-up services which will hold important broadcast programmes of the week for another week or so. This is the latest service offered by most Public Service Broadcasting archives. This will increase the life span of a programme and address the needs of viewers. Apart from a dedicated website, both the Central and Zonal Archives should have state-of-the-art interactive viewing and listening facilities for people to use. Some other measures that can be implemented are:

- Networking with University/ Music departments for using PB Archives through broadband.
- A lot of content is in circulation now through YouTube and other online archives and PB does not enjoy any monopoly anymore over its own material. Therefore, alternative measures are to be evolved for reaching out to people.
- All AIR/ DD archives can have listening rooms both offline and online through nominal payment mechanisms for wider dissemination. For example: Chennai Music Academy is doing this in an off line mode and raga.com and gaana.com through online formats.
- Rules for access to students should be made easier. All departments/ Universities are to be informed about the facilities.
- Prasar Bharati website should be made more effective to have a) listening rooms b) payment gateway c) user created online A/V stations.
- Prasar Bharati could curate or outsource curating of theme based exhibitions of the Archive’s audio and audio-visual content in several cities and towns of the country which could also help drive public interest in the collections and their participation in the process, in addition to being another source of revenue for PBAI.

- In due course, both AIR and DD could have a separate Archive channel that transmits programmes accessed from its archives. If done imaginatively, this can be immensely popular.

Addressing Changed Viewing/Listening Habits: Apart from the conventional Radio and TV sets, most urban homes today access the media with a wide array of equipment like mobile phones, tablets, computers, I-Pads, I-Phones etc. In addition to broadcasting, people are looking for IT enabled entertainment and news content. PB Archives will have to take cognizance of this reality and plan its dissemination programme accordingly. Archive on multi-platforms can provide interactive video content as per the viewer's choices thus making the long tail receive a fresh lease of life. For example, the black and white content of great masters may not find its way to regular broadcasting schedules, but if loaded on a broadband supported video on demand service or Internet Protocol Television (IPTV) portal, this long tail may have exclusive viewers. More over these programmes can earn revenue through pay per view arrangement.

Music and Video Apps for Smart Phones, I-Phones, Androids etc would be a good way to reach out to the younger generation in particular and to bring this content back into public circulation. In this regard, there are several Digital Music distribution agencies which help distribute the digital content on a variety of media like iTunes, Amazon, Spotify, Deezer, Google Play, Grooveshark, YouTube, imusica, 7Digital, OVI(Nokia), Rhapsody, Juno download, digital-tunes, gracenote, movistar to name just a few. These agencies operate on a nominal ingestion cost per track/clip per store and allow the licensee to keep most of the royalty earned in return thereby creating an assured revenue stream for the Archive. A proper cataloguing of what content the Prasar Bharati would be comfortable and legally viable to ingest in these multiple new-age media needs to be made and suitable contracts drawn with agencies thereafter.

Marketing of Archived Material: There is currently no clear marketing policy for archival content. Synergy between AIR and DD is also essential to ensure full value for the material to be marketed and also to avoid duplication of effort and resources. Some of the important action points in this regard are:

- Formulating a clear marketing policy which should be dynamic to meet market demands
- Constitution of a dedicated marketing team under the PD covering both organisations
- One dedicated and attractive archive website for audio and video
- Products to be sold directly through Internet with payment gateways
- Coordination in selecting themes/artistes for release and organising one release function with proper publicity
- Channel, outdoor and print publicity to showcase audio/video releases
- Utilisation of authorised vendors and graphic designers

Security: A number of security issues that have been identified, which include the following, need to be implemented in the Central and Zonal Archives:

- One point entry and exit with log of each activity maintained
- Physical frisking and checking of valid entry card
- Electronic systems like CCTV etc and Biometric security systems
- Barcode scanning of Tapes/CDs etc
- Limited access to vaults. No person to sit inside vaults.
- No laptop, pen drive or storage system allowed into the security area of archives
- No recycling of tapes
- Physical protection of the premises 24x7
- CDs issued should be collected by the library after broadcast
- Master CD should not be issued; only copy to be issued

International Best Practices: The Group felt that international best practices should be studied as organisations like BBC and NHK, Japan have overcome the same type of problems and successfully set up excellent archives. The technological standards being followed internationally should be adopted, particularly in areas like digitalisation, metadata creation and safe housing.

7. Summary

The Report stems from the understanding that the archival material locked up in DD and AIR have great historical, cultural, social and educational value. In this direction, creating a living

Archive that has an enthusiastic public response and participation is the need of the hour. With the realization of the critical importance of this largest public electronic media archive in India, the document lays out a set of recommendations as an action plan for revitalizing and providing it with better access. Considering that the corpus is spread in AIR stations and DD kendras spread across the country, in different states of preservation and in varying formats, the challenge is to take up the task in a Mission mode that covers all aspects, including survey, stock taking, documentation and preservation of the holdings through standardised formats in a comprehensive electronic catalogue, and ensure safe housing strategies and fool-proof risk management system.

For the retrieval and transfer of data from obsolete technologies to a current platform, the restoration of legacy equipment is an important preservation priority. For transfer of archival material and long term preservation, digitisation methodologies with focus on metadata creation and documentation, and selection of appropriate technology that comply with international standards need to be evolved. For access to material in the digital age, interactive viewing/listening facilities with a balance of open access and monetisation may be evolved.

Issues pertaining to copyright ownership as well as the rights for fair use and dissemination need to be balanced; the goal is to promote access to the archive through encouraging public availability, for information, education and entertainment oriented purposes. To achieve this enormous mandate, it is essential to put in place a monitoring system with a visionary group of experts and an operating mechanism with a cadre of skilled archivists headed by a Project Director. AIR and DD together represent a significant part of India's collective memory and knowledge inheritance of the last hundred years. It is the responsibility of the nation to safeguard it in a way that benefits present and future generations.

The Group would like to sincerely thank the Expert Committee headed by Shri Sam Pitroda for allowing it this opportunity to participate in this task of national importance. The Group would also like to thank Shri Jawhar Sircar, CEO, PB and his team for their generous guidance and support as well as the Committee Secretariat for their logistical assistance.

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Technology/Equipment for Central and Zonal Archives

Doordarshan

1. Equipment/modules for the Archive cell Tape Cleaner and Evaluator: Dust, fungi etc. get deposited on old tape based recording media which clog the playback head of the VTR during playback. These are required to be removed before loading the old tapes in VCRs. For the purpose of tape cleaning, "Tape Cleaner & Evaluator" for the recording format of BCN, U-Matic, Betacam and DVCR-PRO are required for the Central and Zonal Archives.

2. Preview Systems: Old legacy tapes are previewed to decide the archival value of the content and for categorization of program, essential details including place and date of acquisition, details of artist/personality etc. Legacy machines of Ampex, BCN, U-Matic, Beta cam formats along with Video Monitor and Audio monitoring equipments are required.

3. Noise Reduction and Digital Restoration System: The content quality can be improved by restoration systems. The restoration system employs complex and computation intensive filtering and processing. It involves selection and setting of various parameters, depending upon the type of impairment. Artifacts such as dirt and dust, scratches, picture stabilization, Luma flicker, video dropout etc can be repaired. Some of the equipments available are:

- a) Standard Noise Reducers
- b) High Quality Advanced Noise Reduction & Restoration System
- c) Software based Restoration on NLE

4. Media Asset Management System (MAM): MAM provides integrated content management functionality. It offers real time access of rich media content to multiple users. It provides powerful metadata management capability for effective cataloguing and quick retrieval. The user is able to create and modify metadata fields as per the requirements. Ingestion, metadata creation, metadata support, asset view, low resolution browse & playback, intelligent search (including Boolean) and refined search are some of the important and essential capabilities. MAM system consists of following:

- a) Ingest System and Browsing System
- b) Transcoder System
- c) Online Storage System
- d) Near Line Storage System - LTO -6 based Deep Archive System
- e) Retrieval System

- 5. Quality Control Systems:** Automatic Quality checking for file based content
- 6. NLE and NLE with 3D Graphics System:** These are required for repurposing and DVD authoring of the archived content.
- 7. Tape Storage Management System:** These are for management of tapes in tape library.
- 8. Mobile Shelving Compactors:** MS Compactors are required for storage of tapes in dust free and controlled environment (temperature and humidity)
- 9. P/S equipment, Air conditioners, Dehumidifiers, Firefighting equipment etc.**

Akashvani

- 1. Software for Digitisation:** Quadriga Digital Software (including CD inspector, BWF Editor)
- 2. Software for Refurbishing:** Restoration Software Bundle (including Wavelab, Virtual Precision Instruments (VPIs), VPI Denoiser, VPI Debuzz, VPI Declicker, VPI Declipper, VPI Decrackle, VPI Zoom Analyzer, VPI Spectrograph, VPI Dscratch, VPI RepariFilter, VPI Spectrapolator etc.
- 3. Work flow software:** Cube Work Flow (including Dobbin Module)
- 4. Digital Audio Workstation for Digitisation:** T-1650 (CPU Intel Xeon E3-1270 v2 3.50Ghz,8MB Cache) along with Microsoft Windows 7
- 5. Sound Card for Digitisation:** HDSPe-AIO
- 6. CD Players:** CD 500B
- 7. Digital Audio Workstations for Refurbishing:** T-5600 (CPU Intel Xeon E5-2643 3.30Ghz) along with Microsoft Window 7
- 8. Sound Cards for Refurbishing:** L-22 (including Cables)
- 9. Servers for Refurbishing System with Server O.S. and RDBMS with 5 Nos. of CALs, network antivirus for server & WS:** R720-CPU Intel Xeon-E5-2609, Two Sockets (with iDRAC6 Enterprise hardware & DELL Open Manage)+Microsoft Windows Server 2008 with 5 CALs at each stations (total 5 Sets) +RDBMS-My SQL with 5 CALs at each station (total 5 Sets) +suitable antivirus with 6 CALs at each stations(total 5 Sets) +SYMANTEC Back-up EXES.2010 (total 5 Sets)
- 10. External SAN Storage (6TB) for Refurbishing System:** PS6100XV
- 11. 24 port Ethernet Switch:** Power Connect 5524

- 12. Online 5 KVA UPS along with power supply distribution cabling etc. for server, WS and Refurbishing system: Maxi Power**
- 13. Tape Library for Backup storage: TL4000**
- 14. Active Monitors: 8030 A**
- 15. Laser Bar Reader Hand Held Scanner: XL8000**
- 16. Thermal Printer: C168**
- 17. Software for CD /DVD Tracking: Bar Code System**
- 18. Professional DVD Writer/player: DVRA1000HD**
- 19. CD/DVD Analyser: DVX4**
- 20. P/S equipment, Air conditioners, Dehumidifiers, Firefighting equipment etc.**

REPORT OF THE EXPERT GROUP ON GLOBAL INITIATIVES

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Key Recommendations

- Financial autonomy is central to functional autonomy. Recommend a Prasar Bharati Trust Fund created from revenue share collected from the TV Distribution industry. Cable should contribute, like DTH; or charge a cess/levy to build a corpus.
- The new Global Platform must be independent of the Government and of the domestic organisations of DD and AIR. The ideal structure would be the PPP model. The entity will be manned by professionals and report to an independent Board.
- Need to design the platform for new media (mobile, internet) first, and launch it on social media; then extend it to conventional TV. Should be designed by a specialist world-class design house.
- Branding must be neutral/global. DD or Prasar Bharati- linked names are not recommended.
- The platform should treat leading Public Service Broadcasters such as BBC, CNN and CCTV as competitors and benchmark them on quality and reach.
- The strategy must include financial sustainability as a key objective. Pursue all revenue streams such as advertising, subscription (in due course) etc.
- The content strategy: news and views, features on art, culture and social issues. Showcase success stories of emerging media, leverage Bollywood, and provide a platform for new documentaries and new Indian cinema.
- Aggressively pursue reciprocal landing rights in other countries to gain distribution.
- Launch in all geographies that matter to India and influence opinion about it. Geographic extension can be in phases. A simultaneous launch in India and overseas can be considered.
- Identify the audiences that radio needs to address. Recognise the obsolescence of analogue radio. Resource sharing with the TV, new media platform is possible but run radio as an independent platform.
- There are multilingual opportunities in neighbouring countries: Bengali, Tamil, Punjabi, Urdu. Similarly, there is a separate opportunity on the Internet radio with the breadth of diverse Indian content.

INTRODUCTION

It would appear to be anachronistic that there should be talk of a global initiative for the public broadcasting service in India when the first task appears to be to reorganize and restructure the domestic platforms under the aegis of Prasar Bharati.

However, early in its deliberations this Group came to the conclusion that the conceptualization of a global media platform need not be sequential to, or dependent on, the restructuring of Prasar Bharati.

1.1 *Mandate*

To create a strong international presence, using all possible platforms and content.

To create a truly world-class broadcasting service at par with the best in the world by focusing on next-generation opportunities, technologies, business models and strategies to bring about generational change.

METHODOLOGY

The approach of the Group has been outward looking and holistic rather than deep diving and getting into minutiae, recognizing the competencies of the members. A detailed business plan should be the subject of expert consulting advice and subject to a clearer view of the resources that would be available for a venture as ambitious as the launch of a global media platform.

Consequently, each member was requested to consult widely with business associates, colleagues and experts and use them as a sounding board. This process of outreach resulted in valuable suggestions and recommendations. Think tanks such as Gateway House in Mumbai, media owners such as Dr. Prannoy Roy, heads of TV Channels, and members of the Board of Prasar Bharati have been sounded out. Gateway House very kindly submitted an Approach Paper, which is available in appendix with this report.

2.1 *Collaborative Approach.*

It was clear at the outset that the Group on Comparative Analysis of Public Service Broadcasters would have a material overlap with the remit of our Group. So, joint sessions were held with them and Prof. Nalin Mehta was included in several meetings both locally, through videoconference, and even through a meeting in Singapore with the Convener. We agreed to share our respective thoughts and this report reflects several areas of convergent thinking. Similar cross-group initiatives were also undertaken and feedback received from the Group on Government Relationship, Group on Finance, and the Group on Regulatory Mechanism.

The Group on Global Initiatives met formally three times in Delhi and the minutes of these deliberations are also appended.

2.2 Report.

This report endeavours to cover the following broad heads:

- Vision and Strategy
- Status, Structure & Governance
- Competition
- Identity including Branding
- Content
- Distribution & Social Media

VISION STATEMENT

'Brand Neutral/Global' will become the platform of choice for discerning and liberal viewers across the world. It will present a rich tapestry of content from news and views to stories featuring art, culture, business and issues of social significance. It will shed stereotypes and present the perspective of modern India on both domestic and international issues.

VISION & STRATEGY

A fundamental question raises itself when a new media platform is being envisaged: which medium do we wish to use? The Group believes the answer should emerge from a dispassionate assessment of the market for media products and services and the dynamic and evolving relationship modern consumers across the globe have with these services.

The emergence of the digital economy in the 90's and its explosive growth to a consumer reach of 2 billion users in 2012 is a compelling development. This will cross 3 billion in 2016. (In India the reach of the Internet might well be at 125 million users today, but leading analysts estimate it will cross 330 million by 2016). Moreover, by 2015 mobile phone penetration will reach 90% globally. By 2016, 80% of server workloads will be virtualized. Overall, there will be 1 trillion connected devices by 2015 (Source: BCG research).

So, when we wish to address the world we need to address digitally connected consumers *first*.

4.1 Platform Concept.

Strategically, this means that we should be designing our media platform for the Internet and for smart mobile phones. We could then adapt this core concept and design for effective execution on *both* TV and radio, including the Internet radio. It is important that the architecture, especially the branding and on-screen graphics, should be world- class; and we should endeavour to get the best talent available globally to execute this. This is necessary if we are to compete with the best in the world.

A key aspect of designing the product and the marketing mix for the platform is the need for a comprehensive and contemporary understanding of audiences in our target markets. This will need strategic investments in consumer research, both qualitative to get insights, and quantitative to establish the order of magnitude for investments both in terms of money and people. Good quality consumer research will also help us to validate our hypotheses as we construct a meaningful business plan and before we commit large resources.

4.2 Financial Sustainability

Financial sustainability should be a key part of the strategy and the business plan that is envisaged. While the business models adopted by Public Service Broadcasters across the world vary (from fully Government-funded operations like NHK from Japan or Al Jazeera, to partially subsidized operations like Australia's ABC and the BBC) this Group envisages that we should pursue all revenue streams for our platform such as advertising, subscription etc. from the get-

go. While a significant initial investment from public (non-government) funds will be necessary for some years the platform should work towards sustaining itself financially within 5-7 years.

STATUS, STRUCTURE & GOVERNANCE

This Group believes that the platform for global outreach should not be linked with the Government in any way.

There are three compelling reasons for this. First, Prasar Bharati itself is going to change and go through a process of restructuring. The size and complexity of the operations of DD and AIR within India is large and challenging enough to be managed effectively. This will require complete focus on the part of its management.

Secondly, the challenge of global markets, competing with brands such as the BBC, CNN, CCTV or Al Jazeera and the unique and fast-changing new media space will be daunting; and this will need a separate set of competencies. Therefore, even the staffing of this platform should be a judicious mix of local and international talent.

Thirdly, in order to build credibility and to be seen to be a media platform independent of Government with an independent editorial policy, the de-linking from the Establishment as well as established local entities is essential.

This would mean that this new entity should also be independent of the domestic organizations of both Doordarshan and AIR.

5.1 Structure

There is significant merit in considering the PPP (Public Private Partnership) model for this new platform. This will not only minimize the investment required from public funds but also bring in a culture of commercial accountability. Private funding could be sought from Indian businesses/entities that would pool their investments with contributions from a new recommended Prasar Bharati Trust.

5.2 Prasar Bharati Trust

The new Prasar Bharati Trust as an over-arching entity in a general sense will be similar to the BBC trust in the UK.

It should have two separate entities that it will oversee: a domestic arm that would manage DD and AIR, and a global arm that would operate the new international platform.

The public funding for this Trust should come from an “independent” source. This could be in the form of an allocation from the revenue share already collected by Government from TV distribution platforms such as DTH platforms and the Cable TV industry or by way of a cess/levy, or it could even be a grant. It is important that the Trust should have no organizational connection with the Government. This will go a long way to promote financial and, therefore, operational autonomy for Prasar Bharati.

The global platform would be an independent commercial entity accountable to an independent Board, which would have representatives from the shareholders, that is private investors, as well as nominees from the Trust. The platform would be manned by high quality local and international talent with domain expertise and paid market-based remuneration. It would not have employees on deputation from Government. It would be fully accountable to the independent Board.

It should be recognized, however, that there could be a need for a mechanism that would facilitate the sharing of content on a selective and need-based basis between the domestic establishment of Prasar Bharati and the global platform. A clear commercial transfer pricing arrangement would need to be worked out to facilitate this.

IDENTITY AND BRANDING

It is vital that the global platform has a unique and independent identity of its own. As discussed above, this is important for it to have the credibility to compete against well-established brands such as the BBC and CNN. One important branding guideline is that there should be no reference to Prasar Bharati, Doordarshan, Akashvani or All India Radio in the nomenclature. The reason for this in strict Marketing terms is that these brands carry the baggage of their history and imagery and the perception of overt links with the Government. Not all of this is flattering, nor will it necessarily add value to the aspirations of this new brand and its emerging personality. Besides, within India the mandate for these brands and services has rightly been focused on social development and support to the community and is an important part of our developmental agenda. But this differs substantially from the mandate for the new global platform.

6.1 Positioning

The brand will be positioned as a modern, forward-looking platform that will cover world events in the framework that India (not the West) is the norm. It will present the India story as distinct from the Indian (MEA) point of view. The tonality will be moderate, contemporary, factual and non-partisan. Moreover, it will present a wide sweep of content of which only a proportion needs to be about India and Indian issues and not just about Indian politics. Its presentation of world events and global issues will be an important expression of its positioning (witness, Al Jazeera or Russia Today).

While developing the architecture for the brand across new media as well as conventional media platforms the need for strong creative-development- oriented market research and world class Marketing management cannot be emphasized enough. Specialist advice should be sought in these areas.

Also, the target audience envisaged is the opinion-maker and influencer abroad, whether of Indian origin or otherwise. The priority should be local citizens overseas and Indophiles, in general. The Group does not recommend addressing the lowest common denominator among the Indian diaspora. The Group also feels that the language of the platform should be English with local sub-titling, if required. There should be an aggressive investment behind presenting a technically high quality look and feel across the platform. A world class- logo should become the platform's most recognizable asset.

CONTENT

For starters, it is interesting to observe that different Public Service Broadcasters have adopted segmentation as an important part of their strategy to address global markets. Older platforms such as the BBC and ABC have adopted this in conjunction with their domestic strategy. However, newer platforms such as CCTV have launched a slew of specifically tailored channels – a more expensive approach. Here’s an illustration.

	News & Current Affairs	Documentaries	Entertainment	Sport	Science	Others
NHK	56	2	12	-	9	20
ABC	-	45	38	8	-	9
ABC News 24	100	-	-	-	-	-
BBC News	100	-	-	-	-	-
BBC Four	-	90	10	-	-	-
BBC One,Three	-	-	70	-	-	30
BBC Sport	-	-	-	100	-	-
Al Jazeera	58	42	-	-	-	-
CCTV News	100	-	-	-	-	-
CCTV-12 (Doc)	-	100	-	-	-	-
CCTV-6,8,15 (E.T)	-	-	100	-	-	-
CCTV-5(Sports)	-	-	-	100	-	-
CCTV-10 Science	-	-	-	-	100	-

PROGRAMMING CONTENT FOR WEEKDAYS (%)

- Major platforms have specific channels for specific genres. For eg. BBC has BBC News, BBC Sport. CCCTV has CCTV Sports, CCTV Science.
- The content percentage in case of weekdays is generally weighted in favour of documentaries.

PROGRAMMING CONTENT FOR WEEKENDS (%)

	News & Current Affairs	Documentaries	Entertainment	Sport	Science	Others
NHK	33	12	10	1	31	13
ABC		34	66	-	-	
ABC News 24	100					
BBC News	100				-	
BBC Four		33	20			47
BBC One, Three			60			40
BBC Sport				100		
Al Jazeera	58	42	-	-	-	
CCTV News	100					
CCTV-12(Doc)		100				
CCTV-6,8,15(E.T)			100			
CCTV-5(Sports)				100		
CCTV-10 Science					100	

7.1 Content Strategy

An interesting revelation of this analysis is the focus on documentaries as a genre. This makes sense for countries and cultures seeking to showcase their home cultures to global audiences. Clearly, this presents a unique opportunity for India's burgeoning film industry and its vast pool of talent. From issues covering the diaspora, democracy and nation building, technology, medicine and healthcare, from labour and mechanization to geographic stories not just from India but also from BRICS countries, South Asia the range available is rich and wide. Women's issues, education, and youth issues should be highlighted but given solution-based coverage.

The Group is convinced that the story of 'emerging' India and its vibrant democracy needs to be put out there. Content has to be inherently interesting; the look and feel sophisticated with excellent production values. Uniquely Indian themes such as Yoga, Ayurveda or Bollywood are obvious areas but information about Indian business successes and the richness and diversity of the country need prominence. The rich archival content available with DD and AIR and other cultural repositories should be presented innovatively. For this, funding support should be sought from large corporate entities that would gain from the elevated association and could help the platform to upgrade the quality of its programming significantly.

There was diversity of opinion on whether there should be debates/discussions on the platform, the conversation being coloured by the controversial nature of such programming on local Indian TV today. The consensus was based on our agreement that the signature tonality of our programming strategy must remain 'moderate, non-partisan and factual'. The example of the Doha Debates aired by the BBC is an illustration of the right approach to discussing controversial issues.

While it is not the task of this report to prepare a comprehensive content strategy some useful pointers from Gateway House do contain a useful listing that can be used as a thought-starter:

On weekdays, programming could contain an India news update every four hours with a running ticker. There would be a Breakfast show as well, and at prime time in the evening we could include, debates, and discussions with panelists with a focus on local markets and global events, not just India issues. On weekends, there would be more features, documentaries and coverage including Bollywood, pop and classical music, theatre and folk forms. Stories highlighting entrepreneurship, financial markets, innovation, rural India, math contests and general knowledge, not to mention Indian food and drink. While the language should be English with local sub-titling, we could, in time introduce Bangla, Hindi, Urdu and Tamil. This is especially relevant for neighbouring markets in the Indian subcontinent.

The Group has not been able to access expert advice on radio. There is a strong need to address two aspects. The first is the growing obsolescence of conventional analogue radio and the strong emergence and proliferation of digital-based Internet radio. The broad point is that radio programming will also need segmentation as TV does. The focus on audio properties

such Indian music and the rendering of Indian mythology in high quality audio programming is self-evident.

DISTRIBUTION; SOCIAL MEDIA

It is noteworthy that the MEA estimates that the reach of DD News in overseas markets has diminished over the years and has shrunk from 118 markets to a mere 36, currently. This is reach alone and does not reflect viewership, which is probably very small. Of course, it is content that builds viewership but getting regional access in multiple geographies is a very expensive proposition today. The challenge is to buy satellite transponder capacity at fairly high rental rates and then spending even more money to gain distribution on the ground via cable or DTH platforms, all which charge for access to their customers. Especially for free-to-air channels, which all Public Service Broadcasters are, the revenue from subscriptions by consumers is not available. The contribution of advertising revenue is small and it will take several years for traction to be built up. So, much of the expense for the running of TV channels in overseas markets will be on gaining distribution. One avenue for investigation is to seek reciprocal landing rights in different markets so that we can gain a foothold to start with. So, if NHK Japan is to be available in India then our TV channel/s should be given access in Japan, for instance.

An alternative strategy is for ANTRIX, the commercial arm of ISRO to negotiate with satellite providers for whom they are important customers and seek access to global markets on a reciprocal basis.

On the ground, there can be a graduated approach. In many countries hotels, airports etc. are the first points of entry for international programming. These are usually accessible through cable/ DTH networks but there could be direct deals possible with large hotel chains. Another alternative is to use existing distribution networks that work with private Indian operators such as ZEE or NDTV or even global networks like Star to see if platform-sharing is possible.

8.1 Social Media

One of the ways of easing the entry into new markets is to use social media extensively to build awareness, acceptance and popularity to begin with and then seek distribution on TV, which is more expensive. It is interesting to note that CNN has 6 million followers on social media. Eyewitness accounts are becoming a source of localized content and CNN has a million registered contributors. BBC World has 4 million followers on Twitter and BBC Sports, 1.3 million. The guidelines are open and accommodating:

1. Participation should be online
2. The BBC should not be brought into disrepute

3. There should be moderation
4. Dealings should be open and transparent.

AL Jazeera is relatively new but is active on Twitter, Facebook, Flickr, Tumbler, Google+, Reddit and Instagram. Recently, the platform launched a social media-centred news programme, The Stream. This is a web community and a daily TV show powered by social media and citizen journalism. It uses social media sources to create TV programming including both stories and images from these sources. Al Jazeera has 1.6 million followers on Twitter in English and interestingly, 3 million in Arabic.

Russia Today has the most interesting presence on YouTube. It is the first global news channel to hit 1 billion views on YouTube. Apart from news and views it offers a unique insight into Russian history and culture.

8.2 Launch Phasing

So, we could consider a plan to design the platform for social media to start with, launch on the various platforms available including YouTube and then extend to conventional TV.

While we should aim to extend the platform to all geographies that offer a need and a potential for our platform we could consider a phased extension. A simultaneous launch both in India and overseas could be considered versus an exclusive overseas launch in one set of, say English speaking markets and then a gradual extension to other geographies. It should be clarified, though, that it would be best to avoid the complexity of different versions for different cultural mores, at least in the first few years

SUMMARY

1. The Group believes that the mandate to create a platform for global initiatives is essentially a task that requires us to look at Indian Public Service Broadcasting de novo. So, the exercise to restructure Prasar Bharati need not precede the creation of a Global Platform.
2. The key words in the mandate are 'world class', 'next-generation opportunities'. So, the approach has been outward-looking and inclusive.
3. The vision and strategy for the new platform spells out the critical role for new media technologies recognizing the paradigm change in the behaviour of audiences across the globe.
4. The positioning of the new platform, its branding and the business model should be constructed so that it can compete effectively against international brands, both established and new.
5. A key aspect of the recommendation is the importance of autonomy in the setting up as well as the functioning of the new platform. It has been recommended that a Prasar Bharati Trust should be created with the corpus coming from public (rather than Government) funds. This Trust should be the supervisory overseer for two arms, the one being Prasar Bharati and the other being the Global Platform. Both entities should have independent Executive Boards reporting to the Trust.
6. The entity that runs the Global Platform should be a Public Private Partnership that is funded from both sources. This will make it commercially efficient. It should be professionally run by domain experts and pay market rates for all resources.
7. The branding and the identity of the platform should be neutral and not carry the baggage of the existing entities Prasar Bharati, Doordarshan or All India Radio. The brand should have an architecture that will appeal to its core audience who will be opinion makers across the globe. It will not be targeted at the lowest common denominator in the Indian diaspora.
8. The content strategy will project India rather than the (official) Indian point of view. It will leverage the best that India has to offer with its rich and diverse culture. News and views will be featured along with debates and discussions. But the tonality will be modern, contemporary, factual and non-partisan. The language will be English with sub-titles for relevant markets.
9. Distribution will be led by social media to start with and then graduate to mainstream television. A gradual phased launch in selected geographies could be considered.

APPENDICES

Appendix 1: Approach paper, The Gateway House, Mumbai

DOORDARSHAN INTERNATIONAL

A vision and working model

By Gateway House: Indian Council on Global Relations

March 2013

VISION:

Doordarshan International should be necessary viewing worldwide for news and features of politics, business and society globally, in the framework that India (not the West), is the norm. Eliminate stereotypes to present a progressive India.

POSITIONING:

A moderate voice, factual and non-partisan on views reflective of the developing world.

In particular, India as the attainable middle nation, its journey as a developing economy and polity, transition from traditional to modern reflecting struggles, complications and achievements in the economic, social, political and geopolitical global context.

Quality:

Technologically high-quality production and content – television, internet and mobile

Tone:

Moderate, factual, non-partisan

Geographical distribution:

Global, beginning with India, SAARC, West Asia, BRICS, NAM, Asean, LatAm

BRANDING:

Get Indian (India-owned, India-initiated, India-based) branding consultancy/agency to create the India brand, and it should be this: Every time we think of Doordarshan, we think

'sophisticated and accessible.' The brand must be recognized for its world class programmes, excellence in broadcasting production etc. Logo can be redeveloped and should be the institution's best, most recognizable asset.

MARKET RESEARCH:

Done globally to assess audience needs, target audience, branding opportunity, competition.

COMPETITION:

Al Jazeera, CCTV (China), Russia Today, BBC, CNN, DW (Germany), private Indian channels.

FUNDING:

Government of India, with private advertising globally and locally (from wherever it airs).

Initial outlay: Rs. TK crores.

With Internet and Mobile distribution: Rs. Tk crores

TARGET AUDIENCE:

Local citizens, maximum reach; policy-makers; businesses; Indian diaspora; South Asian diaspora; Indophiles

BUSINESS MODEL:

-Separate entity from Doordarshan India, with professional chief executive and executive team hired from private industry worldwide.

-Limited role for Ministry of External Affairs (it's about India, not the Indian position)

-Hiring of independent studio or barter with existing local studio spaces.

-Low cost, high quality (like India's software and healthcare industry)

PRODUCTION:

-International standard

- High Quality technology
- Talented and international production team necessary

DISTRIBUTION

- Share satellite space (Antrix??) through share of ad revenues??? (CK)
- Entry point at hotels
- Internet, cell phone distribution (through 4G)

CONTENT

1) Weekdays

- a) India news update every four hours, with running ticker
- b) Breakfast show: News and talk show light, chatty
- c) Evening Prime Time: News and serious discussion, critical commentary with panellists (relevance to local market and big news on India and/or global events)

2) Weekends

- a) India News Update every four hours, with running ticker
- b) Features and documentaries:
 - i) News
 - ii) Bollywood/Pop/Classical, esp. theatre and folk forms.
 - iii) Entrepreneurship/Business/Financial talk
 - iv) Innovation
 - v) Rural stories
 - iv) Math contests, global general knowledge
 - iiiv) Culture/Yoga (eg Cooking, Vipasana, Iyengar Yoga, etc)

II

Language: English, with local subtitles or dubbing

In time, can introduce Bangla, Hindi and Tamil for the Sub-Continent

III

Non-India features/Documentaries. Focus on features and shared lessons on the following:

- a) Diaspora
- b) Geographic stories on BRICS, South Asia, Asean, West – all with a non-West perspective
eg. Analysis on elections, interventions, natural disasters (solution-based coverage)
- c) Democracy and nation-building
- d) Entrepreneurship: “How To,” Social Enterprise, etc.
- e) International and traditional finance
- f) Technology
- g) Medicine/Health
- h) Women’s issues
- i) Globalization issues like labour and mechanisation
- j) Education
- k) Global institutions like the ADB, UN, WHO (their role, impact, etc)
- l) Youth issues
- m) Wild life

IV

Correspondents/Bureaus:

1. Pick existing DD correspondents, who have expertise in covering such subjects and are adaptable and adventurous (and also know ‘the system’)
2. Hire from outside and build an international team: 60% Indians, 40% international. Hire Indian expatriates in situ (can have part-time correspondents in countries like Fiji etc), and hire locals in West Asia, Africa, etc, and some experienced Western hands hired locally.

3. Bureaus/bureau sharing arrangements:

-India:

Delhi, Mumbai, Chennai, Calcutta, Bangalore, Chandigarh, Amritsar. Amritsar can cover Srinagar, Bhutan and Nepal.

South Asia:

Colombo, can cover Male

Dhaka

Karachi, can cover Kabul

Asia:

- Singapore, can cover Myanmar, Thailand and Malaysia
- Jakarta, can cover Philippines, Australia and South Pacific
- Tokyo can cover Korea, Taiwan
- Beijing/Shanghai

West Asia/Africa:

- Tehran, can cover Herat (Afghanistan), Baluchistan, Baghdad
- Abu Dhabi/Dubai/Kuwait City
- Cairo, can cover North Africa
- Johannesburg, can cover East and southern Africa
- Lagos, can cover West Africa

Europe:

Moscow

Berlin, can cover Geneva and UN

London (for Indian expatriate population, finance)

Americas:

Rio de Janeiro, can cover Latin America, Mexico

New York, can cover Canada

4. Bureaus work with Ministry of External Affairs, expat Indian businesses, local businesses, local and Indian think tanks.
Do reporting for TV (and podcast together?), internet and Twitter.

Prepared by:

Gateway House Team

21st March, 2013

Appendix 2: Minutes of the Meetings

First Meeting of the Expert group on 'Global Initiatives'

Date: March 26th, 2013

Venue: Conference Hall, Prasar Bharati, 2nd Floor PTI Building, New Delhi - 110001

The following members have attended the meeting:

1. Mr Vikram Kaushik, Member, Prasar Bharati and former CEO, Tata Sky
2. Mr Dilip Cherian, Founding Partner, Perfect Relations
3. Mr Subimal Bhattacharjee, CEO, General Dynamics
4. Ms Riva Ganguly Das, Joint Secretary (Public Diplomacy), MEA
5. Mr Pranjal Sharma, Advisor, Prasar Bharati

Important points discussed:

- The convenor asked everyone to introduce themselves and opened the discussion with the pre-circulated approach document that was prepared by 'Gateway House – a think tank'.
- The document proposes a vision for DD International. It presents suggestions with regard to positioning, branding, research, competition, funding, target audiences, content etc.
- The group spent time on some, and not all the items in the paper.
- The main area of comment was content. It was felt that there is a serious lack of information about India abroad. The story of emerging India and its vibrant democracy needs to be put out. The platform, therefore, needs to present both news and non-news from a distinctly Indian point of view; though this should be about India and not necessarily the 'official Indian position'. India, rather than Indian politics should be the focus.

Content has to be fundamentally interesting, the look and feel has to be world class and sophisticated with excellent production values. Uniquely Indian themes such as Yoga, Ayurveda, Bollywood etc. are obvious areas but information about Indian business successes and the richness of the country's diversity need significant

prominence. As an illustration DD Bharati could focus on Archival content, but present it innovatively. Funding for this could be sought from large corporate houses that would gain from the elevated association and help quality up-gradation.

There was diversity of opinion on whether there should be debates/discussions; the conversation being coloured with the controversial nature of such programming in the domestic market today.

- Tonality was dwelt upon. The approach paper recommends a 'moderate, non-partisan and factual' stance. The group veered towards the view that the target audience should be the opinion-maker and influencer abroad whether of Indian origin or otherwise. The priority should be local citizens overseas and Indophiles, in general. Addressing the lowest common denominator among the Indian diaspora was firmly rejected by the group. Some market research in target markets is recommended. The competition is extensive: BBC, CNN, CCTV, DW, al Jazeera were discussed. In this context there was agreement that the language of the channel should be English with local subtitling, if required.
- The autonomy for the platform from Government was debated. The challenge pertaining to this question in the domestic market remains just as valid for the international platform. The source and nature of funding seems to be crucial in this respect.
- There was an interesting discussion on structure though no firm conclusion was drawn. The paper recommends a separate entity from DD India with a professional Chief Executive and an executive team hired from the burgeoning private media industry globally.

Distribution is a significant challenge. Barter deals like content-swapping with successful, established broadcasters like NHK, BBC, ABC, PBS etc. should be encouraged. Otherwise distribution could become very expensive. In terms of focus, a phased strategy could be considered starting with SAARC, West Asia, BRICS, NAM, ASEAN and LatAm. It could be possible to target content to specific geographies with tailored content with help of modern technology.

For the next meeting on 12th April at 5 pm the following points were agreed:

- Discuss a strategy for accessing global markets.
- All members should attempt to share a paragraph on their perception of the objectives of the group.
- Group members to share a draft Vision and Mission statement with the rest
- Content-mapping of PSB's in other markets would be conducted by the Secretariat.
- Other experts who can contribute to the deliberations of the group are to be identified and invited to share their thoughts.

- Radio and new media to be discussed.
- Research has to be done on the following:
 - (1) Content line-up for international broadcasters like PBS, NHK, ABC, SABC.
 - (2) The split of time b/w news, sports, entertainment etc.
 - (3) Their social media presence.
 - (4) Viewership of Indian programmes overseas.

Conclave of Expert Groups (Meeting of Global Initiatives)

Date: April 5, 2013

Venue: Kadamba Hall, India Habitat Centre, New Delhi

The following members have attended the meeting:

1. Mr Vikram Kaushik, Member, Prasar Bharati and former CEO, Tata Sky
2. Mr Dilip Cherian, Founding Partner, Perfect Relations
3. Mr Subimal Bhattacharjee, CEO, General Dynamics
4. Ms Riva Ganguly Das, Joint Secretary (Public Diplomacy), MEA
5. Mr Pranjal Sharma, Advisor, Prasar Bharati
6. Mr Suhas Borker, Social Activist
7. Prof. Nalin Mehta, Professor, IIM Bangalore
8. Mr Ashok Arora, Principal Advisor (HR), Prasar Bharati
9. Ms Riva Ganguly Das, Joint Secretary , MEA

Important points discussed:

- The session got started as the document on 'Benchmarking of Public Service Broadcasters' prepared by Prof. Nalin Mehta was discussed. Numerous broadcasters were compared.
- No global service is financed through commercial fees, some are financed by the government and some by the former ministry. BBC world is a classic example, as it is not financed by the license fees but by the foreign office.
- BBC domestic services are financed by license fees and the global services are funded by special grants from foreign office which will not be renewed from 2014 onwards.
- Hence the size of global services is shrinking and will continue to do so. It spends 218 million £/year on its global service.
- ABC spends around 20 million \$/year.
- Russia Today is one channel which has the maximum number of YouTube views.
- They focus entirely on YouTube, its financing is opaque. Its majorly involved in New Media. The Russians are more popular than the BBC and Al Jazeera and have doubled their viewership in the UK because their content is totally international.
- Al Jazeera is completely financed by the govt. Their motto is not to earn money, it is completely political.
- China has invested about 2 billion \$ in expanding global television, majority of which goes in the CCTV global service. It has a special service for US, special service for Africa. It has more resources than any other network in the world.

- One interesting thing about CCTV is that they hire foreign staff.
- The main focus of these broadcasters has been 'online' and global content.
- The average spend of these broadcasters on global services is between 50-300 million, this is only for multilingual platforms.
- Prasar Bharati has a MOU with YouTube, where whatever is put up it is a revenue share.
- None of the successful broadcasters are mirror images of their respective domestic services. They have completely different programming strategies.
- The reality of the challenge of distribution has changed. We want a channel to create a channel communicable to the rest of the world. Russians are spending serious money on gaining distribution. Networks charge high carriage fees from other networks who want to be globally accessible.
- Next the document explaining the split on programming content was talked about.
- CCTV has quite an interesting framework as it has separate channels for different genres like entertainment, news, sports etc. The downside being its very expensive.
- Channels like Al Jazeera are only handling news and current affairs and documentaries.
- Look to create a platform that would carry the 'India story' overseas. We are looking at a section which is more 'magazine', which has a fabric which is richer, should include art and culture and archival material.

The question here arose that should this be segmented to only news or should the non-news section comprising of Bollywood, arts and culture has to be thought about too?

- This leads to the implication that there should be more than one channel covering all the areas.
- It was felt by Mr Sam Pitroda that art and culture, ethos are commodities that have not been sold properly by the Indian market.
- There should be a particular presence and outreach to make the channel attractive to viewers.
- There is a need to go to local audience in international markets who are interested in India.
- The members agreed that a mix of content is to be presented rather than segmenting ourselves to one or two areas.
- The convenor felt that if there is an independent platform it has to be independent of DD domestic. It has to be manned with people (Local or international) who can deliver on global standards.
- Prasar Bharati and DD don't have a specific IT system, an official MIS and a personnel information system.
- One thing fundamental to global servicing is that the same people cannot be hired for presenting both domestic and international features. The global service of a network can't be a mirror image of its domestic service. There is a need for international faces as we need to attract international audiences.
- The next challenge is to find and create distribution.
- Reported reach of DD News from regions has drastically reduced from 118 to 36 according to a MEA report.
- Internationally the monetization, the business models of the broadcasters have changed.

- Getting region access to markets is a very expensive business. We have to buy transponder capacity for satellites, and then have to buy access to localized markets on the ground whether it's to DTH, cable or terrestrial platforms. The task of going global is too big and diverse a task to go on.
- We need to explore if PB can get barter deals going. For eg. If NHK Japan wants access to the Indian market in case of distribution then PB can have a share in the Japanese market.

Second Meeting of the Expert group on 'Global Initiatives'

Date: April 12th, 2013

Venue: Conference Hall, Prasar Bharati, 2nd Floor PTI Building, New Delhi - 110001

The following members attended the meeting:

1. Mr Vikram Kaushik, Member, Prasar Bharati and former CEO, Tata Sky
2. Mr Dilip Cherian, Founding Partner, Perfect Relations
3. Mr Subimal Bhattacharjee, former CEO, General Dynamics
4. Ms Riva Ganguly Das, Joint Secretary (Public Diplomacy), MEA
5. Prof. Nalin Mehta, NUS and IIM Bangalore (*Via Skype*)

Important points discussed:

- There is general consensus that actual autonomy will be rooted in financial autonomy. Mechanisms in this regard need to be worked out.
- An international platform/channel, when it comes into being, should be completely independent of its domestic (DD) counterpart, but with content sharing possibilities.
- **Platform Positioning.** The draft for discussion prepared by the convenor was debated. The new platform should become the platform of choice for discerning, liberal viewers across the world. It will be neutral in its stance or global in its perspective. It will present a rich tapestry of content from news and views to stories featuring art, culture, business and social issues. It will shed stereotypes and present the perspective of modern India on both domestic and international issues.
- **New Media**
From its inception, the new channel should be designed for the new media such as the internet and mobile telephony; it must keep abreast of the newest technology. The new generation of users looks for apps that are accessible on the move. TV and PC's are likely to become parallel screens along with mobile devices. Mobile apps and the internet could become significant revenue generators.
- The new platform should seriously consider launching an internet radio service. It would include Bollywood music, classical music, archival content, news and current affairs, plus 'India stories'. It could be an extension of the visual platform i.e. mobile, television etc. For radio to be successful, it was felt that it could have language versions e.g. an Urdu channel, a Hindi channel etc. To that extent 60-70% of the programs should cater to local as well as international audiences.
- There is a need to develop a comprehensive strategy for the internet radio and identify the optimal target audience.

Appendix 3: Mr Kiran Karnik's views

For credibility, it is key that a channel/entity be seen as completely independent of government. This means that:

1. Its funding must come from an "independent" source/s (a cess/levy, commercial/non-government sponsors, advertising, grants from non-government sources, etc). Given distribution costs and costs of international-quality programming plus need to have correspondents/coverage from around the world, the funding requirement will be high.
2. It must have no organisational connection with the government. This means an independent Board and employees who are not on deputation (certainly not employees) of government.
3. Given the present perception of PB as an arm of government, this organisation must be arms length from PB too.
4. The long-term credibility is ultimately established by the programmes. Any attempt at projecting a "government" viewpoint will be completely counter-productive.
5. The goal must be to reinforce and take forward India's "soft power", and not to directly project a government view-point. This will bring immediate benefits to trade/exports, industry, culture and tourism, and long-range geo-political advantage, thus enhancing our strategic positioning.

REPORT OF THE EXPERT GROUP ON PRESENCE ON SOCIAL AND OTHER NEW & EMERGING MEDIA

1. Social media refers to means of social interactions, using highly accessible and scalable communication platforms and techniques to convert communication into interactive dialogue. Its use is driven by mobile and web-based technologies which are emerging and evolving rapidly. While social media differentiates from traditional media in many aspects²¹, Prasar Bharati must explore the tremendous possibilities offered by new media and its integration with traditional media.
2. **The New Media Demographic:** The internet is seeping into the lives of the people of India rapidly, and social media being its subset, is among the fastest growing segments, with the highest growth coming through mobile access and from young India. At the end of year 2012, as per TRAI estimates, India had 485 million internet and broadband

²¹ Social media has the following characteristics:

- I. It is highly interactive, allowing anybody to 'publish and broadcast' multimedia content. These interactions can go across platforms through social sharing, emails, etc.
- II. This interactivity is enabled in real-time and the media also allows information exchange to happen asynchronously over time.
- III. It provides an opportunity for one-to-one, one-to-many and many-to-many communication. As social media essentially links networks of people, there is a great opportunity for relevant, interesting and important information to go viral quickly and therefore spread exponentially very quickly.
- IV. Social media allows and encourages use of various content formats including the old formats such as text, audio, video, photograph, document, etc. and is also giving rise to new popular formats such as tweet (140 characters), infographics, etc.
- V. It gives users an opportunity to engage at different levels with the content and with various people. For e.g. users can simply read content, also like it, also share it, and also get into an interaction taking the conversation further.
- VI. Social media is seamlessly integrated with mainstream media and between the online and offline world. Journalists now consider it as a vital source of leads, stories, trends, data, content and sources.

connections, out of which there are more than 446 million wireless internet connections. Today, India is the second largest consumer of the internet. Social Media is driving growth of the Indian Internet market. Social networking sites like Facebook has 6 crore Indian users, video-streaming site YouTube has 4 crore users and micro-blogger Twitter and business-networker LinkedIn have 2 crore users each. It is expected that by 2020, half of the global internet traffic will be video content. Prasar Bharati should be at the forefront of this media transformation.

3. Given the growing internet penetration, increasing base of social media users, growing numbers of smartphone users and decreasing cost of bandwidth and smartphones in India - it is suggested that Prasar Bharati sets up **a new arm called Prasar Bharati Digital (PBD)**.
4. **Prasar Bharati Digital will be an authentic, reliable, accessible, scalable and highly interactive platform bringing India together.** Prasar Bharati will bring together Doordarshan (DD), All India Radio (AIR), RSTV, LSTV, Government, Industry, Civil Society, and Citizens via the PBD Platform. PBD will be set up as the third arm of Prasar Bharati, independent of DD and AIR and will be reporting directly to the PB Board. PBD will have its own set of manpower with adequate skills and exposure to the social media space. It is suggested that PBD is set up with a team of 10 technically well-qualified young professionals. This team may be augmented later as PBD stabilises and expands. The team can be split into 3 broad groups – DD & AIR, GoI and Active – each looking at the needs of and working with DD & AIR; Government and public sector organisations; Industry, Civil Society, etc. respectively. PBD will be headed by a Director and assisted by 3 assistant directors (PBD – DD & AIR, PBD – GoI, PBD – Active). PBD will primarily source content from DD, AIR and other public service/Government organisations.
5. This platform will give an opportunity for connecting a billion minds; bring together different regions, cultures and languages and holds tremendous possibilities for cultural integration and nation building. **PBD's content and engagement strategy will further the mission and objectives of Prasar Bharati, which are²²:**
 - a. To uphold the unity and integrity of the country and the values enshrined in the Constitution;
 - b. To promote national integration;
 - c. To safeguard citizens' rights to be informed on all matters of public interest by presenting a fair and balanced flow of information;

²² <http://prasarbharati.gov.in/Corporate/mission>

- d. To pay special attention to the fields of education and spread of literacy, agriculture, rural development, environment, health & family welfare and science & technology;
 - e. To create awareness about women’s issues and take special steps to protect the interests of children, aged and other vulnerable sections of the society;
 - f. To provide adequate coverage to diverse cultures, sports and games and youth affairs;
 - g. To promote social justice, safeguarding the rights of working classes, minorities and tribal communities.
6. To be able to do the above, **PDB can facilitate generating new and engaging streams of content and information by working closely with DD & AIR²³**. Some ideas on ‘content and programming’ are given below. These ideas will integrate traditional with new media, create new spaces for community engagement and informed interactions. This will also give PB the ability to crowd source content and creativity.
- a. **Citizen Sourcing:** The concept of citizen sourcing is based upon public citizens ‘playing an active role in the process of collecting, reporting, analysing, and disseminating news and information’. New media technologies have made citizen sourcing more accessible to people worldwide. PBD must encourage and support this form of content being published online after due editorial diligence. PBD will thus become a unique platform bringing together different regions, cultures and local languages. In the same spirit, PB can encourage people who are interested in making documentaries (in local languages) on subject areas of interest to PB. PBD can invite short trailer-like clips via its new media platforms and work with DD to source talent & ideas, create documentaries, and disseminate them via the traditional and the new media.
 - b. **Hub Activity:** A large amount of content is available with Government/Non-govt. organisations that do not reach a larger audience. Ministry of Culture, Tourism, Education, Health, MIB, Public Diplomacy Division of the MEA amongst others can be harvested for suitable content. Many NGOs, international agencies like the WHO, UNICEF, TERI, etc. can be tapped for content. A lot of old content can be brought back from various archives and shared with the new India.
 - c. PBD can work with DD and AIR to **integrate use of social media platforms** like Twitter and Facebook with some of their existing shows and/or in creating new

²³ Refer to Figure in Appendix A

shows. Shows such as an innovation reality show, a women's achievement show, a reality show around the lives of police, a travel and lifestyle show aimed at middle class travel, shows for skills development and enhancement, etc. can lead to productive engagement on social media.

7. It is recommended that along with setting up of PBD, both **DD and AIR must enhance their online and social media presence** by doing the following:
 - a. Completely **transform the existing PB, DD & AIR websites** to make them more appealing, interactive and engaging. The websites should also integrate with the existing social media channels of DD & AIR.
 - b. **Strengthen Social Media Units of AIR and DD**; Increase activity and engagement levels of existing social media channels; Study best practices of use of social media by other media organisations
 - c. The **producers of both TV and radio will need to be retrained** in how to create programming keeping in mind interactive component in mind for new media
 - d. Orientation to all employees and **internal capacity building**
8. **Define Social Media Strategy**: The PBD team will need to come up with a **short-term and medium-term social media strategy for Prasar Bharati**. Their strategy will drive their **choice of social media platform(s)**. It is recommended that PBD must use **analytics and measurement tools** to analyse and understand the usage patterns on various platforms. PBD must launch, in due course of time, the use of **mobile apps** to disseminate and popularise content via smartphones.
9. **Define Social Media Policy**: PBD team will also need to create social media guidelines and policy, in line with the guidelines of other government agencies, for all its employees and users. A policy like this will help inform and educate employees, set internal and external expectations, command proper use and procedure, prevent any obstacles from obscuring the path and establish legitimacy.

To summarise, the following steps are recommended for Prasar Bharati to embrace new media

1. Create a new arm of Prasar Bharati called Prasar Bharati Digital. Prasar Bharati Digital will be an authentic, reliable, accessible, scalable and highly interactive platform bringing India together.

2. Set up PBD with a team of 10 young professionals. PBD will be headed by a Director and supported by 3 additional directors (PBD – DD, PBD – AIR, PBD – Active). PBD will closely work with DD and AIR but will be directly report to the PB Board.
3. PBD will source content from DD & AIR and other public service/government organisations (including archival material etc.). PBD will also facilitate generating new and engaging streams of content and information by working closely with DD & AIR.
4. DD & AIR must enhance their online and social media presence
5. Define Social Media Strategy and Policy

Group Members

1. Mr Pankaj Pachauri (**Convener** – supported by Mr Vikas Bagri, Office of Mr. Sam Pitroda)
2. Mr Syed Akbaruddin, Joint Secretary (External Publicity), MEA
3. Mr P. Balaji, MD, Nokia India & South Asia
4. Ms Archana Datta, Director General, AIR News
5. Ms Ankhil Das, Head of Public Policy, India Office, Facebook
6. Mr S. M. Khan, Director General, DD News
7. Mr Rishi Jaitly, India Head, Twitter
8. Mr Shekhar Kapur, Filmmaker
9. Mr Naman Pugalia, Google India
10. Mr Pranjal Sharma, Advisor (New Media), Prasar Bharati
11. Dr R. Sreedher, Commonwealth expert on community radio
12. Mr Parthiv Shah, Director, CMAC

REPORT ON THE EXPERT GROUP ON REGULATORY MECHANISM

CONVENER'S NOTE

As in any such report, the richness of perspective brought in by different members also means a diversity of views. In this context, the degree of harmony on the wide variety of issues covered in this report was, indeed, a pleasant surprise. The differences were mainly in emphasis and nuance, but there were a few that were on the substance of the recommendations. Amongst these were:

- a suggestion to moderate the emphasis about the perception of Prasar Bharati (especially Doordarshan) being a mouthpiece of the government, and a contrary view involving stronger wording;
- criticism about the inadequate depth and research behind news programmes;
- comments about the quality of other programmes, including ones aimed at entertainment.

Apart from the above, this report reflects the consensus of views within the group.

Since this is one of the various groups set up to examine specific issues, the group has limited itself to the major issues related to regulatory aspects. It has, therefore, not dealt with issues like financing, Government-Prasar Bharati relationship, HR, etc since other groups are dealing with these matters.

Finally, I would like to express my gratitude to members of the group who not only dedicated considerable time, but also brought in their rich experience and knowledge. Thanks are also due to the Secretariat (particularly Ms. Parvati Tampi), for their support and hard work.

17 July, 2013

Kiran Karnik

EXPERT GROUP REPORT

The following were members of the Expert Group on Regulatory Mechanism:

1. Mr A. K. Bhatnagar
Former Engineer in Chief, Doordarshan and formerly Advisor to TRAI
2. Dr Ashok Chandra
Former Wireless Advisor to the Government of India, Wireless Planning & Coordination (WPC) Wing
3. Mr Kiran Karnik (**Convener**)
Former President, NASSCOM
4. Mr Amir Singh Pasrich,
Head, I.L.A Pasrich & Company
5. Mr R. N. Prabhakar
Former Member, TRAI
6. Mr Rajeev Sharma
Advocate, Supreme Court
7. Mr Malay Shrivastava
Former Joint Secretary, Department of Telecommunications and currently Executive Director, Indian Trade Promotion Organisation

Mr. AK Bhatnagar
(Member)

Dr. Ashok Chandra
(Member)

Mr. Kiran Karnik
(Member;Convener)

Mr. Amir Singh Pasrich
(Member)

Mr. R. N. Prabhakar
(Member)

Mr. Rajeev Sharma
(Member)

Mr. Malay Shrivastava
(Member)

Expert Group Meetings and Terms of Reference

The group met 6 times, beginning with the first meeting which took place on the 2nd April 2013 to the final meeting which was held on the 13th July 2013. Other meetings were held on: 5th April (held at the India Habitat Centre, New Delhi), 7th May, 24th May and 4th June.

The group deliberated in detail on the various focus areas mentioned in the Terms of Reference (see Annexure 1) and related areas. This report summarises the recommendations and the rationale behind them. It also provides the context which shapes the recommendations and outlines the role of Prasar Bharati as it flows from the country's needs and the Act.

Background and Context

Prasar Bharati was created to “function as a genuinely autonomous body innovative, dynamic and flexible – with a high degree of credibility” (*Statement of Objects and Reasons*). It was the result of much debate, discussion and extensive consultation, which followed concern about the need to have a public broadcaster that was genuinely independent of the government.

While the concept of Prasar Bharati took shape in the 1980s and the Act creating the organization was passed in 1990, it came into force only in 1997. By this time, there was growing concern about commercialization (particularly of TV) resulting from the scramble for advertising. In a hyper-competitive scenario, with the limited capacity of cable networks that delivered TV to most households, this resulted in excessive focus on a (flawed) ratings system and tended to encourage lowest-common-denominator sensationalist programming.

In such a situation, the public broadcaster should ideally have carved a distinct niche for itself, distancing itself from both negative influences: government propaganda and crass commercialization. Unfortunately, it (especially Doordarshan) has sometimes succumbed to the former and – thanks to pressure from the government to “raise its own funds” – thoughtlessly (and unsuccessfully) tried to emulate popular commercial channels. As a result, it is neither fish nor fowl: it is far from true public service models like BBC (UK), NHK (Japan) or PBS (USA), and is unable to position itself as a popular, commercially successful channel. A major difference between Prasar Bharati and BBC is the extent of public involvement. The BBC meets its public purposes through specific ‘Purpose Remits’, which are developed in consultation with the public. These documents are specific guidelines or action plans setting out how the BBC will achieve a certain Public Purpose. Thus, the agenda and manner of execution, both involve participation of the intended beneficiaries of the BBC's services. Perhaps more public involvement on a model similar to the BBC would help Prasar Bharati regain the position it once had.

Yet, in its heyday, Prasar Bharati – through both AIR and DD – has produced outstanding programmes. Legends like “radio rice” and a string of great TV series in the 1980s and 90s are

yet recalled with nostalgia by old-timers. Though from a different time, they are indicative of both, the capability of the organization and the possibility of producing meaningful yet popular programmes. In more recent times, niche channels like Discovery (and, subsequently, National Geographic and Animal Planet) have proven that even in today's context, there is space – even hunger – for “different” and content-heavy programmes.

Another trend is localization. All over the world, media – print, radio and TV – are finding large audiences for very localized content. In a country with India's diversity – not only linguistic, but also agro-climatic – the desirability and need for localization is obvious. With its chain of terrestrial TV and radio transmitters, Prasar Bharati is uniquely placed to fulfill this need. No other TV channel (all delivered via cable and/or satellite) can match DD's localization potential. Yet, in its eagerness to emulate private channels, DD does not seem to have realised this unique possibility, and has not fully capitalized on this competitive advantage – neither to build a large and loyal audience, nor for the huge local-advertising potential.

One crucial obstacle to fulfilling many of these possibilities is regulatory. Some of the present regulations, and many practices, negate the flexibility and innovation mentioned in the objectives of the Act. This brief report makes a few recommendations that may help to overcome some of the constraints: a necessary – but not yet sufficient – condition to reinvigorate Prasar Bharati.

Role of the Public Broadcaster

The role of a public broadcaster has been defined many times and sometimes in different ways. The cliched phrase of “inform, educate and entertain” is not only very broad and vague, but hardly conveys the true role of public service (in fact, even private/commercial channels will claim that they do the same). A public broadcaster must – amongst other things – stimulate informed debate and discussion on issues of public importance (as opposed to, for example, a discussion on the sartorial style of a Bollywood star in Cannes). It must, as part of public service, reach out to audiences that are generally ignored (e.g., small linguistic minorities) and showcase cultural and artistic performances or artifacts that are otherwise neglected (e.g., step in where there is “market failure”). It must focus and celebrate the diversity of India's culture (its heritage as well as its new, modern forms) as a key part of the concept of India. It must seek to give a voice to the voiceless, carrying to the country the views and lives of countrymen who are disadvantaged or on the periphery, thus providing a channel of reverse-flow (“bottom-up”) communication (as opposed to the traditional centre-to-all or top down model). It must provide the Indian audience a window to the world, and provide the world a perspective from India. It must be objective, credible, fair and reflect the diversity of views (particularly contrarian view) that are bound to exist in such a diverse society. It must stay fully abreast of new and emerging communication technologies and platforms (e.g.,

increasingly popular social media), and adopt them as appropriate. Finally, and importantly, it must treat the audience as citizens and not consumers.

The above summary of the role of Prasar Bharati must be the basis for its regulatory framework. As noted earlier, the regulatory framework can, at best, be an enabler; many other steps will have to be taken in other domains for Prasar Bharati to take on its proper role and become successful. A number of other groups are looking at many of the diverse dimensions. It is hoped that they would take account of the role, as outlined above, when they make their recommendation.

Broadcasting, to be successful, must necessarily be creative. While parts of it, even beyond the technological infrastructure, are a science, programming is yet substantially an art. Therefore, it requires innovation and creativity. The structure and processes of the organization must, then, facilitate and encourage such creativity. This means that standardized bureaucratic procedures and tightly defined controls and rules are unsuitable for such an endeavour.

Systems, procedures and rules are, of course, necessary; equally, though, there is need for flexibility and space for subjective judgment. Failures have to be permitted and risk-taking (obviously after careful assessment) permitted. An audit that seeks to classify a failed programme as “wasteful expenditure” is a sure way to kill creativity and ensure dull, dreary programming. Degrees of freedom to exercise subjective judgment about a person or programme, based mainly on trust in a person’s integrity and capability, will have to be permitted.

This requires a stepping away from excessively tight, hierarchy-based and role-based government procedures and systems. Separately, there is the issue of credibility of news (especially relating to political issues), enhanced by the freedom to air views that are diverse and critical of the government of the day. Without credibility – and the clear perception of independence – the public service broadcaster could be reduced to being a government mouthpiece or propaganda channel.

The regulations must, therefore, for reasons of creativity and credibility, ensure that the organization is arms-length from government, with no control – direct and/or indirect – by the government. This also means that its financing must be assured and independent of the government’s whims and fancies. The group on financing is looking at this issue and will, doubtless, ensure such independence.

Specific Regulatory Issues

The crucial regulatory issues that will help Prasar Bharati to fulfil its objectives and ensure its autonomy relate to:

1. Mode of selection of members of the Prasar Bharati Board and its Chairperson, as also the number of direct or indirect government nominees

2. Mode of selection of the CEO, and the process for his / her removal
3. Powers – both explicit and implicit – of the government vis-à-vis Prasar Bharati
4. Mode of funding and financial flexibility and autonomy
5. Freedom and flexibility with regard to matters pertaining to human resources (recruitment, terms of appointment, termination, promotions, training, etc.)
6. Procedural matters and other issues that will ensure the autonomous, smooth and efficient functioning of Prasar Bharati
7. Smooth and easy decision-making on key issues affecting Prasar Bharati like spectrum allocation.
8. Accountability: to whom (Parliament, government or an independent regulator) and in what manner
9. Grievance redress mechanism: internal and vis-à-vis the audience/citizens.

Recommendations

1. Constitution of the Board

This is a key issue that will have a major bearing on autonomy and increased professionalism. The constitution of the Board is optimum as far as the number of members is concerned. However, the membership of the Board must be credential-based, with only experienced, credible and eminent persons being nominated. There must be specialised fulltime/part time members for certain crucial areas like technology, finance, personnel and marketing.

At present there is one full time Member (Finance) and one full time Member (Personnel). Given the complicated issues involved, which will continue for the next few years, there is need for a strong HR/Personnel function in Prasar Bharati. The Director-General (Akashvani) & Director-General (Doordarshan) are doing most of the HR/Personnel functions. It is suggested that Member (Personnel) may be fully involved in policy formulation of HR/Personnel functions along with both the DGs.

There are six Part-time Members in the board and their general experience requirements have been defined in the Act. It is felt that some of the members must have specific experience. In this context it is suggested that at least one part time member should have a strong technical background and one part time member must have marketing experience. The other four members of the Board may consist of persons with knowledge or expertise in key areas of education, health, development, broadcast journalism and current affairs, etc.

The selection of members of the Board should be made after wide publicity of the process and requirements in the newspapers and circulation in the various government/public sector organisations. The selection committee can also invite candidates whom it feels are suitable. The credentials of all prospective members being considered for positions on the Board should meet the new eligibility criteria to be specified in the Act itself. The process of selection, credentials and resulting names of selected members should be widely publicized. The crucial changes in the existing process of appointment to the Board of Prasar Bharati are (i) the definition of eligibility criteria, beyond just “people of eminence” and (ii) the establishment of an independent selection board.

In the present Act, the term of the Chairperson is fixed at three years or until the age of seventy years whichever is earlier, Executive Member as five years or until the age of sixty five years, whichever is earlier, both full time Members at six years or until the age of sixty two years, whichever is earlier. The term of part time Members is fixed at six years with no age restriction like other Members of the Board.

It is recommended that the Act be amended such that the term of all these members including the Chairperson/Executive member / full time members is five years with an age limit of not beyond sixty five years for all except the Chairperson, who may continue up to seventy years (as in the existing Act).

As the term of each member will be five years, it is also suggested that the person once selected as member of the Prasar Bharati (including the Chairperson and Executive Member) should not be given a second term nor any other government assignment for at least two years after the end of his/her term. This is likely to ensure that Board members work independently and do not get influenced.

No change is proposed in regard to ex-officio members, but there is no need for two representatives of the employees of the Corporation (as specified in the Act) There are other mechanisms and fora to ensure that the interests and views of employees are reflected in the deliberations of the Board.

As a matter of policy, at the management level (other than the Board) Prasar Bharati should not have any officers on deputation from the Government. All selected candidates must be required to resign from their government positions and join on a permanent absorption basis.

2. Selection of CEO

The Executive Member is also designated as Chief Executive of the Corporation and his/her required credentials have been defined in the Act. It is recommended that the minimum educational qualification may also be defined in addition to the credentials set out in the Act. The applicant can be from within or outside the government. However, in case of selection of a person from a government organization, the person must resign from the government organization before joining the post. In case a person is selected from a private organization, there should be some "cooling off" period for such a person after his/her retirement or departure from Prasar Bharati before he/she rejoins the same organization. Similarly, a cooling off period should also be prescribed for a person selected from within the government again joining the government after his/her retirement from Prasar Bharati. We recommend that this period is at least 2 years.

3. Selection Committee

The Selection Committee for the Board and the CEO is a key element in ensuring the autonomy and independence of Prasar Bharati. Taking note of this, the composition of the Selection Committee is, in many ways, the first step to ensuring genuine autonomy.

It is recommended that the size of the Selection Committee be changed, with five members instead of three. The members should be: Chairperson of Rajya Sabha, Chairperson TRAI, Chairperson Press Council, Chairperson UGC and an eminent jurist to be nominated by the Chief Justice of India.

4. Powers of Prasar Bharati vis-a-vis Government

This issue is part of the deliberations of another group and is, therefore, not elaborated here. However, in terms of the regulatory aspect, it is recommended that certain matters specified in Section 32 as falling within the rule-making powers be omitted and be included in Section 33 of the Act under the Regulation making powers. This change will not only strengthen the autonomy of Prasar Bharati, but will also increase efficiency by enabling quicker action for matters like recruitment and HR issues.

5. Independent Budgets and Funding

Fundamentally, Prasar Bharati should get full financial support on an assured, non-discretionary basis from the Central Government and once the funds are allotted, Prasar Bharati should be given full autonomy to utilize them as per their plans. These funds should be part of the “Non-lapsable Fund”. Prasar Bharati should not look towards their “controlling” or nodal Ministry for any further approvals for the funds utilization.

The objective of Prasar Bharati is mainly non commercial and correspondingly DD channels are ‘free to air’ but with possibility of ad revenue. The ad revenue may be permitted to be retained by Prasar Bharati and Prasar Bharati can utilize such funds for various innovative and developmental activities, particularly for new programme initiatives. Such revenues could also be used to produce / procure programmes which may not be otherwise financially feasible; for example, informative documentaries and localized programming.

Funds for Prasar Bharati could be collected by the government through various methods. (Section 17 of the Prasar Bharati Act to be amended accordingly). It is felt that the concept of making Prasar Bharati self-sustainable by mobilizing its own financial resources (through commercial means like advertising revenue) should be avoided if it has to serve the role of a public broadcaster. However, ad revenue could be utilized in the manner mentioned earlier instead of being channelled into making the Prasar Bharati a profit-driven commercial organization. This would ensure bigger budgets - and hence better quality - for public-purpose centric programming and actually enable Prasar Bharati to effectively meet the objectives set out in Section 12 of the Prasar Bharati Act. The possibility of a corpus funding scheme (equal amount matched by the government) should also be explored.

6. Must Carry Provision for Doordarshan Channels

As per various orders/ notifications of Ministry of Information & Broadcasting / Prasar Bharati, only a few DD channels are to be compulsorily carried on DTH/IPTV/Analog Cable TV Platforms. For Digital Cable TV (Digital Addressable Systems-DAS), TRAI has notified must carry provision for 5 National and 11 Regional Channels of DD on Basic Package only. As Digital TV service providers offer several packages other than Basic which are commonly subscribed by the customers, the primary purpose of Prasar Bharati as public service broadcaster is not fully served by the existing orders/notifications. It is therefore suggested that all DD channels (presently 5 National and 13 Regional) which are operating on a 24 hour basis should be mandated to be compulsorily carried on all packages offered by service providers of various Digital TV platforms.

7. Regulatory Mechanism for Frequency Authorization

A special regulatory mechanism, operating in a time-bound manner, is essential for AIR and Doordarshan in regard to Frequency Authorization including siting clearances in the exclusive bands/sub bands identified for broadcasting services from WPC Wing of Ministry of Communication and I.T. Certain portion of spectrum needs to be notified as exclusive broadcasting bands.

This recommendation is mainly from the point of timely allocation of spectrum to Prasar Bharati.

8. Oversight

It is recommended that accountability and oversight be through the Parliamentary Committee as already specified in Section 13 of the Prasar Bharati Act. This mechanism has been dormant and needs to be activated. The scope and responsibilities of this committee need to be specified. The process of evaluation and the parliamentary reports need to be clear - for instance, the objective criteria on which Prasar Bharati is assessed should first be decided and then applied transparently. The Parliamentary Committee should have a broader, more policy-reform centric approach, while the Broadcasting Council (discussed below) would operate as an internal check on the administration and efficiency of the organization.

9. Broadcasting Council

Section 15(1)(i) of the Prasar Bharati Act provides that the Broadcasting Council shall receive and consider complaints of “any person or group of persons alleging that a certain programme or broadcast or the functioning of the Corporation in specific cases or in general is not in accordance with the objectives for which the Corporation is established”. This provision allows

the general public to approach the Prasar Bharati with grievances in the form of written complaints. An efficient (and transparent) grievance redressal mechanism will provide a much needed forum to the general public to take up their concerns regarding Prasar Bharati. It will also ensure that internal HR/personnel-related issues of Prasar Bharati staff get an independent examination and quick resolution. This will allow self-evaluation and an internal check in the functioning of the organization where issues will get dealt with in the usual course of business, thus complementing the oversight by the Parliamentary Committee. The Broadcasting Council (to handle complaints, etc) has not yet been created. There is need to set this up immediately, so as to provide an independent authority that can handle all such issues.

REPORT OF THE EXPERT GROUP ON COMPARATIVE ANALYSIS OF PUBLIC SERVICE BROADCASTERS

Group Convenor:

Prof. Nalin Mehta, IIM Bangalore

Members:

Prof Obaid Siddiqui, MCRC, Jamia Millia Islamia

Mr Sharad Sadhu, Media Specialist

Prof Vartika Nanda, Lady Shri Ram College, University of Delhi

Mr Sam Miller, BBC World Service Trust

To

Mr Sam Pitroda,
Chairman, Expert Committee on Prasar
Bharti, Advisor to the Prime Minister of India
on Public Information Infrastructure &
Innovations

New Delhi: 22 May 2013

Dear Mr. Pitroda,

Report of the Expert Group on Comparative Analysis of Public Broadcasters

We are pleased to submit the report of the Expert Group on Comparative Analysis of Public Broadcasters – by the Group set up by your committee and the Prasar Bharti Secretariat through a notification on 21 February 2013.

Prasar Bharti is in urgent need for modernization and generational change to carry out its mandate of being a genuinely autonomous public broadcaster which can fulfil national communication needs and be accountable to the public. Major changes are needed in Prasar Bharti to enable it to respond meaningfully to the changed national media-scape and imbibe new media technologies so that it fruitfully channels the growth aspirations of the country.

In order to prepare this report, the Group had a series of internal meetings and members have also separately consulted with leaders of international public broadcasters, private sector broadcasters, academic and domain experts. We have benchmarked Prasar Bharti with its international peers in seven areas: autonomy, government relations and oversight; management and accountability framework; financing, expenditure and business models; programming and content; HR and organisation; global initiatives; digital media and technical directions. In our opinion, Prasar Bharti fares rather poorly on most of these indices, although it is one of the largest public service broadcasters in the world.

We find that Prasar Bharti needs to move to a higher paradigm on all of these registers but there is nothing here that cannot be fixed. Ushering in genuine autonomy with accountability and providing good content are two sides of the same coin. Prasar Bharti needs to shift from being a government organisation into a public service organisation: in mind-set, structure and work culture. This will require a significant overhaul of its oversight mechanism and its relationship with the Ministry of Information and Broadcasting, its management structures and the setting up of a new public accountability mechanism. Simultaneously, this will need to be accompanied by significant changes in its organisational set-up, human resource and administrative and financial culture which must be guided by the articulation of

clear mission objectives and a strategic direction that is set for the next 5-10 years.

Our recommendations for the expert committee headed by you are contained in the following sections. It is time to act and move to save a national institution that is in danger of withering away if we do not.

A handwritten signature in black ink, appearing to read 'Nalin Mehta', with a long horizontal stroke extending to the right.

Prof Nalin Mehta

Convenor, Expert Group on Comparative Analysis of Public Broadcasters

INTRODUCTION

Prasar Bharti is the largest public broadcaster in the world, in terms of size (services provided and staff strength). It oversees Doordarshan, which operates 35 national and regional TV channels, 67 Kendras and 1415 transmitters for terrestrial TV transmission; and All India Radio, which operates 366 radio stations, including 119 regional channels, 21 channels on DTH and 406 transmitters which provides broadcasts in 23 languages and 146 dialects. It currently has 33,800 employees as against a sanctioned strength of 48,022.

This makes Prasar Bharti the largest single employer among global public service broadcasters: in comparison, the BBC has a headcount of less than 17,000 employees while China's CCTV, which operates 46 TV channels (though it is not the only public broadcaster in that country) has a headcount of around 10,000.

Yet, Prasar Bharti's financial size is very small compared to its peers. Its annual expenditure amounts to INR 3312 crore (\$612.9 million) which is roughly equivalent to the financing of South Africa's public broadcaster, which operates a small fraction of the services run by Prasar Bharti. In comparison, Japan spends over \$6 billion a year, the UK over \$ 7 billion, Australia and Canada over \$1.7 billion and Germany over \$ 2 billion on public broadcasting. Among advanced television economies, Prasar Bharti is the biggest public broadcaster in size, but among the smallest in terms of its funding and expenditure.

Prasar Bharti's commercial income accounts for nearly 40% of its total annual expenditure. Despite diminishing audience shares over the past few years, commercial revenues remain a major bulwark of Prasar Bharti's revenues on a scale that is matched only by a few international public broadcasters. In general, the global average for commercial revenues as a share of total revenues for public broadcasters is a little less than 30%. Despite its share of commercial income, Prasar Bharti remains in the red and has been a perennial loss-making institution for the few years. This suggests the need to completely revamp Prasar Bharti's priorities, its structures and its priorities in order to reorient it to new national needs and weed out wasteful and legacy expenditures that are sucking the lifeblood out of the organisation.

Prasar Bharti's two constituent units – Doordarshan and All India Radio – used to be home to great talent and retain the largest broadcasting infrastructure in the country. The failure to set in place proper systems and to transition from being a government department to an autonomous public institution with its own organisation, human resource and management policies has led to severe erosion of Prasar Bharti's ability to be a cohesive broadcaster and to compete adequately with private channels, leave alone fulfil its mandate. There is an undeniable need to enhance capacity of and modernize Prasar Bharti to meet social and economic aspirations and for it to fulfil the intent of the Prasar Bharti Act. With modernization, autonomy and accountability, Prasar Bharti can be a significant exemplar and model of how new technologies and mindsets can re-wire the country and power inclusive growth and development. Only then can Prasar Bharti become a platform for empowering people as well as a source of credible information and wholesome entertainment.

Leveraging new opportunities would, however, require generational change with bold vision, clarity and various new initiatives to look beyond day-to-day operations towards building next generation technologies, network, system and processes necessary to significantly enhance the management, productivity, efficiency and quality. At present, we have a unique opportunity, which must be capitalized on urgently to transform public broadcasting to deliver timely benefits to the people and the nation.

METHODOLOGY

The Group Convener first met with other Group Conveners and the members of the Expert Committee to understand the current status of Prasar Bharti, objectives, challenges, opportunities and expectations from this Group. The Group has since held meetings and discussions and benchmarked Prasar Bharti with comparable global peers on several indicators: comparable size, reach and scope, finances, expenditure and business models, per capita funding for broadcasters, commercial revenues as a share of public broadcaster revenues, autonomy and regulation, content and programming, human resources, digital initiatives and global broadcast initiatives. Though international broadcasters are very different in nature and strict comparisons sometimes are not possible, this benchmarking does provide a general picture of where Prasar Bharti stands. The Group drew on a wide sample of global broadcasters keeping in mind factors like importance and size of public broadcaster, size of country, geographic balance and comparative funding models. In particular, it compared India, where possible and relevant, with Japan, China, the United Kingdom, Australia, Canada, South Africa, Germany, Russia and USA. It drew upon annual reports of major broadcasters; official documentation published by them and research studies available in the public domain. This was accompanied with inputs from one-to-one interactions with industry leaders, representatives of public broadcasters (Russia, Australia, UK, China) and domain experts. Based on these discussions, benchmarking tables were prepared, reviewed and discussed.

We want to be clear that Prasar Bharti has to evolve its own model and need not replicate structures that were created for different settings, yet lessons from other international experiences can provide the backdrop for an informed analysis of what fits the Indian situation. This analysis formed the basis for our conclusions on key recommendations, where appropriate, and observations for the revamp of Prasar Bharti.

STRATEGY

After reviewing Prasar Bharti, and its performance with its peers, the Group focused on three fundamental drivers – **AUTONOMY**, **ACCOUNTABILITY** and **QUALITY** – to revamp Prasar Bharti through a four-pronged strategic re-orientation of its goals as under:

- **BE IMPARTIAL, INNOVATIVE AND DISTINCTIVE:** There is an urgent need to put in place structures that would guarantee a truly independent media

organization that can be audience-focused, innovative and distinctive in serving the needs of diverse communities.

- **BE ACCOUNTABLE AND EFFICIENT:** Be accountable to the public and create trust by setting new standards for openness through a proper public accountability framework, while providing greater efficiency and value for money.
- **CREATE THE FUTURE:** Be at the forefront of technological change and provide audiences greater choice by embracing new platforms in the digital era. Integrate digital and social media platforms to create one service that will be more than the sum of its parts.
- **REFORM AND INVIGORATE:** Revamp management structures, organization, human resource and mindsets to maximize the value of public broadcasting for the tax-payer and create a well-organised, lean and efficient broadcaster.

Based on these four strategic areas, nine core recommendations were identified as illustrated in Exhibit 1 to drive the revamp of Prasar Bharti:

EXHIBIT 1: NINE CORE RECOMMENDATIONS

IMPARTIALITY, INNOVATION AND DISTINCTIVENESS	Make Prasar Bharti completely autonomous and recast relationship with government	Substantially increase spending on content and revamp programming priorities	Review financing and business model	Create a new global initiative to project an Indian point of view internationally
ACCOUNTABILITY & EFFICIENCY	Create a new public accountability framework and bring transparency in functioning			
THE FUTURE: DIGITAL MEDIA	Transform into a fully digital enterprise and embrace social media and mobile technologies			
INTERNAL REFORM	Reform Human Resource Management in line with industry best practises	Reform governance and management structure	Reform Board selection process and oversight mechanisms	

RECOMMENDATIONS

To revamp Prasar Bharti, we submit the following nine recommendations:

1.0. Make Prasar Bharti autonomous and completely recast relationship with government

- 1.1 Make Prasar Bharti completely independent administratively and financially from the Ministry of Information and Broadcasting and the political executive so can it be a genuine, independent public broadcaster and not remain a government department in practice.
- 1.2 Make Prasar Bharti directly accountable to Parliament through a legislative committee, instead of to the Ministry or the sitting government of the day. (The BBC, for example, is governed by the BBC Trust, and its independence is constitutionally backed by a Royal Charter as well as an Agreement with the Secretary of Culture, Media and Sport). This is also the broad conclusion and reached by the Parliamentary Committee on IT in 2013 as well as the guiding spirit of the original Prasar Bharti Act.
- 1.3 For true autonomy, funding of Prasar Bharti should be de-linked from the budget of the Ministry of Information and Broadcasting (which currently spends 2/3 of its annual budget for this purpose) and be untouchable by the political executive, like 'charged funds' for constitutional bodies. (This, for example, is broadly the model followed by the Australian Broadcasting Corporation, which annually presents its demand to Parliament and this is approved directly by lawmakers, without the concerned Minister having any discretion in the matter.)
- 1.4 Currently, oversight and monitoring of Prasar Bharti and all business connected with public broadcasting news services is officially one of the primary functions of the Ministry of Information and Broadcasting. This is in direct contravention with the objective of creating an impartial public broadcaster and with the Prasar Bharti Act. Remove this function from the remit of the Ministry of Information and Broadcasting and create new structures for autonomy and accountability.
- 1.5 The relationship between Ministry of Information and Broadcasting and Prasar Bharti should not be one of superior and subordinate as is currently the case, but more akin to that between the Reserve Bank of India and the Ministry of Finance or that between the Comptroller and Auditor General of India and the Ministry of Finance.
- 1.6 The relationship between Prasar Bharti, the Ministry of Information and Broadcasting (and the Government of India) will need to be defined much more precisely so that the PB retains its functional autonomy, while being responsible to the Parliament and to the public (in Australia, for example, the Minister for Communications is empowered to direct the ABC to broadcast certain matters in the national interest but must always explain every such direction on the floor of the Australian Parliament).

Note: The above changes will require an amendment in the Prasar Bharti Act, particularly to Section 32, which empowers the Central government to makes rules across various

areas, and to the section on Parliamentary oversight. Alternatively, Ministry of Information and Broadcasting can permanently delegate its powers to make rules to the Prasar Bharti Board vide an order/circular. For the requisite communication needs of government, the setting up of a Press Information Bureau channel may be countenanced, to be paid for by government, and hosted by an autonomous Prasar Bharti, like it currently hosts Lok Sabha TV and Rajya Sabha TV.

2.0 Substantially increase focus on content and revamp programming priorities

- 2.1 Content is the point of Prasar Bharti but currently this is the most neglected: Prasar Bharti spends only about 13-14% of its budget on content, the lowest among its global peers. (In comparison, content and distribution spends are over 70% in Japan's NHK, the BBC and Australia's ABC).
- 2.2 Content spending must be substantially increased and its content strategy must be completely revamped to fit in with its larger vision and revised strategic objectives for the next five years so it can be completely audience-focused and innovative.
- 2.3 Focusing on content-generation is an urgent necessity due to a severe mismatch currently between programming needs and programming output: All India Radio currently needs approximately 16,03,080 hours of content per annum but produces only 946,080 hours, forcing nearly 150 centres to relay non-original content. Similarly, Doordarshan needs approximately 171,915 hours of content per annum but is facing a severe shortage.
- 2.4 Programming must be decentralized and there must be functional autonomy at the programming level after putting in place broad organizational objectives. Prasar Bharti should focus on areas under-served by commercial broadcasters, such as interesting, educative programming for children, especially for pre-schoolers, in consonance with its mandate for education. Only a public service broadcaster can put in sufficient resources and weight for truly imaginative programming for children (eg. NHK does this in Japan, and BBC used to do this till recently with its Cbeebies).
- 2.5 There is no point in producing content if no one is watching it. Prasar Bharti should review its existing channels and services to see if they are delivering value to its diverse audiences and if its content profile matches its strategic vision.
- 2.6 Content needs to be created and re-purposed for multiple platforms and screens of all sizes. New types of services need to be put out to extend the market share and to capture new audiences. These could include HDTV, mobile TV, digital radio services to urban and rural audiences, interactive services for TV and radio, special services for smart phones, portable and mobile receivers, services for people needing assistance and emergency warning services. Developmental activity is needed to devise content for new services and for those services that may come up in the near term, such as U-HDTV.

Note: The problem of content is a direct consequence of the dual control structure of Prasar Bharti, the lack of autonomy and failure to evolve an HR policy to draw good talent or optimize existing talent. There are over 80% vacancies in the programming service and

the result is that over 50% of production facilities are in minimal or total disuse. The content problem can only be solved if the larger issues of autonomy, management and HR policy reform are dealt with first and on an urgent basis.

3.0 Review Finance and business model

- 3.1 Currently, Prasar Bharti meets nearly 40% of its expenditure from commercial revenues. This is already higher than most of its peers internationally-- in general, the global average for commercial revenues as a share of total revenues for public broadcasters is a little less than 30%. Prasar Bharti should strive to further increase its commercial revenues, but this in turn is dependent on better content.
- 3.2 Revenue-generation measures like setting up a trust with funding from a share of government income from DTH and cable distribution may be considered. However, this direction can only be considered if it is conditional on the prior creation of complete autonomy, otherwise such measures will have no credibility.
- 3.3 Create a plan to monetize real estate resources of Prasar Bharti, and vastly under-utilised regional kendras, relay and transmission centres, training institutes and studios that occupy vast tracts of prime land.
- 3.4 Put in place a comprehensive plan for monetizing priceless cache of software from both AIR and DD archives on traditional and online media.

4.0 Create a global broadcast initiative to project and Indian point of view internationally

- 4.1 Creating a global Indian broadcaster to project an Indian point of view internationally (news, views, and culture) should be a priority for Prasar Bharti. India has had the expertise to do so for at least a decade and a pre-history of cultural popularity through the long-held popularity of its film industry in the region stretching from the Middle East to Japan, and in the UK, USA, Canada and Australia through its diasporic cultural imprint.
- 4.2 The proposed global service should be a vehicle for articulating an Indian, as opposed to an Indian government point of view, and should not be a government mouthpiece. Else it will not have credibility.
- 4.3 The global service cannot be a mirror image of the domestic service and must be international in its outlook from its very conception, with a separate management, organization and structure, within Prasar Bharti.
- 4.4 The global service should be envisaged from the beginning as a platform (mobile, smart apps, social media etc.) rather than as a TV channel. Its initial concept and design should stress new media (much like Russia has done with its RT network, which has achieved significant success online and on Youtube.)
- 4.5 The Indian global broadcaster should also include an independent radio service, including internet radio, for international audiences. There is an opportunity here for creating a multilingual platform for neighbouring countries: with Bengali, Tamil, Punjabi and Urdu services
- 4.6 Financial sustainability will be key and there is a need to pursue revenue streams

such as advertising, subscription, availability in hotel rooms, reciprocal landing rights with countries and so on. Key geographies to focus on will have to be identified as priority areas to focus on for content, marketing and distribution, at least in the initial stages: for example, South Asia, Africa, Middle East, North America

5.0 Create a new public accountability framework and bring transparency in functioning

5.1 Prasar Bharti needs to adopt a clear public accountability framework with a charter delineating its long-term responsibilities and duties and a clear enunciation of its yearly targets (for example, the BBC publishes its annual work plans and a yearly report comparing its achievements or lack thereof with clearly defined yearly targets. NHK in Japan, RTHK in Hong Kong and ABC in Australia do the same).

5.2 Prasar Bharti must publicly define for its stakeholders what its success would look like, so it can evaluate objectively year-on-year in a transparent manner. Prasar Bharti Board needs to establish a clear time-bound five-year/three-year strategy, vision and goals. These could be defined in terms of types of services (in terms of commitments to programming/time spent on specific categories of programming/targets on reach etc.), depth of reach, quality and diversity of content and suitable adaptations to technology. For example:

- Focus on increasing quality and distinctiveness of content (define clear categories to focus on such as children's content, inspiring knowledge products, culture and music, creative dramas and so on that inform, educate and entertain).
- Ensure that all audiences are served in terms of ensuring balance for regional and local diversity but also in terms of providing adequate attention to specific groups such as the armed forces and so on. Improve value for money for tax payers
- Maximize commercial revenues within the boundaries set for content

5.3 Set up a clear accountability framework and measure performance by delivery on publicly announced commitments through a process of annual review, similar to those carried out by public limited companies. As of now Prasar Bharti ranks very poor in accountability indices – it has not even published an annual report since 2008-09. It must:

- set new standards for openness and accountability
- measure performance by division and by service: How much you spent, how much on content, how much reach, time spent by viewers, cost per user reached, how you compare with private channels in each category.
- Judge performance by a commitments code: in a public report every year which would take stock of delivery on each of the pre-agreed criteria. (For example, Japan's NHK annually publishes a detailed breakdown of its weekly programming hours per channel in terms of how much time was spent on

news, culture, education, and entertainment and so on. The BBC and the ABC, do the same, providing detailed information service-by service as well as on cross-cutting targets.)

6.0 Embrace digital media and mobile platforms

- 6.1 Prasar Bharti must transition into a leader in the digital space and embrace the future by not only setting up new media and mobile services for multiple screens and platforms but integrating them into one audience-focused digital service which is greater than the sum of its parts.
- 6.2 It is crucial to transition into a fully digital enterprise (Eg. BBC IN 2012 saw 2 billion streams of programs to 26 m households, enhanced no doubt by the Olympics but significant nevertheless).
- 6.3 Digital services are no longer tied to one device but are linked to multiple devices. Prasar Bharti must have strategies and outstanding experiences for each of these. It must build partnerships to extend its reach. For example, BBC content in the UK is available on 500 products from 37 manufacturers (reaching 43 million unique users by Feb. 2012).

7.0 Reform human resource management as per industry best practises

- 7.1 Prasar Bharti must set up a professional recruitment entity.
- 7.2 Prasar Bharti's HR policy would need to have a major departure from that currently employed by the government departments. It should focus on the needs of the jobs and on professional competence, as followed by private broadcasters.
- 7.3 It must allow for lateral entry into the system for people with professional expertise and create an environment of seamless integration with the existing structure.
- 7.4 Prasar Bharti must have complete autonomy to decide on creation of posts, conditions of service, salary and allowances for its employees, methods of recruitment and conditions of service.
- 7.5 All jobs must be advertised and open to competition, and tenure linked to performance. This is the policy followed, for example, by the ABC in Australia, where certain support functions like HR are tenured positions while jobs related to content and management are all open to the best talent in the country and linked with individual contracts and performance.
- 7.6 Prasar Bharti is the most over-staffed public broadcaster in the world with a headcount of over 33,000, and a sanctioned strength of over 48,000 (in comparison China's CCTV provides more services with just a staff strength of about 10,000 while the BBC has a headcount of less than 17,000 employees). This is a highly inefficient use of public resources and an urgent review of jobs needed vis-à-vis jobs existing due to legacy issues and needed to streamline the organisation's human resource needs.
- 7.7 A clear need-based mapping of human resource is needed to ensure that different sectors have adequate staff: for example, currently there are only 33 Group A employees to meet the needs of the functions of Finance, Personnel and General Administration, which is clearly inadequate.
- 7.8 Prasar Bharti needs to establish a clear and transparent system of performance appraisal as well as training, in line with global best practices followed by its peers.

7.9 It is crucial for Prasar Bharti to undergo a mindset change for it to embrace a future as an agile public broadcaster, as opposed to being an employment agency and a parking ground for mediocrity.

8.0 Reform governance and management structure

8.1 Prasar Bharti must create a new professional management structure with a senior management team to assist the work of the CEO. As of now, the Secretariat has no structure for a senior management team running separate verticals to aid and support the CEO. The BBC, for example, has senior management team comprising a Director, Television; Director, News, Director, Radio, Director, Digital; Director, Finance; Director, Policy and Standards, Director, HR; Directors of specific regions; Director, Marketing; and Director, Creative. NHK in Japan, ABC in Australia and CBC in Canada have similar professional management structures. Prasar Bharti needs to create a suitable management structure with accountability.

8.2 In order to ensure accountability, individual channels must be led by Channel Heads who are accountable to the CEO/respective DGs for their performance. As of now, no one within the system “owns” any of the channels and as a result there is no management accountability for individual channel performance.

8.3 Create a Public Ombudsman to entertain complaints from the public and to act as a watchdog on the management of Prasar Bharti. The Ombudsman should be independent of the executive structure and be accountable to the Board of Prasar Bharti.

9.0 Reform Board selection process and oversight mechanisms

9.1 The Board of Prasar Bharti must be appointed through a transparent and bipartisan process.

9.2 It is crucial to clearly define the competencies for each member of the Board. The Board must consist of a Chairperson and five permanent members (finance, legal, HR, operations, programming). In addition the Board must consist of six independent directors: consisting of eminent people with distinction in the fields of broadcasting, finance, management, development, media education, arts and technology.

9.3 As per standard global best practice for public broadcasters, employees of Prasar Bharti need not be on the Board, and neither do DG Doordarshan or DG AIR need to be on it since it is their executive function and that of the employees that the Board oversees. The CEO of Prasar Bharti should be the only member of the Secretariat staff on the Board, in an ex-officio capacity.

9.4 The selection of the Chairperson of Prasar Bharti and Board members must be done in a two-stage process: through a search committee of eminent persons/professionals who will identify a suitable panel for consideration in each category and final selection will be made as follows:

- Chairperson and members (unless otherwise stated below): by a committee consisting of Chairperson of Rajya Sabha, Leader of Opposition in the Lok

Sabha, Prime Minister of India and the Chief Justice of India.

- Member (Legal): A Committee consisting of Chief Justice of India and two other nominated judges of the Supreme Court
- Member (Finance): Comptroller and Auditor General of India and two other colleagues nominated by him

9.5 The committee's selection must be final and compensation should be linked to market rates to attract the best talent.

9.6 The Board must have final authority on oversight of Prasar Bharti in all matters and must be accountable only to a special Parliamentary committee set up for this purpose. This will also be responsible for oversight of the Board and performance of individual members.

SUMMARY

Basic flaws in the structure of Prasar Bharti and the way it is currently organized with overlapping controls need to be fixed in order to turn it into a genuinely independent and meaningful public broadcaster. What we have at the moment is an institution that was meant to be autonomous on paper but in practice never put in place robust management systems that could allow it to function as a professional organization or, ironically, even like a regular government entity (as the mess with its HR and recruitment systems elucidates). Without fixing this, precious national resource allocations will be wasted.

Prasar Bharti need not blindly follow foreign models and must have a character of its own based on the requirements of the Indian public and the relevant constitutional requirements: yet its design and makeup can be informed through a thorough analysis of the international landscape of public broadcasting as we have provided. In the developing country context of India, the need for public service broadcasting which can serve the public good, serve diverse audiences and provide information services that commercial broadcasters are unable to provide is undeniable.

India needs a professionally run, functionally autonomous and publicly accountable public broadcaster. The reform of Prasar Bharti is an urgent necessity and we have a unique moment now to implement generational change.

[DETAILED ANNEXURE WITH SUMMARY OF INTERNATIONAL BENCHMARKING OF PRASAR BHARTI ATTACHED BELOW].

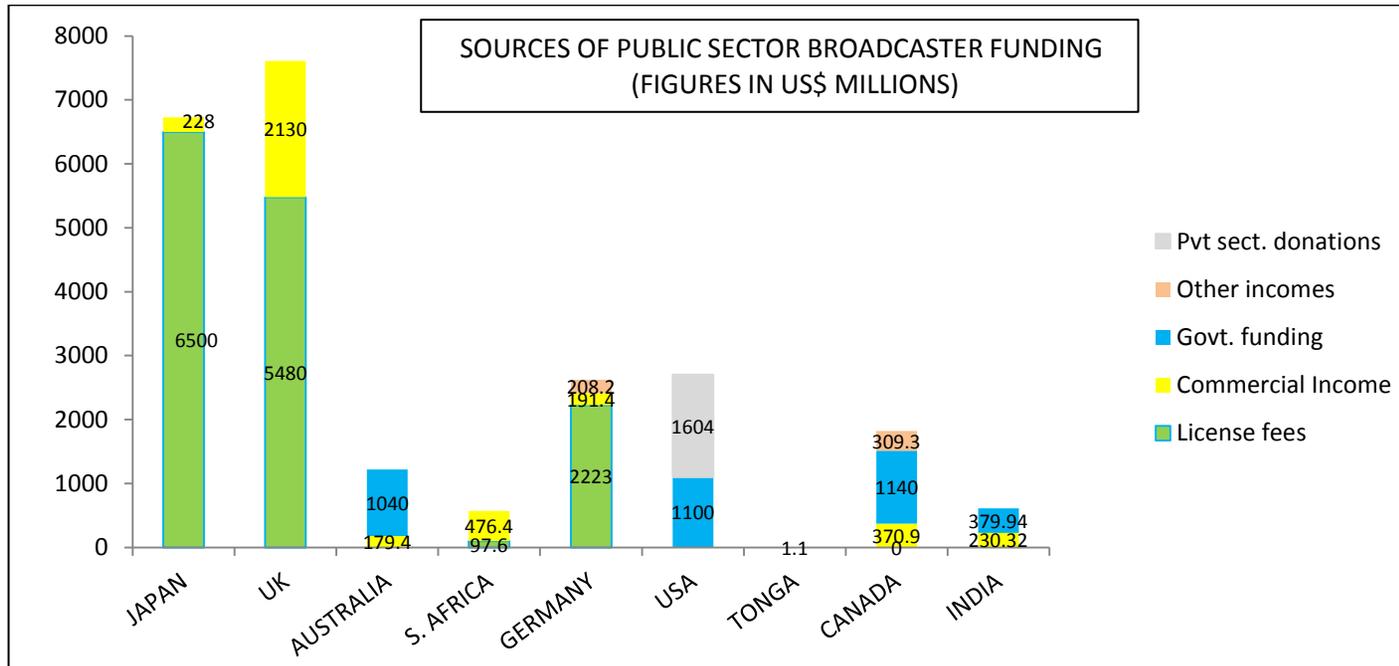
ANNEXURE 1: REPORT OF GROUP ON COMPARATIVE ANALYSIS OF PUBLIC BROADCASTERS

TABLE 1: COMPARATIVE SIZE, REACH AND SCOPE OF SELECT PUBLIC BROADCASTERS GLOBALLY¹

COUNTRY	JAPAN	CHINA	UK	AUSTRALIA	CANADA	S.AFRICA	GERMANY	US	TONGA (Pacific)	INDIA
Broadcaster	NHK	CCTV	BBC, CHANNEL 4	ABC	CBC/Radio Canada	SABC	ARD, ZDF	No public broadcaster, but a Corporation for Public Broadcasting (CPB) provides funding for public-interest programming: <i>(PBS, NPR and PRI are independent private, nonprofit corporations created after the Public Broadcasting Act of 1969.)²</i>	TBC Tonga Broadcasting Commission	Prasar Bharti (DD & AIR)
Status	Special public corporation	State-owned enterprise: controlled by State Administration of Radio, Film & Television	Autonomous public service corporation, constitutionally backed by a Royal Charter as well as an Agreement with the Secretary of State for Culture, Media and Sport and governed by the BBC Trust	Autonomous public service corporation	Autonomous public service Crown corporation	State-owned broadcaster in South Africa	ARD: joint organization of Germany's regional Public Service Broadcasters ZDF: Run as an independent non-profit institution	Private non-profit corporation	A Public Service Broadcaster but with some commercial obligations to totally finance its operation and all expenditure.	Statutory "autonomous" body in law but its status very unclear in practice. No clear autonomy, subservient to MIB
Number of properties	4 TV CHANNELS NHK: general channel BS1" news, sports BS PREMIUM: culture EDUCATION TV 3 RADIO CHANNELS RADIO 1: general RADIO 2: education "Japan's lifelong education channel" FM: music, entertainment (Also NHK NET RADIO (RADIRU)- only in Japan since Sep. 2011 and NHK World Radio Japan) +1 international channel, NHK World	46 TV channels: 21 public channels, 19 pay channels, 6 international channels in 6 languages: Chinese, English, French, Russian, Spanish, Arabic	Funded through license fees: 10 UK TV services for England, Scotland, Wales, northern Ireland 40 local radio stations 2 national radio stations each in Scotland, Wales and N. Ireland and BBC Online Funding now moving to license fees from grants-in-aid: BBC World Service and BBC Monitoring Funding through commercial operations: BBC World News and BBC Studios and BBS Worldwide	8 TV channels: 5 national TV stations (with 2 stations each in every Australian state) , 1 internet TV service 2 International services: ABC International and Australian Network Radio: Has six networks, local radio, 4 national networks 9 metro stations 11 digital and digital only radio stations (domestic ABC radio stations have 23% of metro markets). Radio Australia for international.	8 national radio channels 11 TV channels, 11 digital services	3 TV CHANNELS SABC1: general SABC2: range of content in 7 languages. SABC3: public commercial service 19 RADIO CHANNELS Metro FM, 5FM, Good Hope FM: part of public commercial service Other 16: public service channels SAfm: English language channel Lotus FM: indian music, news & current affairs Radio 2000: sports	ARD: TV CHANNELS Das Erste: National tv Phoenix: Current events, news and documentaries KI.KA: Children's programmes 3sat: Cultural/traditional programming Arte: Franco-German cultural programming 54 regional and local radio stations and seven regional TV networks ZDF: ZDF channel 3sat, ZDFinfokanal: information and news channel KIKa: Children's channel; daytime only) ZDFkultur: Cultural	<i>PBS members are America's public TV stations -- noncommercial, educational licensees that operate more than 350 PBS member stations and serve all 50 states, Puerto Rico, U.S. Virgin Islands, Guam and American Samoa.</i>	3 RADIO CHANNELS Radio Tonga 1 (MW-the only radio that covers all islands of the Tonga Group) Radio Tonga 2 (FM) Radio Tonga-Vava'u (FM) in second largest island) 3 TV CHANNELS TV Tonga 1 (Public service TV covers 78% of population) TV Tonga 2 (News, Sports and Entertainment channel, same coverage as TV 1) TV Tonga-Vava'u (Based in the second largest island of Vava'u and covers 15% of population)	35 satellite TV channels 366 radio stations

ANNEXURE 1: REPORT OF GROUP ON COMPARATIVE ANALYSIS OF PUBLIC BROADCASTERS

TABLE 2: FINANCES OF PUBLIC BROADCASTERS³

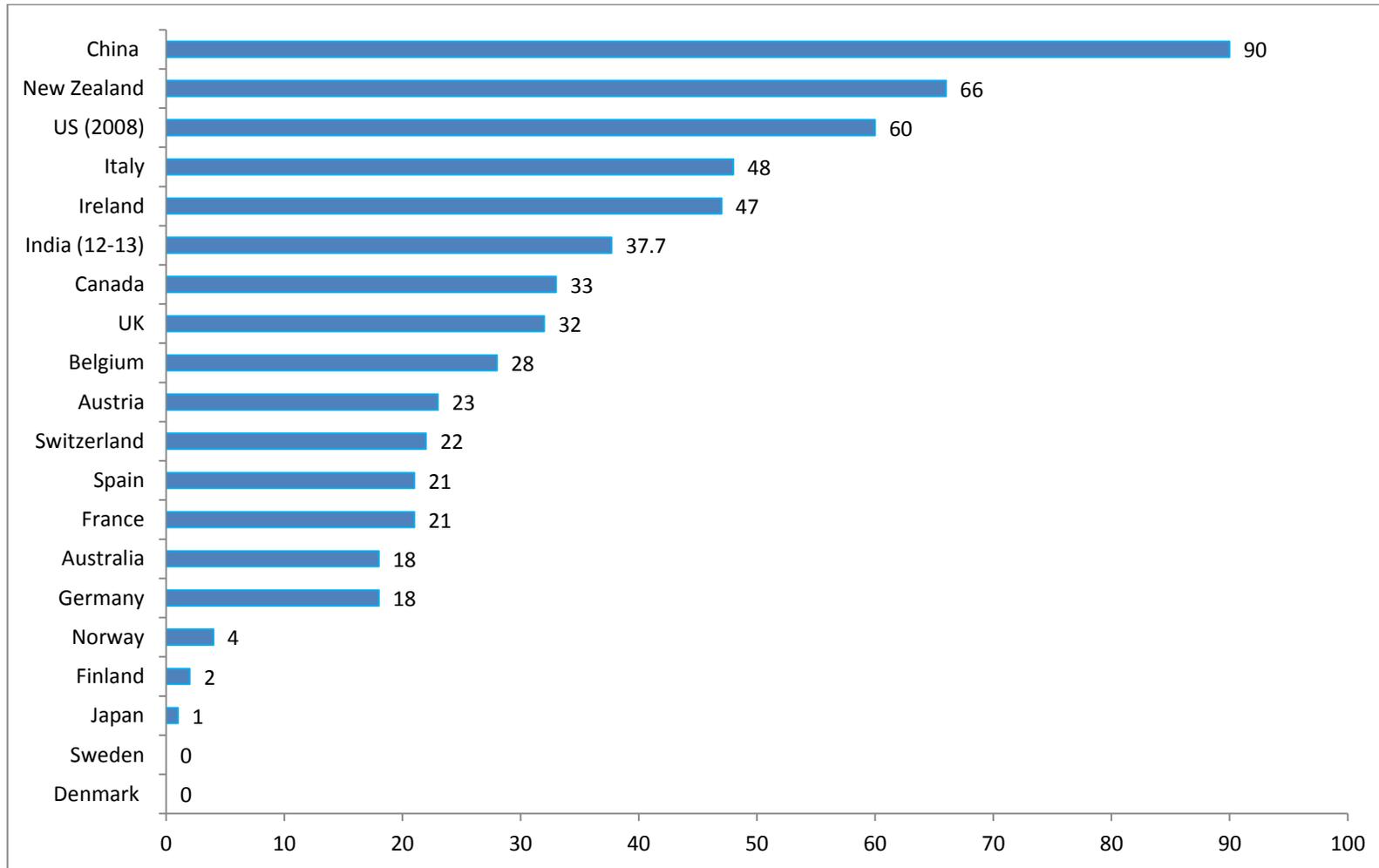


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- **Out of the major public sector broadcasters only India's is a loss-making entity.**
 - Japan's NHK works on a no-profit-no loss basis and surplus money is kept in reserves (Annual expenditure is same as revenues).
 - UK's BBC makes annual operating profit of US\$ 592.4 million.
 - Australia's ABC makes annual operating profit of US\$10.13 million
 - Canada's CBC makes annual operating profit of US\$40.27.
 - South Africa's SABC makes annual operating profit of US\$ US\$ 47.67 million
 - Germany's ARD makes annual operating profit of US\$ 90.5 million.
 - **Prasar Bharti has an annual operating deficit of INR 2062 crore or US\$ 375.6 million, if government does not cover salaries, pensions and other costs.**
- **License/receiving fee:** Japan funds its public service broadcasting through receiving fee on every household with a TV set and UK and Germany through a license fee. This ensures steady flow of income and independence from government interference (though this is not the case in South Africa which also has a license fee).

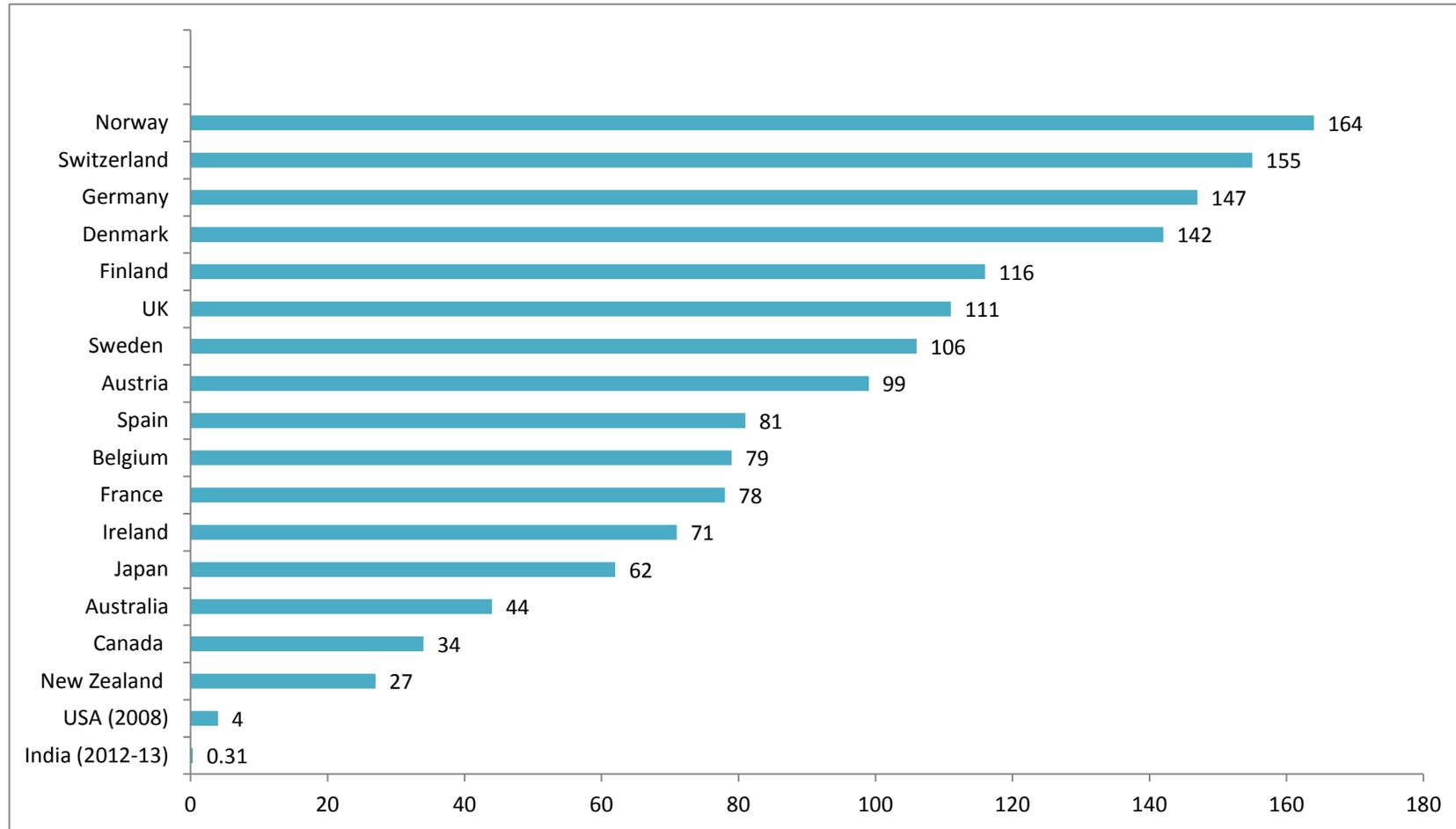
ANNEXURE 1: REPORT OF GROUP ON COMPARATIVE ANALYSIS OF PUBLIC BROADCASTERS

TABLE 3: COMMERCIAL REVENUE AS PERCENTAGE SHARE OF PUBLIC BROADCASTER REVENUES⁴



ANNEXURE 1: REPORT OF GROUP ON COMPARATIVE ANALYSIS OF PUBLIC BROADCASTERS

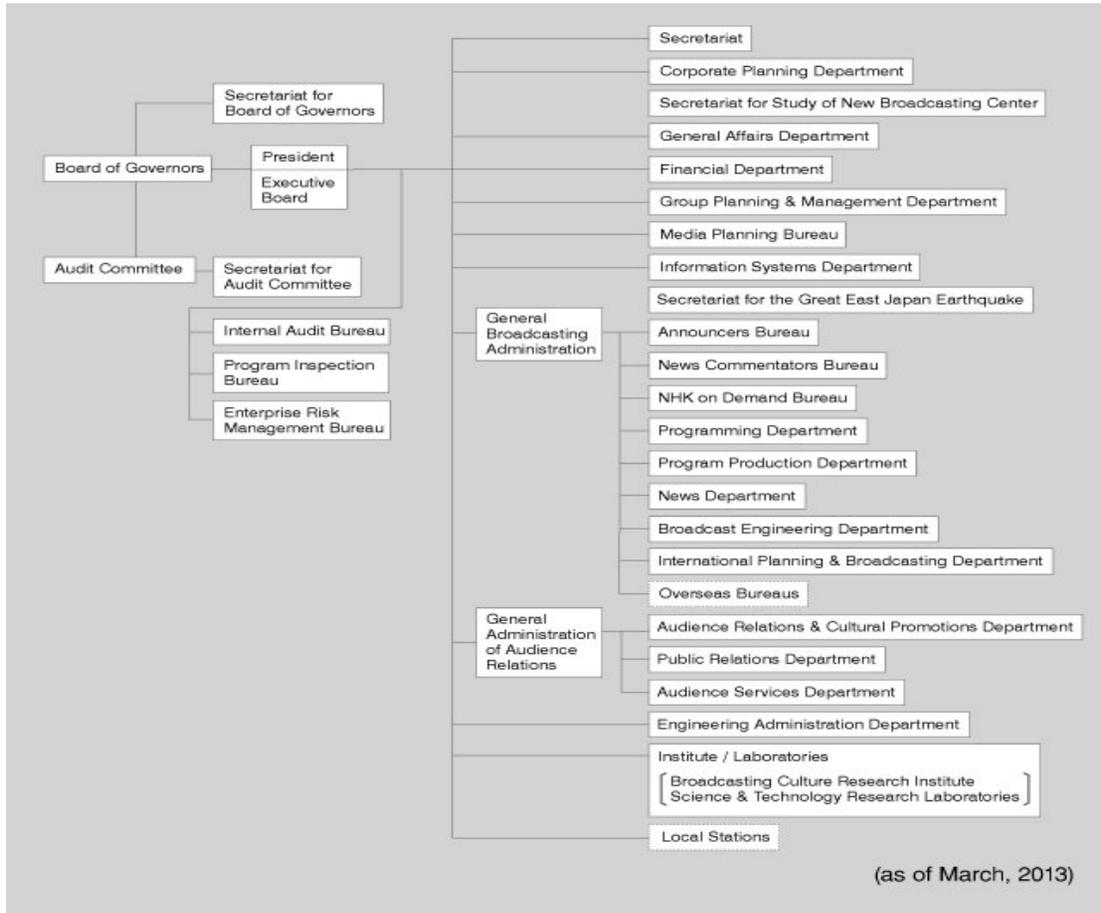
TABLE 4: PER CAPITA PUBLIC FUNDING FOR BROADCASTERS
(2009 FIGURES UNLESS OTHERWISE INDICATED, US\$)⁵



ANNEXURE 1: REPORT OF GROUP ON COMPARATIVE ANALYSIS OF PUBLIC BROADCASTERS

5: MANAGEMENT AND ACCOUNTABILITY STRUCTURES OF PUBLIC BROADCASTERS: A COMPARATIVE ANALYSIS

Table 5.1. JAPAN: MANAGEMENT STRUCTURE OF NHK⁶



KEY STRUCTURES

Board of Governors is the decision-making body for every important matter concerning NHK's management policy and operation, including the annual budget, operational plan and basic programming policy. 12 Governors who are appointed by the Prime Minister, with the consent of the House of Diet on behalf of the Japanese public.

Governors appoint their own Chair.

One Governor appointed from each of the eight districts, no more than 4 Governors can belong to any one political party.

Term of office of Governors is three years, and they may be re-appointed.

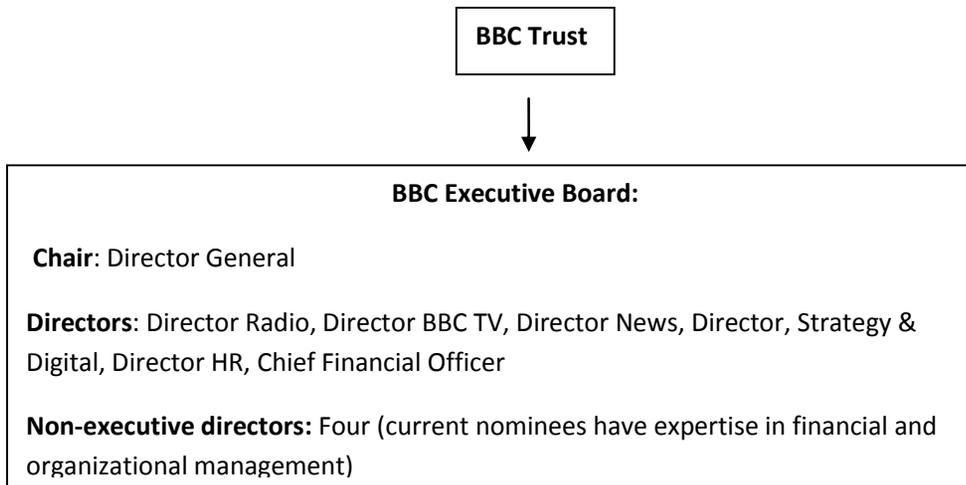
Executive Board consists of the President, the Executive Vice-President and between seven and 10 managing directors. Responsible for executive management on directions set by the Board of Governors

Audit Committee is independent of both the Board of Governors and the Executive Board, audits all business conducted by the Governors and the Executive Board and reports to the Board of Governors. The Audit Committee consists of three or more members chosen from and appointed by the Board of Governors. At least one member is appointed full time.

Note: *There is a clear separation of the powers of the governing and executive boards, with the former responsible for overall oversight and direction, and the latter responsible for day-to-day running of the organization and editorial issues*

ANNEXURE 1: REPORT OF GROUP ON COMPARATIVE ANALYSIS OF PUBLIC BROADCASTERS

Table 5.2: UK: MANAGEMENT STRUCTURE OF THE BBC⁷



KEY STRUCTURES

The BBC's Royal Charter provides for the establishment of both the BBC Trust and the Executive Board.

The BBC Trust consists of a Chairman, Vice-Chairman and 10 ordinary members. Members are appointed for a maximum of five years by Order in Council, and may be reappointed.

Trustees are appointed by the Queen on advice from DCMS (Department for Culture, Media and Sport) ministers through the Prime Minister. When new Trustees are needed the posts are publicly advertised. Trustees are chosen on merit and the process is regulated by the Office of the Commissioner for Public Appointments, an independent office.

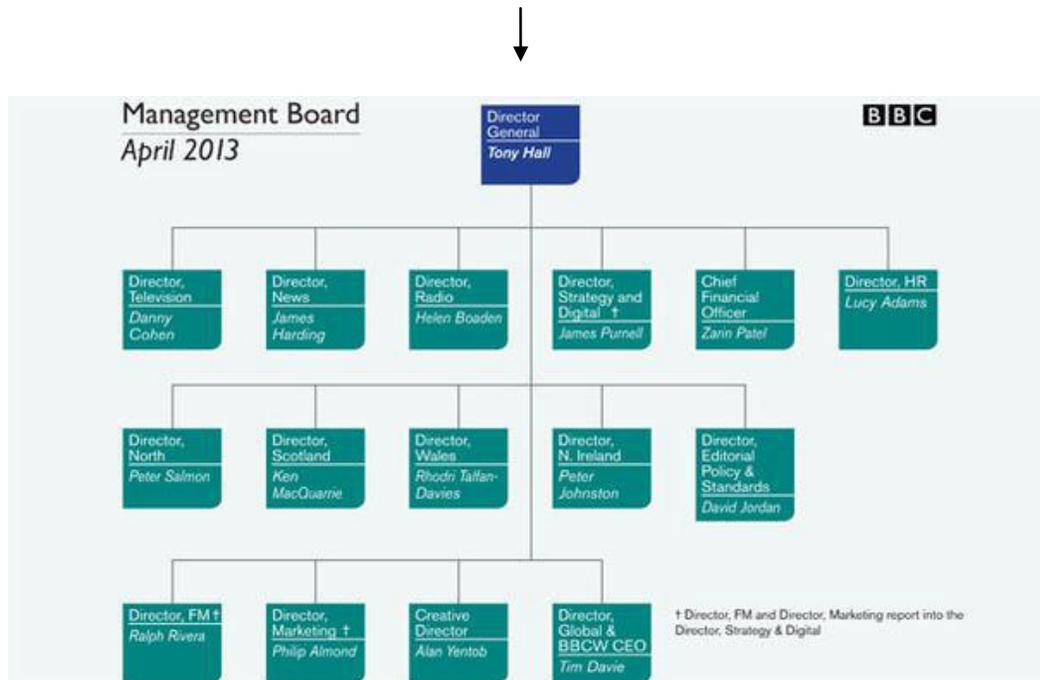
The main roles of the Trust are to set overall strategic direction for the BBC, overseeing the Board and ensuring that the BBC is run in public interest

The Executive Board is responsible for operational management and for the delivery of BBC services according to the plans that have been agreed with the BBC Trust. The Board is made up of executive directors from within the BBC and 4 non-executive directors from outside. It is chaired by the Director-General who is appointed by the Trust. The other Board members are appointed by the Nominations Committee and Executive Board, with non-executive appointments requiring approval by the BBC Trust.

It is also supported by a number of management groups, including the BBC Management Board, the Finance and Business committee, and boards at the Group level, such as Television and Radio. The boards of BBC Commercial Holdings and BBC Worldwide support the Executive Board on commercial matters.

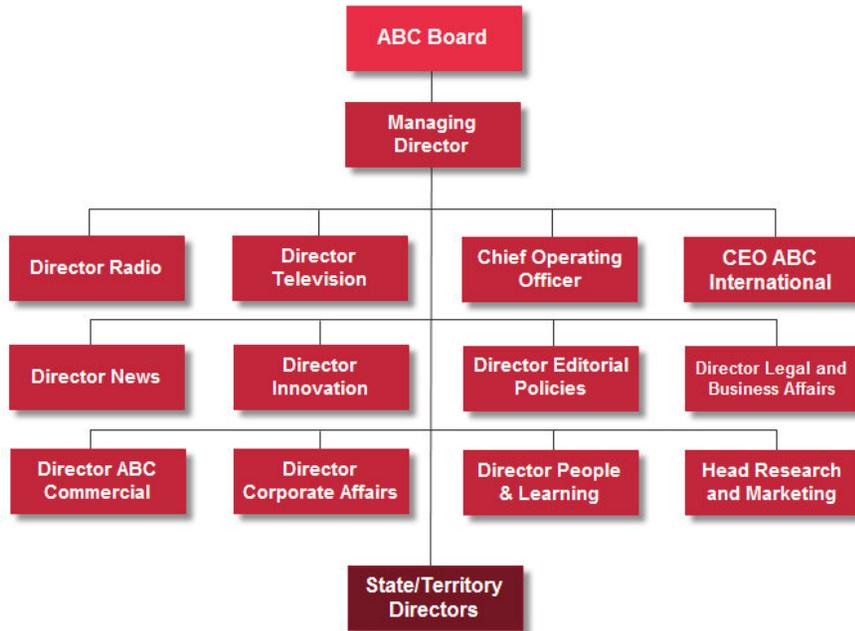
Note: The BBC Trust assesses the performance of the Executive Board in the Annual Report, which is published in July each year. The Report also includes the Board's own review of the year.

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ANNEXURE 1: REPORT OF GROUP ON COMPARATIVE ANALYSIS OF PUBLIC BROADCASTERS

Table 5.3. AUSTRALIA: MANAGEMENT STRUCTURE OF THE ABC ⁸



KEY STRUCTURES

The ABC is governed by the ABC Act of 1983 and the ABC Charter which is part of the Act.

The ABC Board is responsible for the ABC's operations. Its job is to ensure that the functions of the Corporation are performed efficiently with maximum benefit to the people of Australia, and to maintain the independence and integrity of the Corporation. The Board is also responsible for ensuring that the gathering and presentation of news and information is accurate and impartial, according to recognised standards of journalism, and that the ABC complies with legislative and legal requirements.

Up to seven Directors are appointed by the Governor-General on the recommendation of the Government. The ABC Act requires that Directors must be experienced in broadcasting, communications or management, or have expertise in financial or technical matters, or have cultural or other interests relevant to the provision of broadcasting services.

The Australian Government has established a merit-based appointment process for non-executive directors to the ABC

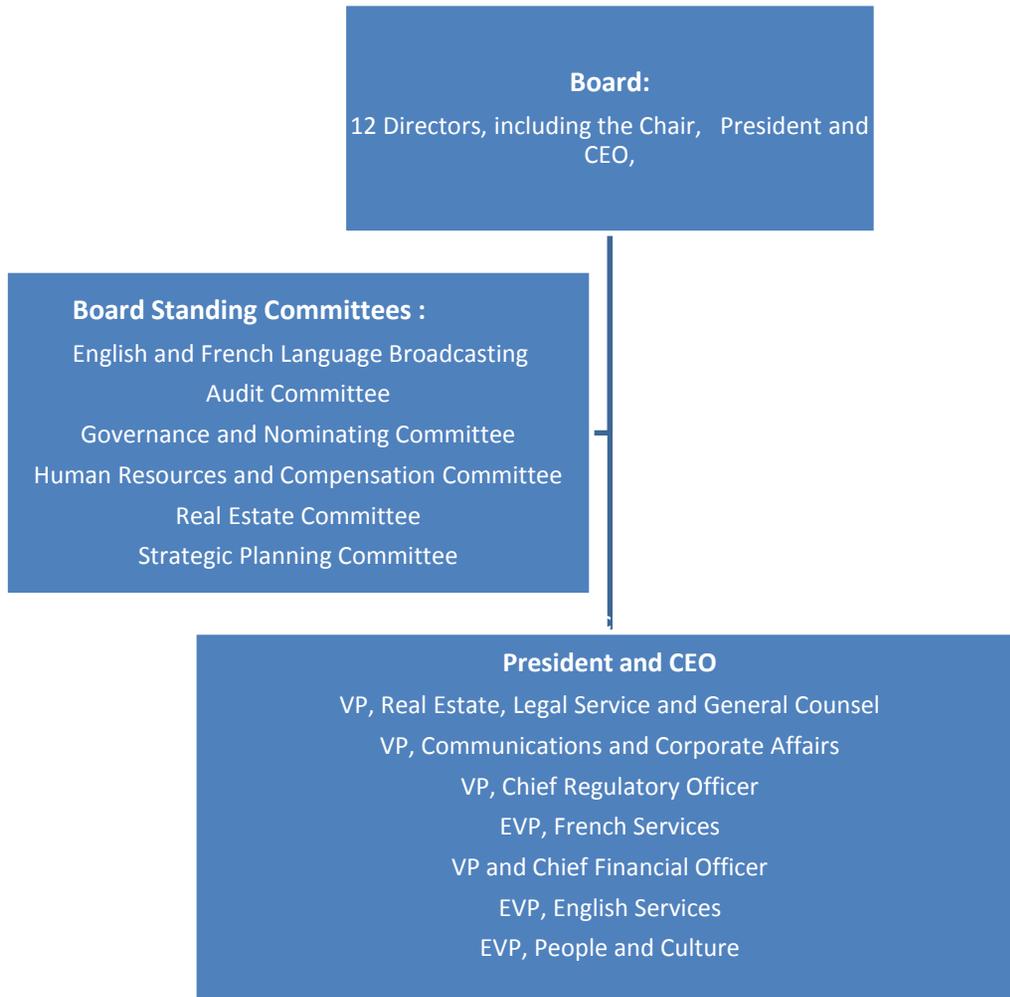
The ABC's Managing Director is appointed by the Board for five years and is eligible for reappointment. The duties of the Managing Director are to manage the affairs of the ABC, in accordance with any policies determined by or instructions given by the Board.

ABC Advisory Council is appointed by the ABC Board with 12 members for a period of two years with a possible two-year extension. Applications to join the Council are invited through promotions on ABC Radio, Television and Online and advertisements in the press in September and October each year. Its job is to advise the Board on all matters related to broadcasting and the ABC and its work.

Note: 92% of Australians believe the ABC 7 pm News does a good job of being balanced and even-handed.

ANNEXURE 1: REPORT OF GROUP ON COMPARATIVE ANALYSIS OF PUBLIC BROADCASTERS

TABLE 5.4. CANADA: MANAGEMENT STRUCTURE OF CBS⁹



The Board of Directors of up to twelve members, comprised of prominent citizens from the fields of law, medicine, accounting, business and the arts, representing all regions of the country, is charged with principal oversight of the CBC’s performance.

Directors are appointed by the Governor in Council (the federal Cabinet) for up to two consecutive five-year terms, after which they may not be reappointed for at least twelve months.

The Board bears overall responsibility for the management of the businesses, activities and other affairs of CBC.

The President, who serves on a full-time basis, is the chief executive officer of the CBC and, as such, supervises and directs the work and staff of the Corporation. The Chairperson and President are paid at a rate fixed by the Governor in Council, while other Directors are paid for attending meetings at a rate fixed in the by-laws.

The CBC has an independent, internal Ombudsman, to review serious unresolved public complaints related to the discharge of its mandate. The Ombudsman reports directly to the President.

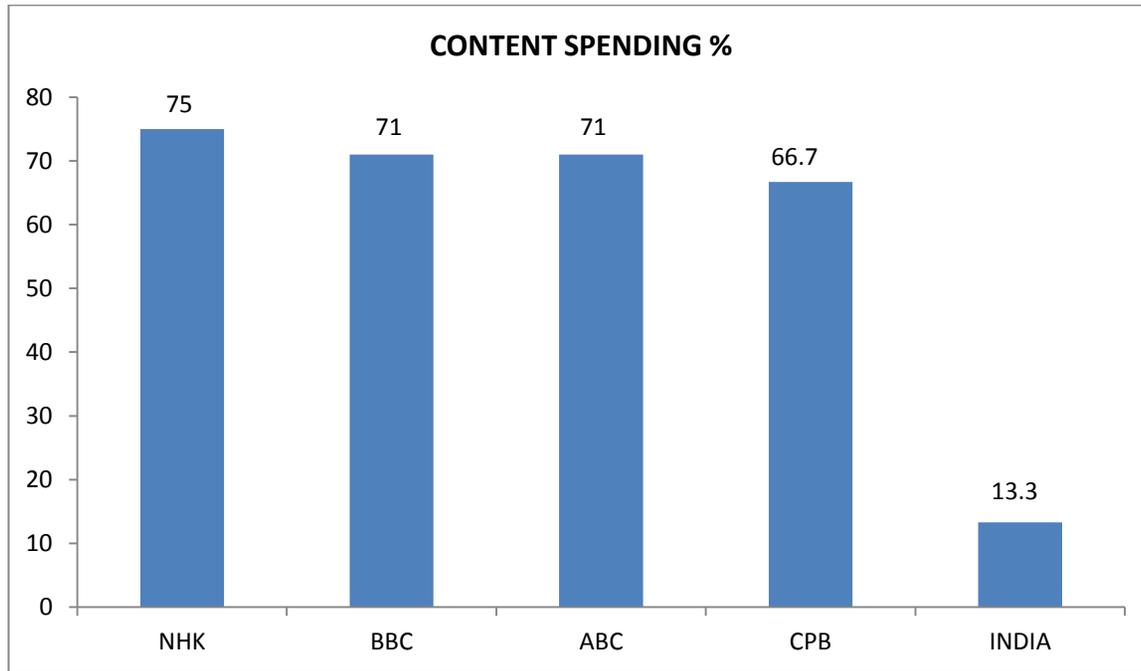
ANNEXURE 1: REPORT OF GROUP ON COMPARATIVE ANALYSIS OF PUBLIC BROADCASTERS

TABLE6: PUBLIC ACCOUNTABILITY STRUCTURES: COMPARATIVE ANALYSIS OF BROADCASTERS

BBC	<ul style="list-style-type: none"> • Directly accountable to licence fee payers; independence written in law and mandated to operate transparently. • Consults licence fee payers and industry on important decisions, • Conducts audience research • Has 4 Audience Councils in N. Ireland, Scotland and Wales for information on views of licence fee payers across the United Kingdom. • Publishes all major decision, evidence in favour and explains conclusions. Also publishes costs of all major new decisions • Publish the findings of all editorial appeal decisions, the outcomes of value for money and service licence reviews and the minutes of monthly BBC Trust meetings. • Publishes seven-year strategic plan document and its annual work plan annually. • Annual Report measure results vis-a-vis published targets on various criteria
ABC	<ul style="list-style-type: none"> • Independence protected by Act of Parliament and Charter • Federal Govt has jurisdiction on broadcasting and ultimate legislative control. • Government grant routed through line Ministry but Minister has no discretionary power. It is directly voted on by Parliament. • Minister of Communications empowered to direct ABC to broadcast certain matters in national interest but must report each such direction to Parliament. • Publishes three-year Strategic Plan and Annual Reports (on audience experiences, finances, corporate responsibility, governance) and annual performance reports (equity and diversity, audience appreciation)
CBC	<ul style="list-style-type: none"> • Accountable to Parliament through annual reports through the line-Minister. • Ombudsman, independent of management, to respond to complaints, and reports to President and CEO and Board • Senior executives hold annual Public Meeting where citizens can ask questions of CEO and Board via web-link/online mechanism or in person • Publishes minutes of all Board meetings, corporate plans, quarterly finance reports and expenditure incurred by senior management in discharge of duties,
NHK	<ul style="list-style-type: none"> • Accountable to Parliament through annual reports • An Audit Committee, independent of both the Board of Governors and the Executive Board, audits all business conducted by the Governors and the Executive Board and reports to the Board of Governors. The Audit Committee consists of three or more members chosen from and appointed by the Board of Governors • Required to establish a Consultative Organization on Broadcast Programs to oversee quality and service. This advisory body must be consulted for developing or amending broadcast standards. • A central consultative committee on Broadcast Programs of more than 15 members, Regional Consultative Committees on Broadcast Programs of more than seven members in every district, and an International Consultative Committee on Broadcast Programs of more than ten members. These bodies are responsible, in their respective areas, for monitoring programming and providing input into broadcast standards. • The Broadcast Law provides for a right of reply for anyone whose rights have been infringed by the broadcasting of untrue matter, as well as for a correction whenever a broadcaster discovers that it has broadcast incorrect material. • Conducts and publishes significant research on all aspects of broadcasting.

ANNEXURE 1: REPORT OF GROUP ON COMPARATIVE ANALYSIS OF PUBLIC BROADCASTERS

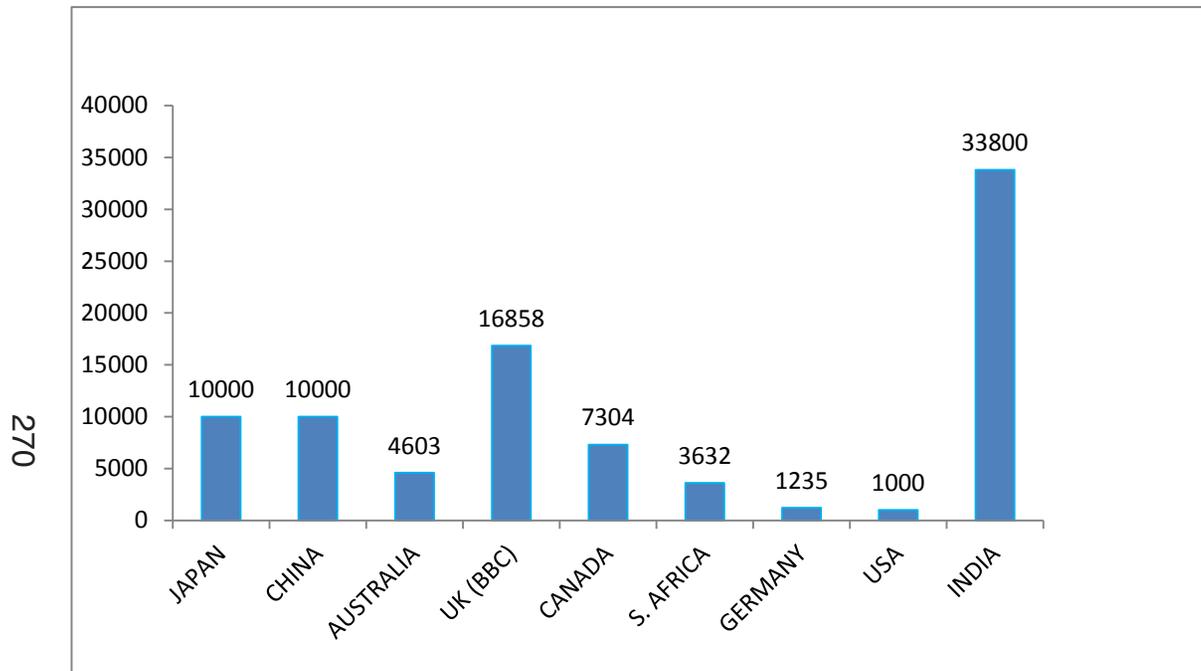
Table 7: COMPARATIVE ANALYSIS OF CONTENT AND TRANSMISSION SPENDS



ANNEXURE 1: REPORT OF GROUP ON COMPARATIVE ANALYSIS OF PUBLIC BROADCASTERS

TABLE 8. COMPARISON ON HUMAN RESOURCE STRENGTH OF PUBLIC BROADCASTERS

(Figures for 2011-12, unless otherwise stated)¹⁰



NOTE: Figures for China, Japan and USA are estimated figures reported by CCTV, NHK and CPB

ANNEXURE 1: REPORT OF GROUP ON COMPARATIVE ANALYSIS OF PUBLIC BROADCASTERS

TABLE 9: GLOBAL BROADCAST INITIATIVES BY PUBLIC BROADCASTERS (figures from 2011-2012 unless otherwise indicated)¹¹

COUNTRY	JAPAN	CHINA	UK	AUSTRALIA	CANADA	S.AFRICA	GERMANY	QATAR	RUSSIA TODAY	TONGA
Broadcaster	NHK	CCTV	BBC	ABC	CBC/Radio Canada	SABC	ARD, ZDF	Al Jazeera	RT	TBC
Global operations	<p>NHK World TV is an English network for news and culture in 108 countries. Focuses on Asia-specific news (general and business) and Japan-specific programming/documentaries on culture, travel, technology, art and design documentaries. NHK also offers NHK WORLD PREMIUM internationally.</p> <p>NHK World Radio Japan is in 18 languages: Japanese, English, Arabic, Bengali, Burmese, Chinese, French, Hindi, Korean, Indonesian, Persian, Portuguese, Russian, Spanish, Swahili, Thai, Urdu, Vietnamese .</p> <p>30 overseas offices, 80 correspondents</p> <p>Live streaming of global radio and TV service in</p>	<p>CCTV International. Separate feed for 2 hours for Africa, 2 hours for USA.</p> <p>Also operates in Spanish, Arabic, Swahili</p> <p>Reportedly \$2.19 billion for global expansion in TV... [reportedly 19x BBC expenditure] out of \$8.7 billion allocated for external publicity in 2009-10.</p>	<p>BBC World Service television services in English, Arabic, Persian, Turkish and Bengali. As well as on BBC World Service Mobile and Online</p>	<p>ABC International, Australian Network (to 44 countries in Asia-Pacific) and Radio Australia</p> <p>12 bureaus globally</p> <p>Australia Network broadcasts a mixture of English language programming, including general entertainment , sport, and current affairs.</p> <p>Aims for affluent audiences in Asia-Pacific region.</p>	<p>Radio Canada international Newsworld International (NWI), an American cable channel that rebroadcast much of the programming of CBC Newsworld (now known as CBC News Network). Trio, an arts and entertainment channel.</p>	<p>SABC Africa shut down in 2008, only broadcasts SABC news internationally now</p>	<p>Deutsche Welle is Germany's international broadcaster, broadcasting both television and radio programmes in different languages for overseas viewers and listeners giving them information on the political, cultural and economic situation of Germany.</p> <p>1500 staff and hundreds of freelancers in 60 countries.</p> <p>Radio service in 30 languages. Also, DW Akademie focusses on German language training through radio service .</p>	<p>Over 20 channels: Al Jazeera Arabic, Al Jazeera English, Al Jazeera Balkans, Al Jazeera Sport, Al Jazeera Mubasher, Al Jazeera Documentary, the Al Jazeera Media Training and Development Center and the Al Jazeera Center for Studies.</p> <p>Over 600 staff.</p>	<p>Operates in English, Arabic and Spanish.</p> <p>It runs the following services:</p> <p>RT America</p> <p>RT Doc, since 2011: documentaries from Russia</p> <p>Free Video: web based news agency offering free ready-to-air content for TV companies. Videos offered in original language, with English translations in script as well</p> <p>RT Online</p> <p>RT Al-Yaum, in</p>	<p>Currently live internet streaming of Radio Tonga 1 and TV Tonga 1 in mostly the Tongan language</p>

ANNEXURE 1: REPORT OF GROUP ON COMPARATIVE ANALYSIS OF PUBLIC BROADCASTERS

	<p>on NHK World online.</p> <p>NHK World Premium is for Japanese overseas and broadcasts domestic news in Japanese 5 hours day as well as Japanese programming.</p> <p>NHK undertakes new co-production projects with broadcasting stations, production companies and distributors around the world. Between April 2010 and March 2011, NHK broadcast 105 co-productions under 31 titles</p>			Content is Australia and Asia-specific, with a focus on Australian programming`			Roughly 50% news (focus on European perspective) and rest is current affairs and cultural programming with a focus on promoting German culture (art, fashion, music etc)		<p>Arabic since 2007</p> <p>RTR Spanish, since Dec. 2009</p> <p>Ruptly: new video news agency, offering raw footage, based out of Berlin</p> <p>22 bureaus in 19 countries and over 1000 staff</p>	
REACH	Claims 160 million household in 130 countries		<p>Claims 180 million global audience.</p> <p>In 2011-12: Increased by 8.2 million in India through Hindi FM, in Iran by 3 million through Persian TV service.</p> <p>27 million reach is for non-English services. Big focus on Arabic and Persian, now also on Russian.</p> <p>13 million weekly unique users for website</p> <p>1.1 million weekly unique users for BBC World Service mobile</p>	Claims 1.2 million viewers for Australian Network	Does not report separately	Not applicable	Claims 86 million worldwide	Claims 250 m households in 130 countries.	<p>RT claims 630 m viewers, and more than 2.7 million hotel rooms worldwide. 28% of cable network subscribers worldwide receive RT.</p> <p>Claims its US viewership doubled in 2011, 85 m viewers receive it in the US.</p> <p>RT on Youtube has had more than 930 million views and is the largest provider if news video</p>	

ANNEXURE 1: REPORT OF GROUP ON COMPARATIVE ANALYSIS OF PUBLIC BROADCASTERS

			site						<p>footage on Youtube, according to the Pew Research Centre. Google Annual Report 2011 says that Youtube's most-watched video in 2011, was from RT, with 20 m views.</p> <p>Over 50% of visitors to RT Online are from US, UK and Canada. It is ahead of Al Jazeera in UK on viewership ratings in Q3 2012.</p> <p>RT viewership ratings high in Asia and Africa, compared to peers.</p> <p>Arabic service has 350 m viewers.</p>	
COSTS	Does not report international service cost separately. Paid for by license fees. See Table 2 for cost details.		BBC World Service annual operating budget is £218 million. Funded by grant-in-aid from Foreign Office and funding will be shifting to license-fees from 2014	\$20 million annually, paid by foreign office	As above	Not applicable	€271 million annually (from tax revenues. See Table 2).	Does not report publicly. Started with \$130 m loan from royal family and estimated annual costs to be \$30-100 million annually, depending on who reports it.		
PROFITS	As above		£8 million annual surplus (before tax and interests).	Does not report separately	As above	Not applicable		As above		

ANNEXURE 1: REPORT OF GROUP ON COMPARATIVE ANALYSIS OF PUBLIC BROADCASTERS

			[Deficit in 2011 was 17 million and this was reduced after major restructuring in 2012]							
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TABLE 9: INTERNATIONAL NEWS CHANNELS, REACH IN USA¹²

New Cable News Channels Have Proliferated, Many of Them International					
<i>Key Figures on Other Cable News Channels Available in U.S. Systems</i>					
	Al Jazeera English	BBC World News	Current	France 24	RT (Russia Today)
Founded	2006	2006*	2005	2006*	2005
Affiliation	Al Jazeera	BBC	Current Media	Group TF1 and France Televisions	RIA Novosti
Headquarters	Doha, Qatar	London	San Francisco	Paris	Moscow
2011 Revenue	N/A	\$3.7 million	\$115.4 million	N/A	N/A
U.S. Households Reached	5 million	5.9 million	65.8 million	N/A	50 million
Bureaus	70	48	N/A	15	21

Source: SNL Kagan, a division of SNL Financial, LLC; and the networks themselves
 Note: * "Founded" indicates when the channels were made available on U.S. cable systems

PEW RESEARCH CENTER'S PROJECT FOR EXCELLENCE IN JOURNALISM

2012 STATE OF THE NEWS MEDIA

ANNEXURE 1: REPORT OF GROUP ON COMPARATIVE ANALYSIS OF PUBLIC BROADCASTERS

¹ NHK data from NHK Annual Report 2012-13. China data from <http://factsanddetails.com/china.php?itemid=1634&catid=7&subcatid=43> , http://www.cjr.org/feature/sino_the_times.php?page=all. <http://liberalconspiracy.org/2013/01/08/chinas-new-english-media-will-have-19-times-bbcs-budget/> , http://cas.lehigh.edu/CASWebAdmin/Uploads/Documents/Jirik_lecture.pdf Canada data from CBC Radio Canada Annual Report 2011-12 and 2011-10. 'Public Service Broadcasting in Canada, Germany, the United Kingdom and the United States'. <http://www.cpb.org/aboutcpb/> . <http://www.pbs.org/about/corporate-information/> All information on TBC has been received from the Tonga Broadcasting Commission: www.tonga-broadcasting.net China data from <http://www.cctv.com/english/special/news/20091207/103449.shtml>

² CPB distributes more than 70 percent of its federal funds directly to stations.

³ Figures from Annual reports of concerned broadcasters (NHK: Japan, BBC, UK, ABC: Australia, CBC/Radio Canada: Canada, SABC: South Africa, ARD/ZDF: Germany, CPB: USA, TBC: Tonga, Prasar Bharti, India). USA figures are for 2011. Japan figures for 2012-13 and India figures for 2012-13. Converted to US\$ at 5 Apr. 2013 exchange rates)

⁴ All international comparative figures, unless otherwise stated, from Nordicity, *Analysis of Government Support for Public Broadcasting and Other Culture in Canada, Report for CBC-Radio Canada*, April 2011, p.5. Indian figures added in. Chinese figures are for reports of State Administration of Radio, Film and TV

⁵ All international comparative figures from Nordicity, *Analysis of Government Support for Public Broadcasting and Other Culture in Canada, Report for CBC-Radio Canada*, April 2011, p.4. Indian figures added in. Note: figures converted at 1 April 2013 exchange rates

⁶ http://www.nhk.or.jp/pr/english/organizations_and_network/index.html

⁷ <http://www.bbc.co.uk/aboutthebbc/insidethebbc/managementstructure/bbcstructure/>

⁸ <http://about.abc.net.au/who-we-are/our-organisational-structure/organisational-chart/>

⁹ <http://www.cbc.radio-canada.ca/en/explore/board-of-directors/remi-racine/>

¹⁰ Figures from Annual Reports of respective broadcasters.

¹¹ *BBC World Service Annual Review 2011/12*, http://downloads.bbc.co.uk/worldservice/annual_review/bbc_world_service_annual_review_2011_12.pdf . http://www3.nhk.or.jp/nhkworld/english/info/update/tv_programs.pdf, <http://www.abc.net.au/news/2011-12-09/dover-australia-network/3721202>, <http://mondoweiss.net/2011/03/why-al-jazeera-is-better.html>, <http://www.economist.com/node/814185>,

¹² *The State of the News Media in 2012: An Annual Report on American Journalism*, *Pew State of the Media Report 2012*.

http://stateofthemediamedia.org/files/2012/03/29_Cable_New-Cable-News-Channels-Have-Proliferated-Many-of-Them-International.png, *RT Question More* brochure, supplied by RT's Global Managing Editor and Deputy Head.

PROGRAMMING CONCEPTS RECOMMENDED FOR PRASAR BHARATI BY PANEL OF ADVISORS

1. As reality shows become a mainstay for television worldwide, DD should develop **transformational ideas** for such programming. While the cable companies concentrate on glamour, entertainment and song, and overtly melodramatic shows, DD could consider the following options:

a. **An Innovation reality show**, where a group of judges select the most significant innovations that are both transformational and sustainable. Examples of this are available globally. In fact a similar show in China by China TV became the hottest show for almost a year and provoked a huge surge of entrepreneurship. There needs to be an entertaining format and enough incentive for participants. The money for the same may be raised through brand sponsorship.

b. **A women's achievement show**, where the competition is to find a girl that fought the hardest, against greatest odds to achieve the most. We could develop such shows, bringing the social objectives into mainstream, rewarding the social behaviour patterns we want to provoke in good citizenship. Entertainment is key here.

c. **A reality show focusing on the lives of the police**. To make the citizens see the police as human beings and not just a force of potential oppression. Reality shows provide a potential interaction and two way traffic between the citizenry and the police.

d. **A travel and lifestyle show**. A show should be created that is aimed towards middle class travel as against the hi-flyer travel shows currently on cable networks. Domestic tourism is an important factor in integration, especially (say) of the North East and a great indicator of the growth and confidence in the economy.

2. There is a need for the **integration of DD into the social media space** thus giving it an edge over other channels. Once that is done, it is a good way to spread education and skill set training. *The Khan Academy* on YouTube is an example that can be referred to.

3. **A 'Citizens News' channel** should be encouraged. This will give people from around the country a platform to share news and other clips they have shot. The news clips could be edited and 'curated' by DD.

4. **Interactivity through New Media** should be encouraged. On AIR for example, one could have a 'new music' show. This could consist of songs sent in by people. The best ones are played over the radio and the listeners will have a chance to vote for the best new singers, sounds and songs.

5. With the fast onset of the Internet and Social Media, the role of TV as the main source of news is decreasing. **DD should stop seeing itself as primarily a News channel.** It may instead focus on in depth discussion groups on current issues. As a public service broadcaster, it has better access to important figures in the political and other arenas.

6. **Autonomy is key for Prasar Bharati.** It is a non functional body without that. It must not be, or perceived to be a mouthpiece of the Government. BBC and NPR are two such examples of public service broadcasters that are perceived to be autonomous of their governments.

7. **DD should be seen by top documentary makers as an outlet for their work.** Despite the occasional melodramatic programming, the History Channel, Nat Geo etc which are popular channels are all documentary-based.

8. There is a possibility that in the time to come films will start being premiered on TV first. DD has a widespread reach accessible in areas where many films are in any case watched on pirated cable or videos. There may be a case for **investigating the potential of premiering indie films that do not get distribution** in what is called single theatres or in the interiors to instead premier on DD.

9. **Good serials with social messaging** are a must too. One example of such programming is *Udaan*. It significantly changed the lives of many young girls who were encouraged by their parents to be educated after being influenced by the serial.

10. **Content curation or selection of programming and content creators must be an independent process.** Not all programs can be or should be done or selected by in house creative departments in DD. Curation, or selection of programming and content creators, creative must be independent. Not all programs can be done or selected by in house creative departments in DD.

11. DD can consider once again being a **source of distribution for creativity.** An example that could be followed is that of successful mini-series like *Tamas* from Govind Nihilani, where the creative entrepreneur brought his/her own brand sponsors and advertising. DD could kick start a new phase of being the best creative channel.

12. Other TV channels do not allow creative houses/producers etc to hold any intellectual property in their product. **If DD were willing to allow them to own the IP then creative forces will move to DD in droves.**

ANNEXURE 1.5

NOTIFICATIONS

F.No. 50613/5/2013-BAP
Government of India
Ministry of Information & Broadcasting
A Wing, Smaatri Bhawan
BAP Division

Dated: 28.01.2013

Subject: Expert Committee to review functioning of the Prasar Bharati.

It has been decided to constitute an Expert Committee for the purpose of reviewing the institutional frame work of Prasar Bharati including its relationship with Government, its continuing role as a public broadcaster and measures needed to ensure technical upgradation of the organization. The composition of the Expert Committee is as under:-

- i) Sh. Sam Pitroda, Advisor to the Prime Minister of India on Public Information Infrastructure & Innovations - Chairman
- ii) Smt. Asha Swarup, IAS(Retd) and former Secretary to the Govt. of India - Member
- iii) Dr. B.K. Gairola, Mission Director (e-Governance) - Member
- iv) Sh. Shekhar Kapur, Member of the National Innovation Council - Member.
- v) Prof. M.P. Gupta, IIT Delhi - Member
- vi) Shri Jawhar Sircar, Chief Executive, Prasar Bharati - Member (Convenor)
- vii) Sh. Jitendra Shankar Mathur, Additional Secretary and nominated member on Prasar Bharati Board- Member

The committee may co-opt any member(s) as may be necessary for discharging its functions.

2. The terms of reference of the Committee are as follows:-

- a) To suggest measures to sustain, strengthen and amplify Prasar Bharati's role as a Public Broadcaster with special reference to its relationship with Government in the emerging context.
- b) To review the status of implementation of the recommendations made by various committees that have undertaken study of Prasar Bharati, namely, the Sengupta committee, the Bakshi Committee and the Narayanamurthy committee and suggest a road map ahead for enhancing the reach and potential of Prasar Bharati.
- c) To suggest measures to digitize the archival material in the possession of Doordarshan (DD) and All India Radio (AIR) including material from Independence Movement era, and develop enabling infrastructure, in the form of data digitalization systems, data centers and networks etc.

Prasar Bharati Sectt
(India's Public Service Broadcaster)

No.OSD/DM/Expert Committee/2013 Dated:- 6th September, 2013

OFFICE MEMORANDUM

In partial modification of OM of even number dated 25.03.2013 regarding amendments in various Expert Groups of Expert Committee on Prasar Bharati under the Chairmanship of Shri Sam Pitroda, following amendment in the Expert Groups is made w.e.f. 19.06.2013 :-

Sl. No.	Expert Group	Existing Member to be replaced	New Member
1	Expert Group on the Prasar Bharati-Government relationship	Shri C. Vishwanath, AS, M/o I & B	Shri J.S. Mathur, A.S, M/o I & B
2	Expert Group on HR and Organisation		



(Arvind Kumar)
Director (Personnel)

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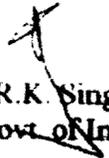
1. All Committee Members.
2. Chairman and Members of the Expert Committee.
3. Shri Amit Agarwal, OSD to Shri Sam Pitroda.
4. Shri Shantanu Sen, Chief Co-ordinator, Sam Pitroda Sectt.

5. Ms. Parvati Tambi
✓ Ms. Astha Alang.

- d) To suggest ways of using the new media to deliver digital content - both in broadcast mode (DTH) and in a demand-based mode (Free on social media like You-Tube, and on payment through IPTV).
- e) To suggest a strategy for creating a network of domestic and overseas business partners for ensuring wider reach to a worldwide audience including creating an exclusive overseas service.
- f) Any other statutory issue that the committee may like to consider.

3. The expenditure of the Chairperson/ Members on TA/DA in connection with the meetings of the Expert Committee or any work incidental to the functions of the Expert Committee will be borne by the Prasar Bharati.

4. The Expert Committee will be serviced by the Prasar Bharati.


(R.K. Singh)
Joint Secretary to the Govt. of India

Distribution

The Chairman and Members of the Expert Committee

CEO, Prasar Bharati

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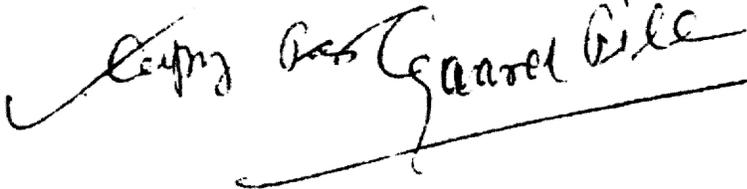
P.S to Hon'ble Minister (I&B)

PPS to Secretary (I&B)

PPS to Additional Secretary (I&B)

PPS to Additional Secretary & Financial Adviser (I&B)

PPS to JS (Films)/ JS(B-II)/ JS(B-I)/ JS(P&A)


Anupam K. Garg

F.No. 50013/5/2013-BAP
Government of India
Ministry of Information & Broadcasting
A Wing, Shastri Bhawan
BAP Division

Dated: 12.02.2013

Subject: Expert Committee to review functioning of the Prasar Bharati.

In continuation of this Ministry's Order dated 28.1.2013 regarding the constitution of an Expert Committee to review the functioning of Prasar Bharati, it has been decided to include Shri Vikram Kaushik, Business Strategist & Brand Advisor and Part-time Member on Prasar Bharati Board, as an additional Member on the Expert Committee.

2. This issues with the approval of competent authority.

J. Jayanthi
(Jayanthi G)
Director

a/c
Successor to all
Members of
Committee
including Chairman
by Special Post (4)
13/2

Distribution

The Chairman and Members of the Expert Committee

CEO, Prasar Bharati

Copy for information to:

P.S to Hon'ble Minister (I&B)

PPS to Secretary (I&B)

PPS to Additional Secretary (I&B)

PPS to Additional Secretary & Financial Adviser (I&B)

PPS to JS (Films)/ JS(B-II)/ JS(B-I)/ JS(P&A)

Prasar Bharati Secretariat
(India's Public Service Broadcaster)

File No. OSD/DM/Expert Committee/2013

Dated 21st February, 2013

OFFICE MEMORANDUM

In its first meeting held on 5th February, 2013, Expert Committee on Prasar Bharati constituted by the Government under the Chairmanship of Sh. Sam Pitroda, decided to constitute Eleven Expert Groups for assisting it in achieving its objectives as per the following details.

1. **Expert Group on the Prasar Bharati-Government Relationship**

The Expert Group will re-examine the relationship between Prasar Bharati and government and suggest mechanisms to ensure its autonomy as an independent public broadcaster. This would take into account all aspects, including content & programming, administrative & financial matters, ownership of assets and contents, etc.

Composition:

1. Ms Shabana Azmi, Actor, Social Activist and Member of Parliament
2. Ms Asha Swaroop, former Information & Broadcasting Secretary and Member, Prasar Bharati (**Convener**)
3. Mr J. S. Mathur, Additional Secretary, Ministry of Information & Broadcasting
4. Ms Leela Samson, Chairperson, Central Board of Film Certification & Sangeet Natak Akademi
5. Mr Suhas Borker, Social Activist
6. Mr Sashi Kumar, Chairman, Asian College of Journalism

2. **Expert Group on Technology**

The Expert Group will work for arriving at a technology roadmap keeping in view convergence of technologies for content creation, storage and delivery, while taking into account standards, interoperability, legacy assets, maintaining vendor-independence, and a way of responding to technology changes in a dynamic fashion in planning and procurement.

Composition:

1. Mr Ajay Chowdhary, former Chairman, HCL (**Convener**)
2. Dr B. K. Gairola, Mission Director (eGovernance), Department of Electronics & Information Technology
3. Mr Kuldeep Goyal, former CMD, BSNL and currently Executive Director, Radius Infratel
4. Mr R. K. Jain, Adviser (Tech), Prasar Bharati
5. Mr Manu Kapoor, Executive Director, Vodafone

3. **Expert Group on Business Development**

The Expert Group will re-examine the business model of Prasar Bharati and suggest measures to augment existing revenues and create new revenue streams, from both domestic and foreign markets, with the aim of making the organisation financially autonomous in its operations.

Composition:

1. Dr Sunil Kapoor, Educational entrepreneur and Member, Prasar Bharati
2. Dr C. Muralikrishna Kumar, Senior Adviser, Planning Commission
3. Ms Vibha Desai, former Vice President, McKann-Ericsson
4. Mr V. K. Jain, Additional Director General, Doordarshan
5. Mr Ajay Khanna, President, Jubilant Expert Group and former Deputy Director General, Confederation of Indian Industries (CII)
6. Dr Jai Menon, Director, Global Innovation & IT and Expert Group CEO, Bharti Enterprises
7. Dr Mahim Sagar, Associate Professor, Department of Management Studies, IIT Delhi (**Convener**)

4. **Expert Group on Finance**

The Expert Group will work for developing a self-sustaining financial model to secure financial autonomy and to this end, identify ways of mobilising additional financial resources, including through leveraging of natural resources, infrastructure, archives, etc.

Composition:

1. Prof. Sameer Kumar Barua, Member, Prasar Bharati and Director, IIM Ahmedabad (**Convener**)
2. Member (Finance), Prasar Bharati
3. Mr Neeraj Bharadwaj, Chief Executive Officer, Carlyle
4. Mr J. S. Deepak, former Joint Secretary, DoT and currently Additional Secretary, Department of Commerce
5. Dr K. P. Krishnan, former Joint Secretary (Capital Markets), Finance Ministry and currently, Principal Secretary (Coordination), Karnataka Bhawan, Delhi
6. Prof. Ajay Shah, Professor, National Institute of Public Finance & Policy, Delhi

5. **Expert Group on HR & Organisation**

The Expert Group will undertake review of the current human resource management systems of Prasar Bharati and suggest a comprehensive new HR policy. This would include reorientation for dynamic and flexible skilling and deployment of existing personnel, a modern system of functional autonomy coupled with benchmarked appraisal and accountability, and new recruitments to induct fresh talent.

Composition:

1. Mr Ashok Arora, Principal Adviser (HR), Prasar Bharati (**Convener**)
2. Mr J. S. Mathur, Additional Secretary, Ministry of Information & Broadcasting
3. Brig. (Rtd.) V. A. M. Hussain, Member (Personnel), Prasar Bharati
4. Prof. M. P. Gupta, Department of Management Studies, IIT Delhi
5. Ms Nandita Gurjar, Global Head, HR, Infosys
6. Mr Mohandas Pai, Educational entrepreneur and HR expert
7. Mr Satish Pradhan, Chief, Expert Group Human Resources, Tata Sons Limited

6. **Expert Group on Programming & Content**

The Expert Group will undertake re-examination of programming and content on Prasar Bharati and provide broad parameters to ensure that content choices retain focus on the public service function of Prasar Bharati while ensuring wide viewership and adequate financial resource generation. This would include a roadmap for increased interactive delivery on new and emerging platforms.

Composition:

1. Mr Muzaffar Ali, Member, Prasar Bharati & Filmmaker (**Convener**)
2. Mr Tripurari Sharan, Director General, Doordarshan
3. Mr L. D. Mandloi, Director General, All India Radio (AIR)
4. Mr Shekhar Kapur, Filmmaker
5. Mr Sunit Tandon, Director General, Indian Institute of Mass Communications
6. Ms Sevanti Ninan, Senior Journalist
7. Mr Rajiv Mehrotra, Managing Trustee, Public Service Broadcasting Trust
8. Ms P. N. Vasanti, Director, Centre for Media Studies
9. Prof. Kiran Seth, Founder, SPIC MACAY
10. Mr Brij Kothari, CEO, Planet Read India & Faculty, IIM Ahmedabad
11. Dr K. Vageesh, Head, AIR Music
12. Mr Jawahar Wattal, Producer

7. **Expert Group on Archiving**

The Expert Group will suggest plan of action for bringing archival management to international standards while safeguarding intellectual property, and based on robust standards. It would include digitalisation of both past and current content, preservation of old media, disaster recovery, and networking with other relevant archives domestically and abroad. The Expert Group will also go into any issues that need addressing for Prasar Bharati to monetise its archival resources for generating financial resource for itself.

Composition:

1. Mr Raghu Menon, Principal Adviser (Archives), Prasar Bharati (**Convener**)
2. Dr Suresh Chandvankar, Honorary Secretary, Society of Indian Record Collectors

3. Mr Subroto Chattopadhyay, Chairman, The Peninsula Foundation & MD, Saregama India
4. Prof. Amlan Dasgupta, JadHAVpur University (restorer of classic audio-visual records)
5. Ms Aparna Vaish, ADG (Programming), Doordarshan
6. Dr Sudha Gopalakrishnan, Director, Sahapedia
7. Mr Prasant Pathrave, Director, National Film Archive of India, Pune
8. Ms Krishna Sarma, Advocate General, Government of Assam and IPR law expert
9. Sh. Vikram Sampath, Founder, Archive of Indian Music

8. **Expert Group on Global Initiatives**

The Expert Group will suggest measures for Prasar Bharati to create a strong international presence, using all possible platforms and contents, as the authoritative Indian voice overseas. For this purpose, the Expert Group will also suggest business and content strategies, partnerships, etc.

Composition:

1. Mr Vikram Kaushik, Member, Prasar Bharati and former CEO, Tata Sky **(Convener)**
2. Mr Subimal Bhattacharjee, CEO, General Dynamics
3. Mr Dilip Cherian, Consulting Partner, Perfect Relations
4. Ms Riva Ganguly Das, Joint Secretary (Public Diplomacy), Ministry of External Affairs
5. Mr Pranjal Sharma, Adviser (New Media), Prasar Bharati (will assist the Convener)

9. **Expert Group on Presence on Social and Other New & Emerging Media**

The Expert Group will examine the strategies and plan of action for increased presence of Prasar Bharati on social and other new & emerging media, including FM with mobile interface, community radio and narrowcasting.

Composition:

1. Mr Pankaj Pachauri **(Convener)** – supported by Mr Vikas Bagri)
2. Mr S. M. Khan, Director General, DD News
3. Ms Archana Datta, Director General, AIR News
4. Mr Syed Akbaruddin, Joint Secretary (External Publicity), MEA
5. Mr P. Balaji, MD, Nokia India & South Asia
6. Ms Ankhi Das, Head of Public Policy, India Office, Facebook
7. Mr Rishi Jaitly, India Head, Twitter
8. Mr Shekhar Kapur, Filmmaker
9. Mr Naman Pugalia, Google India
10. Dr R. Shreedher, Commonwealth expert on community radio
11. Mr Pranjal Sharma, Adviser (New Media), Prasar Bharati

10. **Expert Group on Regulatory Mechanism**

The Expert Group will re-examine, in particular, (i) the regulations that govern telecom licensing relevant to Prasar Bharati, especially in the context of licensing for new & emerging media and convergence of technologies, (ii) compliance mechanisms for content regulations, including those stipulated by News Broadcaster Association's Standards Authority, and (iii) assess the adequacy of provisions under the Cable TV Act for enabling Prasar Bharati to optimally perform its intended role as an the public broadcaster.

Composition:

1. Ms Supriya Sahu, Joint Secretary, Ministry of Information & Broadcasting **(Convener)**
2. Mr A. K. Bhatnagar, former Engineer in Chief, Doordarshan and formerly an adviser to TRAI
3. Dr Ashok Chandra, former Wireless Adviser, Wireless Planning Cell
4. Mr Kiran Karnik, former President, NASSCOM
5. Mr Rajeev Sharma, Advocate, Supreme Court
6. Mr R. N. Prabhakar, former Member, TRAI
7. Mr Amir Pasrich, Head, International Law Associates
8. Mr Malay Shrivastav, former Joint Secretary, Department of Telecommunications and currently Executive Director, Indian Trade Promotion Organisation

11. **Expert Group on a Comparative Analysis of Public Service Broadcasters**

The Expert Group will work for developing a viable model for public service broadcasting in the Indian context, it is essential to look at other similar models in various countries, like, NHK, Australian Broadcasting Corporation, Canadian Broadcasting Corporation, British Broadcasting Corporation, Public Broadcasting Service of USA and many others. The Expert Group will study various models and give its recommendations.

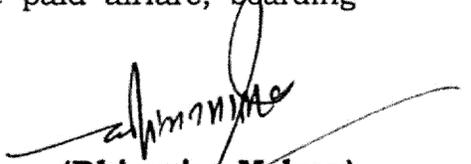
Composition:

1. Prof. Nalin Mehta, IIM Bangalore **(Convener)**
2. Prof. Obaid Siddiqui, Professor (Media School), Jamia Milia University
3. Mr Sam Miller, BBC World Service Trust
4. Mr Sharad Sadhu, Asia-Pacific Broadcasting Union
5. Prof. Vartika Nanda, Head of the Department of Journalism, Lady Shri Ram College

2. The description of the work of each Expert Group is only indicative: the Expert Group members may like to amplify on the scope of functioning of their respective Groups further as required.

3. The Expert Groups will have some degree of cross-cutting work, and they will need to coordinate inputs from each other.

4. Sitting fee and other allowance of Board Members will be in accordance with relevant statutory Rules. Non-official Members/Experts will be paid sitting fee of Rs.2000/- per meeting and also local transport expenses as per norms. Outside non-official Members/Experts will be paid airfare, boarding and lodging expenses as per norms.



(Dhiranjan Malvey)
OSD (PBB)

Copy:

1. **All Committee Members**
2. **Chairman and Members of the Expert Committee**
3. **Sh. Amit Agarwal, OSD to Sh. Sam Pitroda**

File No. OSD/DM/Expert Committee/2013

Dated 13th March, 2013

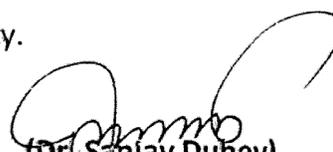
OFFICE MEMORANDUM

In partial modification to the O.M. No. OSD/DM/Expert Committee/2013 dated 21.02.2013, it has been decided to add following members in the Expert Groups:-

NAME OF MEMBERS	EXPERT GROUP
1. Secretary (ER), Ministry of External Affairs	1. Global Initiatives
2. Joint Secretary, Ministry of Information & Broadcasting (concerned with policy matters concerning digitalization of broadcasting)	2. Group on Technology

2. Further, It has also been decided to have a Group of Advisors to assist the Expert Committee. The list of such Advisors is Annexed herewith.

3. This issues with the approval of Competent Authority.


(Dr. Sanjay Dubey)
ADG (Admn.)

Encls:

- (1) List of Advisors.
- (2) O.M. No. OSD/DM/Expert Committee/2013 dated 21.02.2013.

1. Secretary (ER), Ministry of External Affairs, South Block, New Delhi.
2. Joint Secretary (B-2), Ministry of Information & Broadcasting, Shastri Bhawan, New Delhi.

Copy to:

1. All Committee Members.
2. Chairman and Members of the Expert Committee.
3. Shri Amit Agarwal, OSD to Shri Sam Pitroda.

Group of Advisors

S.No	Name of the Advisor & Field
1	Mr Farooq Sheikh, Actor
2	Mr Pritish Nandy , Media Personality , Film Producer & Poet
3	Mr Ronnie Screwvala, Entrepreneur and Social Philanthropist
4	Mr Tarun Das, Business Leader
5	Mr Shyam Benegal, Director & Screenwriter
6	Ms Sharmila Tagore, Actor
7	Ms Nandita Das, Actor & Director
8	Mr Javed Akhtar, Poet, Lyricist & Scriptwriter
9	Mr R. Gopalakrishnan, Management Professional

No.50013/5/2013-BAP
GOVERNMENT OF INDIA
MINISTRY OF INFORMATION AND BROADCASTING
A Wing, Shastri Bhawan, New Delhi – 110 001.

Dated: 18.03.2013

Subject: Expert Committee to review functioning of the Prasar Bharati.

In continuation of this Ministry's Order of even number dated 28.01.2013 read with the Order dated 12.02.2013 regarding the constitution of an Expert Committee to review the functioning of Prasar Bharati, it has been decided to nominate Shri C. Viswanath, Additional Secretary as a Member of the Expert Committee vice Shri Jitendra Shankar Mathur, AS & FA, consequent to re-allocation of work between the Additional Secretaries of the Ministry.

2. This issues with the approval of competent authority.

Jayanthi
(Jayanthi G.)
Director (BAP)
Tel: 23385016

Distribution:

1. The Chairman and Members of the Expert Committee
2. CEO, Prasar Bharati
3. Shri C. Viswanath, AS
4. Shri Jitendra Shankar Mathur, AS & FA

Copy for information to:

1. PS to Hon'ble Minister (I&B)
2. PPS to Secretary (I&B)
3. PPS to Additional Secretary (I&B)
4. PPS to Additional Secretary & Finance Adviser (I&B)
5. PPS to JS (Films)/JS (B-II)/JS (B-I)/JS(P&A)

*C/c
Issued
on 19.3.13
P.No. 2*

Prasar Bharati Sectt
(India's Public Service Broadcaster)

No.OSD/DM/Expert Committee/2013 Dated:-15th March, 2013

CORRIGENDUM

In partial modification of the OM of even number dated 21.02.2013 regarding constitution of 11 Expert Groups of Expert Committee on Prasar Bharati under the Chairmanship of Shri Sam Pitroda and in continuation of the OM dated 13.03.2013, following amendments in the Expert Groups are made:-

Sl. No.	Expert Group	Existing Member proposed to be replaced	New Member
1	Expert Group on the Prasar Bharati-Government relationship	Shri J.S. Mathur, A.S, M/o I & B	Shri C. Vishwanath, AS, M/o I & B
2	Expert Group on HR and Organisation		
3	Expert Group on Archiving	Ms. Aparna Vaish, ADG(Programming), Doordarshan	Ms. Deepa Chandra, ADG(DD)

2. Mr. Kiran Karnik, former President, NASSCOM and a member of the Expert Group on Regulatory Mechanism replaces Ms. Supriya Sahu, Joint Secretary, M/O I & B as Convener of the same Expert Group. Ms. Supriya Sahu would function as a Member in the same Expert Group.

3. Ms. Shabana Azmi is shifted from the Expert Group on Prasar Bharati -Government Relationship to the Expert Group on Programming and Content.

4. Further, designation of Ms. Krishna Sarma as "Advocate General" in the Expert Group on Archiving is replaced with "Additional Advocate General".


(Arvind Kumar)
Director (Personnel)

Copy to:-

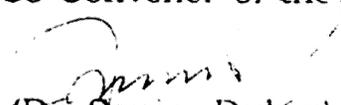
1. All Committee Members.
2. Chairman and Members of the Expert Committee.
3. Shri Amit Agarwal, OSD to Shri Sam Pitroda.
4. Shri Shantanu Sen, Chief Co-ordinator, Sam Pitroda Sectt.

Prasar Bharati Sectt
(India's Public Service Broadcaster)

No OSD/DM/Expert Committee/2013 Dated-11th April 2013

OFFICE MEMORANDUM

In continuation of OM of even number dated 21.02.2013 regarding constitution of 11 Expert Groups of Expert Committee on Prasar Bharati under the Chairmanship of Shri Sam Pitroda, OM dated 13.03.2013 and Corrigendum dated 25.03.2013, Shri J.S. Deepak, Additional Secretary, Department of Commerce who is presently a Member of the Expert Group on Finance is appointed as Co-Convener of the same Group.


(Dr. Sanjay Dubey)
ADG(Admn.)

Copy to:-

1. All Committee Members.
2. Chairman and Members of the Expert Committee.
3. Shri J.S. Deepak, Additional Secretary, Department of Commerce, Udyog Bhawan, New Delhi.
4. Shri Amit Agarwal, OSD to Shri Sam Pitroda.
5. Shri Shantanu Sen, Chief Co-ordinator, Sam Pitroda Sectt.

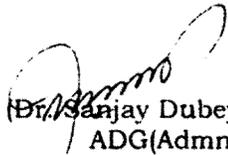
Prasar Bharati Sectt
(India's Public Service Broadcaster)

No.OSD/DM/Expert Committee/2013 Dated:-6th May, 2013

OFFICE MEMORANDUM

In continuation of OM of even number dated 21.02.2013 regarding constitution of 11 Expert Groups of Expert Committee on Prasar Bharati under the Chairmanship of Shri Sam Pitroda and subsequent OM dated 13.03.2013, Corrigendum dated 25.03.2013 and OM dated 11.04.2013, Shri Parthiv Shah, Director, CMAC is appointed as Member of the following Expert Groups :-

1. Expert Group on Archiving
2. Expert Group on Presence on Social and Other New and Emerging Media


(Dr. Sanjay Dubey)
ADG(Admn.)

Copy to:-

1. All Committee Members.
2. Chairman and Members of the Expert Committee.
3. Shri Parthiv Shah, Director, CMAC.
4. Shri Amit Agarwal, OSD to Shri Sam Pitroda.
- ✓ 5. Shri Shantanu Sen, Chief Co-ordinator, Sam Pitroda Sectt.
6. Shri Raman Kumar, DD(Tech.) and Nodal officer, Sam Pitroda Committee Sectt.

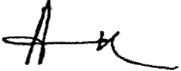
**PRASAR BHARATI
(INDIA'S PUBLIC SERVICE BROADCASTER)
PRASAR BHARTI SECRETARIAT
2ND Floor, PTI Building,
Sansad Marg, New Delhi**

No. Misc-1/109/2013-PPC

Date: 18.06.2013

Mr. Sam Pitroda, Advisor to the Prime Minister of India on Public Information, Infrastructure and Innovations/Chairman, Expert Committee on Prasar Bharati will be meeting the representatives of all the Recognized Associations of Prasar Bharati on **20.06.2013 at 02:30 PM in the Conference Hall, 2nd Floor, PTI Building, Parliament Street, New Delhi.**

2. All the Chairman/President and General Secretary/Secretary of the Associations and the Officers mentioned below are requested to kindly make it convenient to attend the meeting.


(Arvind Kumar)
Director (Pers.)
Tel.: 23737594

To,

1. General Secretary, Association of Radio and TV Engineering Employees (ARTEE), (Kind Attention: Shri Anil Kumar S.) Post Box No.422, New Delhi-01.
2. General Secretary, AIR & DDn Technical Employees Association (ADTEA), (Kind Attention: Shri Kulbhusan Bhatia), Post Box No. 736, New Delhi-01.
3. General Secretary, AIR & DDn Engineers Association (ADEA), (Kind Attention: Shri P. N. Bhakta), Room No. 333, Akashvani Bhawan.
4. General Secretary, Programme Staff Association of AIR & DDn (PSA), (Kind Attention : Shri R. Srinivasan), Room No. 406, Akashvani Bhawan, New Delhi-01.
5. General Secretary, Association of Doordarshan Programme Production Personnel (ADP3), (Kind Attention: Shri Sukanta Sen Gupta), 18/3 Uday Shankar Sarani, Golf Green, Kolkatta-700095.
6. General Secretary, AIR & DDn Administrative Staff Association (ADASA), (Kind Attention: Shri V. Prasad), New Delhi-01

.....contd..../-

7. Secretary, AIR & DDn Stenographers Association (ADSA), (Kind Attention: Shri P. Chandrasekhar), NSD, Broadcasting House, N.Delhi-01.
8. General Secretary, Akhil Bhartiya Akashvani evam Doordarshan Chaturth Shreni Karamchari Sangh (ABADCSKS), (Kind Attention: Shri Jagdish Prasad), Room No. 240, Akashvani Bhawan, New Delhi-01.
9. General Secretary, Audience Research Employees Association (AREA), (Kind Attention Shri Arvind Dhanwick), Room No. 202, Akashwani Bhawan, New Delhi-01
10. General Secretary, Akashwani Announcer Association (AAA), (Kind Attention: Shri M. Chandrasekhar.), House No. 3-6-361/38, Oil Seeds Govt. Qtrs, St. No. 26, Himayat Nagar, Hyderabad-500029.

Copy with a request to attend the meeting:

- 1) CEO, Prasar Bharati
- 2) Member (Pers), Prasar Bharati
- 3) Member (F), Prasar Bharati
- 4) ADG (Oprs.), Prasar Bharati
- 5) ADG (A), Prasar Bharati
- 6) OSD (AR), Prasar Bharati
- 7) Dir. (Pers.), Prasar Bharati
- 8) Chief Coordinator, Sam Pitroda Secretariat

Copy for information to:

- i) PPS to CEO, Prasar Bharati
- ii) PS to Member (Pers)/Member (F), Prasar Bharati
- iii) PS to ADG (Oprs.)/ADG (A)/OSD (AR), Prasar Bharati
- iv) PA to Dir. (Pers.), Prasar Bharati
- v) DD (Tech), Nodal Officer, Sam Pitroda Committee and its Secretariat
- vi) DD (C&GA) for booking of the Conference Hall.
- vii) Shri Sat Pal Singh, UDC, Prasar Bharati for necessary arrangement.
- viii) Shri Jitender Singh, PBRB Cell with reference to their Meeting Notice from **F. No. A-10/84/2007-PPC (Vol.-III) dated 14.06.2013.**
- ix) Ms. Parvati Tampi, Deputy Coordinator, Sam Pitroda Secretariat
- x) Ms. Astha Alang, Deputy Coordinator, Sam Pitroda Secretariat

Stakeholders consulted by the Expert Committee on Prasar Bharati

Convenors

Name	CONVENOR OF EXPERT GROUP
Ms Asha Swaroop	The Prasar Bharati - Government relationship
Mr Ajay Chowdhary	Technology
Dr Mahim Sagar	Business Development
Prof. Sameer Kumar Barua	Finance
Mr Ashok Arora	HR & Organisation
Mr. Muzzafar Ali	Programming & content
Mr. Raghu Menon	Archiving
Mr. Vikram Kaushik	Global initiatives
Mr. Pankaj Pachauri	Presence on social media and other new & emerging delivery platforms
Mr Pachauri	Adviser to PM, Public Information Infrastructure and Innovations
Ms Supriya Sahu	Regulatory mechanism
Prof. Nalin Mehta	A comparative analysis of public service broadcasters

Members of Group on Government Relationship

Name	Designation
Mr Sashi Kumar	Chairman, Asian College of Journalism
Mr J. S. Mathur	M/o I&B, Additional Secretary
Mr Suhas Borker,	Social Activist
Ms Shabana Azmi	Actor, Social Activist & MP
Ms Leela Samson	Chairperson, CBFC & Sangeet Natak Akademi

Members of Group on Technology

Name	Designation
Mr Manu Kapoor	ED, Vodafone
Mr R. K. Jain	Advisor (Tech), Prasar Bharati
Mr Kuldeep Goyal	Former CMD, BSNL & currently ED Radius Infratel
Mr. V.K. Singla	Engineer-In-Chief, AIR
Mr. R.K. Sinha	Engineer-In-Chief, DD
Dr B. K. Gairola	Mission Director (eGovernance)

Members of Group on Regulatory Mechanism

Name	Designation
Mr Amir Pasrich	Head, International Law Associates
Mr A. K. Bhatnagar,	Former Engg in Chief, Doordarshan and formerly an adviser to TRAI
Mr Kiran Karnik	Former President, NASSCOM
Mr R. N. Prabhakar	Former Member, TRAI
Mr Rajeev Sharma	Advocate, Supreme Court
Mr Malay Shrivastav	Former Joint Sec, DoT & now ED, ITPO
Dr Ashok Chandra	Former Wireless Adviser

Members of Group on Global Initiative

Name	Designation
Mr Dilip Cherian	Founding Partner, Perfect Relations
Mr Subimal Bhattacharjee	CEO, General Dynamics
Ms Riva Ganguly Das	Joint Secretary (Public Diplomacy) MEA
Mr Pranjal Sharma	Adviser, Prasar Bharati

Members of Group on Comparative Analysis

Name	Designation
Mr Sam Miller	BBC World Service Trust
Prof. Obaid Siddiqui	ex-BBC, ex-NDTV, Professor (Media), Jamia Milia
Mr Sharad Sadhu	Asia-Pacific Broadcasting Union
Prof. Vartika Nanda	Head of the Department of Journalism, Lady Shri Ram College

Members of Group on Programming and Content

Name	Designation
Ms P. N. Vasanti	Director, Centre for Media Studies
Mr Brij Kothari	CEO, Planet Read India & Faculty, IIM Ahmedabad
Mr Sunit Tandon	Director General, Indian Institute of Mass Communications
Mr Shekhar Kapur	Filmmaker
Mr Rajiv Mehrotra	Managing Trustee, Public Service Broadcasting Trust
Ms Sevanti Ninan	Senior Journalist
Mr L. D. Mandloi	DG (AIR)
Mr Tripurari Sharan	DG, Doordarshan
Prof Kiran Seth	Founder, SPIC MACAY
Dr K. Vageesh	Head, AIR Music
Mr Jawahar Wattal	Producer

Members of Group on Social Media

Name	Designation
Mr Pranjali Sharma	Adviser, Prasar Bharati
Mr Naman Pugalia	Google India
Mr Rishi Jaitly	India Head, Twitter
Mr Syed Akbaruddin	Joint Secretary (External Publicity), MEA
Ms Archana Datta	DG, AIR News
Ms Ankhi Das	Head of Public Policy, India Office, Facebook
Dr R. Sreedher	Commonwealth expert on community radio
Mr S. M. Khan	DG, DD News
Mr P. Balaji	MD, Nokia India & South Asia
Mr Shekhar Kapur	Filmmaker

Members of Group on Archiving

Name	Designation
Mr. Subroto Chatopadhyay	Chairman, The peninsula Foundation & MD, Saregama
Ms Krishna Sarma	Advocate General, Govt of Assam & IPR law expert
Ms Aparna Vaish	Additional DG(Programming), Doordarshan
Prof. Amlan Das Gupta	Jadhav Pur University
Dr. Sudha Gopal Krishnan	Director, Sahapedia
Prof. Vikram Sampath	Founder, Archive of Indian Music
Dr Suresh Chandvanka	Honorary Secretary, Society of Indian Record Collectors
Mr Prasant Pathrave	Director, National Film Archive of India, Pune

Members of Group on Finance

Name	Designation
Mr. Neeraj Bhardwaj	CEO, Carlyle
Prof. Ajay Shah	National Institute of Public Finance and Policy
Brig (Retd.) VAM Hussain	Member (P), Prasar Bharati
Dr. K. P. Krishnan	Former Joint Secretary (Capital Markets), Finance Ministry
Mr. J. S. Deepak	Former Joint Secretary, DoT/ Additional Secretary, D/o Commerce

Members of Group on H R & Organization

Name	Designation
C. Vishwanathan	Additional Secretary, M/o I&B
Brig (Rtd.) V. A. M. Hussain	Member (Personnel), Prasar Bharati
Prof. M. P. Gupta	D/o Mgmt Studies, IIT Delhi
Mr Satish Pradhan	Chief, Group Human Resources, Tata Sons Ltd.
Ms Nandita Gurjar	Global Head, HR, Infosys,
Mr Mohandas Pal	Educational entrepreneur & HR expert

Members of Group on Business Development

Ms Vibha Desai	Executive Director, Ogilvy & Mather
Mr Ajay Khanna	President, Jubilant Group & former Deputy Director General, CII (Noida)
Dr Jai Menon	Director, Global Innovation & IT and Group CEO, Bharti Enterprises
Dr C. MuraliKrishna Kumar	Sr Adviser, Planning Commission
Mr VK Jain	Additional DG, Doordarshan
Dr Sunil Kapoor	Member, Prasar Bharati & educational entrepreneur

Advisors

Name	Designation
Mr Farooq Sheikh	Actor
Mr Pritish Nandy	Media Personality, Film Producer & Poet
Mr Ronnie Screwvala	Entrepreneur and Social Philanthropist
Mr Tarun Das	Business Leader
Mr Shyam Benegal	Director & Screenwriter
Ms Sharmila Tagore	Actor
Ms Nandita Das	Actor & Director
Mr Javed Akhtar	Poet/Lyricist/Scriptwriter
Mr R Gopalakrishnan	Management Professional

Adjunct Link Officers

EXPERT GROUP	LINK OFFICER	DESIGNATION
Prasar Bharati Govt. Relationship	JS Mathur	Addl Secy, M/o I&B
	Brig (Retd.) VAM Hussain	Member (P), Prasar Bharati
Technology	R. K. Verma	E-in-C, DD
Business Development	V.K. Jain	ADG, O/o DG: DD
Finance	J.P.S. Chawla	ADG(B&A), PB Sectt.
(assisted by)	Om Prakash	OSD (OP)
(and)	P. Manoharan	DD(Fin.), Prasar Bharati
HR & Organisation	Om Prakash	OSD (OP)
Programing & Content	Shri F. Shehryar	ADG (P)
Archiving	Deepa Chandra	ADG(P), DG: DD
Global Initiatives	Shri Ranjan Thakur	ADG(P)
Presence on Social & Other New and Emerging Media	Shri Pranjal Sharma	Advisor
Regulatory Mechanism	Shri A.K. Bhatnagar	former E-in-C
Comparative Analysis of Public Service Broadcasters	Prof. Nalin Mehta	IIT Bangalore

Associations Attendees

Mr. Anil Kumar,	President - ARTEE
Mr. Umesh Chandra,	Genl.Secretary - ARTEE
Mr. Bharat Lal,	President - ADTEA
Mr. P.N Bhatia,	Genl. Secretary - ADEA
Mr. O.K Sharma,	President - ADEA
Mr. S.K Nahar,	Executive Vice President - PSA
Mr.. Srinivasan,	General Secretary - PSA
Mr. Umesh Mishra,	President - ADPPP
Mr. G.K Acharaya,	President – ADASA
Mr. V.Prasad,	G Secretary – ADASA
Mr. P.Chandra Sekhar,	Secretary - ADSA
Mr. Ved Narayana Jha,	President - ABADCSKS
Mr. Jagdish Prasad,	G Secretary – ABADCSKS
Mr. Arvind Dhanvick,	General Secretary – AREA
Mr. Chandrasekhar,	General Secretary – AAA