

BROADBAND Bits & Bytes

A BIF Communiqué

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M.F. Farooqui

IAS (Retd.), Chairman,
Broadband India Forum

Message from Chairman

Broadband India Forum is committed to proliferation of Broadband in all echelons of Indian Society. State of Broadband proliferation in India needs significant improvement. There are many ongoing schemes aiming at better broadband connectivity. The realization of the Digital India dream will also depend to a very great extent on our ability to quickly bridge the gap in broadband connectivity. India is standing today at the cusp of a great new opportunity. We can leverage the potential of the Fourth Industrial Revolution and also usher a new paradigm of socio-economic empowerment on the back of this drive for digitization.

The forum has consistently strived to promote policies which will help increase the reach of broadband. It has done so by taking up the issues with the Government Departments and the concerned regulators. This included our comments on net neutrality, machine to machine communications, V Band, Wi-Fi, etc. In addition to this, we have commissioned studies on important issues like the socio-economic impact of the Internet usage. We have also taken a series of sustained initiatives on Satellite Communication.

There has already been a very significant step up in the activities of the forum. The Quarterly Newsletter is an important initiative, which aims to link all the activities of the forum towards the larger objective of increasing the reach of the Broadband. This will focus on increasing the awareness across the wide cross section of the stakeholders. It will also keep track of the emerging trends and innovative ideas and help the authorities and the regulator to respond to the challenges and harness the opportunities.

We, in the forum, are thankful to all the supporters and contributors who have always been pillars of strength for us. We do sincerely hope that this newsletter will fulfil the need for timely, accurate and path-breaking information.

A handwritten signature in dark ink, appearing to read 'M.F. Farooqui', written in a cursive style.



**WE WANT TO SUSTAIN
THE MOMENTUM IN
THE COMING DAYS
AND A NUMBER OF
NEW INITIATIVES HAVE
BEEN LINED UP FOR
THE NEAR FUTURE”**



TV Ramachandran
President,
Broadband India Forum

From the President's Desk

Dear Readers,

Welcome to the Inaugural Edition of our Quarterly Newsletter - Broadband Bits & Bytes on trends and perspectives related to Broadband sector in India. The Newsletter focusses on all the key areas such as spectrum and licensing, content and applications, SatCom, infrastructure, security, new technologies and innovations, which could lead to proliferation of Broadband in India.

BIF is dedicated to enhance the potential of the entire ecosystem to deliver broadband across the whole of India. BIF's mission is to support and enhance all policy, regulatory & standards initiatives for the proliferation of high quality broadband in the country in a technology-neutral and all-inclusive manner. We have, in the short time frame of less than two years, contributed to several regulatory and policy consultations and been working closely with all concerned Government agencies providing credible inputs on Broadband to assist and facilitate the process of policy making.

The Newsletter is divided into several sections. In the **"Spotlight"** section, the sector in focus for the Inaugural Edition is Spectrum and Licensing. We discuss our suggestions for the Settlement Package for Facilitating Telecom Propulsion to Greater Heights. We have views on the current position of Content and Applications in the Indian context with relevance to regulatory and market developments over the next 4-5 years in the **"Industry Speak"** section, and I would like to thank the industry experts personally for sharing their valuable thoughts. In our **"Newsflash"** section, we have summarized the significant happenings in the Broadband sector over the last quarter. In the **"Upcoming Events"** section, we give you a glimpse of the proposed annual BIF Event on SatCom.

We hope you enjoy reading this issue!

In an effort to make this newsletter more useful to you, we would appreciate your comments and suggestions that you may have on this issue as well as topics that you would like us to feature in the forthcoming issues.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Ramachandran' followed by a stylized flourish.



**BIF EFFECTIVELY
FUNCTIONS AS A
THINK TANK AND
POLICY FORUM"**

Spotlight: Settlement Package for Facilitating Telecom Propulsion to Greater Heights



Curiouser and curiouser. Nothing could describe better the current state of the Indian mobile telecom sector—replete with freebies, penalties, accusations and denials, growth & predictions of doom. All this after the dramatic entry of a powerful new player & the so-called Jio Effect. To remain competitive, the incumbents have been compelled to reduce their tariffs sharply causing deep erosions in their revenues and viability. With the sector already having a debt of over Rs 4.5 lakh crore, there is also great concern, for banks, about high NPAs. Telcos have been clamouring for urgent relief measures from the government. Even banks have joined this chorus and the government has, understandably, set up an inter-ministerial group to provide recommendations. Seeing all this, one is overwhelmed by tremendous déjà vu. Many aspects are a powerful replay of happenings in 1998 & 1999, when the fledgling sector was about to collapse completely due to high license fees, unviable business cases, delayed governmental clearances, defaults in license fee payments and a threat of NPAs to banks.

Despite the similarity, there are important differences. The current situation is largely the result of aggressive competition from a new entrant which has also admittedly produced remarkable results in terms of data usage,

mobile internet and broadband adoption that are greatly in sync with the National Telecom Goals. India has, thus, become one of the largest mobile data consuming countries in the world, and its internet user base has now become the second largest in the world. All these would provide, as well established by World Bank, a significant boost in GDP growth and personal productivity as well as security and enhancement of quality of living. Of course, economists and policymakers might well ask whether such tariffs are sustainable, but the market would decide that.

INDIA HAS BECOME ONE OF THE LARGEST MOBILE DATA CONSUMING COUNTRIES IN THE WORLD

Truth is, even before the Jio Effect, the sector was in financial distress due to flaws in the spectrum and licensing regime. The Jio Effect only precipitated the crisis. Although it is inarguable that telcos need

major policy relief to survive, given the current scenario of massive consumer/economy benefits, it may be neither appropriate nor sustainable to hand out one-sided relief packages to the incumbents to compensate the Jio Effect. A bailout would be a significant cost to the national exchequer and might invite PILs since the spectrum-related reliefs would be an ex-post revision of spectrum auction conditions. The government might even face criticism since the statutory regulator has upheld the promotional tariffs of the new entrant and highlighted interconnection issues.

Cut to 1999, when the government offered relief measures, not as a bailout package, but as a fair settlement. The government might now also obtain from the incumbents' certain undertakings that will help achieve national telecom objectives (example rural broadband, Digital India) and serve public interest (QoS).

In 1999, the telcos had to forego their extremely precious duopoly right enshrined in their licenses/contracts and also withdraw all their license-related legal challenges in the various courts. Last but not the least, an affidavit had to be given in court as regards a remarkable reduction of the prevailing high tariffs to a very low and affordable level.

Assuming that a settlement is the basis, the first relief required for telcos is with regards to spectrum usage charges (SUC), which are more than 5% of revenues. This represents a highly anachronistic situation. Once the spectrum has been won in an auction, enlightened regimes merely cover the cost of administering and regulating the spectrum, which would only be a small fraction of 1%. Hence, it is recommended that, for auction-allocated spectrum, the SUC level should be brought down to max 1%. The second relief concerns extension of spectrum EMI payments from 10-years till end of the concerned licenses.

License fees also need to be reduced from current level of 8% to 3% maximum, which would be in line with international norms and also be far higher than the cost of administration & regulation, which is what most enlightened regimes follow. (It may be recalled that the TRAI study in 1998 determined that about 0.2% of AGR is adequate for covering cost of regulation). There are two additional justifications for this measure. One is that the GST on telecom services will be 18%—a big hike of

3% from the current level of 15%. The other justification is that the USO levy of 5% included in the license fee could be drastically reduced to say, 1%, since as part of the settlement the government could take undertaking from the TSPs for rural rollout. The government should concurrently put in a fair definition of AGR.

Most important, the government needs to review the auction rules for reserve prices, which are out-of-line with international norms and result in non-discovery of market prices. In fact, most of our auctions could be deemed failures since major spectrum quantities have remained unsold and whatever was sold was at the Reserve Price (RP) or marginally above it. Unless remedial actions are taken, the situation is bound to worsen in the years ahead.

The RPs are continuously rising in a 'killer' spiral and it is estimated that, at this rate, sector would need several lakh crores for spectrum over the next few years. Industry would soon be back in a critical state and seeking relief yet again unless the trend is reversed.

Last, different licenses ending at different times create continuing complexities as regards spectrum demand and availability, and level-playing field. The government could take this opportunity to declare a common sunset date and align all licenses to make pro-rata payments or credits on LF and one-time spectrum fees as also create licenses in perpetuity. All will retain and continue with their existing spectrum and be entitled to acquire additional spectrum only through auctions.

What Indian telecom needs now is a robust and visionary settlement that provides opportunity to clean the system of legacy issues and propel the sector to the global Numero Uno position.

TODAY'S SCENARIO RESEMBLES THE INDUSTRY IN 1999



**SPECTRUM
USAGE
CHARGE**

reduce to **1%**



**LICENSE
FEES**

reduce from
8% to 3%



GST

Same as the rate on
mobile handsets



AUCTION

Review
the rules



LICENSES

declare '**sunset date**' and align all licenses

Industry Speak: Current position on Content and Applications in the Indian context with relevance to regulatory and market developments over the next 4-5 years



**Chetan
Krishnaswamy,**
Director - Public Policy,
Google India

"Honorable Prime Minister's vision of a connected India with its focus on development, growth, opportunity and governance for everyone has given a renewed thrust to the Internet ecosystem in India. Over 400 million Indians are connected to the Internet today, improved connectivity and affordable smartphones is fueling this and over 650 million Indians are expected to be online by 2020. What is heartening to see is the adoption is going beyond the metros and today Indian language users form majority of the user base. While the english web is infinitely useful, the Indian language speaker today gets limited value from the web due to lack of Indian language content and services. As we look to build an inclusive Internet for every Indian, we need to make India's Internet more representative of the India we live in and form public-private partnerships to work towards creating broadband abundance and make it affordable and useful for everyone."

"The true value of broadband cannot be just connectivity alone, but the right mix of "content and applications" - tailored to the needs of the local population - driving usage."



Parag Kar
Vice President
Government Affairs,
India & South Asia,
Qualcomm

"Over the past decade, the Internet has transformed how we interact in social, political and economic environments, while contributing significantly to the Indian GDP. Today, mobile apps have gone beyond social networking and are the preferred vehicle to reach a target audience, enhance productivity, create efficiencies and reduce barriers to information to create impact. This apps ecosystem is being effectively leveraged by the Government to reduce the bottlenecks to deliver social welfare schemes around India's sustainable development goals. BIF had taken a leading role in this policy space, especially by producing impactful research papers, to assist policymakers with leading academic institutes and industry input."



Ashwani Rana
Head of Connectivity
Policy, South & Central
Asia, Facebook

"It is now globally recognized that Broadband is a critical infrastructure necessary for the growth and development of society. We, as a country, have been lagging behind in this respect and need to leapfrog. The dichotomy of India being the world's IT superpower but having the largest number of digital have-nots should shake us out of our complacency. Given this backdrop, we are fortunate to have BIF play the role of a catalyst bringing together the entire ecosystem ranging from the equipment manufacturers, technology players, content providers and the policy makers to push this national agenda forward."



S Chandrasekhar
Group Director,
Government Affairs
and Public Policy,
Microsoft India

Newsflash: Updates and Achievements

CONTENT & APPLICATIONS

- ❖ As per ICRIER report on “Estimating the Value of New Generation Internet Based Applications in India”, a 10% increase in India’s total Internet traffic, delivers on average a 3.3% increase in India’s GDP, and a 10% increase in India’s mobile Internet traffic, delivers on average a 1.3% increase in India’s GDP
- ❖ BIF commissioned a research paper on socio-economic impact of Internet based content and applications with WIK using consumer surplus method
- ❖ Supreme Court has permitted BIF to assist with inputs on privacy related issues

SPECTRUM & LICENSING

- ❖ India is getting ready for 5G as Government plans to auction 5G spectrum bands
- ❖ BIF released a White Paper on, “V Band – 60 GHz: The Key to Affordable Broadband in India”
- ❖ BIF engaged with National Institute of Public Finance and Policy (NIPFP) to provide input on study related to overall impact of opening of V band in the Indian economy
- ❖ BIF launched a White Paper along with IIM Bangalore and Counterpoint research on local value addition in mobile phone industry

SATCOM

- ❖ ISRO launched a communication satellite GSAT-17 from French Guiana on June 29, 2017
- ❖ ISRO launched the country’s heaviest rocket – Geosynchronous Satellite Launch Vehicle-Mark III (GSLV-Mk III) – along with a communications satellite GSAT-19 on June 05, 2017
- ❖ BIF President – Mr. TV Ramachandran met with Chairman ISRO on May 29, 2017 and apprised

him of the role that SatCom can play in expediting achievement of the objectives of Digital India

- ❖ BIF held a commemorative event on the eve of the World Telecom & Information Society Day on May 16, 2017 which was presided over by Ms. Aruna Sundararajan, Secretary, DoT along with Mr. N. Sivasailam, Addl. Secretary, DoT. The theme of the event was role of SatCom for Digital India

OTHERS

- ❖ BIF submitted position paper on opening of UHF band IV & V for Broadband usage, delicensing of additional spectrum in 5 GHz, delicensing of V band and opening up of E band during National Frequency Allocation Plan (NFAP) discussions
- ❖ BIF Submitted position paper on High Altitude Platform Stations (HAPS) to WPC during discussions about NFAP
- ❖ BIF submitted co-existence study for EESS and Fixed Wireless to WPC, DoT and TRAI
- ❖ BIF released a White Paper together with E&Y on incentivising domestic handset manufacturing in India under GST regime



BIF - World Telecom & Information Society Day

White Papers from BIF



Interesting Articles

BELOW ARE THE ARTICLES AUTHORED BY BIF PRESIDENT, MR. TV RAMACHANDRAN WHICH HAVE BEEN PUBLISHED IN LEADING BUSINESS DAILIES:

- ❖ Telecom disparity: US spectrum 9 times cheaper than India even though auction revenue was double [\[LINK\]](#)
- ❖ Digital India needs reforms in satellite communications [\[LINK\]](#)
- ❖ The great gig in the sky [\[LINK\]](#)
- ❖ Satellite Communications can drive the broadband revolution [\[LINK\]](#)
- ❖ Broadband through cable networks [\[LINK\]](#)
- ❖ Registration or implied licensing legally feasible for new generation [\[LINK\]](#)

FEW OTHER ARTICLES THAT YOU MAY FIND INTERESTING:

- ❖ TRAI bats for private players in satellites [\[LINK\]](#)
- ❖ Broadband India Forum calls for V-Band delicensing for Wi-Fi and backhaul [\[LINK\]](#)
- ❖ Debt, Regulatory-Policy Infirmities, and Indebted Industry? [\[LINK\]](#)
- ❖ Ready to Take Off (SatCoM) [\[LINK\]](#)
- ❖ Impact of Extending Spectrum Payment Tenure on Operators [\[LINK\]](#)
- ❖ Indian Spectrum Outflows [\[LINK\]](#)

Upcoming Event

International Summit - “India SatCom”

India SatCom 2017 – 3rd International SatCom Summit – being organized by the Broadband India Forum, offers a unique opportunity to access key decision makers and business leaders driving the development of Satellite Broadband in India. Register today to gain the knowledge and contacts you will need to make your company part of this growing market for satellite communications services.

The 3rd International Summit of “India SatCom” is proposed to be held as a one day event **between 20th to 30th November 2017**. We shall update the exact date by 31st July, 2017, on our website <http://www.broadbandindiaforum.com/>



Join Us in New Delhi for India Satcom 2017:

- ❖ Learn about opportunities to provide Satellite Broadband across urban and rural India.
- ❖ Talk with key Government decision makers on policy formation, regulations and infrastructure rollouts.
- ❖ Attend panel discussions on market growth, regulatory issues, foreign direct investment policies, the role of SatCom in Digital India and other topics.
- ❖ Network with government officials, business leaders and executives from the world’s major satellite operators, manufacturers and equipment providers.

About Broadband India Forum

Broadband India Forum (BIF) is a technology and service agnostic think-tank that works for the development & enhancement of the entire broadband ecosystem in a holistic manner.

Registered as IPTV Society, its brand - BIF was formed in October 2015 and is a fairly nascent but dedicated Forum with participation from all parts of the eco-system, including Technology Providers, Telecom Operators, Internet Service Providers, Value-Added Service Providers and seasoned Industry professionals who are familiar with different technologies, operations, regulations and policies. Members include Airjaldi, AT&T, Bluetown, BSNL, Cambium Networks, C-DOT, CISCO, Ericsson, Facebook, Google, Huawei, Hughes, Intel, Intelsat, Microsoft, Nelco, Orbital, Ortel, Oxygen, Sterlite, TCIL, Qualcomm, Viasat, WIN Broadband and Xi-Fi.



Mr. Shyamal Ghosh,
*Chairman Emeritus - BIF
and Founder - IPTV Society*

The Forum's senior leadership team includes renowned and respected professionals from both Industry and Government. Mr. Shyamal Ghosh, Former Secretary-T & IT and first Administrator of the USO Fund, is the Chairman Emeritus of the Broadband India Forum. Mr. M. F. Farooqui, IAS (Retd.), former Secretary-T, is the current Chairman and Mr. TV Ramachandran is the President of the Forum. Mr. Vimal Wakhlu, CMD, TCIL and Mr. T. R. Dua, DG, TAIPA are the Forum's current Vice Presidents. Mr. Anil Prakash is the Secretary General. Mr. S. N. Gupta, seasoned technocrat and senior luminary who has worked in DoT and as a Senior Adviser to TRAI (Regulator) is the Treasurer. In addition, the organization is greatly privileged to have a distinguished Panel of dignitaries and experts as Honorary Principal Advisers: Mr. P K Garg, former Wireless Advisor, Government of India and former Chairman, RRB, ITU; Mr. Kuldip Singh, former Member TDSAT and former CMD MTNL; Mr. B K Syngal, former CMD, VSNL and currently Principal Adviser to Dua Consulting; Mr. J V Ramamurthy, former Director, HCL; Mr. D P Singh & Mr. Abhishek Malhotra, Partners of 'Arthe Law' - a firm specialized in TMT legal & policy affairs.

BIF works exclusively to enhance the potential of the entire ecosystem to deliver broadband across the whole of India.

BIF seeks to be a thought leader and a credible and effective voice of the Indian broadband industry to help propel the nation to achieve the ambitious vision of our Honorable Prime Minister of creating a Digital India. To achieve this, BIF works to promote the rapid development of affordable and high speed broadband throughout the country on a technology-neutral basis through the development of the entire broadband eco-system.

BIF functions through many specialist committees for the advocacy, coordination, facilitation and promotion of all activities with the objective of furthering the goals of the National Telecom Policy in Spectrum, Licensing & Standardization, Telecom Infrastructure, Rural Digital Initiatives, Content & Applications, Privacy, Trust & Security, SatCom and Technology Innovations & New Initiatives.

The activities of the Forum broadly relate to coordination, promotion and formulation of expert opinion on topical subjects related to Broadband. To act as a bridge between Industry on one side and Government and the Regulatory Bodies on the other, front ending several issues related to policy & regulation; conducting conferences, seminars and knowledge events; writing research papers and white papers in collaboration with reputed research institutes such as ICRIER, IIM Bangalore and Counterpoint Research; running awareness campaigns within the highest echelons of Government's policy makers on several issues; releasing media articles on issues currently pertinent to telecom in India such as Make in India, EMF radiation, Net Neutrality, Internet Telephony, SatCom Liberalization & Reforms, V band, GST, Wireless Fiber, etc.



Mr. Anil Prakash
Secretary General, BIF

"It is indeed my pleasure to be associated with Broadband - Bits and Bytes. It would be our endeavor to keep you updated with latest technology, standards, innovation, policy and regulation, which embark on and facilitate speedy and affordable broadband proliferation in the country."

Our Esteemed Members



Panel of Distinguished Honorary Advisers



Mr. PK Garg



Mr. Kuldip Singh



Mr. B K Syngal



Mr. J V Ramamurthy



Mr. D.P Singh



Mr. Abhishek Malhotra



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