



COMMENTS ON DRAFT

NATIONAL DIGITAL COMMUNICATIONS POLICY 2018

CUTS International welcomes the draft National Digital Communications Policy 2018 (NDCP) by the Department of Telecommunications (DoT). The policy is forward looking in many respects and marks a commendable shift from the erstwhile telecom specific perspective to a broader digital communications perspective. It is quite comprehensive and covers most of the Information & Communication Technology (ICT) challenges, the country is facing. A roadmap to address them, by devising appropriate policy objectives, has also been knitted in the NDCP, which covers the aspects of accessibility, affordability, inclusiveness and security and if achieved, it would give a boost in developing India into a Global Digital Force.

However, a number of domestic and/or international issues have been in existence for years, for which we are yet to develop practical solutions. For instance, data protection is still being adjudicated by policymakers globally, and is expected to remain a work-in-progress in the near future. Similarly, India's telecom infrastructure has been struggling, with right to way for the erection of telecom towers as one of the key concerns. Aggravating the issue are the perceived health hazards of telecom radiations, for which policymakers have been fighting the misconception, by educating citizens. However, this subject has seen limited progress.

Thus, there is a need to suggest possible strategies, which may result in the objectives, as stated in the NDCP, to be achieved. While mentioning micro-level action may be outside the purview of NDCP, it must identify actors/institutions involved in designing the actions. Along with it, NDCP should stipulate suggestive timeframe, within which, an action plan to achieve the objectives must be formulated.

Given that the NDCP will impact all facets of the economy, which is currently undergoing the digital transformation, it is imperative to enable its close interaction with other policies, programmes, laws and regulations. This may be at different levels such as Make in India, Start-up India, IPR policy, Industrial Policy, Ease of Doing Business, several licenses, approvals and land acquisition relation laws.

In order to ensure effective interaction and designing practical action points, the government departments/ministries, should not work in silos and should rather adopt a "whole of government approach". The approach has been explained in a CUTS report, "A new industrial policy for India: Back to the drawing board¹".

¹ http://www.cuts-ccier.org/pdf/A_NEW_INDUSTRIAL_POLICY_FOR_INDIA.pdf

SPECIFIC COMMENTS

Connect India

- **2022 Goals**

- ❖ While 50Mbps for Citizens, 1Gbps to Gram Panchayats and 100Mbps to Key Development Institutions, is envisaged, these numbers reflect the maximum attainable speeds, in most favourable scenario. The actual speed, to be experienced by citizens, is likely to be comparatively lower than these and the “actual” speed will be the deciding factor for future growth, to be unleashed by Digital Economy. Thus, the Goals should mention the attainable average speeds, which will be experienced by citizens or businesses.
- ❖ There should be a uniformity in the units of speed, which are being used in regulations, advertisements, speed tests (being undertaken by citizens or for audits), etc. Currently, two different units are being used, which may look similar but differ a lot and have severe implications on Quality of Experience (QoE) for consumers, i.e. Mbps (Megabits per second) and MBps (Mega Bytes per second). The difference in units also leads to a lot of confusion, leaving consumers feeling that there is mismatch in the quality promised and delivered.
- ❖ The sector needs enhanced transparency measures, to safeguard consumer welfare. Since, telecom services are often technical in nature, it becomes highly difficult for a normal consumer to decipher the information available, resulting in uninformed or inappropriate choices. A recent initiative on transparency in tariffs, “Tariff Portal” by TRAI, suffices this need for tariffs and various plans on offer by Telcos. Similar mechanism is required for other aspects of telecom services, especially in terms of Quality of Service (QoS), Internet Downtimes, Internet Shutdowns, etc. Some of these information, such as for QoS, Reliability (downtime), etc. should be disclosed by the Telcos.

On the other hand, the Government should justify the use of Internet Shutdowns as well. It should be a tool, which should be used as a last resort, as it has severe implication on businesses and well social well-being of citizens. Thus, the NDCP should direct the disclosure/transparency of this information, by relevant stakeholders, in public domain.

- ❖ There is also a need for a significant improvement in QoS and QoE for broadband consumers, which may partially be addressed through an effective and transparent information disclosure mechanism (as stated in the previous point). CUTS International, along with IIT-Delhi and its regional partners, has been working on an initiative since 2017, ‘**Consumer Broadband Labels**’, wherein a transparent information disclosure mechanism has been advocated through a standard information tool that lists down certain parameters that enable consumers to make informed choices. For more information on the initiative, kindly visit: (<http://snip.ly/ivefs>)
- ❖ While Goal (f) aims deployment of 5 million public WiFi Hotspots by 2020, data security will be a key to their success. It should be considered that these hotspots,

as well as all access points for ICT services, will be prone to cyber-attacks, which needs to be allayed. While some of the security issues have been covered in the “Secure India” section of the NDCP, there is a need to identify the interlinkages between connectivity (Connect India), promoting (Propel India) and security (Secure India). While access (connectivity) has always been an issue, there seems a growing reluctance among consumer who are aware of security threats, in using public connection, but unaware consumers may end up falling prey to cyber-attacks, if security is not upto mark. Thus, any initiative for either of the three aspects, should be evaluated on the basis of its impact on other two as well. This suggests that the goal should refer to them as “Secure WiFi Hotspots”, along with ensure the security of users.

- ❖ Light Tough Regulatory Approach, should be promoted in NDCP, for regulating the telecom sector in India. Telecom services are key to future growth, which may be thwarted because of heavy handling of service providers through policies and regulation. The financial state of the sector is already a concern, though USD100bn worth of investment are envisaged through the policy. However, sub-optimal regulation may still end up impacting the health of the digital industries negatively, which suggests for a continuous evaluation of the regulatory framework.
- **“Strategies Section 1.1 (b) clause i”**, proposes to accord Telecom Optic Fibre Cables the status of public utility. Internet was also classified as utility, similar to telephones and electricity, by United States of America (US) Federal Communication Commission (FCC) in 2015 Net Neutrality ruling. However, it is being considered to be repealed as “utility” tag and may end up burdening operators in terms of responsibilities and compliances, impacting their business models and revenues. Further, utilities are not profit-driven, unlike telecom services. Thus, if the government-laid optic fibres are to be considered as essential facility, it would benefit the smaller businesses and allow them to innovate and contribute to the ecosystem. At the same time, the optical cables being laid by private players, should not be considered as essential facility, as they are backed by profit driven business strategies, which may be pose adverse financial implications on telecom operators. However, in interest of nation’s development, sharing of private infrastructure must be mandated, though at market prices.
- While the NDCP calls out few long-term measures such as spectrum pricing and incentives to invest, the DoT may also come up with few short-term measures to guide the telecom sector towards a sustainable financial health, which is not the case currently. Immediate responses, to allay the situation, are required.
- The regulator should strongly consider the use of cost-benefit analysis², while working on regulatory as well as competition policy frameworks. While this will ensure a move towards optimising regulations to maximising benefits, it will balance the interests of producers, consumers as well as the nation.

² CUTS Experience on Cost/Benefit Analysis - <http://cuts-ccier.org/ria/>

- Connectivity is not all about telecom service connectivity but connectivity of citizens with Government Department/Ministry and the Regulator as well. For this, there is a need for TRAI and DoT to have more regional presence to enable platforms of consumer interaction. This may be in form of organising Open House Discussions, Board Meetings, Round Tables, Q&A sessions, etc. involving all relevant stakeholders, especially civil society and academia. Another way may be opening additional regional offices for DoT and TRAI. An example of this may be drawn from “Grahak Suvidha Kendra” (GSK - <http://snip.ly/b97ct>), a collaboration between Department of Consumer Affairs and Consumer Organisations in India. GSK acts as a bridge between consumers – producer – government, in cases of consumer grievances and has been an efficient forum for consumers in finding resolutions. CUTS and Consumer Education and Research Centre (CERC), operate GSKs for Western Zone of India, with centres located at Jaipur and Ahmedabad, respectively.
- To achieve the objective of Digital India, low cost handsets and equipment, without any compromise on quality and security, are required. The government should incentivise the production of the same through a facilitative policy environment for manufacturers.
- "While welcoming reference to E & V bands in the Draft Policy [Policy Clause 1.2 (d) (iii) & (iv): under Promoting Next Generation Access Technologies], in view of the huge data growth and the need for quantum growth of Broadband & Digital Communications infrastructure, CUTS urges upon the Government to recognise the need for opening up unrestricted, delicensed access to the entire V band from 57-71Ghz and not upto 64Ghz only.
- To cater to the multitude of Use cases which stem from the use of Short Range Devices for applications viz. as Video, Mass Data Distribution system, Data centers, Video on Demand, Augmented Reality, Virtual Reality, Mesh networks of many point to point links, Mobile offloading, etc. the entire V band from 57Ghz to 71Ghz should be opened up without specifying any pre-fixed channelisation plans.
- If need be, the upper V band (66-71Ghz) could be reserved for Telcos for the purpose of limited point to point cellular backhaul links. This could be done on a link-by-link basis through a self-coordinated (registration) manner.
- The availability of delicensed V band (60 Ghz) in major international markets will ultimately result in the emergence of new applications. Furthermore, it is the large production base of WiGig standard chipsets that could be leveraged to facilitate low cost 60 GHz infrastructure. For India to reap the benefit of low cost backbone infrastructure which is so essential for overall Broadband proliferation and to avoid the cost of nonstandard equipment, it is essential to delicense the V band.
- A delicensed V band would lead to substantial economic and social benefits that would further accelerate the government’s Digital India goals. As has been pointed out in the NIPFP Study Report (No. 226 of 2nd April 2018) on " The Economics of Releasing the V band and E- band Spectrum in India “, that substantial economic benefits in terms of consumer surplus and GDP contributions will be spurred by the availability of this spectrum for use in an unrestricted and license exempt manner. It further states that the government should avoid targeting revenue maximisation while allocating the spectrum as then it will only be able to extract part of the producer surplus. Such an approach will have effect on Broadband proliferation and therefore on consumer surplus and GDP

contributions and would lead to significantly lower economic benefits of the spectrum for the economy as a whole. "

- However, to add to the delicensing aspect, it is imperative to look at its implications on the telcos, which are already cash strapped. Delicensing should not adversely impact the health of telecom sector, and should be intended to promote innovation and connectivity.

Propel India

- While, there has been a lot of emphasis on promoting innovation, the country needs more Research & Development (R&D) Centres and Labs. These will promote innovation and enhancement of indigenous patent pool and thus, should be added to the list of 2022 Goals. At present, there is scarcity of such institutions in India, and the existing technical institutions seem poorly capacitated to innovate. Enhanced budget towards innovation is highly sought.
- Under the leadership of Late Former Prime Minister Shri Rajiv Gandhi, Sam Pitroda launched the Center for the Development of Telematics (C-DOT) in 1984 to transform India's telecom sector. While the move was path-breaking and revolutionary, there are only two C-DOT R&D centres currently in Delhi and Bangalore. Ideally, C-DOT should have mushroomed around the country in these 35 years and not just two cities. DoT and MeitY should give more thrust to innovation by directly collaborating with technical institutions and Sector Skill Councils (of Electronics, Security, IT/ITeS and Telecom) to develop talent pool and patents.
- The policy should enhance the role of civil society in order to truly "Propel India". Civil society can relay the consumer voice from the grassroots, build their capacities, as well as engage in unbiased researches, insights from which may help the policymakers in drafting optimal regulatory solutions. Higher engagement of Civil Society with DoT and TRAI is much needed.
- TRAI should be empowered with greater authority, than what it has currently. For instance, it should have the power to penalise service providers, in case of them failing to meet the objectives or benchmarks, as stipulated in regulations. A cue for this may be taken from the call drop penalty, imposed by TRAI, which was struck down by the Supreme Court. An empowered regulator, may go a long way in streamlining the sector to national objectives.
- Indigenous electronic and ICT products will effectively bring down prices and provide more choices for consumers, provided they comply with adequate quality standards to improve longevity and trust in 'Made in India' equipment and devices. While the Compulsory Registration Order (CRO) Standards of 2012 were brought in specifically to address this aspect, and India has been able to develop its own standards and labelling of ICT products, the regime remains very tedious. A briefing paper on the subject prepared by CUTS may be accessed from this link – (<http://snip.ly/92tnt>). There are high costs and time involved in compliances and keeping in mind the technological innovations in the ICT domain, the CRO regime struggles to match the industry's pace, which adds on the burden. Thus, there is a need to improve the CRO regime's efficiency and effectiveness.

- A greater emphasis is required for the nation's Startup and MSME network, which has showcased a lot of potential for aggressively expanding the ICT ecosystem's capability and reach in the domestic as well as international markets. This would need the NDCP to blend perfectly with the National IPR policy, regulatory and competitive policy regime, to boost the over-the-top (OTT) applications and help in bringing positive impact on consumers by offering services, that is of high-quality and compliments their diverse local-content demands.
- Preferential Market Access (PMA) should only be a short-term incentive and in the long run, ICT products 'Made in India', should be able to compete with International Products, in both domestic as well as international markets. This should be specified upfront.
- In reference to 2.3(d) (Fostering an Intellectual Property Rights regime that promotes innovation), implementation of the policy should focus on increasing specialisation of and providing incentives to firms which have the potential to move up the ICT Global Value Chains. This is because a major part of the core technological innovation is happening in other developing countries (such as China, Taiwan etc.) where there is a well-built component ecosystem. This ensures domestic value addition, increases the global competitiveness of domestic firms, enhances technological sovereignty of the nation, and more importantly contributes to employment generation. Secondly, participation in global standards development processes should be encouraged and domestic firms' internal capacities to learn from and contribute to the global standard setting processes should be increased. This would significantly advance India's technological capabilities in the global ICT marketplace as local firms would extensively invest in R&D activities, thereby generating and increasing their own SEP portfolios. In order to do so, collaboration between government institutions, industry, academia and civil society is critical. The government has taken several steps towards this end by announcing its willingness to invest in technologies such as 5G, and the industry ought to also focus more on how R&D activities can be spurred to make the most of the upcoming technological opportunities such as 5G.³
- While implementing 2.5 (Ensuring the availability of essential background IPR in Fair, Reasonable And Non-Discriminatory (FRAND) terms required for promoting local manufacturing), it should be ensured that a fine balance between IP protection and competition is maintained. As India seeks to develop its domestic innovation ecosystems to tap in the developmental benefits of 5G and IoT, it might be first beneficial to focus on advocacy efforts that generate awareness about standards and the importance of investing in R&D (as opposed to making relevant changes in regulations and policies to favour domestic firms). Moreover, there is a need to focus on harmonising the enforcement of competition law and IPR (especially in context of SEP licencing) and to that end, the general rule should be to treat standards and licencing of underlying essential-IP as efficiency improving, welfare enhancing, pro-innovation and pro-competition. Ill-informed interventions which lack a strong economic footing might have

³ For more on this, see the recommendations of our latest report, *Standards and Welfare Maximisation Towards a Competitive and Innovative 5G Ecosystem in India*, prepared in collaboration with the Broadband India Forum, available at http://www.cutsccier.org/pdf/Standards_and_Welfare_Maximisation_Towards_a_Competitive_and_Innovative5G_Ecosystem_in_India.pdf

an adverse impact on market dynamics resulting in distortions to competition and disincentives to invest in R&D. For instance, in the smartphone industry, despite economic evidence which points towards dynamic competition, growing output, falling market concentration ratios and decrease in prices of wireless telecom services, still theories of harm to competition (such as patent hold-up) have pervaded regulatory interventions globally. Hence, while contemplating issues such as FRAND licensing, regulators should rely on evidence-based approaches arbitrary interventions should be avoided.⁴

Secure India

- The NDCP gives due recognition to the data protection and privacy concerns. Added to this, it also recognises other critical elements such as cybersecurity, network preparedness and security and safety of the country's citizens. Telco's and digital entities are major consumer data harvesters and thus, the NDCP has a greater responsibility towards ensuring consumer welfare as well as keeping the policy framework conducive for businesses.
 - An extension of this dialogue is data sovereignty, where our government wants to protect its citizens from such potential threats by exploring possibilities with technology companies to build datacentres in India that host consumer-generated data within domestic boundaries. This is all the more important keeping mind that India already has close to billion telecom subscribers that are generating tonnes of data. Datacentres are a huge investment opportunity for India, owing to its diverse topography and location, which can also act as a hub for other countries in the South Asia and South East Asia regions. In this digital age, India may act as an important player in the datacentre market if it is able to provide regulatory certainty and address on-ground 'ease of doing business' challenges.
 - NDCP should incentivise the storage of data within India. This may be achieved by enhancing capacities in India for data processing, analytics and utilisation for business advantage. With all major internet companies having significant business interest in India, this would surely fly off as a great business proposal that will also help these companies to provide high-quality experience to consumers. The NDCP 2018 may play a strong facilitator by defining a regulatory regime for the datacentre market in India.
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