RE-EVALUATION OF NATIONAL DIGITAL COMMUNICATIONS POLICY, 2018: ACHIEVEMENTS & SHORTCOMINGS

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ABSTRACT

The National Digital Communication Policy (NDCP) of 2018 plays a crucial role in India's digitalization efforts by addressing the digital divide & promoting economic growth in rural areas. It is a key document that guides India towards technological empowerment & global competitiveness. This ambitious policy envisioned a digitally empowered India, well-equipped to navigate the challenges and opportunities of the digital age. The NDCP outlined a comprehensive roadmap encompassing three main goals: to provide widespread broadband connectivity, to embrace new technologies & to establish strong data protection and security measures. The Government of India aimed to achieve these goals through initiatives such as increasing broadband access in rural areas, embracing emerging technologies like 5G, AI & implementing data protection regulations. The NDCP sets out ambitious goals, but implementing it effectively seems to be difficult due to the complex regulations & financial limitations.

This article will firstly examine and try to provide with an overview analysis of the policy, then it will further go on to check the status quo of the missions envisioned in the policy as to whether the Indian Government was able to achieve its goals, Finally the article will re-evaluate the NDCP while trying to find reasons for the achievements or the failures of the government in implementation of the policy.

Keywords: National Digital Communications Policy, National Telecom Policy, Digital Communication Infrastructure, Digital India, 5G Connectivity.

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1. INTRODUCTION

The utilization of digital infrastructure and services is becoming increasingly essential & influential in driving a nation's progress & overall welfare. The ongoing process of digitalization represents a significant technological shift, one that carries immense implications for the future. How nations embrace these transformative technologies will shape the foundation for the years to come. This paradigm shift promises to enhance economic efficiency & competitiveness, adopting the creation of novel enterprises & products, while also addressing pressing issues such as financial inclusion, governance improvement, & inequality reduction. For India, digitalization holds particular significance, given its vast population, a majority of which resides in rural areas. By uniting the nation through digital connectivity, a greater number of citizens can access the advantages & opportunities offered by a modern economy, effectively bridging the economic divide. India has made notable advancements in its endeavor towards digitalization, which can be credited to various factors including the increasing accessibility of broadband services, technological advancements, affordable data usage, and the unwavering commitment of the government towards establishing a robust and dependable digital infrastructure.[2]

In response to the Digital India initiative, a new policy was put into place by the DoT (Department of Telecommunication) known as NTP 2018 (National Telecom Policy). This policy aimed to propel the Indian economy towards becoming a prominent digital economy. Consequently, NTP 2018 was later renamed the National Digital Communication Policy (NDCP) 2018. The goals of NDCP 2018 were carefully crafted to align with the objectives of the Digital India initiative, specifically in bridging the gap between those who have access to digital resources & those who do not. The Government of India (GOI) had high expectations for NDCP, considering it a crucial cornerstone for the success of the overall Digital India campaign. Not only was NDCP expected to generate substantial revenue, but it is also perceived as a vital instrument for promoting socio-economic development across the country.[3]

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[2] EY India, Digitalizing India: A force to reckon with EY US - Home (2023), https://www.ey.com/en_in/india-at-100/digitalizing-india-a-force-to-reckon-with#:~:text=India%20has%20been%20digitalizing%20at,thrust%20on%20building%20digital%20infrastructure (last visited Apr 16, 2024).

[3] Mugdha Mujumdar et al., Indian National Telecom Policies Evolution Significance and a perspective, 9 International Journal of Recent Technology and Engineering (IJRTE) 333–340 (2020).

The NDCP 2018 is a highly comprehensive & all-encompassing strategy that aims to significantly enhance the adoption & accessibility of top-notch digital communications within India. Its vision & goals are truly praiseworthy, particularly the approach of "Connect-Propel-Secure," which covers every aspect of digital communication.[4]

2. OVERVIEW OF THE NDCP, 2018

On September 26, 2018, the Union Cabinet made the decision to approve the NDCP, effectively replacing the NTP, 2012 (National Telecom Policy). The new policy set forth a vision for India's future as a digitally empowered economy & society, with a focus on establishing widespread, strong, & affordable digital communication infrastructure & services. The objective of this policy is to maximize the capabilities of digital communication networks while outlining a thorough blueprint of objectives, actions, approaches & ideal policy results.[5]

In terms of regulatory strategy, the NDCP 2018 has multiple objectives. Firstly, it aims to decrease the burden of regulations, addressing issues such as excessive barriers that hinder investment in the digital communications & infrastructure sector. Additionally, the policy seeks to foster an environment that encourages innovation & pushes for advancements in technology. Furthermore, it emphasizes the importance of prioritizing consumer interests, ensuring that their needs & preferences are safeguarded in the digital communications & infrastructure space. These objectives are in correspondence with the Government's overarching goal of facilitating a business-friendly environment & encouraging the ease of doing business. The NDCP 2018 aims to establish a comprehensive plan that will facilitate the integration & utilization of various cutting-edge technologies in the near future. This includes the development of a strategic roadmap that will enable the seamless integration &widespread implementation of developing technologies like 5G, AI, robotics, IoT & cloud computing. By incorporating such advanced technologies into various sectors, the NDCP 2018 seeks to revolutionize industries & enhance overall societal progress.[6]

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[4] Hits and misses of National Digital Communications policy 2018 - tele-talk by R. Venkateswaran: Et telecom ETTelecom.com (2018), https://telecom.economictimes.indiatimes.com/tele-talk/hits-and-misses-of-national-digital-communications-policy-2018/3101 (last visited Apr 16, 2024).
[5] Decoding National Digital Communications Policy (NDCP) 2018 (2018), https://www2.deloitte.com/content/dam/Deloitte/in/Documents/tax/in-tax-decoding-ndcp-noexp.pdf (last visited Apr 16, 2024).
[6] Puja Saha, "A thrust for digital connected India: The National Digital Communications Policy, 2018 - telecoms, Mobile & Cable Communications" - India (2019), https://www.mondaq.com/india/telecoms-mobile--

In India, the "National Digital Communications Policy" has set forth a series of strategic goals and notable achievements with the aim of propelling the progress and advancement of the digital communications industry. These objectives encompass the provision of broadband access for all, the generation of employment opportunities, the enhancement of the sector's contribution to the nation's GDP, the elevation of India's standing in the global information and communications technology landscape, the heightened engagement in Global Value Chains (GVC), and the safeguarding of digital autonomy.[7]

The policy boasts several notable features, including providing 50 Mbps broadband access to all citizens, prioritizing high-speed connectivity in rural areas, offering 100 Mbps Broadband on Demand for development organizations, expanding access to underserved regions, attracting substantial investments, promoting skill development, nurturing innovation-focused start-ups, advocating for intellectual property rights, expanding the Internet of Things (IoT) network, implementing strong data protection measures, and ensuring secure digital infrastructure and services with accountability.[8] These measures collectively aim to establish India as a frontrunner in the digital communications industry while safeguarding its interests in the global digital economy.

2.1. Connect India:

In order to achieve its objective, the policy places emphasis on the implementation of collaborative models that encourage the sharing of infrastructure among public, local & private entities. This approach aims to improve access to fibre optic cables in towns, rural areas & national highways. The goal is to incentivize investment in broadband infrastructure by providing financial benefits like accelerated depreciation & tax incentives. In summary, this policy outlines a comprehensive strategy for establishing a strong digital communication infrastructure. It covers a wide range of factors including infrastructure sharing, fiscal

cable-communications/781670/a-thrust-for-digital-connected-india-the-national-digital-communications-policy-2018 (last visited Apr 16, 2024).

[7] Drishti IAS, The National Digital Communications Policy, 2018 Drishti IAS (2018), https://www.drishtiias.com/daily-news-analysis/the-national-digital-communications-policy-2018 (last visited Apr 16, 2024).

[8] National Digital Communications policy – 2018, https://www.meity.gov.in/writereaddata/files/National_Digital_Communications_Policy%E2%80%932018.pdf (last visited Apr 16, 2024).

incentives, regulatory conditions, satellite communications, renewable energy, & research & development.[9]

Moreover, the policy's target is to incentivize the usage of renewable energy technologies in the communication segment. It also seeks to promote research & development in this area.

The main objective of this mission is to establish a strong & reliable digital communication infrastructure. With this task, this policy aims to encourage the widespread availability of broadband connectivity while ensuring that the services provided are of high quality & environmentally sustainable.[10]

The policy wants to create a group that will help make sure everyone has access to the internet. It also wants the government & other groups to work together to make this happen. The policy suggests giving rewards & exceptions for building cell phone towers. It also wants to make sure that the radio waves used for internet are used efficiently. The policy says that the fees for using the internet should be looked at, & the rules for using satellite communications should be changed[11].

This policy is made to help VSAT operators & allow them to offer more services using high-speed satellite systems. It also wants to make things easier for them by simplifying paperwork & supporting the development of satellite communication systems. It encourages businesses to get involved too.

2.2. Propel India:

In order to facilitate the development of communication infrastructure, the policy recognizes "telecom" as critical &vital infrastructure, thereby enabling access to low-cost funding. Additionally, it aims to revamp the licensing & regulatory framework &streamline compliance requirements, with the aim of attracting investments, promoting innovation, & enhancing the overall ease of doing business in India. The significant goal of this mission is to decisively append the abilities of arising computerized advancements, like "5G, artificial intelligence,

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[9] *Supra note 5.*
[10] *Supra note 6.*
[11] *Supra note 8.*

Internet of Things (IoT)", Distributed computing & Huge Information, through the advancement of speculations, help of development & IPR.[12]

It is recommended to adopt a comprehensive & coordinated strategy to maximize the potential of emerging technologies in the communication sector. This technique envelops a few methodologies, including designating adequate authorized & unlicensed range, laying out a strategy structure for OTT administrations, working with the rollout of rapid web, IoT, and M2M through the execution of 5G advances, relegating 13-digit numbers to all M2M versatile associations, and making administrative designs and promptings to advance the foundation of worldwide server farms, content conveyance organizations, & independent interconnect trades in India. One of the main objectives of the policy is to encourage and support research & development in digital communication technologies. This is to be achieved by streamlining the approval & procurement processes for research & Development projects, as well as making it easier to obtain experimental licenses.[13]

Additionally, the policy places significant emphasis on the promotion of Indian intellectual property rights & plans to review the existing legal framework in this regard. Furthermore, the policy intends to provide financial incentives for Standard Essential Patents related to digital communication technologies.

Another key goal of the policy is to reduce barriers to entry for start-ups, particularly in emerging & innovative segments &services.[14]

In addition, the policy places a strong emphasis on encouraging the production of digital communication equipment within the country. This is achieved through various measures such as streamlining taxes, levies, & differential duties. Furthermore, the policy aims to attract & provide incentives for global original equipment manufacturers (OEMs) & generic component players to establish industrial facilities in India. The government also gives high importance to the acquisition of domestic products &services that have domestically owned intellectual property rights (IPR) by government organizations.[15] Additionally, private operators are encouraged to purchase local telecom products through different incentives.

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[12] *Id.*
[13] *Supra note 4.*
[14] *Supra note 4.*
[15] *Supra note 11.*

2.3. Secure India:

The primary goal of this mission is to protect the rights & well-being of the people of India & maintain control over the country's digital operations. This mission places emphasis on guaranteeing personal freedom & the ability to make independent decisions, as well as asserting ownership over data, ensuring privacy & security, & acknowledging the significant economic value of data.

In order to protect the integrity and security of digital communications, a comprehensive array of strategies has been devised. These strategies encompass establishing a robust framework for safeguarding sensitive data, as well as implementing disclosure and transparency measures to uphold the principles of net neutrality. Moreover, addressing security concerns within digital communications and establishing safety standards for equipment and devices are fundamental components of this strategy. Additionally, formulating a clear policy regarding encryption and data storage is paramount for enhancing data security. Furthermore, a comprehensive plan encompassing network readiness, disaster response, recovery, and reconstruction will be put into effect to ensure the resilience of digital communication networks in times of emergency, thereby reinforcing the overall safety and dependability of digital communications infrastructure.[16]

3. STATUS OF THE MISSIONS UNDER THE NDCP, 2018

3.1. Connect India:

Under the connect India vision of the policy, the government introduced the National Broadband Mission in association of the BharatNet (National Optic Fibre Network) project which as of now under the supervision of the Telecom Minister, Ravi Shankar Prasad. The objective of the policy was to connect all Gram Panchayats to high speed internet (100 Gbps by 2022). There are about 2.5 lacs of Gram Panchayats in India.[17]

While the exact data on the speed at which these GPs are gaining access is unknown, it has

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[16] *Supra note 5.*
[17] Over 1.54 lakh Gram Panchayats now have high-speed broadband infra: Prasad, The Economic Times (2021), https://economictimes.indiatimes.com/industry/telecom/telecom-news/over-1-54-lakh-gram-panchayats-now-have-high-speed-broadband-infra-prasad/articleshow/81431597.cms?from=mdr (last visited Apr 16, 2024).

been reported that as of November 28, 2022, a total of 184,399 GPs in the country have been equipped with broadband infrastructure under "BharatNet", according to information provided in Parliament. This project aims to provide last mile connectivity through Fibre to the Home connections, Wi-Fi Access Points, and internet access for Government institutions, among other services. Presently, Wi-Fi access points have been installed in 104,664 GPs.[18]

Another goal under the connect India was to universal broadband connectivity that aimed to connect all citizens to at least 50mbps of high speed internet. For the purpose of achieving the same, government aimed to increase the optic fibre footprint by nearly five-fold or 7.5 million kilometers by the year 2022. The Centre also unveiled a budget of Rs 7 lakh crore for this mission.[19] However, as of December 2022, the total optic fibre footprint of India is only 3.5 million kilometers in total, which is far from what the policy aimed to achieve by 2022.[20]

Additionally, the policy also aimed at providing 50% of Indian household with fixed access to a broadband connections. According to the 2020 TRAI recommendation report, as of December 2020, there were 22.94 million fixed broadband connections. This figure suggests that only 9.1 out of 100 households have access to fixed broadband, indicating a low level of penetration. Additionally, it is worth noting that approximately 45% of India's population still lacks access to broadband.[21]

The NDCP also aimed at assuring connections to those areas which were uncovered. Although no exact data can be found as to how much "uncovered areas" got access to connectivity, however, as of 2022, it was reported that 50% of Indians, that comes down to about 759 million

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[18] 1.84 Lakh Gram Panchayats Service-Ready With Broadband Infra Under BharatNet: Government (2022), https://www.outlookindia.com/business/1-84-lakh-gram-panchayats-service-ready-with-broadband-infra-under-bharatnet-government-news-246991#:~:text=As%20many%20as%201%2C84%2C399,Parliament%20was%20informed%20on%20Wednesday (last visited Apr 16, 2024).

[19] Universal broadband connectivity by 2022 unrealistic: Telecom group - ET Telecom. (2023), https://telecom.economictimes.indiatimes.com/news/universal-broadband-connectivity-by-2022-unrealistic-telecom-group/74392704 (last visited Apr 16, 2024).

[20] Preeti Negi, "India's optical fiber cable network covers 3.5 million kilometers: Government", W.Media (2022), https://w.media/indias-optical-fiber-cable-network-covers-3-5-million-kilometers-government/#:~:text=South%20Asia%20New,India's%20Optical%20Fiber%20Cable%20Network%20Covers%203.5%20million%20kilometers%3A%20Government,at%20the%20end%20of%20September (last visited Apr 16, 2024).

[21] Recommendations on Roadmap to Promote Broadband Connectivity and Enhanced Broadband Speed, Recommendations_31082021.PDF(2021), https://trai.gov.in/sites/default/files/Recommendations_31082021.pdf (last visited Apr 16, 2024).

people now are active Internet users, out of which 71% were from urban areas.[22]

The NDCP also emphasized on creating 4 million more jobs as one of the main goals that had to be attained by 2022; however, no particular measures or plan skeleton were provided.[23] Consequently, not much emphasis was put in this mission as well.

3.2. Propel India:

The policy under its Propel India mission aimed at expanding the nation's contribution to the Global Value Chain (GVC), though no quantitative goals were set. However, India's share in global exports was from 0.5% in 1990 to 1.7% in 2018 to 2.1% in 2022.[24] Further, the contribution of tech manufacturing was not even 10% out of the total.

Furthermore, it also had the objective of fostering the establishment of pioneering start-ups in the digital field, while emphasizing the development of globally acknowledged intellectual property rights (IPRs) in cutting-edge technologies like 5G, artificial intelligence, &big data. The government to achieve this goal has been taking several initiatives, including Atmanirbhar Bharat. The latest development in this can be traced to the Digital India week under the Ministry of Electronics & IT, wherein The Indian government has introduced Digital India Bhashini as part of its Digital India initiative. This program aims to provide internet access to millions of Indians who do not speak English. It will involve the development of technologies, datasets, &applications specifically designed for this purpose. A new digital platform called bhashini.gov.in has been launched with the purpose of offering open-source AI models in both Indian languages & English. These models are incredibly versatile &can be utilized for a range of tasks, including translating text, converting speech to text, converting text to speech, transliteration, & optical character recognition. The main objective of this initiative is to provide support to startups, industries, & government agencies by enabling them to create

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[22] Pti, Over 50% Indians are active internet users now; base to reach 900 million by 2025: Report The Hindu (2023), https://www.thehindu.com/news/national/over-50-indians-are-active-internet-users-now-base-to-reach-900-million-by-2025-report/article66809522.ece (last visited Apr 16, 2024).
[23] 12 key highlights from India's new National Digital Communications policy, Business Insider (2018), https://www.businessinsider.in/12-key-highlights-from-indias-new-national-digital-communications-policy/articleshow/64016323.cms (last visited Apr 16, 2024).
[24] India Briefing, How India can expand its share in global value chains India Briefing News (2023), https://www.india-briefing.com/news/how-india-can-integrate-with-global-value-chains-sector-opportunities-foreign-investment-27130.html/#:~:text=India's%20participation%20rate%20in%20GVC,to%2041.3%20percent%20by%202018 (last visited Apr 16, 2024).

&implement groundbreaking products &services that cater to users who prefer Indian languages. The goal is to make it easier for people across the country to access the internet & digital services. The Indian Government is aiming to achieve a trillion-dollar digital economy & is actively promoting opportunities for startups & young individuals to contribute to this goal.

An additional objective was to attain a staggering number of 5 billion interconnected Internet of Things (IoT) devices. As of 2019, the count of IoT connected devices in India was estimated to be around 250 million, with projections indicating a substantial surge to surpass the two billion mark by the year 2021[25] & according to the Ministry of Communications, it was projected that India could potentially have a staggering 3 billion connected devices by the year 2022. This estimation accounts for approximately 60% of the total 5 billion devices that are expected to be present globally during that time.[26] However no quantitative data has been released to show how many IOT devices are connected till now.

3.3. Secure India:

The objective of the policy is to form a resilient & adaptable data protection framework, empowering both individuals &businesses to function independently & exercise their freedom of choice. This is probably the one mission under which the efforts & results are much evident. The earliest draft of the law, the "Personal Data Protection Bill, 2018" was proposed by the Ministry of Electronics & IT, then the "Personal Data Protection Bill, 2019" was proposed by the Parliament of India which was withdrawn, although the mission couldn't be achieved by the proposed timeline of 2022, however in 2023 we now have the "Digital Personal Data protection Act, 2023" (DPDPA). This new Act, extensively discusses various aspects including the parties involved, governance, prerequisites, consequences, &mechanisms for addressing grievances. Its primary aim is to empower individuals & grant them authority over their personal data in the digital realm.

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[25] Shangliao Sun, India: Number of IOT connected devices 2021 Statista (2021), https://www.statista.com/statistics/1184091/india-number-of-iot-connected-devices/#:~:text=Number%20of%20IoT%20devices%20in%20India%202019%2D2021&text=In%202019%2C%20there%20were%20approximately,over%20two%20billion%20by%202021 (last visited Apr 16, 2024).
[26] Telecommunication Engineering Centre(TEC) releases "code of practice for securing consumer internet of things(iot)," Press Information Bureau (2022), https://www.pib.gov.in/PressReleseDetailm.aspx?PRID=1787727#:~:text=As%20per%20the%20National%20Digital,exist%20in%20India%20by%202022 (last visited Apr 16, 2024).

Additionally, the NDCP seeks to introduce a TTSC (Telecom Testing & Security Certification) that upholds security benchmarks aligned with international standards, for the telecommunication equipment.[27] The Department of Telecommunications released the regulations for TEC certification of telecommunications equipment on October 13, 2020. These regulations, known as the "Communication Security Certification Scheme" & the "Procedure for Security Certification of Telecommunication Equipment," outline the requirements for telecommunications equipment & govern the certification process. Overall, the issuance of these regulations marks a milestone in ensuring the security & quality of telecommunications equipment in India. One significant aspect of these new regulations is that certain products listed under TEC certification now must undergo testing in India by the Telecom Security Testing Laboratory (TSTL).[28]

4. RE-EVALUATION OF THE NDCP

Upon initial observation, it is impossible not to be deeply impressed by the policy in question. It encompasses all the essential elements required to create a robust digital communication framework & provide services that are in complete alignment with the digital strategic goals to be achieved by the year 2022. Aligned per these aims, the three undertakings "Connect India, Propel India, & Secure India" are commendable & serve to further delineate the policy's aims & plans, encompassing everything needed to ensure that India not only fortifies its position but assumes a leading role in the forthcoming era of digitization across the globe.

Nevertheless, the attainment of the objectives of any policy relies heavily on the implementation of the policy in practical terms. The effectiveness of any policy over time is gauged by the extent to which barriers were overcome in order to accomplish the emphasized objectives.

The NDCP 2018 had a multitude of objectives. Its primary goal was to alleviate the burdensome regulations that impede investment in the digital communications & infrastructure industry. Moreover, it aimed to cultivate an environment that fosters innovation & promotes technological advancements. Additionally, it placed great emphasis on safeguarding consumer

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[27] *Supra note 23.*
[28] Julian Busch, "TEC has released new security requirements for Telecom Products", MPR India Certification (2024), https://www.certification-india.com/en/tec-has-released-new-security-requirements-for-telecom-products/ (last visited Apr 16, 2024).

interests, ensuring that their needs & preferences are protected within the digital communications & infrastructure realm. These objectives align with the Government's overarching aspiration of creating a business-friendly environment & facilitating ease of doing business. The NDCP 2018 seemed to establish a comprehensive plan that facilitates the integration & utilization of cutting-edge technologies in the near future. This involved the creation of a comprehensive strategic plan that facilitates the incorporation &extensive utilization of advanced technologies, including to 5G, AI, robotics, IoT & cloud computing. By incorporating these advanced technologies into various sectors, the NDCP 2018 endeavors to revolutionize industries &enhance societal progress as a whole.

The policy discusses the need to review fees & levies, define AGR, & rationalize the USO (Universal Service Obligation) levy. However, there is no specified timeline for these actions, which is concerning given the financial state of the industry. Urgent attention is needed to prevent the fragile telecommunications ecosystem from impeding digital growth in the future. Funding for broadband initiatives will come from USO & public-private partnerships. The establishment of NFA (National Fiber Authority) was a positive stride, which lead to the formation of NOFN (National Optic Fibre Network) but its scope needs to be defined.[29]

While the NDCP aimed to streamline regulations and attract investment, challenges remain. The policy mentioned reviewing fees and levies but lacked a concrete timeline, potentially hindering financial sustainability. Establishing the NFA and NOFN were positive steps, but the policy's articulation of the NFA's scope needed further clarity to be well implemented.

The unforeseen COVID-19 pandemic significantly impacted the NDCP's timeline. Widespread broadband access and adoption of innovation, as envisioned in the policy, were likely hampered by the pandemic's disruptions.

Despite these challenges, the NDCP's strengths are undeniable. Its comprehensive nature and focus on cutting-edge technologies like 5G and AI position India for future advancements. The introduction of the Digital Personal Data Protection Act, 2023, signifies progress towards the "Secure India" mission.

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[29] National Digital Communication policy 2018 – the hits and the misses Communications Today (2020), https://www.communicationstoday.co.in/national-digital-communication-policy-2018-the-hits-and-the-misses/ (last visited Apr 16, 2024).

It can be argued that the policy from the beginning was a very ambitious one & the implementation of it was going to be challenge undoubtedly in the given time frame of just five years. However this is not to say that the vision the policy holds is to be frowned upon. Except for a few places where the strategies are a bit vague, the policy itself is a very comprehensive one & had the covid-19 pandemic not hit the world, the country could've witnessed technological advancement in a never seen before manner.

5. CONCLUSION

The National Digital Communications Policy is an incredibly significant milestone for India, as it paved the way for the country to advance technologically on a global scale. This policy proposes the necessary revisions to outdated laws & encourages the adoption of advanced technologies that are already prevalent worldwide. By doing so, India can position itself as a technologically advanced nation, prepared for the challenges & opportunities of the future. At its core, the NDCP aimed to transform the telecom sector into a digital communication powerhouse. In fact, there are discussions underway to rename the TRAI as the "Digital Communication Regulatory Authority of India", reflecting this shift towards a digital centric approach.

The primary objective of this policy was to ensure that India was well-prepared for the challenges & opportunities that lay ahead in the future. However, in order to effectively address & implement these policies, it was crucial for the necessary machinery & infrastructure to be in place. The policy had set ambitious targets to be achieved by the year 2022. However, the unforeseen outbreak of the global pandemic has had a devastating impact on the economies of even the most powerful nations, including India. Consequently, the goals that were originally envisioned to be accomplished by 2022 have now become incredibly difficult to attain. Nevertheless, it is important to acknowledge the commendable progress that has been made by the Indian Government despite these obstacles. The key notable achievements being the 184,399 Gram Panchayats that were equipped with broadband infrastructure, the government actively promoting opportunities for startups to contribute to a trillion-dollar digital economy &implementation of new security measure &regimes such as the DPDPA, 2023 & new telecommunication certification regime. That restructured the legal, licensing &regulatory framework for the new age digital India.

Despite the hurdles & the disruption caused by the COVID-19 pandemic, the NDCP signifies India's commitment to technological advancement. It envisioned a future where India can lead in the global digital landscape. The achievements, such as broadband infrastructure expansion & data protection legislation like the Digital Personal Data Protection Act, 2023, demonstrate progress toward this goal.

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