The GSMA response to the TRAI

"Consultation Paper on Inputs for Formulation of National Telecom Policy – 2018"

Executive Summary

The GSMA would like to thank the TRAI for the opportunity to submit its feedback related to the above consultation. Though we would have responded to the paper in greater detail, however due to a stringent timeline, in summary and in reply to the 2 questions posed by the TRAI, we submit the following:

Structure

- The TRAI seems to have followed the structure of NTP-2012 for its input. As there have been many changes in the market place since then, there may be a possibility that the final structure adopted by the DoT may be a different one. Even if the same structure is followed, a logical hierarchy of principles as adopted in the NTP-2012 i.e. from the Vision to the Mission, the Objectives, and Strategies; should also be followed. In the current TRAI paper, in some cases, the chain of such a logical hierarchy looks broken. If unaddressed, this may lead to a situation that the ambitious goals listed under "Strategy" appear somewhat incidental, and may not be properly reflected in the Objectives and the Mission.

- The TRAI's input to the 2018 Policy ("TRAI's Input") defines 6 broad Strategies with a wish-list of what needs to be done to achieve these (some are more specific than others). Some important topics like security and spectrum management deserve more detailed analysis, even though we appreciate that the 2018 Policy will of necessity be a high level policy.

Content

- There have been massive changes in the telecoms market in India in the past 6 years, however they seem not to have been fully reflected in TRAI's description of the industry. These changes require a fundamental re-think of the how (and to what extent) the regulators should regulate the converged communications sector, beyond the traditional response that they should also regulate broadcasting (Strategy D (j)). There should be a debate about the continued role of sector-specific rules in the changed competitive environment faced by the Telecom Service Providers ("TSPs"). TRAI can help the DoT with its views on the regulatory principles/assumptions required to deliver the 2018 reform (albeit some of these maybe beyond TRAI's current responsibility).

  Specifically, the consultation paper does not refer directly to the challenges faced by the TSPs e.g. declining revenues (from an increase of 6% in 2016 to a 5% decline in 2017), increased competition from OTT players and the inevitable consequences of this (annual capex investment is declining i.e. USD7.7 billion in 2016 to USD 5.9 billion)[1].

- In the light of the five areas of focus for the 2018 Policy identified by Government[2] and the "twin goals" identified by TRAI, the *Mission* section should consider the following specifically:

  o *Attracting investment*: The TRAI has set ambitious Objectives for attracting investment but this should be a focus in the Mission statement; the primary focus of this goal should be to ensure continued networks investments (rollouts, maintenance and upgrades)

  o *Creating an inclusive society*: "Inclusive socio-economic growth" (Goal 1) cannot be achieved without public support for policies aimed at reducing the Digital Divide.

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[1] GSMAi "Global Mobile Trends 2017", September 2017
[2] TRAI Input, page 6, para. 8

- o *Rules and regulations to support Policy aims*: Pursue regulatory goals based on achieving functional objectives and consistent, horizontal rules aligned with the dynamism of digital market; interventions should be evidence based, focusing on regulatory impact assessment

- *Objectives* which are either missing or should be more explicit (rather than demoted to strategies) and also follow from the broad mission principles outlined just above include:
  - o Making mobile infrastructure investment a priority
  - o Streamlining of licence / regulatory framework to apply consistent principles across the ecosystem.
  - o Ease of Doing Business- facilitating deployment of network infrastructure and reducing costs.
  - o Allowing networks to meet new demands by providing technical and commercial flexibility
  - o 5G as an enabler and need for new, harmonised spectrum at affordable pricing

We do refer to the "2018 Policy" rather than "NTP-2018" (the TRAI's reference) as we strongly believe that the new Policy will need to take into account the transformation brought about by digitisation in the market and to recognise that traditional categories of "telecommunications" and "broadcasting" services are now part of a wider ecosystem.

The response to the consultation document is presented as follows:

- A short background to our submission
- An overview of the Indian mobile market and the industry's contribution to jobs and economic growth. We highlight the challenging market environment for the industry and the need for regulatory reform.
- Our understanding of TRAI's goals and objectives for the 2018 Policy.
- GSMA's response to the structure and content of the 2018 Policy.

Please do not hesitate to contact us if you have any questions regarding this submission or any other matter in which we might be of help to the TRAI and other stakeholders in India.

1. Background

The Telecommunication sector in India has been the flagbearer of India's liberalisation success, delivering the fruits of liberalisation and the ability for the country's socio-economic progress to trickle down to widening segments of society. Some of the successful performance indicators highlighted by the TRAI in its Consultation Paper ("CP"), are testimony to India's evolving and progressive polices from time to time.

The telecom service providers ("TSPs") too, in India, especially the mobile operators, have risen to the occasion, delivering on the national policy aspirations. The significant investments in - network rollouts, tower infrastructure across length and breadth of the country, and, services and content among others, has served the huge diverse needs, population, geographies equally.

Innovations (be it pricing or services) have led to possibly one of the affordable most tariffs in the world for over a decade and half now, catering to all strata of population and their need given the economic constraints of our country. Possibly only Telecom has been the sector in India, where tariffs constantly came down without any inflation adjustment, even when latter went up.

The mobile screen has been the first computer screen for a significant majority of Indians. Today, the Indian mobile ecosystem is providing access to internet based services and experiences; the industry, keeping it attuned to changing market dynamics has been constantly making significant investments and innovation into networks for the digital future.

While the above has been true, it is also a fact that, in the dynamic, data driven digital age, as network traffic has decoupled from the revenue ability, competition from new innovative digital player emerges, there are serious challenges that telecom industry is facing specially with respect to revenue realisation. This is making it tough to generate enough returns on investments or to remain profitable.

It is well known that telecom is a capital intensive venture, with long gestation periods. However, with emerging market reality, it is not just long gestation that needs to be addressed, but, policymakers must take into consideration how to create policies in the digital age, those lead to more investments into networks that are sustainable, replenish-able.

Needless to state what the Authority has already highlighted in terms of government's flagship programmes like Digital India, Start-up India, Make in India, Skill India etc., they will rely heavily on the robust and resilient mobile networks, more so in case of India since for a long time mobile will remain the predominant mode of communication here.

TRAI itself has acknowledged that convergence of digital and physical products through M2M and IoT services is paving way for Industry 4.0. With India aiming to be among the leading nations working on a comprehensive 5G strategy, the importance of network investments is only going to be fundamental.

It is therefore, very important that the Indian policymakers once again take lead in designing a policy that makes sure that India remains at the forefront of not just innovation and new services, but also in sustainable network investments.

With the above background in perspective, we provide our high level comments on the NTP 2018 consultation by TRAI.

2. Overview of the Indian Mobile Market

At the end of 2016, there were 2.7 billion unique subscribers in Asia Pacific. Subscriber growth globally is being driven by Asia Pacific with India contributing 26% (162 million) of new subscribers by 2020.
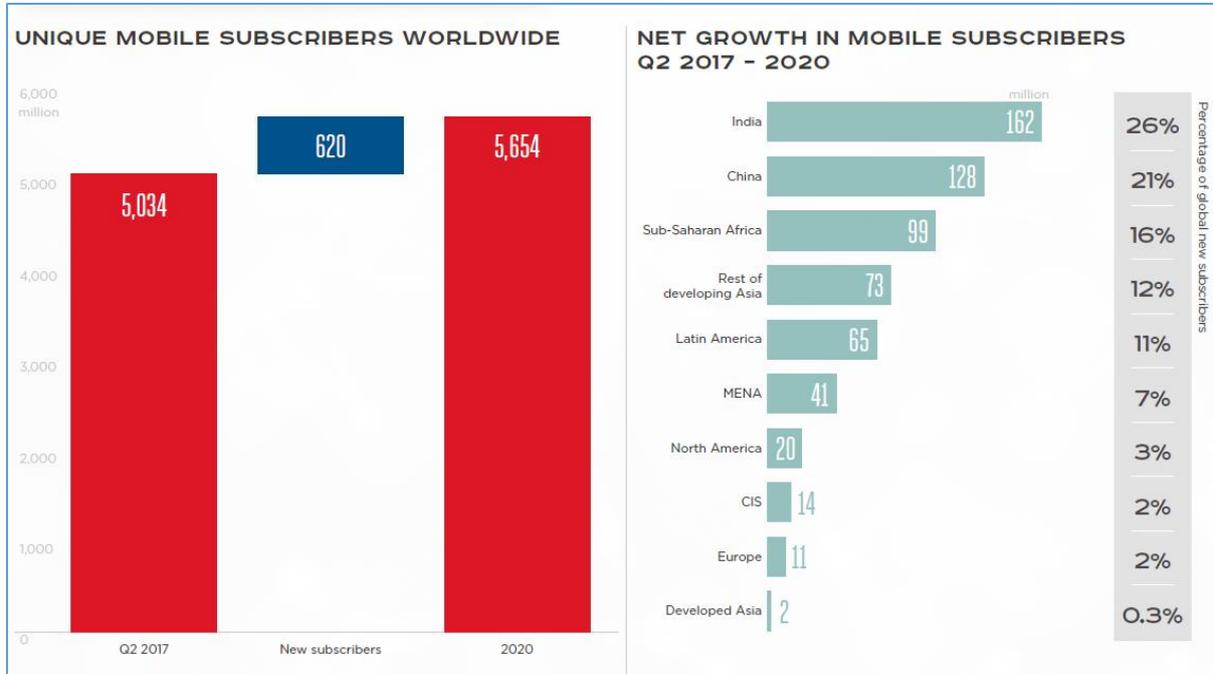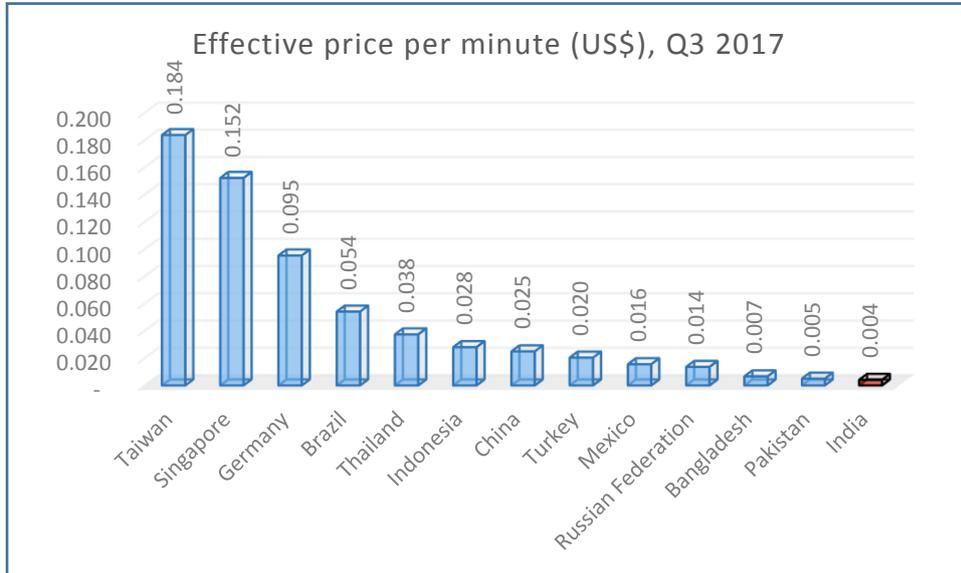

Source: GSMA Intelligence

Despite rapid subscriber growth, the Digital Divide in India is one of the highest in the world with more than 60% of the population not on the internet.
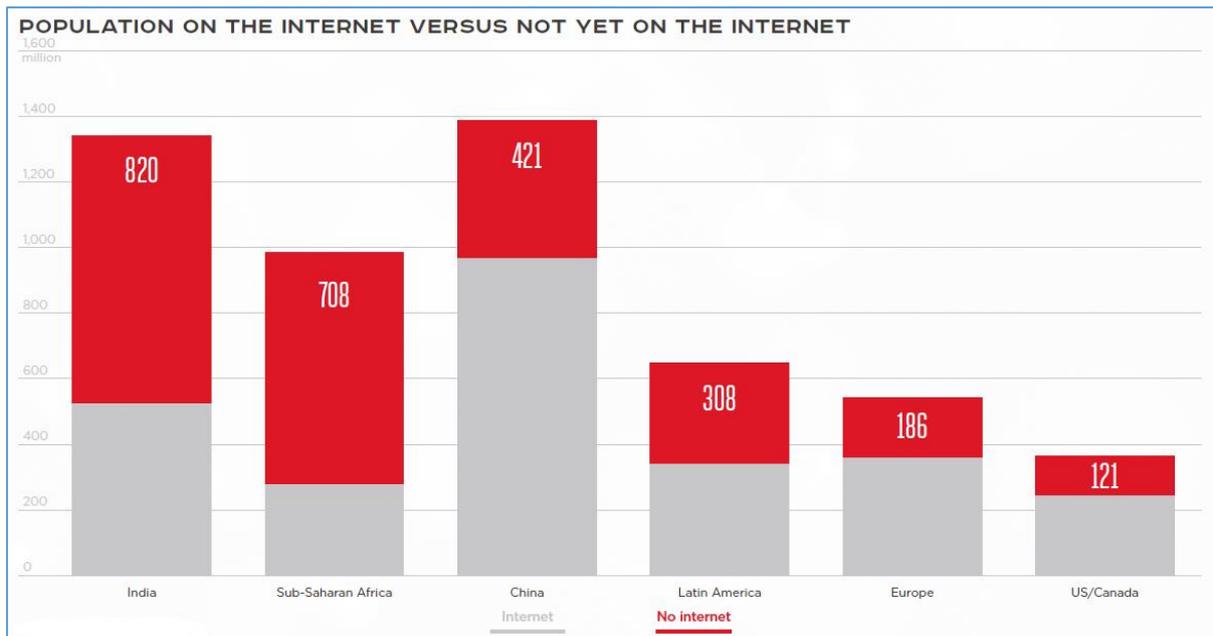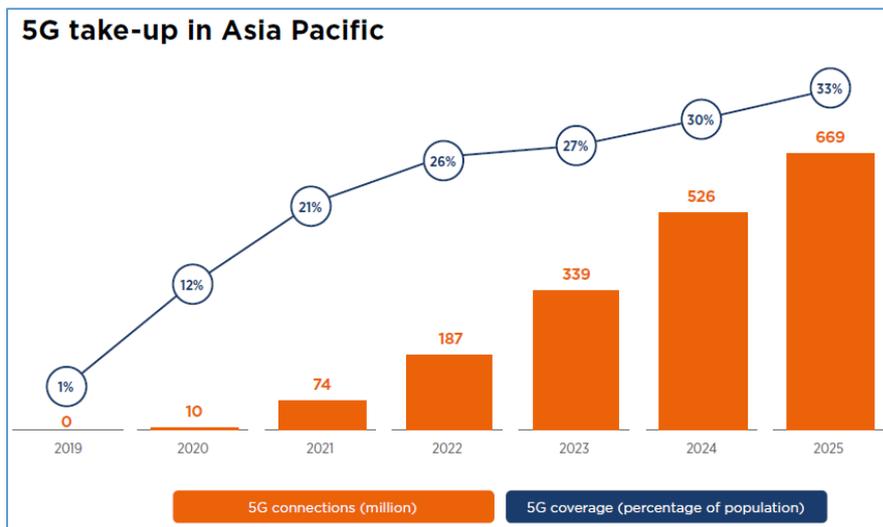

Source: GSMA Intelligence

Connectivity tariffs in India are possibly among the lowest globally (comparison with a few sample countries below) even without adjusting for the PPP terms.

Effective price per minute (US$), Q3 2017

Country	Value
Taiwan	0.184
Singapore	0.152
Germany	0.095
Brazil	0.054
Thailand	0.038
Indonesia	0.028
China	0.025
Turkey	0.020
Mexico	0.016
Russian Federation	0.014
Bangladesh	0.007
Pakistan	0.005
India	0.004

Source: GSMA Intelligence

By 2020 an estimated 50% of total mobile connections in India will be running on mobile broadband (3G and 4G) networks. However, 5G is attracting a lot of attention around the world and between 2016 and 2025, the GSMA estimate there will be 1.2 billion 5G users. 5G will require a major shift in how cellular networks are designed and what they are used for. Many countries will host their first commercial 5G network deployments in next three years.

5G take-up in Asia Pacific

5G connections (million):

Year	2019	2020	2021	2022	2023	2024	2025
Connections	0	10	74	187	339	526	669
Coverage	1%	12%	21%	26%	27%	30%	33%

5G connections (million) — 5G coverage (percentage of population)

Source: GSMA Intelligence

Extremely reliable 5G networks will provide for better remote health care, virtual reality, tactile internet, autonomous- connected cars and other applications. At the same time, networks will be designed for IoT and smart cities and support new industrial revolution.
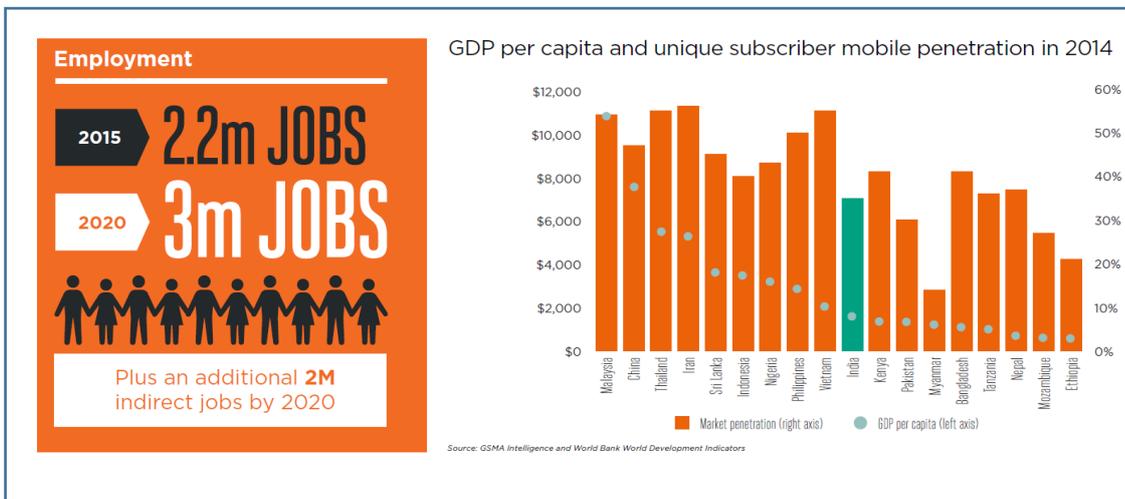
New widely harmonised mobile spectrum will be required to ensure 5G services meet future expectations and deliver the full range of potential capabilities for India. This will require spectrum in different frequency ranges: low frequency bands for coverage, mid-range frequency bands to provide both coverage and capacity, and high frequency bands on licensed basis to provide large bandwidths to meet high broadband speeds. The backhaul spectrum in E and V bands would be equally important for 5G. The GSMA therefore recommends the following to be included in draft NTP 2018:

- To make available adequate globally harmonised IMT spectrum in 600 MHz(470-698 MHz), L band(1427-1518 MHz) and 3.3-3.6 GHz
- To identify additional frequency bands for IMT in bands 26 GHz, 28 GHz and in the range 37-43.5 GHz and 43.5-86 GHz with the view to achieve harmonization at global/regional level at WRC-19
- To prepare a roadmap for availability of additional spectrum, with review every year

Any unlicensed bands must be planned carefully to prevent any interference in adjacent bands.

In 2015, the mobile industry was responsible for 6.5% of India's GDP (more than INR9 lakh crore of economic value added) which is projected to touch almost 14 lakh crore[3] by 2020. Mobile operators and the ecosystem provided direct employment to approximately 2.2 million people in India[4] and almost 2million in indirect jobs.


Source: GSMA Intelligence and World Bank World Development Indicators

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[3] https://www.gsma.com/mobileeconomy/india/
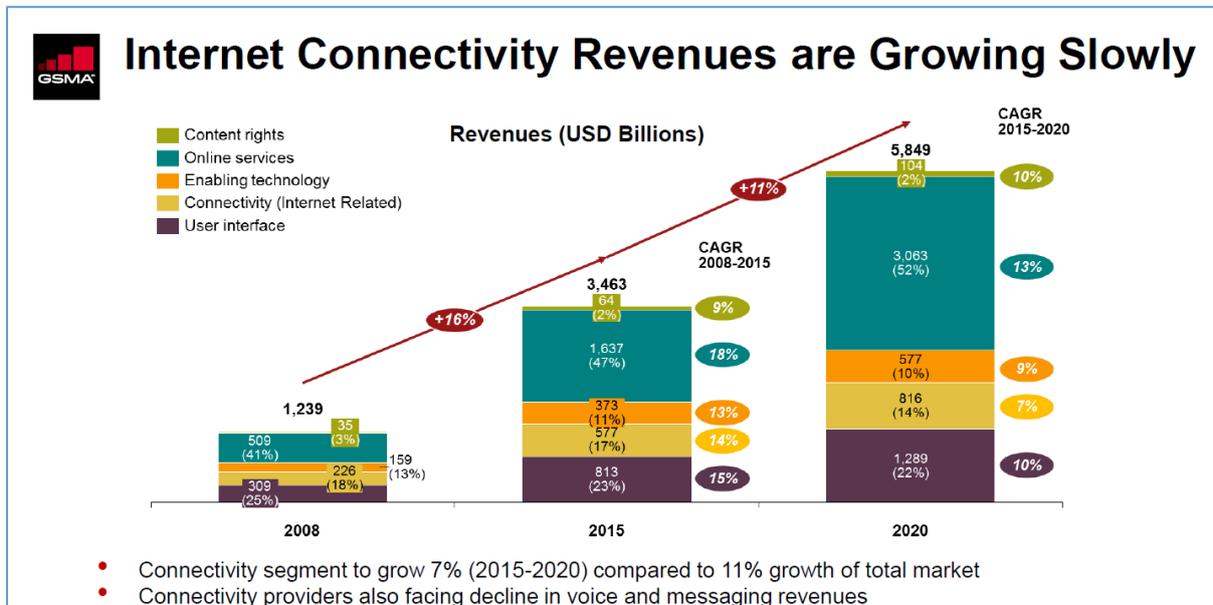
[4] https://www.gsma.com/mobileeconomy/india/

In addition, the mobile ecosystem makes a highly significant contribution to the funding of the Indian public sector, with approximately INR1.05 lakh crore in 2015[5] before auction payments. In addition industry has committed significant amounts in bids to the mobile spectrum auctions since 2010:
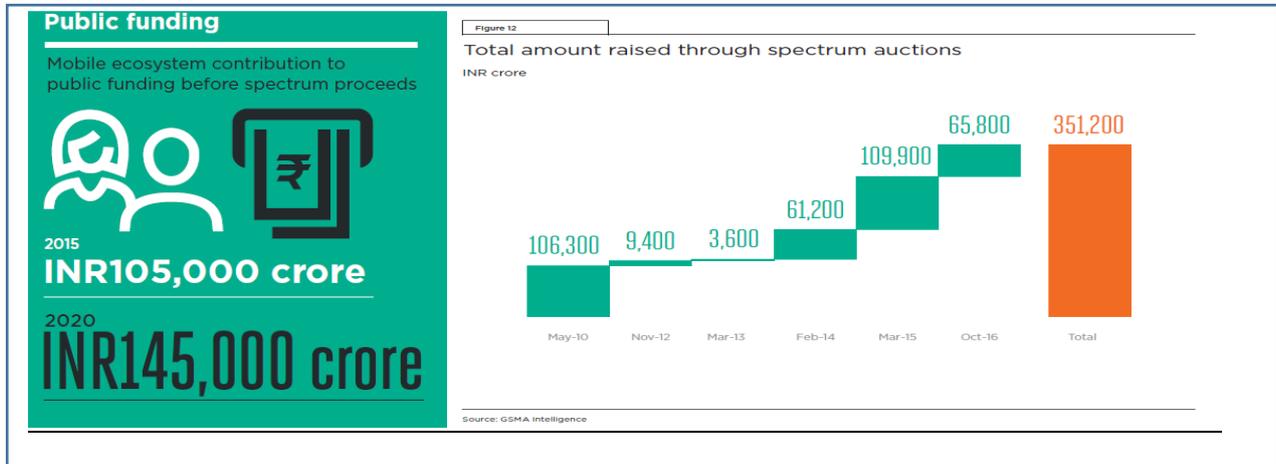
Source: GSMA India Mobile Economy Report 2016

In fact the importance of the sector as a services facilitator and not just the revenue generator is recently reemphasised by the Hon'ble Minister of Communications (IC) Mr Manoj Sinha[6].

Revenue growth has slowed sharply in India from an increase of 6% in 2016 to a 5% decline in 2017[7]. Globally also, the Connectivity revenues are slowing, which is in sharp contrast to other categories digital ecosystem market; particularly online services which outperformed all categories (see below).

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[5] https://www.gsma.com/mobileeconomy/india/

[6] https://telecom.economictimes.indiatimes.com/news/telecom-a-services-facilitator-not-just-revenue-generator-manoj-sinha/62467904

[7] GSMAi "Global Mobile Trends 2017', September 2017

Mobile operators in India have made capex investments worth INR154,100 crore (USD 23 billion) over the 5 year period 2011-2016, that was estimated to reach INR 2.3 lakh crore (for 2016-20 period[8]. However, the challenging market environment (declining revenues, competition from OTT players) has resulted in a decline in annual capex investment by operators from USD7.7bn in 2016 to a projected USD 5.9 bn in 2020 (-6.5% CAGR)[9].

As the TRAI recognises, digital transformation has generated tremendous benefits for consumers in India. At the same time digital convergence has increased regulatory uncertainty. Therefore implementing regulatory reforms that encourage investment in communication infrastructure, facilitate deployment of network infrastructure and allow networks to meet new demands by providing technical and commercial flexibility will be required to deliver the goals and objectives of the 2018 Policy.

3. The 2018 Policy: goals and objectives

According to the TRAI, one of the key aims of the Government in the 2018 Policy is to address
 "…*regulatory & licensing frameworks impacting the telecom sector, connectivity-for-all, quality of services, ease of doing business, and absorption of new technologies including 5G and IoT".[10]*

The TRAI has conducted workshops with a wide range of stakeholders, including the GSMA, to determine the objectives and strategies required to form the 2018 Policy. The TRAI has apparently concluded that the "twin goals" of the 2018 Policy are, to:

> 1)   Facilitate development of communication infrastructure and services to achieve inclusive socio-economic growth in the country; and
> 2)   Propel India to become the front-runner in the Fourth Industrial Revolution

Theoretically, the Mission and Objectives to be accomplished should be developed from these Twin Goals stated above. The Mission statement and 11 Objectives are described in section C and D (page 11) of the TRAI Input.

4. GSMA's Response to the Structure and Content of the NTP-2018

In the context of the above, the GSMA's response to the structure and content of the TRAI's 2018 Policy is given below.

A key challenge for the Government will be to implement the necessary regulatory reforms to facilitate the 2018 Policy objectives. The consultation document falls short of addressing this aspect. We trust that in the TRAI's recommendations / inputs this can be addressed. In addition, it would be useful to include the monitoring process for ensuring the objectives are being achieved and the feedback system to make adjustments where necessary.

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[8] https://www.gsma.com/mobileeconomy/india/
[9] GSMAi "Global Mobile Trends 2017', September 2017

[10] TRAI Input, page 6, para. 8

Generally, the GSMA considers that it would be useful for the 2018 Policy to include the following and the GSMA would welcome TRAI's views about these areas:

- *Areas of the current regulatory framework which need to be reconsidered*. For example, consumer protection obligations are addressed in both the Unified Licence and the Information Technology Act. Streamlining the obligations and make them consistent across similar services can be an Objective of this exercise

- *The process of how the new policies should be implemented*. For example, TRAI could provide its views on its role and the best method for the Government to make changes in each area where the regulatory framework is to be amended?

- *Institutional changes that may be required*. For example, how should the roles and responsibilities of the TRAI be amended?

- *The regulatory principles/assumptions of how the TRAI proposes to accomplish the 2018 Policy*. The table below provides some examples of what might be included.

The GSMA believes the content of the 2018 Policy should focus on the following five areas that we believe are fundamental to achieving a significant number of objectives identified by the TRAI and can help drive the achievement of goals/vision envisaged in the Policy 2018:

1. ***Making mobile infrastructure investment a priority***
   The regulatory reforms should promote investment in mobile network infrastructure, growth and innovation in markets for the sustainable health of industry leading to long-term benefit for end users.

2. ***Streamlining of licence / regulatory framework to apply consistent principles across the ecosystem.***
   A review of obligations in the licences and other relevant instruments to ensure consistent regulatory principles are applied across similar services. Ensure regulation is streamlined and consistent with competition law. Therefore, the policy supporting rules and regulations should:
   a. Take care of dynamic effects of digital (multi sided) markets and functional similarity
   b. Be based on evidence thus relying more on *ex-post* than *ex-ante* form of intervention
   c. Ensure that interventions are supported by regulatory impact assessments, and where benefits must outweigh the costs of regulating
   d. Be harmonised and horizontal wherever possible than sector specific (e.g. privacy)

3. ***Ease of Doing Business-* f*acilitating deployment of network infrastructure and reducing costs.***
   Examine what can be done to further reduce the costs of mobile network deployment, including but not limited to the rollout of fibre (fast tracking rights of way at nominal rates), tower installation, costs of deploying sites, and affordable power for sites etc. There is a need to revisit the higher spectrum usage charge (recover only administrative cost of managing spectrum), significantly cut the USO levy and other input taxes/fees. Spectrum should be allocated and released under reasonable terms and conditions.

4. ***Allowing networks to meet new demands by providing technical and commercial flexibility***. A review of the threshold for ex ante regulation to achieve better balance between regulation and investment risk.

5. ***5G as an enabler and need for new, harmonised spectrum (access and backhaul) at affordable pricing***

   5G should be at the heart of NTP 2018 including the spectrum bands discussed earlier. Also, the spectrum pricing should promote, and not undermine, the optimal use of spectrum for the benefit of society. Considering the significant increase in the amount of spectrum needed to support high data traffic, the GSMA believes that the pricing of access to this critical resource must be done in a manner that will deliver long-term social and economic benefits of broadband, rather than maximize short-term state revenue goals.

The GSMA looks forward to further working with all stakeholders in India, to develop the new regulatory framework that encourages network investments, reduces asymmetries, promotes competition and innovation and allows regulatory objectives to be achieved more effectively.