EXECUTIVE SUMMARY

India represents one of the best textbook examples where an enabling policy and regulation combined with a gradual lowering of levies on the telecom resulted in affordable tariffs and a surge in subscriber growth. COAI together with the private sector GSM players played a leading role in the process of telecom reforms.

The graph below depicts the various points of inflexion leading to a growth in the subscriber base.

1. COAI played an active role and provided inputs for the introduction of NTP-99 (New Telecom Policy 1999). NTP-99 marked the start of telecom reform process in India. Through the NTP-99, the high Fixed License Fee Regime was replaced with a Revenue Share Regime, which lowered the License Fee burden. The result was a steep fall in mobile tariffs for the subscribers.

2. The Indian GSM mobile industry always welcomed competition and GSM service providers surrendered their duopoly rights. There was entry of 3rd & 4th Cellular Operators in the year 2001 and 2002 respectively which increased competition in the market.
3 & 4. There was a prolonged litigation since fixed line service providers started offering fully mobile service using CDMA technology which was not allowed as per their licence. After a considerable amount of litigation, the GSM industry was persuaded by the Government to withdraw the case from the Apex Court and so as to resolve the issue the GSM service providers were offered a 2% reduction in the revenue share (from 12%, 10% & 8% depending on the service area). A further 2% reduction in revenue share for the 1st & 2nd GSM operators in Circles was also allowed, subject to the caveat that the revenue share percentage will not fall below 5% (the USO contribution). Benefits of this reduction were immediately passed on to the GSM subscribers.

5. The GSM mobile industry, under the aegis of COAI played a major role in the Introduction of CPP (Calling Party Pays) in India which further reduced the cost of calls for the consumers by making incoming calls free.

6. COAI played an active role in the reduction of the ADC charges. ADC (Access Deficit Charge), though charged on a call-by-call basis was reduced from an effective rate of 30% of revenues to 10% of revenues.

7. Migration to a Revenue Share ADC Regime from a Call-by-Call Regime helped in spread of affordable service in the country. ADC was also lowered from 10% to 1.5% of AGR in March 2006.

8. ADC was further lowered from 1.5% to 0.75% of AGR with effect from April 2007.

All the above policy initiatives, which were driven primarily by the Indian GSM industry under the aegis of COAI, yielded positive benefits both for the Indian mobile industry as well as the subscribers. These initiatives removed the bottlenecks which were hampering the growth of the telecom sector.
INTRODUCTION

India started witnessing a new cycle of economic transformation and liberalisation in the early nineties. Commercial activities like banking, IT and international finance started becoming critically dependent on global information and efficient electronic exchange. As a result the demand for telecommunication service started growing rapidly. The abysmal performance of the state-owned telecom service providers and the increasing need to attract capital for the upgradation of the sector served to hasten the process of privatization of telecom sector.

OPENING UP OF THE TELECOM SECTOR

Resulting from the above developments, the importance of a robust telecom infrastructure was first recognized in the National Telecom Policy 1994 (NTP-94) which recorded that telecommunication services of world class quality were necessary to ensure the success of the Government's new economic policies. The Policy also recognized that development of telecom was both technology and capital intensive and that the rapid acceleration in the growth of telecom services would require huge resources, which were beyond the reach of the Government. In fact the National Telecom Policy 1994, estimated a resource gap of INR 230,000 million to meet the telecom targets of the eighth five-year plan of the Government of India (1992-97). To bridge this resource gap, telecom was eventually opened up to private sector participation.

In India, the mobile licences have been granted State wise or Service Area wise and not for the entire country as a whole. Cellular mobile was one of the first sectors to be opened up to the private sector participation. First the licences for providing mobile service in four metros of India were awarded in 1994. The method of selection was through a beauty parade. The license fees prescribed were a small fixed ascending fee for the first three years of the license, followed by a variable annual fee levied on a per subscriber basis from year 4 onwards.

This method recognized the importance of a gestation period in telecom where investments were available to create infrastructure and rollout networks rather than to
pay high license fees. However, the prescription of a very high per subscriber fee (from year 4 onwards) was an anomaly in this approach.

However, this approach of the Government took an about turn in the next round of licensing in early January 1995, when tenders invited for cellular and fixed telecom services in 20 Telecom circles or states of India. The selection of the company in this instance was to be through a single-stage bidding process.

It was here, at this juncture, that things began to go wrong. The environment of liberalization, the attractiveness of the Indian market in terms of low tele density, long waiting list for telephones (high latent demand) and a burgeoning middle class, etc. generated a huge hype leading companies with little or no experience to bid exorbitant amounts for the Circle licenses. 34 licenses in 18 Circles fetched INR 200,380 million for a 10-year license. Another reason for these high bids was that the auction procedure was not designed correctly.

The adverse consequences of the huge license fee were manifested in several ways such as high tariffs, limited roll-out, not enough subscribers, default in rollout obligations, inability to meet huge fixed license fee obligations, etc. Cellular mobile tariffs prevailing during this period were around Rs. 10 per minute as a result of which there were not many takers for the service. Consequently, the cellular market remained a niche premium market and subscriber growth inched forward at a snail’s pace especially in the Circles. The national objectives of affordability, access, coverage and associated consumer benefits enunciated in NTP-94 were disregarded and the telecom sector was viewed as a cash cow for the Government exchequer.

The auction approach adopted by the Government in 1995 was one of the key factors responsible for the sluggish growth of the telecom sector and one of the biggest bottlenecks in infrastructure creation.

As a result, by the end of 1998, most of the circle cellular licensees were on the brink of bankruptcy and it was looking as if India’s telecom dream would soon turn into a nightmare.
It was under the above circumstances that the Government undertook a review of NTP 94 as well as the role of the Regulatory Authority. In pursuance of the directions of the Hon’ble Prime Minister, a Group on Telecommunications (GoT) was constituted on 20th November 1998 under the Chairmanship of Shri Jaswant Singh, the then Deputy Chairman, Planning Commission. GoT was to make recommendations on the following:

a. Propose a New Telecom Policy;
b. Issues relating to existing licensees of basic and cellular services and suggest appropriate remedial measures within the framework of the New Telecom Policy
c. Issues relating to the TRAI.

With active participation and initiative from COAI, Industry Group on Telecommunications (InGoT) was set up on November 26, 1998. The Group represented all the segments of the India telecom industry. InGoT, in which COAI participated very actively, was the common platform for suggestions / recommendations to the Group on Telecommunications (GoT).

As a result of the above initiatives and the inputs provided by InGoT, The New Telecom Policy 1999 (NTP 99) was announced in March 1999 (effective April 1, 1999).

NTP 99 was formulated in an extremely open, transparent and consultative manner. A draft discussion paper on the Policy was placed on the Internet receiving over 17,000 responses from a cross-section of stakeholders. The result was an extremely forward-looking policy. NTP-99 sought to significantly change the dynamics of the Indian telecom industry as it not only replaced the high cost fixed licensing regime with a lower cost licensing structure through an entry fee + revenue sharing mechanism, but also provided for greater degree of competition and more flexibility in choice of technologies. The Government owned fixed line service providers, BSNL and MTNL, were deemed to be the third cellular mobile operator in every service area and introduction of further competition was envisaged based on need, timing and the recommendations of the TRAI.

The preamble to NTP-99 recorded the importance of telecommunications stating,

“The Government of India (Government) recognizes that provision of world class telecommunications infrastructure and information is the key
to rapid economic and social development of the country. It is critical not only for the development of the Information Technology industry, but also has widespread ramifications on the entire economy of the country. ….

Accordingly, it is of vital importance to the country that there be a comprehensive and forward looking telecommunications policy which creates an enabling framework for development of this industry.”

The key objectives enunciated by the Policy included provision of access, availability of affordable services, creation of a modern and efficient telecommunications; increased competition, level playing field, etc.

Further, while approving the Policy, the Union Cabinet had opined that it would be in public interest for the New Telecom Policy to be uniformly applicable all over the country.

COAI was actively involved in providing inputs and played a key role in every aspect of formulation of NTP 99.

It was pursuant to the NTP-99 that the Government sought the opinion of the Attorney General as to whether it was legally possible to bring the existing licensees under the New Policy regime. The GSM mobile industry played an active role in providing inputs for the same. The Attorney General in his opinion noted that the NTP 1994 had failed to achieve its objectives and that the expected network expansion had not materialized. He also noted that large capital resources had been invested by the private licensees and that their unviability was not only affecting the domestic and foreign financial institutions who were funding these projects, but also the viability of the telecom service industry itself. Thus the Attorney General opined that in light of the objectives of NTP-99 and having regard to the ground realities and the prevailing situation engulfing the telecom industry, migration of licensees from the earlier Telecom Policy of 1994 to NTP-99 was warranted. Attorney General also opined that the transition to the new policy should be from a prospective date while fully realizing past dues and arrears.

A key aspect of NTP-99 was the development of a migration package according to which all fixed service providers would pay their licence dues as of 31 July 1999 as a one-time entry fee as well as a stipulated percentage of their revenue as licence fee over the
period of their licence. All existing cellular and fixed operators accepted the migration package and migrated to the new regime with effect from August 1, 1999. In return, the GSM service providers surrendered their duopoly right and greater competition was allowed in the sector.

The rationale merits and urgency for migration included several considerations. Financial Institutions had a huge exposure to the telecom sector of almost around INR 100,000 million. In the absence of the migration package, there was a very real danger of the bulk of this exposure becoming non-performing assets. Without migration, several companies would have been unable to secure financial closure, which in turn, would lead to abortion of projects, large-scale bankruptcy and failures. The Government also perhaps realized that efforts to mechanically enforce contracts, terminate licenses, encash bank guarantees, take over assets, etc could lead to multiple & prolonged litigation. In addition, there was bound to be dislocation of services and serious inconvenience to consumers. It was felt that a shift to revenue sharing would promote the interest of telecom sector, improve tele-density, lower tariffs and improve both reliability and quality services to the consumers. It was also felt that since migration would be from a prospective date and that there would be no write-off or waiver of past dues or liabilities, this solution would also be legally tenable. Also since NTP-99 envisaged open competition, existing licensees would be giving up their duopoly rights in exchange for migration to the new regime.

Migration was one of the most groundbreaking and landmark decisions of the Government with no parallel either in India or for that matter anywhere else in the world. There have been comparable situations in other telecom regimes where licensees have bid exorbitantly and have been unable to meet their contractual obligations. And an unwillingness of the Governments to renegotiate contracts has lead to the collapse of the sector. But the timely and responsive intervention of the Government showed tremendous vision and foresight and clearly demonstrated the commitment of the Government to the reforms process. Migration was not an easy decision, but the Government did not hesitate to take this bold step. In fact, it can safely be stated that migration was one of the key factors that was responsible for the complete transformation of the Indian telecom, especially the cellular mobile sector, which is now widely looked up to as the flag bearer of the Indian liberalization process.
The beneficial impact of the new regime could be seen almost immediately in the lower tariffs, increased coverage and growing subscriber base. NTP-99 and migration definitely provided the much needed kickstart to the mobile telecom sector.

The number of cellular mobile subscribers has grown from a miniscule 1.24 million in March 1999 to cross 35 million in March 2004. And are today at around 153 million (See Graph-1) **It can thus truly be said that India’s real telecom liberalization started in 1999.**

**GROWTH IN CELLULAR SUBSCRIBERS**

![Growth in Cellular Subscribers](image)

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<td>Cellular Subscribers (in Million)</td>
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<td>69.19</td>
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*Source: Cellular Operators Association of India*

**AN INDEPENDENT REGULATOR AND TELECOM TRIBUNAL**

In January 1997, DoT which was the operator at that point in time, introduced an exorbitant charge for call mobile phones from fixed line phones. This charge was 23 times more expensive than the rates for local fixed-to-fixed line calls. As a result of this the calls to cellular phones were completely un-affordable. **Catastrophic blow was struck at the very root of cellular operations by DoT.** The mobile phone service
became completely unviable. In the absence of the Regulator, COAI approached the Delhi High Court - what is now known as the famous ‘PSTN to Mobile’ Case. It was at this point in time that the need of an independent regulator was felt. As a result of the above actions/initiatives of COAI, TRAI was set up in March 1997. TRAI heard the above case and quashed the high fixed-to-mobile tariffs.

Based on the inputs provided by COAI, NTP 99 was followed by enabling policy measures so as to strengthen the telecom sector. The amendment of the TRAI Act on January 25, 2000 resulted in a considerable strengthening of the Regulator and greater clarity on its role and powers. The amendment also put in place a separate dispute settlement mechanism in the form of the Telecom Dispute Settlement and Appellate Tribunal (TDSAT) to expeditiously deal with and resolve issues relating to the telecom sector.

The institution of TDSAT too, is a uniquely Indian initiative, and a successful one at that, which has not been attempted by any other telecom regime. The formation of TDSAT was the outcome of the continuous representation by the industry for an independent, efficacious and specialist dispute resolution mechanism to look into telecom disputes. Under Section 14 of the Act, the TDSAT is empowered to adjudicate any dispute between a licensor and licensee, between service providers, between service providers and a group of consumers as well as any appeal against the directions, decisions and orders of TRAI. Having an independent body to adjudicate over the decisions and directives of the Licensor and Regulator gave a tremendous boost to investor confidence in the sector.

The powers and jurisdiction of the TDSAT were further amplified and clarified by the Supreme Court in its judgment on WLL (M) in December 2002. The Court held that “Having regard to the very purpose for which the appellate tribunal was constituted, we have no hesitation in coming to the conclusion that the power of the Appellate Tribunal is quite wide, …holding that the said tribunal has the power to adjudicate any dispute between the persons enumerated in clause (a) of Section 14….A bare comparison of Section 14 which confers jurisdiction on the tribunal and Section 18, which confers jurisdiction on the Supreme Court, would unequivocally indicate that the tribunal has much wider jurisdiction than the jurisdiction of this Court under Section 18, as this court
would be entitled to interfere only on a substantial question of law, which arises from the judgment of the tribunal and not otherwise…"

Thus the GSM industry together with COAI, played a crucial role in setting up and strengthening of TRAI as well as TDSAT.

INCREASED COMPETITION
As a part of the migration package which was offered to the service providers, the GSM service providers surrendered their Duopoly rights and the same was replaced by increased competition. The 3rd and 4th GSM operators in every state/telecom circle were introduced in 2001-02.

Looking at the growth in mobile and market potential, other non-mobile telecom service providers, primarily fixed line service providers, who were not having the license to provide fully mobile service started providing CDMA based fully mobile service. Both the fixed service tender as well as license carried explicit provisions prohibiting the fixed operator from offering mobile services. The reason for the express prohibition on mobility in the fixed licenses was that in addition to being allowed to lay cable & wires, the fixed operators were also allowed under their license to use wireless in the last mile (WLL-wireless in local loop) to offer fixed services. Thus because the Government was aware of the capability of this wireless to be used to offer mobile services (by replacing the FWT with a mobile handset) that it was felt it necessary to expressly prohibit the same as separate licenses had been awarded from provision of mobile services.

In spite of the prohibition, the Fixed service providers started providing fully mobile service. What followed was a prolonged process of Litigation in the Telecom Tribunal and the Apex Court of India.

Eventually the GSM industry was persuaded by the Government to withdraw the case from the Supreme Court. So as to resolve the issue the GSM service providers were offered a reduction in the Licence Fee burden. A 2% reduction in the revenue share (from 12%, 10% & 8% depending on the service area) was offered to
the GSM service providers. A further 2% reduction in revenue share for the 1st & 2nd GSM operators in Circles was also allowed, subject to the caveat that the revenue share percentage will not fall below 5% (the USO contribution).

**The reduction in the License Fee burden led to a further fall in GSM tariffs** and enabled the GSM service providers to offer even more affordable service to the subscribers.

**INTRODUCTION OF CPP REGIME**
Another issue, for which the GSM industry actively worked for, was the introduction of CPP regime in India. Absence of CPP regime (RPP regime) was stifling growth of service and was severely hampering take-up/usage of service. This was one of the very serious roadblocks which mobile industry was facing. There was strong opposition from the fixed line customers who were not willing to pay a small premium to access a mobile customer. **COAI made many representations/submissions at various fora for an early introduction of CPP.**

Eventually CPP was introduced in May 2003 and this was **one of the most important milestone in telecom reforms.** Affordability of cellular mobile services was **further enhanced by introduction of Calling Party Pays** (CPP). Introduction of CPP removed one of the greatest barriers to take-up of cellular mobile services as it encouraged increased subscription amongst the low-end and marginal consumers.

**INTRODUCTION OF ADC REGIME**
The concept of Access Deficit Charge (ADC) was first introduced by TRAI in its IUC Regulation of January 2003. Access Deficit, by its very name implies the deficit that is required to be paid to operators for providing access services at below cost tariffs so as to make these services affordable to the common man and therefore achieve the universal service & access objectives envisaged as per NTP-99.

When TRAI first introduced the concept of ADC in January 2003, it stated that ADC was payable to Basic (fixed line) Service Operators which they must get in order to keep the
rentals as well as the local calls affordable for the common man to promote both universal service and universal access as per NTP-99.

It may be noted that in January 2003 when the ADC regime was introduced, tariffs were regulated for fixed wireline services, but for wireless services – fixed wireless, limited mobility and cellular mobile services, the tariffs were forborne.

The ADC quantum as determined by TRAI in the above exercise was INR 130,000 million, which was approximately 30% of the revenues of the total telecom sector. Since the start everything associated with ADC was in a state of confusion and mess.

COAI together with the Stakeholders questioned the huge ADC quantum and also pointed out several inaccuracies & anomalies in the calculations to TRAI.

The initial levy on a per call basis resulted in a very heavy burden on the Service providers – estimated to be approximately as high as 30% of revenues.

However, after a continuing dialogue & inputs form COAI, consultation process and review, the initial faulty ADC burden on the service providers was progressively brought down over the years. One of the key milestone was the migration from a call-by-call levy to a revenue share ADC regime on 1st March 2006, which was similar to the licence fee regime and the same was prescribed at 1.5% of revenue. After another round of consultation and review ADC was further lowered from 1.5% of revenues to 0.75% of revenues with effect from 1st April 2007.

Each and every reduction in ADC was promptly passed on by the GSM service providers to the consumers. As a result tariffs continued to fall and mobile subscriber base continued to expand at a rapid pace.

LEVIES AND DUTIES ON TELECOM

Although, over the years, the burden of levies on the telecom sector has come down, India still has one of the highest levies as compared to several of the comparable Asian economies.
The Cellular Operators Association of India (COAI), which represents the GSM service providers in India, has been taking up this issue with the Government, Department of Telecom (DoT) and the Telecom Regulatory Authority of India (TRAI).

A separate white paper has been issued by COAI on the further need of lowering the burden of levies on telecom.