

Consultation Paper No. 12/2008



Telecom Regulatory Authority of India

**Consultation Paper
on
Growth of Value Added Services and Regulatory Issues**

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Telecom Regulatory Authority of India

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PREFACE

In the 1990s, the introduction of mobile phone and Internet has demonstrated that how the Network can be used to create new mass market products and services that can change the way people think and transact. With the rapid expansion of mobile phones, tele-density and Next Generation Network (NGN) services many more such novelties are in store for Indian population with mobile phone services and broadband services at the centre of innovation. Telecommunications had traditionally been a voice communication service. The services today have moved beyond their fundamental role of voice communications to a spectrum of non-core services, which in telecommunication parlance is called Value Added Services (VAS). In short, all services beyond basic voice calls and fax transmissions come under the category of VAS or also called enhanced services. In simple terms, Value Added Services add value to service, enabling the subscriber to use the telephone, particularly the mobile phone or any end user terminal device for a host of purposes like sending short messages, pictures, play games, listen to music, read news headlines, astrology, get flight information, surf Internet and mobile banking including mobile payments. In times to come people will buy mobile phones or any end user terminal device not just to remain connected but to express themselves in a variety of ways.

2. Value Added Services are provided either directly by the telecom operators themselves or by a third party Value Added Service Provider (VASP). VASP connects to the core equipment of telecom operators through inter-working units using protocols like short message peer-to-peer protocol (SMPP), connecting either directly to the short message service center (SMSC) or to a messaging gateway that allows the telecom operators to have control of the content.

3. Value Added Services have matured globally and form a considerable portion of the revenues. People are now focusing on mobile entertainment, mobile-commerce, location based services and new

enhanced services in next generation network (NGN) environment. In India the revenue (estimated) from mobile Value Added Services is over 10 to 14% of the total revenue of mobile telecom service providers. The Value Added Services have great revenue potential. The mobile revenue through Value Added Services is expected to reach beyond 30% of the mobile telecom service provider's revenue in the next 5-7 years as revealed in various studies/position papers. Today SMS constitutes major portion of the VAS revenue. While entertainment service would be popular with the consumers, there remains a scope for utility based services like location information, mobile commerce (M-Commerce) for mobile transactions etc.

4. For the telecom operators, success of Value Added Service is important for their growth. Introduction of calling party pays (CPP) regime and gradual reduction in call rates are two main factors that led to the exponential growth of mobile telephone services. The service providers will shift their focus from subscriber base expansion to Value Added Services, as it has potential to generate good revenue for the telecom operators and contribute to the overall growth of the GDP of the country.

5. The Value Added Services industry in India is at nascent stage and does not have a proper process or common benchmark or code of practice. There is no coordinated effort to make the industry grow and it also lacks transparency as the consumers are not fully aware of the nuances of the services. But considering the market potential for value added services in the coming years and the multiplicity of value added services that the Next Generation Network (NGN) will offer, there is a need to harmonize the licensing/regulatory framework for ushering growth in all the segments of the value added service viz content development, technology platform, content aggregation including copy right protection etc. There is also a need to facilitate provision of value added services directly by the content aggregators/value added service

providers (VASPs). With a view to bringing out all the related aspects of the issue and to provide a suitable platform for discussion, this consultation paper focuses on the approach, regulatory guidelines and terms and conditions in respect of licensing and provisioning of Value Added Services. Any expression of opinion in this document is to be read in the context of analysis of the available information and it does not reflect the views of the Authority.

The stakeholders are requested to send their written comments on the issues raised in this paper **on or before 30th June, 2008**. For any clarification on the matter, **Shri M C Chaube, Advisor (Quality of Service)** may be contacted on Telephone No. 011-23230404, Fax No. 011-23213036 and e-mail: chaubemc@trai.gov.in. Submission in electronic form would be appreciated.

New Delhi.

Dated 28th May, 2008

(Nripendra Misra)

Chairman, TRAI

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CHAPTER-I

INTRODUCTION

1. **Background:**

1.1. The developments in telecommunication driven by liberalization, exponential growth in wireless telephony and the Internet have been enormous. In the 1990s, the introduction of mobile phone and Internet has demonstrated how the Network can be used to create new mass market products and services. With the rapid expansion of mobile phones, tele-density and deployment of Next Generation Network (NGN) many more such novelties are in store for Indian population with mobile phone services and broadband services at the centre of innovation. *“Telephones changed almost everything about business”* writes Alvin Toffler, author of ‘Powershift’. *“Voice communication conveyed far more information, through intonation, inflection and accent The phones made big companies bigger. They made centralized bureaucracies more efficient.”* In this decade the Value Added Services will increasingly be adopted by telecom consumers, especially by the mobile phone users for efficiently managing time, entertainment and social networking.

1.2 **Definition of Value Added Services:** Value Added Service (VAS) in telecommunication industry refers to non-core services, the core or basic services being standard voice calls and fax transmission including bearer services. The value added services are characterized as under:-

- Not a form of core or basic service but adds value in total service offering.
- Stands alone in terms of profitability and also stimulates incremental demand for core or basic services
- Can sometimes be provided as stand alone.
- Do not cannibalize core or basic service.
- Can be add on to core or basic service and as such can be sold at premium price.
- May provide operational synergy with core or basic services.

A value added service may demonstrate one or more of these characteristics. A value added service today may become a part of core/basic service in future. For example, with mass adoption of Short Message Service (SMS) person to person (P2P) which is categorized as a mobile value added service is now perceived by consumers as a part of core/basic mobile service.

1.3 The licence agreement for provision of Unified Access Services (UAS) define the **Value Added Services**:- “Value Added Services are enhanced services which add value to the basic teleservices and bearer services for which separate licence are issued”. The Government of India issues licenses for the following Value Added Services:-

- (i) Public mobile trunking service
- (ii) Voice mail service
- (iii) Closed users group domestic 64 kbps data network via INSAT satellites system
- (iv) Videotex service
- (v) GMPCS
- (vi) Internet
- (vii) Audiotex
- (viii) Unified messaging service

1.4 Unlike the core or basic services, the Value Added Services have unique characteristics and they relate to other services in different ways. They also provide benefits which the core services cannot provide. Basically there are two types of Value Added Services - Value Added Services that stand alone from operational perspective and value added services provided as an optional service along with voice service. Non-voice services like SMS are examples of stand alone value added services.

1.5 At present, over 270 million people in India own mobile phones. With ever rising mobile phone subscribers and motivated by the need to bring in more revenue and service differentiation, the mobile telecom operators are bringing new value addition to the services to satisfy the

growing demand of Indian consumers. The Value Added Services thus help the operators to maximize revenue and increase average revenue per user (ARPU). Further, the competition is also forcing the mobile telecom service providers to aggressively market the Value Added Services.

1.6 The revenue (estimated) from mobile Value Added Services is over 10 to 14% of the total revenue of mobile telecom service providers. The Value Added Services have great revenue potential. The mobile revenue through Value Added Services is expected to cross 30% of the mobile telecom service provider's revenue in the next 5-7 years as reported in various studies/position papers. This is going to be a win-win situation for the mobile telecom service providers, value added service providers / content aggregators, handsets manufacturers, content developers/authors/creators and others associated with mobile contests and streaming audio and video.

1.7 While the VAS industry is ripe for growth, the concerned stakeholders will have to constructively engage and thus create a self-sustaining and transparent environment for the growth. The telecom operators would need to be concerned about the quality of content, consumer education and transparency in provisioning and charging of value added services. While entertainment service would be popular with the consumers, there remains a scope for utility based services like location information, mobile commerce (M-Commerce) for mobile transactions etc. While addressing the various aspects of VAS, this paper has focused mainly the mobile value added services including enhanced/new services in next generation network (NGN) environment and its orderly growth.

1.8 Convergence in telecommunications brings new players in the telecom market and the mobile virtual network operators are another mode for companies to enter in the mobile telecom market and start offering both core and value added services. Further, the barriers between telecom and broadcasting are also getting reduced with the

digital convergence at different levels such as end user terminal or mobile handset, core network technology, access network technology and services. In truly converged scenario the separation between telecom and broadcast will disappear and all companies in the market of telecom and broadcast will compete in a so called single telecom market. In the provisioning of value added services MVNO also sources the contents from content providers/content aggregators called value added service providers. The MVNO provides mobile phone services without owning the radio access part particularly the spectrum where the infrastructure of Mobile Telecom Operator is used. However, it is observed that in some of the countries in 3G scenario, the MVNOs create their niche market in mobile service provisioning with the feature of rich mobile value added services.

1.9 The purpose of bringing this consultation paper is that considering the market potential for value added service in the coming years the licensing/regulatory framework needs to be harmonized for ushering growth in all the segments of the value added service viz content development, technology platform, content aggregation etc. thereby enabling benefits to consumers and also revenue generation. Section 11(1)(a)(iv) of the TRAI Act, 1997 provides for recommendations to the Government by TRAI, either suo moto or on a request from the licensor, on measures to facilitate competition and promote efficiency in the operations of telecommunications services so as to facilitate growth in such services. Further, Section 11(1)(a)(vii) provides for recommendations for measures for the development of telecommunication technology and any other matter relating to telecommunication industry in general. There is also a need to facilitate provision of value added services directly by the content aggregators/value added service providers (VASPs). In this case the consumer will pay the access/carriage charges to the telecom operator and for the content charges will be paid directly to the value added service provider. This shall call for cooperation, collaboration and competition between value added service provider and telecom operators. Some of the services which are integrated on call-to-call basis such as

caller ring back tune (CRBT), SMS person-to-person will generally be in the domain of telecom operators. However, the value added services such as music, games, news, entertainment, M-commerce etc. can be directly marketed by value added service provider. Therefore, to facilitate the orderly growth of value added services and keeping in view the above mandate, TRAI proposes to seek the comments of all stakeholders for evolving a licensing framework for value added services and entities involved in providing mobile value added services, including such services in Next Generation Network (NGN)/ convergence scenario.

CHAPTER – II

VALUE ADDED SERVICES – STATUS IN INDIA AND POTENTIAL FOR GROWTH

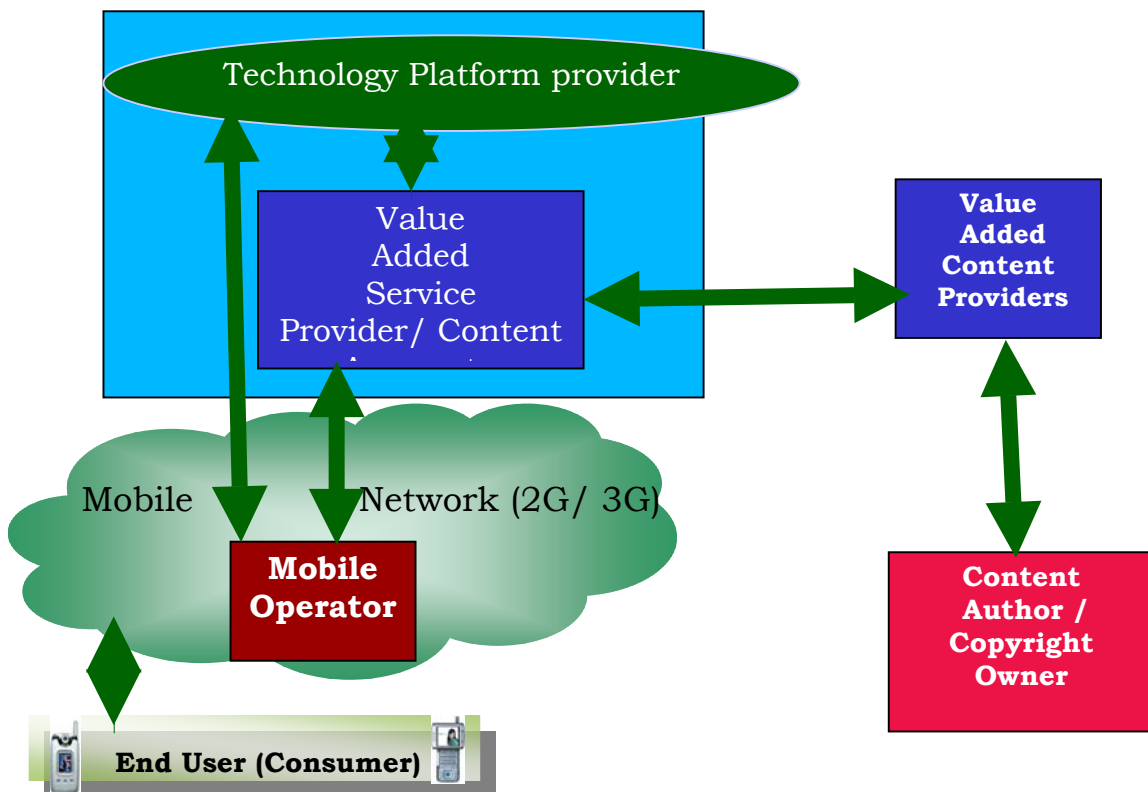
2.1 Presently, in the Indian market value added services are provided either directly by the telecom operators or by third party content aggregators/enablers generally known as Value Added Service Providers (VASPs). Examples of value added services provided directly by the telecom operators are SMS, GPRS. The commercial arrangements between telecom operators and Value Added Service Providers(VASPs) do exist. In many of these cases, the VASPs provide technology platform which enables a user to access content on to his mobile or terminal device. Examples of value added services provided through VASPs are astrology, ring back tunes. In most of the cases the VASPs do not own the contents but they have arrangements with the content providers/content developers or copyright owners known as content owners. For some of the value added services, say SMS or Messaging, the value added services platform including gateway/middleware is provided by the telecom operator and VASP only provides the content. In the commercial agreements, compliance to copyrights, digital rights management including sourcing of the content is the responsibility of VASPs. The various mobile value added services, be it voice based or SMS based, are provided to the mobile phone customers through the SIM Card and through the Short Codes. The marketing of Value Added Services is done through advertisement/media by telecom operators mainly for the contents hosted by them and also through the VASPs. It is noticed that VASPs do have arrangements with various telecom operators for their products and these value added service products are provided under a unique short code across different networks. In such cases the VASPs also advertise/market the value added services collectively targeting the customers of different telecom operators with whom they have commercial agreements.

2.2 Value Added Services – Value Chain:

2.2.1 The mobile value added services value chain consists of following:-

- Cellular Mobile Telephone Service Providers (telecom operators)
- Content Aggregators/Enablers [Value Added Service Provider (VASPs)]
- Content Authors/Producers or copyright owners (Content owners)
- Device/Mobile Handset Manufacturers
- End Users i.e. Customers

Figure : Mobile Value Added Services – Value Chain



2.2.2 The first stakeholder in the value added services value chain is the Content Authors/Producers or copyright owners known as content owners. They have commercial agreements or arrangements with the VASPs for providing or sharing the content with VASPs. In some cases the Mobile handset manufacturers have direct agreement with content owners or VASPs for content which are embedded in the handset or

terminal device. An example of such content is games coming with the mobile handset. The role of VASPs is to provide contents for telecom operators. Contents are at times developed by the telecom operators themselves or directly by the VASPs, where the Telecom operators provides necessary platform to facilitate provision of value added services to the customers. Presently, the VASPs are neither regulated nor licensed and mainly they act as channel partners of telecom operator. The telecom operators are nevertheless the core in the value chain as they own network infrastructure and have a large customer base. The VASPs can provide services to the last link in the chain i.e. the end users through the network infrastructure including billing and customer care owned by the Telecom operators. The telecom operators by virtue of being owners of the network have near monopoly advantage in the value chain.

2.2.3 The issue is to create congenial environment for the orderly growth of value chain in India through licensing by Department of Telecommunications and also through appropriate regulatory regime by the Telecom Regulatory Authority of India.

2.3 VAS Business Model:

2.3.1 A number of entities are involved in the value chain and various studies made by market research organisations reveal that in the Indian context the well defined structure do not exist. Sometimes one entity performs one or more roles and try to expand their existing roles. As discussed in the preceding para, revenue share arrangements/commercial agreements do exist in the mobile value added services value chain between VASPs and telecom operators. Similarly, at the backend VASPs have commercial agreements with content providers or copyright owners including technology platform enablers or solution providers.

2.3.2 Further, the study of some of the telecom operators' commercial agreements for different value added services indicate different revenue share. For example, on account of Airtime revenue, the telecom operator retain as high as 80% of the revenue while the VASP is given 20%. However, the services such as Mobile Commerce (M-Commerce) which are transaction based, the VASP is allowed 75% of the transaction revenue and only 25% is retained by the telecom operator. In the value added services like Music Messaging Service, the revenue is shared on 50-50 basis. Some of the value added services are priced to the consumer which may not be affordable to mass market as they may not be commensurate with value perceived by the consumers. Therefore, unless there is a rationalization in the revenue sharing and pricing, the stakeholders in the value chain of value added services would not feel enthused for subscribing and providing high quality contents/services.

2.3.3 In view of the above situation, there is a need to deliberate on the revenue share model for value added services. Any regulatory facilitation for revenue model can be evolved if the VASPs are also brought under the licensing regime. One of the options could be to have an indicative self regulatory revenue model and another option is to have mandatory revenue model in which a determination can be made for revenue share within the regulatory framework. **The stakeholders' suggestions, keeping in view the need to facilitate the growth of value added services, will be key inputs for initiating any regulatory measure.**

2.4 **Value Added Services Offerings:** In addition to SMS and Voice mail, the other value added services presently being provided by the telecom operators are listed below:-

Sl.	Types of VAS	Description
1.	News	National, International, Business, Entertainment, Sports News
2.	Finance	Stocks (NSE, BSE, NASDAQ etc.), Forex

3.	Entertainment	Games, Mobile TV and jokes
4.	Travel	Railways, Airlines
5.	Downloads	Logos, Ringtones, Caller tones etc.
6.	Astrology service	Personal Horoscope/Personalized Prediction
7.	Cricket	Cricket Score, Match clippings, cricket commentary
8.	Missed call alert	Subscriber to get a SMS alert of incoming calls when the subscriber's mobile phone is switched off / not reachable and busy.
9.	E-mail	E-mail through SMS
10.	Music demand on	Dial a song
11.	Contest	Reality Shows
12.	GPRS/WAP	Mobile Internet, Mobile Chat, Mobile TV
13.	MMS	Picture Messages, Picture clippings
14.	Health	Health Tips, Beauty Tips
15.	M-Commerce	Transaction based services with multiple payment modes and supporting multiple domains like WAP, GPRS, SMS , IVR & Web.
16.	Miscellaneous	Devotional, Movies & Music, Fun, Location based services

2.5 **Technical Arrangement/VAS Platforms accessed by customers**

For provisioning of Mobile Value Added Services, the Short Codes are allotted by the telecom operators as authorized by Department of Telecommunications within the framework of the National Numbering Plan (NNP). Following technical arrangement/structure is presently being used by telecom operators for enabling customer to access and acquire Mobile Value Added Services:

- i. **Short Message Services (SMS)** – SMS can be person to person (P 2 P), person to application (P 2 A). SMSC Platform is used by the telecom service providers to process and deliver SMS based value added services, SMS short codes, E-mail on SMS, Chatting on SMS, and Content down load through SMS, Cricket scores etc.
- ii. **Interactive Voice Response (IVR)** - It is a computer and telephony integrated technology through which one uses a touch tone phone to interact with a data base to acquire information from other end. These are voice based value added services such as news, live talk to astrologer, movie information, jokes, cricket commentary etc. which can be accessed by subscribers.
- iii. **Unstructured Supplementary Services Data (USSD)** - This is a method of transmitting information/instructions over GSM network. It is a session oriented service where user gets a flash message in real time. Services like content download, cricket updates, jokes, news alerts etc. can be acquired by consumers through process of using USSD.
- iv. **General Packet Radio Service (GPRS)** – It is a service which enable users the access to Internet on the mobile. These include basically data based value added services such as Internet browsing, MMS, Content download like wall paper, Ringtones, Themes, Games and Mobile TV etc.
- v. **Call Management Services (CMS)** – Services like missed call alerts, call forwarding, voice mail, incoming call block etc. come under this category.

2.6 Most of the services like SMS Short Codes, Music/Media contents including GPRS based content are served by external content providers which involves testing and integration with the platforms/gateways and

including middleware/billing systems of telecom operators. For SMS Short Code, the VASPs need to integrate with telecom operators SMSC. Music contents for download/listening, the content generally lies with the Server of the VASPs. All the content can be uploaded on a common server of the telecom operator for various services like caller ring back tone (CRBT), background music and radio etc. For GPRS based contents, the content provider needs to integrate with telecom operators' WAP/GPRS Gateway, billing system and SMSC. In this process, during the integration of the system of external content providers' with the equipment of telecom service providers, interface development and testing is generally required.

2.7 Some of the companies have acquired Short Code Numbers and have made commercial arrangement with third party clients. The commercial arrangement made enables the customers of different telecom operators to send the SMS to the same number. As per the market research conducted by IMRB in December, 2006, operators ask for minimum deposit and also a minimum guaranteed volume of SMSs per month for entering into an arrangement with the Short Code Provider. Content provider/content aggregators are mostly small and medium enterprises (SMEs) who provide in addition to contents the platform/software and authoring tool. These VAS platforms are the backbone of the telecom operators for managing of various entertainment services such as games, streaming audio/video and ringtone downloads etc. The authoring tools and digital rights management software are necessary components for delivering various applications/contents by application developers.

2.8 Issues that determine growth of Mobile Value Added Services in India

2.8.1 Mobile Value Added Services segment of the Indian telecom sector is burgeoning and framework is still to be evolved. It is also to be noted here that in the value chain of Value Added Services, telecom operators are very big entity in comparison to the content providers/content

aggregators who are basically SMEs. Some of the issues are listed below, which need to be addressed for the growth of the Value Added Services:-

i. **Handset features:** for Value Added Services consumption consumer need feature handsets which enable the easy access and display/storage of contents. There has been phenomenal growth in mobile subscriber base but the low feature handsets continue to be in large proportion. Basically the purchasing of handsets is driven by voice utility of mobile connection. The lack of feature rich mobile handset thus continues to be a barrier to the growth of Mobile Value Added Services. It is expected that the prices of feature rich mobile handsets will decline with increasing competition among manufacturers and also because of technological advancement.

ii. **GPRS connectivity:** GPRS connectivity is relatively low due to number of reasons such as handset capability, telecom operators network capability and consumer education i.e. user friendliness for accessing the services. GPRS is capable of providing rich information and also online delivery experiences.

iii. **Copyright Protection:** To encourage the content producer/creator and protect their copyrights, the need is to have stringent regulatory framework. This will encourage the branded content at lower cost and also will create trust among various stakeholders in the value chain. Content providers/content aggregators (VASPs) will have to ensure the copyrights and digital rights management.

iv. **Regulatory Framework:** Presently there is no regulatory framework for Value Added Services except the consumer protection issues addressed by Telecom Regulatory Authority of India through directions on Value Added Services. There is need to develop/adopt new technology, bring consolidation in the industry and confidence in the investors particularly foreign investors. Value Added Services which will be provided through 3G and Broadband Wireless Access will need foreign technology/investment. Creation of mass market will happen with the

content branding rationalized pricing and consumer education. Therefore, for encouraging investment particularly Foreign Direct Investment, there is need to evolve a proper regulatory framework.

v. **Mobile Commerce (M-Commerce):** In Indian context transaction based Value Added Services are still in very nascent stage that too in metropolitan/major cities. Primarily, the M-Commerce services can be categorized as under:

- ◆ Mobile financial services – the services facilitate investors by providing real time stock market information and also allow them to participate on line.
- ◆ Mobile banking – in this a customer basically has an account with the bank and uses the mobile phone to carry out banking transactions such as balance enquiry, bill payments, money transfer etc. This service is limited to the telecom consumers having bank accounts.
- ◆ Mobile payments – the services covered in this category are bill payments, remittances, payment for goods and services through a mobile phone. The mobile payment forum (MPF) defines mobile payment “as the process of two parties exchanging financial value using a mobile device in return for goods or services”. In mobile payments system the bank account is not directly linked but there could be a virtual account with a telecom operator or mobile payments service provider (VASP). In this model the benefit is that the service reach covers unbanked population i.e. telecom consumers those who do not have bank accounts. This type of payment may be found very convenient particularly in rural and remote areas where there is easy accessibility of mobile phone services but banks are not in the closed vicinity. The mobile payments is a service enabled by the collaboration of companies belonging to two different sectors i.e. the financial/banking sector and the telecom sector. Mobile payments are a payment method

which substitutes or compliments existing payment instruments such as cheques, bank drafts, credit cards, Internet banking and cash. The usefulness of this service grows with electronic commerce/M-Commerce expansion. Mobile payments provide users with mobility and user can complete money transactions/bank transactions any time, anywhere. Mobile payments provides users greater flexibility of service than other electronic payment instruments such as debit/credit cards which can be used only at places/shops that have card readers. Mobile payments may become the most convenient, secure and efficient payment method. Reserve Bank of India restricts non banking entities from providing monetary transactions. Mobile Commerce services are offered by banks or their affiliates. RBI will have to consider for developing a regulatory framework for mobile banking/M-Commerce so that a vast unbanked population can be brought in the electronic payments transaction system. Further, the mass scale adoption of mobile payments will also depend on the transaction fee set by the service provider. Mobile payments are more convenient than other payment instruments in terms of mobility and ubiquity of use and they can be made as secure as electronic payments such as ATM Cards, Credit Cards and Internet Banking. To facilitate the growth of mobile payment the strong cooperation in the value chain is required and also regulatory/monetary issues need to be addressed. Mobile payment systems can become more popular if there is close coordination, transparency between banks, value added service providers (VASPs) and telecom operators. Authentication standards and other confidence building measures need to be evolved for the success of mobile payments and mobile banking. The potential issue need to be addressed in this mobile banking service is the functions of financial institutions within the regulatory framework of Reserve Bank of India. Mobile value added service provider/telecom operator can of course function as the franchisee of the banks. The

concept of bank account with an individual bank and a virtual account with the mobile value added service provider/telecom operator need to be linked and proper checks and balances need to be evolved to avoid any fraud.

- ◆ In the Value Added Services there is one value added service which is popular particularly abroad called M2M i.e. Machine to Machine for collecting Toll Tax from moving vehicles. The technology advancement and provisioning of back-end system for money transaction through mobile phone is near reality once the proper framework is established and user's confidence is built. The concept of micro finance is developing through Mobile phones.
- ◆ The views of the stakeholders will be useful in identifying the business models, regulations required to facilitate M-Commerce and also get if there are any regulatory hurdles faced by the service providers. The policy changes can be made by the government to enable faster adoption of Mobile Commerce (M-Commerce) in India. In the process, TRAI, RBI and Government can create an environment for the orderly growth of M-Commerce and particularly mobile banking and mobile payments system.

vi. **Consumer education and protection measures:** There is need to bring greater awareness about the usefulness of Value Added Services and also how to use it among telecom consumers. A transparent and effective system for redressal of consumer complaints needs to be developed by the Telecom Service Providers. User friendly IVRS, SMS and proper authentication for the subscription of Value Added Services is required. Particularly for transaction based Value Added Services where money transaction is involved the high level of accuracy and confidentiality needs to be built. Content providers/content aggregators (VASPs) will have to play a greater role in such confidence building measures along with telecom operators. This also calls for a proper regulatory framework.

vii. **Revenue sharing arrangements in the Value Chain:** Generally, the content providers/content aggregators (VASPs) express their feelings that telecom operators in India do not compensate properly as they retain large share of revenue earned through mobile Value Added Services. Therefore, there is a need to have an organized business model as established in other markets such as China, Japan and Europe. The telecom operators and VASPs would need to look at the best practices in those countries and design a fair revenue sharing system where the content providers/content aggregators (VASPs) and content owners do get their due share.

viii. **Need to focus on Utility based Value Added Services:** Presently, the Mobile Value Added Services market in India is centered on entertainment, music and sports. It is generally the younger segment of the consumers who take maximum advantage of such Value Added Services. There is, therefore, need to the focus on to other Value Added Services such as Informational Value Added Services, Transactional Value Added Services etc. so that all segments of the consumers get the benefits of the growth of Value Added Services sector.

2.9 Representation made by CII on behalf of Content Providers/Copyright owners and Content Aggregators/Enablers:

The Confederation of Indian Industry (CII) had made a presentation to TRAI on Mobile VAS Ecosystem. Some of the issues raised in their presentation are outlined below:

(a) Inequitable Revenue Share: The mobile VAS value chain is controlled by Telecom Operators, which are large corporate entities. Being in control of the VAS value chain and the access, bulk of the revenue from value added services is retained by the telecom operator. The telecom operator justifies its revenue share with three costs viz cost of building the market (i.e. licence fees, subscriber acquisition etc.); cost of usage of the network infrastructure (i.e. capex/opex); and cost of billing and collection. At the

existing revenue sharing model, the content providers sell content at 1/4th of its sales price, the rest is distribution mark up kept by the telecom operator or VASP. **The selling prices are set by the telecom operator, even though the content providers are owners of the content.**

(b) Management Information System (MIS), Reconciliation and Payments: The traffic reconciliation process is also dictated by the telecom operators. Some operators' contracts do not allow any reconciliation process till the difference in MIS is upto 5%. Others do not even provide for any formal scope for reconciliation in the contract, compelling the VAS vendor to accept the telecom operator's MIS figures. VAS vendors are compelled to provide for bad debt at the end of the financial year in the region of 5%+ (in certain cases it has crossed even 25%). According to CII, the contracts should allow for a formal process of reconciliation of MIS for difference above 2% - including the right of both parties to seek arbitration proceedings, if necessary. Further, **transparency in MIS and payment settlement between VAS vendor (VASP) and Content Owners is an issue.** There is a need for Content owners to book their mobile content download revenues at the end of the month – based on the Online MIS provided by the VAS vendor – and accepting an adjusted revenue collection later on. The VAS vendor is reluctant to share its On-line MIS with the Content Owner since it is not able to estimate (with any reasonable accuracy) the final MIS that it may have to settle for with the telecom operator, after reconciliation of traffic figures. This has resulted in a lack of transparency – with some large content publishers doubting the integrity of VAS vendors – and insisting of payment on the basis of their own traffic figures. However, this **lack of transparency has its roots in the current reconciliation and payment settlement process.**

(c) Bundling Access and Content: **Under ideal circumstances, the operators should open their pipes, charge for access and this access revenue (after paying out a minority share of this to the other players of the value chain), charge a fee for billing and collection of the content revenue.** This will bring down walled gardens and help the telecom operators grow VAS adoption and revenues by giving the freedom

to those who are in the content and service business. In the present scenario VASPs are not encouraged to do direct billing to consumers through pre-paid/ credit card or other modes. **This calls for separation of accounts of telecom operators for content and distribution businesses through appropriate license conditions.**

2.10 Growth Potential of Value Added Services

As already mentioned in the preceding paragraphs, the revenue sharing arrangements, existing copyright system protection do not encourage orderly growth of the Value Added Services in India. Though the content providers/content aggregators are developing high value contents, they do not get a reasonable share of the revenue earned by the telecom operators through delivery of such contents to the consumers. As per the IMRB Survey Report of December 2006 on Mobile Value Added Services in India, 60% of the revenue earned from Value Added Services is retained by the telecom operators while 25% goes to the content aggregators and 15% to the copyright owners. On the contrary, in developed markets like China, the telecom operator retains only 20-30% of the revenue while the content providers/content aggregators keep much higher amount.

2.11 Development of regional and linguistic contents

The diversity in languages, culture and religion in India also gives ample scope for development of regional and linguistic contents. Regional content is getting popular both in voice and non-voice services. The companies have to be receptive to the local and customized needs of the consumers. Development of regional contents and vernacular news portals would give a significant boost to the content market especially in entertainment segment. Similarly, the facilities to download devotional ringtones, wallpapers and clips to suit individual requirements would further enhance the growth of Value Added Services market in India.

2.12 **Potential for growth of value added services in Rural India**

There is also great potential for growth of Mobile Value Added Services in rural India. Since mobile penetration in urban India is already very high, the Service Providers would naturally look for opportunities in areas so far untapped. The rural areas will be the focal point for further growth of mobile telephone services. Simultaneous provision for development of customized value added services such as crop price alerts, microfinance scheme information, installment dues alerts, weather alerts, mobile payments etc. through mobile telephones would encourage the rural population to subscribe to mobile telephone services.

2.13 Revenue potential of value added services: As per the information available with the TRAI the revenue from provisioning of value added services by Cellular Mobile Telephone Service Providers is Rs.3676 crores (INR 36.76 billion) for the year 2005-06 and Rs.5904 crores (INR 59.04 billion) for the year 2006-07. The percentage increase in the revenue from year 2005-06 to 2006-07 is above 60%. With such growth potential the mobile value added services revenue is expected to reach above Rs.25000 crores (INR 250 billion) by the year 2009-10. Further, the growth potential will also be compounded after the introduction of 3G service. As per the analysis by M/s. zinnov, Cellular Operator Association of India (COAI) has projected that VAS will contribute upto 20% of total telecom revenue by 2009-10. Further the analysis indicates revenue projection of order of US Dollar 10 billion by 2010.

2.14 **3G and Value Added Services Market in India**

2.14.1 3rd generation mobile communications networks (3G) have been heralded as a paradigm shift that will irreversibly change the structure of the telecommunications industry, particularly mobile value added services offerings. In an ideal 3G scenario, users would get abundance of value added services developed by independent service providers with plethora of business combinations and technical implementations. 3G will enhance the application of VAS and also help to add more features to the existing application. Therefore, it is expected

that with the introduction of 3G services, the mobile value added services will get a big boost both in terms of variety and revenue. 3G applications will drive ARPU and traffic, improve brand image and increase customer loyalty.

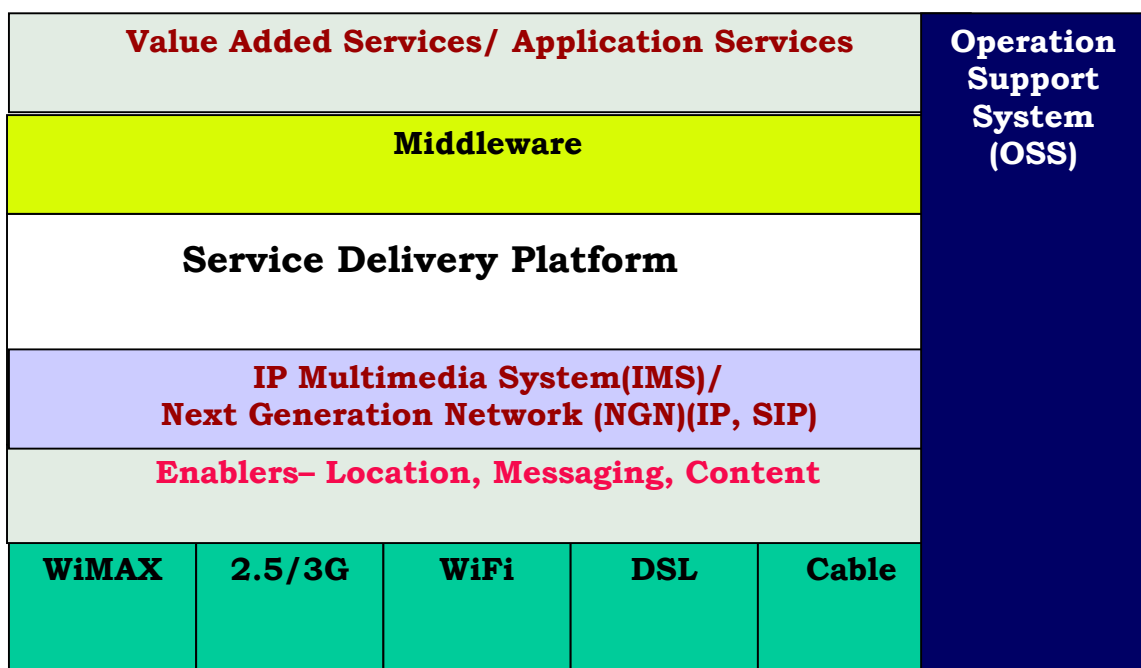
2.14.2 Accessing the Internet on mobile devices, downloading music, pictures, playing games, particularly 3D games and even sending multimedia messages will be extensively used by the customers. 3G would enable a high bit-rate of mobile data, offer greater network capacity and facilitate rich-data applications such as Voice over Internet Protocol, video telephony, mobile multimedia including video conferencing and interactive online gaming. Increased bandwidth allows for quicker and more convenient downloads such as personalized music recommendations, full length tracks, polyphonic ringtones, master-tones, full length videos, artist greetings, logos, ring back tone etc. Thus the demand for downloading applications or contents on the mobile phone is bound to increase leading to more usage. In such a scenario, the role of international VAS technology platform providers would be more prominent.

2.15 Next Generation Network (NGN) and Value Added Services growth:

In the Next Generation Network soft switch technology is used, which is based on Packet Switching/IP phone. The NGN architecture provides applications services at the top layer. This soft switch based NGN enables introduction of new value added services rapidly at low cost. Soft switch in NGN provides basic and supplementary services called core services whereas the value added services are outside the soft switch as application services configured through value added application servers. Generally the application servers are interfaced with soft switch with open and flexible application programming interfaces. Thus, the process basically reduces the time to launch new value added service and also costs. Therefore, it is envisaged that with deployment of NGN network in Indian telecommunications, more and more feature rich value added

services will be available to the telephone consumers. Similar impact is envisaged after the introduction of IP multimedia system (IMS) in the cellular mobile telecommunication network. Further, the adoption of feature rich value added services will get enhanced through fixed mobile convergence (FMC). New communication possibilities enabled by IMS include voice, telephony, Push-to-Talk, MMS, SMS, Messaging, Community, Sharing, TV participation etc.

Figure- Value Added Services as application services in NGN /IMS



Source Yankee Group, 2006

2.16 Convergence:

2.16.1 Services convergence such as voice with Mobile TV, IP-TV over Broadband, TV participation through 3G and Broadband Wireless Access (BWA) etc. and device convergence at the user end and network convergence at core will facilitate the rapid adoption of value added services by the consumers and also rapid deployment by the service providers. In such a scenario voice may not be a primary source of revenue, but provisioning of value added services will have large revenue potential for telecom operators. The service provider will explore the

capabilities offered by the converged network to introduce and market value added services that will enhance the communication experience of individual customers and increase the benefits to corporate customers. These services will be the differentiating characteristics of competing telecom operators. The need to differentiate will continue to drive the convergence of networks. In this context telecom operators will have to adopt strategies to diversify the service portfolio through cooperation and collaboration with cable television and broadcasting companies, Internet service providers and value added service providers (VASPs).

2.16.2 **Impact in society:** Convergence potentially offers many attributes for value added services, easier use, lower cost, ubiquity, greater interactivity etc. The many different communication channels such as telephone, Internet, mobile phone, broadcast TV, cable, satellite etc. is converging into a single interface for all communications. Initially, the passage of information necessary for a free society only required freedom of the press, later broadcasting opened new channels for society to receive information. The telephone both fixed and wireless provided both way interactivity and then came the Internet and Broadband which facilitated multimedia interactions. Now with convergence and competition, the society may get information, entertainment, both way communication and transactions of money on single device through single interface.

CHAPTER-III

EXISTING PROVISIONS IN THE VARIOUS LICENSES AND CONSUMER PROTECTION ISSUES

3.1 The Department of Telecom has a provision for licence and guidelines also exist for issue of licence in respect of value added services namely, voice mail, audiotex, unified message service, video conferencing, videotex, e-mail, Closed User Group (CUG) facilities etc. In a scenario of expansion in content based mobile value added services and acceleration in transaction through M-Commerce, the contribution of these services to the telecom sector will increase the productivity and enhance the efficiency at various levels which will spur the growth of the Indian economy. Thus, there will be a need to closely monitor the value added services in telecom sector in India to ensure that barriers to its growth are removed.

3.2 Existing Licence Provisions

There is no uniformity or clarity in the licensing conditions of the cellular mobile telecom service licensees/unified access service licensees with regard to provision of value added services. This is evident from the following:

3.2.1 Unified Access Service (UAS) Licence:-

(i) Under UASL the access providers have scope for providing: -

- Broadband services including triple play i.e. voice, video and data.
- Value added services such as voice mail, audiotex services, video conferencing, videotex, e-mail, Closed User Group (CUG) facilities over its network to the subscribers falling within its Service Area on non-discriminatory basis.

(ii) The Licensee cannot provide any service except as mentioned above, which require a separate licence. However, intimation before providing any other Value Added Service has to be sent to the Licensor and TRAI. No separate entry fee is charged for voice mail, audiotex, video conferencing, videotex, e-mail service provided by UAS Licensee.

However, all revenue earned by the UAS Licensee through these services is counted towards the revenue for the purpose of paying licence fee.

3.2.2 Cellular Mobile Telephone Service (CMTS) Licence (fourth)

(i) Scope of the Licence has been stated as under:-

The licensee shall be permitted to provide in its area of operation, all types of mobile services including voice and non-voice messages, data services and PCOs utilizing any type of network equipment (however, the technology must be digital) including circuit and or packet switches that meet the relevant International Telecommunication Union (ITU)/Telecommunication Engineering Center (TEC) standards.

(ii) As per the amendment in CMTS License Agreement issued in 2001 or thereafter, Licensee can provide Internet Telephony, Internet Services and Broadband Services including triple play i.e. voice, video and data.

(iii) The licensee shall be free to enter an agreement with other service providers in India or abroad for providing roaming facility to its subscribers under full mobility service unless advised/directed by licensor otherwise.

(iv) However, Licensee cannot provide any service except as mentioned above, which require a separate licence.

(v) In the scope of the Licence Agreement of the Cellular Mobile Telephone there is no mention of provisioning of Value Added Services. However, it may be implied that they can provide Short Message Service (SMS) and data service as Value Added Services. Further at clause 24.10 of Licence Agreement it is stated that “The Licensee may provide additional facilities in case of any value addition/upgradation that the technology permits at later date, subject to approval of Licensor”.

There is need for bringing about clarity in the scope of licence agreement for Cellular Mobile Telephone Service (CMTS) about various Value Added Services.

3.2.3 Cellular Mobile Telephone Service (CMTS) Licence (Old)

(i) In the Licence Agreement under the heading “Permitted Services” following clauses exist:-

“12.2 The Licensee shall provide all such services which are available in GSM MoU 90 days prior to the date of commissioning and decided by the Authority (*Director General of Telecommunications, Govt. of India*).

12.3 The Licensee shall provide unrestricted access for his subscribers to all services including Value Added Services available on PSTN.

12.4 The Licensee shall not engage in the business of the provision of Value Added Services based on the Cellular Mobile Service without specific permission of the Authority”.

3.2.4 Basic Services

(i) In the Licence Agreement the scope of Licensee is stated as under:-

Clause 2.2(a) The service covers collection, carriage, transmission and delivery of voice or non-voice messages over Licensee’s PSTN in the Service Area and includes provision of all types of services except those which require a separate licence.

(ii) Access service providers have been permitted to provide Internet Telephony, Internet Services and Broadband Services including triple play vide amendment letter no, 10-21/2005-BS-I(Vol. II)/56 dated 14.12.2005

3.2.5 Internet Service:

(i) As per the Licence condition the scope of Internet Service Licence is defined as under:-

“Internet Access: Internet access means use of any device/ technology /methodology to provide access to Internet including IPTV and all content available without access restriction on Internet including web hosting, webcolocation but it does not include service provider’s configured Closed User Group Services (VPN). The content for IPTV shall be regulated as per law in force from time to time. Permission to provide IPTV services shall be granted on application by licensee provided the licensee has networth of Rs. 100 crore or more.

(ii) Internet Telephony: Internet Telephony means a service to process and carry voice signals offered through Public Internet by the use of Personal Computers (PC) or IP based Customer Premises Equipment (CPE) connecting the following:

- a) PC to PC; within or outside India
- b) PC / a device / Adapter conforming to standard of any international agencies like- ITU or IETF etc. in India to PSTN/PLMN abroad.
- c) Any device / Adapter conforming to standards of International agencies like ITU, IETF etc. connected to ISP node with static IP address to similar device / Adapter; within or outside India”.

(iii) The scope of the ISP License states that “all content available without access restriction on Internet including web hosting”. The value added service providers particularly providing transaction based services may use the content services such as web portal and payment gateway etc. so, therefore, basically in the provisioning of value added services the Mobile Internet may be used as the media. Some of the value added services like music download, games, etc. are available through the Internet provided by the ISPs.

3.3 In the present scenario, there are quite a large number of small and medium size content aggregators /content enablers called Value Added Service Providers (VASPs). Sometime, such Value Adder Service Providers depend on the facilities provided by the telecom operators. Here the issue of revenue share becomes a major issue. There are no concerted efforts to facilitate the industry growth. There is need to have more transparency in the delivery of the value added services and more efforts are needed to educate the customer on usage of Value Added Services. Therefore, effective cooperation and collaboration amongst various participants is a key factor to form a healthy value chain of value added services. It will ensure development of advance technology, attract

investment, consolidation in the industry and free entry for both domestic and international investors. Technological developments and foreign direct investment will ensure upgradation of technology platform for provisioning of value added services particularly 3G, Broadband Wireless Access (BWA) and Next Generation Network (NGN)based high bandwidth content services.

3.4 **Security Issues:**

3.4.1. One of the important issues relating to some of the value added services is security. A case in point is the Blackberry service of Canada based service provider Research In Motion (RIM) which came under a cloud ever since security agencies expressed fears that terror groups could use the service, including e-mail feature, to communicate without being monitored by Indian security agencies as data is routed through servers abroad with higher order encryption. Ideally, for security reasons it would be appropriate that the value added services provisioning platforms or servers are located within India. In such arrangements any e-mail or message/voice call will get routed within India when both the calling and called customers are located within India. Any message going to abroad has to be routed through international long distance operator. Therefore, in such cases a licensing and appropriate regulatory regime will provide clarity and telecom operator need to source the content for value added services from authorized/licensed /registered content aggregators called value added service providers (VASPs) in India.

3.4.2 [The present licensing regime for Cellular Mobile Telephone Service provide for provision of appropriate monitoring facilities for all types of Value Added Services and additional facilities. However, the licensor had noticed that Telecom Service Providers expand their operations by introducing different value added services and additional facilities without implementing systems to monitor these services/facilities. Therefore, the Department of Telecommunications vide letter No.842-336/2004-VAS/19 dated 17th September, 2004 and No.842-336/2004-VAS/22 dated 21st](#)

October, 2004 directed all Cellular Mobile Telephone Service Providers (including those migrated to UASL) “to intimate the details of various value added services and additional facilities available in their network along with the details of provision made for lawful interception and monitoring of these services/facilities within 10 days from the date of receipt of this letter and if monitoring facility is not available, plans to provide these monitoring facilities with specific time frame. In future licensee should intimate the licensor about provision of any new service/facility along with details of provision made for lawful interception/monitoring of these facilities at least 15 days in advance before the introduction of these services/facilities”.

3.5 Consumer Protection Issues: A key consumer issue which has emerged in the recent times on provision of value added services is provisioning of value added service without explicit consent of the consumers. To address issues relating to provision of value added services and maintaining transparency thereto, TRAI has made the following provisions:

3.5.1 through the Direction on Value Added Services dated 3rd May, 2005, the Authority mandated all the Cellular Mobile Service Providers and Unified Access Service Providers that no chargeable value added service, shall be provided to a customer without his explicit consent. Any value added service, which was earlier being provided free of charge, shall not be made chargeable without the explicit consent of the customer.

3.5.2 through the Direction on Premium Rate Services dated 3rd May, 2005, the Authority mandated all the Cellular Mobile Service Providers and Unified Access Service Providers to publish in all communications/ advertisements relating to premium rate services, the pulse rate/ tariff for the service.

3.5.3 through the Direction dated 29th August, 2006 the Authority, inter-alia, directed all the Cellular Mobile Service Providers, Basic Service Operators and Unified Access Service Providers to acknowledge through

SMS followed by entry in the next bill the requests made through Telephone call, FAX, SMS, e-mail etc for value added services, the charges for which are of a recurring nature;

3.5.4 through the Direction dated 30th October, 2007 the Authority directed all the Access Service Providers (including M/s Bharat Sanchar Nigam Ltd. and M/s Mahanagar Telephone Nigam Ltd.) to, --

(a) provide, within one month from the date of issue of this Direction, the facility to all their customers for registering their requests for unsubscribing of any value added service by such customers ---

(i) through e-mail or FAX or any other means (other than telephone calls and SMS);

(ii) through telephone calls and SMS made to the customer care/helpline/toll-free number (other than e-mail or FAX) without incurring of any cost for such telephone calls and SMS made by their customers;

(b) continue to extend the facility referred to in the preceding subparagraph to their customers;

(c) give adequate publicity to the facility, as referred to in subparagraphs (a) and (b) above, by publishing complete information about such facility on their websites and by communicating the same through SMS and other means to the customers;

(d) ensure that-----

(i) in case of any offer for any value added service, made in writing or through SMS or FAX or e-mail,(other than tele-calling) to the customer, such offer shall contain all relevant details of the value added service offered to the customer including the charges for such value added service and seek and obtain the explicit consent of the customer, through telephone or SMS or FAX or e-mail or by other electronic means, for availing by such customers of such value added service, before activation of such value added service; and

(ii) in case of any offer for any value added service, made through tele-calling or by any other means [except means referred to in item (i) above] to the customer, such offer shall be subsequently made in writing or through SMS or FAX or e-mail, containing all relevant details of the value added service offered to the customer including the charges for such value added service and seek and obtain the explicit consent of the customer, through telephone or SMS or FAX or e-mail or by other electronic means for availing such value added service before activation of such value added service;

(iii) the consent referred to in item (i) or item (ii), as the case may be, shall be acknowledged through SMS before activation of such value added service, or immediately after such activation, and also reflect the same in the next bill, if issued to the customer, giving relevant details of the said explicit consent;

(e) keep complete records of such explicit consent obtained from the customer for subscription to the chargeable value added services and the records of the acknowledgements of such explicit consent by the service provider, for verification, for a period of one year from the date of such explicit consent.

3.5.5 through Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulation, 2006 dated 21st March, 2006 which, inter alia, mandated all access service providers that where a value-added service (e.g. download of content, such as a film clip or ring tone) or entry to an interactive service (such as a game) can be selected through a choice of the service user (e.g. by dialing a specific number) then the charge for the service must be provided to him before he commits to use the service.

3.6 The Authority has been receiving complaints from consumers regarding activation of Value Added Services without their consent. The

Authority has examined some of the complaints and in a few cases Directions/Orders have also been issued to the concerned telecom operators to refund charges levied for value added services wherever the customer has complained or disputed about giving consent for such service. Some of the recent complaints received in TRAI shows accidental activation of value added services such as 'Copy Tune'. The telecom operators need to take adequate measures to avoid accidental activation of value added services. The telecom operators are introducing new methods for delivering value added services. There is also a need for creation of awareness amongst the consumers about the utility, usage and charges for any services so that such service is well received by the consumers and the chances of disputes/complaints are minimized.

3.7 Branding is one of the ways for inducing customer confidence in a particular service. Presently, the telecom operators as well as the value added service providers advertise about the service in some of the cases. There is a need for consolidation in the industry which will not only provide value added service providers (VASPs) the bargaining power for revenue share with telecom operators but will also lead to creation of branding of the various content based value added services.

CHAPTER-IV

INTERNATIONAL EXPERIENCE

4.1 International Experience indicates that Mobile Value Added Services are provided to customers by telecom operators through premium short codes or via mobile Internet (WAP). The country specific studies made reveal following:

4.1.1 **African Countries:** The Position Paper on the challenges of the development of the mobile value added services market in Nigeria by Dr.-Ing. Pierre-Francois KAMANOU quotes following:

“In the field of liberalization of the value added services, it aims at building offers complimentary to the services of the mobile operators so as to meet most effectively the various users needs by developing a wide range of applications across all mobile operators.....observed that specific market of value added SMS/IVR services branded by third party service providers (other than mobile operators) is not well structured for sustainable development”.

It is noted that in African countries there are basically two environments for provisioning of value added services. First case, Regulators have issued a telecommunication value added services licence and allotted short codes called special numbers. In the second case, Regulators has not yet set-up specific lawful environment. However, mobile operators have established agreements with value added service providers and most of these agreements are not favourable for a sustainable development. As per the Position Paper referred above of Dr.-Ing. Pierre-Francois, the following are two best practice cases:

- In Cameroon, the Regulatory Board (ART) has introduced a telecommunications VAS license type under the regime of Authorization since 2002, and had organized and managed

the special numbering plan including short-codes and long-codes since 2003.

- In Senegal, the Sonatel-Orange Operator applies a very good revenue sharing model with the VAS Providers for premium SMS services, with an out-payment of 90% based on the premium tariff in applicable (end-user tariff less the off-net normal tariff).

Dr.-Ing. Pierre-Francois has also mentioned in his Position Paper that in the context of Nigerian market the position of the VAS aggregator is missing, which results to the very low development of the mobile VAS market by mobile operators and very few VAS providers. He has also stated that GTS – Infotel Nigeria was created which intends to position itself as the Mobile VAS Aggregator with main activities revolving around the provision of special numbering service across all mobile operators to third party VAS providers. GTS is basically a VAS platform provider and special number provider.

(Source – Position Paper on the challenges of the development of the mobile value added services market in Nigeria by Dr.-Ing. Pierre-Francois KAMANOU)

4.1.2 In **Germany**, there is a wide range of service providers that act as distributors for SMS and MMS, have specialized on particular VAS services (e.g. mobile advertising), or provide VAS services that are related to their core business. As examples for the latter category the VAS offers of Deutsche Bahn (German railway, see www.bahn.de), Lufthanss (German airline, see www.lufthansa.de) and Vodafone (www.vodafone.com). These companies provide customer services like check in/reservation services or entertainment services. Vodafone also offers business services for fleet management and for M2M as well as mobile office services. Established technologies in the VAS domain are SMS, MMS, WAP, information download, cell-based location detection, WLAN and mobile Internet access. Upcoming technologies are Voice over IP (VoIP), video telephone, mobile TV and WIMAX.

[Source : Mobile Value Added Service in China – Project Report by Bernhard Holtkamp, Fraunhofer ISST (Ed.)]

4.1.3 **China:** In China foreign companies that intend to provide value added services in the Chinese mobile communication market have to pass 3 phases:

- Partnering with a Chinese company
- Applying for a license as a service provider
- Cooperation with a mobile operator

For value-added services, the third step of opening has already been reached and foreign companies are allowed to found nationwide joint enterprises and hold up to 50% shares. According to WTO agreements for mobile communication and data services the second step of opening has been reached that allows foreign companies to found joint enterprises in the cities Chengdu, Chongqing, Dalian, Fuzhou, Hangzhou, Nanjing, Ningbo, Qingdao, Shenyang, Shenzhen, Xiamen, Xi'an, Taiyuan and Wuhan. If the foreign companies invest in telecom enterprises to provide nationwide VAS, the registered capital must be more than 10 million RMB. If the foreign companies invest in telecom enterprises to provide VAS within a certain province, the registered capital must be more than 1 million RMB. Foreign investors which will invest in telecom companies to provide VAS in China must have good reputation for providing VAS. SPs must have a customer services system, sound technical capability and market risk controlling capability.

In China there is Value Added Services Licensing process, MII is in-charge of the examination and approval of all the primary telecommunication services. The company must apply to the local Telecom Administration Bureau for the license to provide value-added services within a single province. The company must apply to MII for the license to provide value-added services covering multi-provinces. Neither MII nor operators do charge for the license. The VAS license, a company can apply for is defined in a service classification list that has been defined by MII. This list exists in two different versions: the original version from 2001 and a revised version from 2003. So far over 16,000 value added service licences have been granted. Among them are 831 with domestic licences, the rest is limited to province level. Till June

2005, 22 Foreign Investment Telecommunications Enterprises (FITEs) have also been given licence for providing value added services. The value added service providers can only offer their services through mobile operators. Hence, a close cooperation between mobile operators and value added service providers is mandatory. Mobile operators regulates the VAS market to a significant extent, by determining VAS service fees, by selecting VAS service providers according to their service portfolio they want to offer, by excluding service providers who do not generate sufficient revenues, by monitoring service contents and service quality and by controlling service access and billing. Cooperation between value added service providers and mobile operators include the passing of conformance test and negotiation of contracts for service provision.

[Source : Mobile Value Added Service in China – Project Report by Bernhard Holtkamp, Fraunhofer ISST (Ed.)]

4.1.4 **Malaysia:**

(i) In Malaysia there is a concept of Application Service Provider including Content Application Service Provider. There is individual licence and class licence system as per the following:

- (a) **Applications Service Providers** - who provide particular functions such as voice services, data services, content-based services, electronic commerce and other transmission services. Applications services are essentially the functions or capabilities, which are delivered to end-users.
- (b) **Content Applications Service Providers** - who are special subset of applications service providers including traditional broadcast services and newer services such as online publishing and information services.

Within the different categories of licences, there are two types of licences provided for - INDIVIDUAL LICENCE and CLASS LICENCE. Individual licences are granted for activities where a high degree of regulatory control is required. Class Licences are annually renewable and are entered into Registers maintained by the Malaysian Communications and Multimedia Commission.

(ii) The Communications and Multimedia (Licensing) Regulations 2000 provides for standard licence conditions for all licences, and special

licence conditions for each category of Individual licence. The Communications and Multimedia Act 1998 (CMA 98) seeks to promote Malaysia's enshrined national policy aspirations via the communications and multimedia industry. A vital provision in the Act's chartered objectives is the establishment of a regime of self-regulation, to better achieve its noble purpose and keep it unblemished. The activities regulated under the CMA 98 cover traditional broadcasting, telecommunications and online services including the facilities and networks employed in providing such services, as well as the content supplied via facilities and networks. Cognisant of the evolving nature of this emerging media landscape in which gamut of standalone industries are converging, the CMA 98 provides for the formation of CMCF. Designated by the Malaysian Communications and Multimedia Commission (MCMC), this Forum acts as the mechanism to formulate and implement developed codes of practice for the communications and multimedia industry. The CMCF will uphold these codes, to ensure they serve as a guide for the industry to operate and flourish.

(iii) The CMCF will govern content by self regulation in line with the Malaysian Communications and Multimedia [Content Code](#). By virtue of it being a voluntary Code, those subscribing to it have undertaken the commitment and responsibility to uphold its objectives and principles. The Constitution of the CMCF states that a [Complaints Bureau](#) be established under Article XIII, to deal with complaints. The Bureau is empowered by the Council to impose sanctions on any member who is considered to have breached the Content Code.

(iv) The CMCF will govern content by self regulation in line with the Malaysian Communications and Multimedia Content Code. The Content Code will set out guidelines and procedures for good practice and standards of content disseminated for public consumption by service providers in the communications and multimedia industry. The Content Code will demonstrate a commitment toward self-regulation by the industry in compliance with the Communications and Multimedia Act

1998 (CMA 98). It will seek to identify offensive and objectionable content while spelling out the obligations of content providers within the context of social values in this country. The Content Code will provide the platform for creativity, innovation and healthy growth of a fast changing industry. The ambit of the Content Code is defined under Section 213 (1) CMA 98 which states that the Content Code "shall include model procedures for dealing with offensive and indecent content".

Section 213 (2) CMA 98, lists the matters that maybe addressed by the Code, but are not limited to:

- a) restrictions on the provision of unsuitable content;
- b) methods of classifying content;
- c) procedures for handling public complaints and for reporting information about complaints to the Commission;
- d) representation of Malaysian culture and national identity;
- e) public information and education regarding content regulation and technologies for the end user control of content and
- f) other matters of concern to the community

Section 211 CMA 98 states that no content applications service provider shall provide content which is indecent, obscene, false, menacing, or offensive in character with intent to annoy, abuse, threaten or harass any person. Section 6 CMA 98 defines content as any sound, text, still picture, moving picture, audio-visual or tactile representation, which can be manipulated, stored, retrieved or communicated. The Content Code would comprise the following parts:

Guidelines on Content, Specific Advertisement Code, Specific Broadcasting Guidelines, Specific Online Guidelines, Specific Audiotext Hosting Service Guidelines, Specific Closed Content, Consumer Protection, Public Education and Code Administration. For the Code to be

truly effective in obtaining deliverables and meeting its objectives, there needs to be ongoing administration of the Content Code. Therefore ongoing administration would include:

- a) promoting public and industry awareness of the Code and compliance requirements
- b) financial and sanctions administration
- c) monitoring for Code compliance
- d) reporting and reviews
- e) amendments of the Code

From the above it is seen that provision of licensing for application services does exist and also there is content code which is implemented through self regulation.

4.1.5 **Singapore:**

(i) In Singapore there is a concept of class licence for value added network services. The value added network services have been defined as under:

Definition: Store-and-retrieve value-added network services are any of the following services provided by telecommunication systems, built over and above the telecommunication systems operated by a Facilities Based Operator (FBO) and accessed through public telecommunication systems or leased circuits, which allow telecommunication traffic between a user and the value added network or between users:

- (a) on-line information and database retrieval services;
- (b) on-line information and data processing services;
- (c) voice information services;
- (d) electronic broking services;
- (e) transaction services such as on-line shopping, on-line reservation service, etc.;
- (f) remote computing services;
- (g) on-line games;
- (h) mailbox services including e-mailbox, voice-mailbox, facsimile-mailbox and multimedia mailbox;

- (i) electronic data interchange services;
- (j) store-and-retrieve file transfer services;
- (k) electronic chatting services;
- (l) bulletin board services;
- (m) other multimedia services where the content or format of the telecommunication traffic is changed or processed.

Singapore has a Code of Practice for Premium Rate Services. The definition of Premium Rate Service as per this Code is given below:

“Premium rate service” means any value-added service provided over a public telecommunications network which consists of –

(a) the provision of content to any person including but not limited to content such as information, news, updates, data, quizzes, jokes, greeting messages, ringtones, wallpapers, logos and games for which charges are imposed over and above the standard network charges of the relevant network operator;

(b) the provision of a facility to any person including but not limited to facilities for chat services, contest participation, charitable fundraising and votelines for which charges are imposed over and above the standard network charges of the relevant network operator; or

(c) a combination of (a) and (b), but shall not include value-added services provided by network operators such as auto redial, back-up SIM card, call barring, call directory, call divert, call transfer, call waiting, caller ID, caller number non-display, conference call, favourite numbers, IDD, missed call alert, multi-SIM card, number retention, number porting, mobile voice and message roaming, speed dial, voicemail or video call services.

Further, the Code defines Premium Rate Service Provider as under:

“Premium rate service provider” means a licensee that engages in the provision of a premium rate service. For the avoidance of doubt, –

(a) a network operator that enables a third party premium rate service provider to provide a premium rate service over its network shall not be treated as the premium rate service provider of that service;

(b) a network operator who itself provides a premium rate service over its network shall be treated as the premium rate service provider of that service; and

(c) where a licensee, such as an aggregator, facilitates the provision of a premium rate service that is controlled, managed or operated by any other party who is not a licensee, the facilitating licensee shall be treated as the premium rate service provider of that service and shall be responsible for complying with this Code notwithstanding that the service is controlled, managed or operated by the other party;

Illustration: Licensee A leases a 5-digit short code from a network operator and enters into an arrangement with Company B, a non-licensee, under which Licensee A enables Company B to deliver a premium rate service to consumers via the short code. Licensee A shall be treated as the premium rate service provider of that premium rate service notwithstanding that it is operated by Company B.

Thus, it may be seen from the above provisions prevailing in Singapore that there exists licensing and regulatory regime for provision of value added services.

CHAPTER-V

LICENSING ISSUES – TERMS & CONDITIONS FOR LICENSING MOBILE VALUE ADDED SERVICES AND VALUE ADDED SERVICES TO BE PROVIDED THROUGH 3G, NEXT GENERATION NETWORK (NGN)

5.1 To address the issues for growth of Mobile Value Added Services including such services to be provided in the 3G, next generation network (NGN) environment in India, as discussed in Chapter-II and III, particularly, Copyright Protection, Regulatory Framework and Mobile Commerce, Consumer Education & Protection and Revenue sharing arrangements in the Value Added Services Value Chain, the clarity in licensing framework is needed.

5.2 For the analysis purpose there could be two approaches for regulating value added services. The first approach could be to address the issues as and when it arise, leaving the status quo to continue. One of the examples in this approach is Blackberry issue. The second approach could be to bring transparency and clarity through appropriate licensing regime for Mobile Value Added Services including such services provided through 3G, Next Generation Network (NGN).

5.3 As per the provisions in the UAS Licence, the Licensee has to intimate before providing any other value added service to Licensor and TRAI except for Voicemail/Audiotex/Video conferencing, Videotex and CUG. As per [the Department of Telecommunications letter No.842-336/2004-VAS/19 dated 17th September, 2004 and No.842-336/2004-VAS/22 dated 21st October, 2004 directed all Cellular Mobile Telephone Service Providers \(including those migrated to UASL\) all Cellular Mobile Telephone Service Providers \(including those migrated to UASL\) should intimate the licensor about provision of any new service/facility along with details of provision made for lawful interception/monitoring of these facilities at least 15 days in advance before the introduction of these services/facilities](#)". From this it is clear that the Cellular Mobile Telephone Service Providers are generally allowed to provide mobile value added services without any further licensing. However, prior intimation is required to be given to Licensor and also to TRAI. Thus the light touch

licensing framework already exists for provisioning of value added services by telecom operators.

5.4 However, there is no licensing framework for the content providers/content aggregators who act as value added service providers (VASPs) in the value added services value chain. The question, therefore is, “Is there a need to bring such value added service providers (VASPs) who not only provide the contents to telecom operators but also provide and operate technology platform/servers under the ambit of licensing regime?” There could also be services which could be directly marketed, provided and charged by the value added service providers using payment gateway etc. This could be particularly used for M-Commerce value added services which are transaction based. The carriage/network usage charges per minute for such cases could be charged by the telecom operators.

5.5 In view of the growing significance of value added services, it may be appropriate to consider whether the licensing system is to be resorted for licensing of mobile value added services including new/enhanced services in 3G, next generation network (NGN) environment. There is a scope to define a value added service in clear terms and what should be the terms and conditions of such licence if it is decided to issue a separate licence. Content is an important ingredient for plethora of value added services being provided by telecom operators. For these services, the telecom operators mainly depend upon the content providers/aggregators but as per the representation from content providers, the revenue sharing arrangements between them are tilted against the content providers/aggregators. In addition an issue of level playing field and transparency has also emerged. In view of the growing and likely unprecedented expansion in these services and their contribution to the telecom sector in particular and economy in general cannot be overlooked. Therefore, level playing field and transparency between content providers/aggregators and telecom operators by rationalizing the revenue sharing arrangement between content

providers/aggregators and telecom operators assume importance. Therefore, to facilitate the growth of Value Added Services and appropriate returns on investment to all the participants in the provisioning of Value Added Services and to protect the interest of consumers, there is a need to have proper authorization/licensing regime. The Framework for issue of licenses for Value Added Services already exists, particularly in respect of Voice Mail/Audiotex, Unified Messaging etc. A copy of the Guidelines for issue of Licence for Voice Mail/Audiotex/Unified Messaging Service is enclosed as **Annex-I**. All the existing content providers/content aggregators who act as value added service providers (VASPs) could take licence/authorisation for providing all the value added services under Indian Telegraph Act, 1885. In the provisioning of value added services a technology platform/server is used for transmission of messages by value added service providers. The terms and conditions of licence for the mobile value added services including new/enhanced services in 3G, next generation network (NGN) environment could be in line with these guidelines, already issued by DoT, with following additions/changes:

- (i) Service area of the licence could be corresponding to the existing licensed service area for access service or on an all India basis similar to ISP Category A licence.
- (ii) Licence fee on % of AGR could be in line with telecom operator as per the licensed service area and for all India licensee as per the Category A ISP licence.
- (iii) Any specific order or direction from the licensor/TRAI issued for protecting the interest of consumers shall be applicable to the licensee and shall be strictly complied with.
- (iv) Content regulation shall be subject to Information Technology Act, 2000 and various provisions made by Ministry of Information and Broadcasting and other laws such as Indian Copyright Act etc.

5.6 As per the guidelines issued by Department of Telecommunications for value added services like Voice Mail/Audiotex/Unified Messaging Service, “the licensee shall take measures to prevent any objectionable,

obscene, unauthorized or any other content or harmful and unlawful messages or communications infringing upon copyrights, intellectual property etc., in any form, from being carried on his network, consistent with the legal framework of the country. Once specific instances of such infringement are reported to the licensee by the Authority, the licensee shall ensure without fail that the carriage of such material on his network is prevented immediately". Similar provisions have been made in the Unified Access Service Licence (clause 40.3,) CMTS licence (clause 43.3) and ISP licence (clause 1.12.9). The provisions in the ISP licence are more detailed than the provisions in other licenses.

5.7 From the above provisions in the licence agreements that the licensees (access service providers and licensed Value Added Service Providers) have been made responsible for the contents carried on its network. In the case of value added service provided by the telecom operators through VASPs who are not presently coming under any licensing regime the issue is that should the entire responsibility for ensuring that the content is provided in accordance with the laws of the country be upon the telecom operators for development of content and value added services? This issue was debated at length during discussions at the meetings of the Next Generation Network Expert Committee (NGN-eCO). This committee had representatives from Associations of Service Providers, Association of Equipment Manufacturers, Department of Telecommunications, Research Organisations, and Academic Institutions etc.

5.8 It was suggested during deliberations of the Committee that network operator should be responsible only if they are carrying content or providing services through unauthorized content/application providers. The liability of the network provider should be limited to the extent to notify the content/service provider who has sent a specific content in case that is found to be objectionable or results in infringement of laid down conditions. Presence of such restrictive clauses, no doubt, decreases the probability of contents provided and limits the scope of NGN environment

where emphasis would be to provide new applications and contents. Appropriate environment needs to be created. While recognizing the need of such prohibitive clauses to check the type of content and to ensure that copyrights are not infringed, perhaps it will be appropriate if these responsibilities are given to content and application providers called Value Added Service Providers. Network providers' liability should be limited to identify and notify the source of content generation, if such content providers/aggregators (VASPs) are authorised and block the same as and when it is so desired. In case, network providers are carrying contents from unauthorized sources i.e. other than the licensed VASPs, then they shall be fully responsible and accountable for carrying such contents. *The NGN e-Co Committee, therefore, recommended that "there may be a need to regulate contents in the context of NGN. Responsibility of network provider relating to content carried on the network be limited to identify the source of the content generation as long as it is provided by content providers".*

5.9 In view of the above, to create an appropriate environment a licensing regime needs to evolved for provisioning of all value added services, including mobile value added services and other new/enhanced application services in 3G, BWA, Next Generation Network (NGN) and IP multimedia system (IMS) environment.

5.10 Content to be regulated by IT Act and/or Ministry of Information & Broadcasting: In the content regulations the objectives are (a) freedom of expression and pluralism, (b) cultural and linguistic diversity within the framework of Constitution and Indian laws, (c) protection of minors and public order and (d) consumer protection issues. In the present regulatory framework content regulation is not within the framework of TRAI Act. The provisions exist in the Information Technology Act, 2000 and Cable Television Networks (Regulation) Act, 1995. In our scenario, therefore, the content regulation issues are primarily dealt by Department of IT and Ministry of Information & Broadcasting.

CHAPTER-VI

ISSUES FOR CONSULTATION

- 6.1 Does the existing definition of Value Added Services given in licence agreement for provision of Unified Access Services (UAS), as mentioned in para 1.3, needs any modification or same can be incorporated for the Value Added Service provided through cellular mobile telephone networks, including 3G, IP Multimedia System (IMS) and Next Generation Networks (NGN)? Please give your suggestions with reasons thereof.
- 6.2 Whether there is a need to bring uniformity or clarity in the licensing conditions of mobile telecom operators/access service providers with regard to provision of value added services?
- 6.3 Apart from the licensing obligation of intimation before introduction of any new value added services and the measures to facilitate monitoring by security agencies of such new value added service, is there a need to put any other obligation on telecom operators?
- 6.4 Whether companies providing Mobile Value Added Services who mainly act as content providers or content aggregators and operate value added services technology platform called Value Added Service Providers (VASPs) need to be brought under the licensing regime or not?
- 6.5 If licensing system is to be resorted to for licensing of mobile value added service (VAS) under the Indian Telegraph Act, 1885, what should be the scope of licence and other terms and conditions for such licensing?

- 6.6 What should be the licensing obligation for protecting copy rights, including digital rights management, and infringement of other laws of the country on value added Service licensees?
- 6.7 What should be the regulatory framework for content regulation? Please give your suggestions with reasons thereof.
- 6.8 Who should allocate short codes for value added services, in order to have uniformity amongst all the telecom operators and also to enable branding of value added services? Please give your suggestions with reasons thereof.
- 6.9 Is there a need to regulate revenue sharing model or should it be left to commercial negotiations? Please give your suggestions with reasons thereof.
- 6.10 Any other suggestions with reasons thereof for orderly growth of mobile value added services including such services to be provided in 3G, next generation network (NGN) environment?

ANNEXURE - I

**DEPARTMENT OF TELECOMMUNICATIONS
LICENSING CELL (VALUE ADDED SERVICE GROUP)
SANCHAR BHAVAN, NEW DELHI-110001
No. 846-53/2000-VAS Dated July 16 , 2001**

**GUIDELINES FOR ISSUE OF LICENCE FOR
VOICE MAIL/AUDIOTEX/UNIFIED MESSAGING SERVICE**

Pursuant to the announcement of New Telecom Policy, 1999 (NTP-99), the Government took the decision to permit migration of existing licensees of Cellular/Basic and other Value Added Telecom Services to NTP-99 regime. Accordingly, Government have decided to migrate existing Voice Mail/Audiotex Licensees to NTP-99 regime and issue additional licences for a period of 15 years. Following guidelines have been finalized in this regard. These guidelines are only for the purpose of general information and do not constitute any legally binding commitment:

1. The licence for operation of Voice Mail/Audiotex/Unified Messaging Service in India shall be issued on non-exclusive basis.
2. Proposals seeking Voice Mail/Audiotex/Unified Messaging Service licence is to be submitted to Assistant Director General (VAS-II), DOT. The proposal is to be submitted along-with a demand draft of Rs. Twenty thousand as a processing fee (non-refundable), drawn on any scheduled bank and payable at New Delhi, in favour of Pay & Accounts Officer (Hqrs), Department of Telecom, New Delhi.
3. The service area for the licence shall be Short Distance Charging Area (SDCA) on the basis of local dialing. From outside the SDCA, the service will be allowed to be accessed on STD call basis. The service provider would install his equipment within the SDCA for which licence is obtained.
4. For Unified Messaging Service, transport of Voice Mail Messages to other locations and subsequent retrieval by the subscriber must be on a non-real time basis. To ensure this LICENSEE shall ensure that there is no dialing out for delivery of the message to the recipient.

5. For providing UMS under the licence, in addition to the licence for Voice Mail/Audiotex/UMS, the licensee must also have an ISP licence. The ISP licence as well as Voice Mail/Audiotex/ UMS licence should be for the areas proposed to be covered by UMS service.

6. There will be no Entry Fee as well as license fee. Performance Bank Guarantee of Rs. three lakhs for each licence shall be required. However, the LICENSEE shall be required to pay levy towards Universal Service Obligations (USO) from the date of licence as per the terms and conditions decided by the Government on the recommendations of TRAI.

7. The Applicant should be an Indian company, registered under the Indian Companies Act'1956. With regard to foreign investment, 100% foreign direct investment (FDI) shall be allowed, subject to fulfillment of other rules and conditions of the Government on FDI.

8. The period of license shall be 15 years, with the provision for extending the same for another 5 years. The existing licensees shall also be allowed the same licensing period.

9. The existing Voice Mail/Audiotex Service Licensees are allowed to migrate to the new licensing regime w. e. f. 1.4.2001.

10. New Telecom Policy-1999 (NTP-99) has defined Cellular Mobile Telephone Service Providers, Fixed Service Providers, Cable Service Providers as Access Providers; Voice Mail/Audiotex/Unified Messaging Service can be provided as a Value Added Service by these service providers over their network. Therefore, such Access Services Providers may provide Voice Mail/Audiotex/Unified Messaging Service to the subscribers falling within their service area on non-discriminatory basis; an intimation before providing any such Value Added Service may be sent to the Licensing Authority. No separate licence fee shall be charged for Voice Mail/Audiotex/Unified Messaging Service to be provided by the Access Service Operators. However, the revenue earned by these operators through this Service, if any, shall be counted towards the revenue for the purpose of paying licence fee under the License granted to them.

11. The Voice Mail/Audiotex/Unified Messaging Service Provider will be bound to provide the services to any person within the service area, without any discrimination.

12. Licensee shall make its own arrangements for all infrastructure involved in providing the service and shall be solely responsible for installation and operation of necessary equipment and systems, treatment of subscriber complaints, issue of bills to its subscribers, collection of revenue, attending to claims and damages arising out of their operations.

13. The Voice Mail/Audiotex/Unified Messaging Service licensee shall operate and maintain the licensed Network conforming to Quality of Service standards to be mutually agreed between the service providers subject to such other directions as the competent authority may give from time to time.

14. The licensee will not assign or transfer its rights in any manner whatsoever under the license to a third party or enter into any agreement for sub-license and/or partnership relating to any subject matter of the licence to any third party either in whole or in part i.e. no sub-licensing /partnership/third party interest shall be created.

15. The Licensee shall not normally employ bulk encryption equipment in its network. However, if any encryption equipment is used and connected to the Licensee's network, then it should have prior evaluation and written approval of the Government.

16. All foreign personnel likely to be deployed by the LICENSEE for installation, operation and maintenance of the LICENSEE's network shall be security cleared by the Government of India prior to their deployment. The security clearance will be obtained from the Ministry of Home Affairs, Government of India. The LICENSEE shall ensure protection of privacy of communication and ensure that unauthorized interception of messages does not take place.

17. LICENSOR shall have the right to revoke/terminate/suspend the LICENCE either in part or whole of the Service area in the interest of national security or in case of emergency or war or low intensity conflict

or any other eventuality in public interest as declared by the Government of India. Provided any specific orders or direction from the Licensor/TRAI issued under such conditions shall be applicable to the LICENSEE and shall be strictly complied with.

18. LICENSOR reserves the right to modify these conditions or incorporate new conditions considered necessary in the interest of national security, public interest and for proper conduct of telegraphs.

19. LICENSEE will ensure that the Telecommunication installation carried out by it should not become a safety hazard and is not in contravention of any statute, rule or regulation and public policy.

20. The LICENSEE shall take measures to prevent any objectionable, obscene, un-authorized or any other content or harmful and unlawful messages or communications infringing upon copyrights, intellectual property etc., in any form, from being carried on his network, consistent with the legal frame-work of the country. Once specific instances of such infringement are reported to the LICENSEE by the Authority, the LICENSEE shall ensure without fail that the carriage of such material on his network is prevented immediately.

21. The Licensee is obliged to provide, without any delay the tracing facility to trace origin or content of nuisance, obnoxious or malicious calls, messages or communications transported through his equipment and network. Any damages arising out of default on the part of Licensee in this regard shall be sole liability of the Licensee.

22. In case any confidential information is divulged to the LICENSEE for proper implementation of the Agreement, it shall be binding on the Licensee and its employees and servants to maintain its secrecy and confidentiality.

23. DOT reserves its right not to grant a licence without assigning any reason.

24. All matters relating to the application or licence, if granted, will be subject to jurisdiction of Telecom Dispute Settlement and Appellate Tribunal (TDSAT).

25. Provision of only Audiotex Service or services through Interactive Voice Response System (IVRS):- The Governmental or Private Service Agencies, offering Public utility services, such as Railways, Broadcasting, News & Media, Cooking Gas Agency or even Restaurants etc., are permitted to provide services such as Audiotex (providing information on automatic basis like News, Weather Forecast, Commentary, Railway/Air Timings etc.), Tele-marketing (receiving purchase orders automatically over phone or host-computer), Tele-complaint (Service Agency providing automatic booking of service complaints through IVRS system etc.) and Tele-Booking (agencies like Cooking Gas, Restaurants for booking of orders using IVRS or host-computer etc.), freely without need for obtaining any license or taking any permission.

**Government of India
Ministry of Communications and IT
Department of Telecommunications
(VAS CELL)**

Sanchar Bhawan, 20, Ashoka Road, New Delhi- 110 001.

No. 842-336/2004-VAS/19

Dated 17.9.2004

To

All Cellular Mobile Telephone Service Providers.

Subject: Provision of appropriate monitoring facilities for all types of Value Added Services.

This has a reference to clause 40.1 of 4th CMTS licence and para 1.1 of amendment to Licence Agreement vide No. 842-47/2002-VAS dated 12th August 2002 which inter-alia provides that “the licensee will provide the necessary facilities for continuous monitoring of system as required by licensor or its various representative(s)”. Further, clause 44.9 of 4th CMTS license and para 5.9 of amendment to Licence Agreement vide No. 842-47/2002-VAS dated 12th August, 2002 provides that “the licensee should make arrangements for monitoring by Government Security Agencies”.

2. However, it has been brought to the notice of licensor that Telecom Service Providers expand their operations by introducing different value added services without implementing systems to monitor these services. This is a gross violation of the terms and conditions of the Licence Agreement as mentioned above.

3. In view of the above, all the CMTS Licensees (including those migrated to UASL) are required to furnish the details of Value Added Services being provided as on date and indicate whether suitable monitoring facility for these services is available? In case, some Value Added Services are being provided without provision of suitable monitoring facility, the Service Providers are requested to give the details of such services and provide explanation as to why the monitoring facilities were not made available prior to commercial launch of such services. Further, they shall indicate the time frame by which the monitoring facility would be made available in such cases.

4. Reply covering the above points may be furnished to this office latest by **29.09.2004**.

Sd/-

((A.K.Dhar)
ADG (VAS-I)

Copy to information and necessary action to:

1. DDG (BS)
2. Cellular Operators Association of India.

**Government of India
Ministry of Communications and IT
Department of Telecom
(VAS CELL)**

12th Floor, Sanchar Bhawan, 20, Ashoka Road, New Delhi- 110001.

No. 842-336/2004-VAS/22

Dated 21.10.2004

To

All Cellular Mobile Telephone Service Providers (including those Migrated to UASL)

Subject: Provision of appropriate monitoring facilities for all types of Value Added Services and additional facilities.

This has a reference to clause 40.1 of 4th CMTS licence and para 1.1. of amendment to Licence Agreement Vide No. 842-47/2002-VAS dated 12th August 2002 which inter alia provides that “the licensee will provide the necessary facilities for continuous monitoring of system as required by licensor or its various representative(s)”. Further, clause 44.9 of 4th CMTS license and para 5.9 of amendment to License Agreement vide No. 842-47/2002-VAS dated 12th August, 2002 provides that “the licensee should make arrangement for monitoring by Government Security Agencies”.

2. However, it has been brought to the notice of Licensor that Telecom Service Providers expand their operations by introducing different valued added services and additional facilities without implementing systems to monitor these services/ facilities.

3. In view of the above, all the Cellular Mobile Service Providers are directed to intimate the details of various value added services and additional facilities available in their network along with the details of provision made for lawful interception and monitoring of these services/facilities within 10 days from the date of receipt of this letter and if monitoring facility is not available, plans to provide these monitoring facilities with specific time frame. In future licensee should intimate the licensor about provision of any new service/facility along with details of provision made for lawful interception/monitoring of these facilities at least 15 days in advance before the introduction of these services/ facilities.

4. The above instructions may be followed scrupulously and violation of the same would be treated as violation of the terms and conditions of the License Agreement for which action would be taken in terms of the Licence Agreement.

5. Please acknowledge receipt of this letter.

Sd/-
(A.K. Dhar)
ADG (VAS-I)

Copy to: Cellular Operator Associations of India.

ABBREVIATIONS

ARPU	Average Revenue Per User
ATM	Automated Teller Machine
BWA	Broadband Wireless Access
CII	Confederation of Indian Industry
CMS	Call Management Service
CMTS	Cellular Mobile Telephone Service
CPP	Calling Party Pay
CRBT	Colour Ring Back Tone / Caller Ring Back Tone
CUG	Closed User Group
DSL	Digital Subscriber Line
FMC	Fixed Mobile Convergence
GDP	Gross Domestic Product
GPRS	General Packet Radio Service
IMS	IP Multimedia System
INR	Indian Rupee
IP	Internet Protocol
IPTV	Internet Protocol TV
ISP	Internet Service Provider
IT	Information Technology
IVRS	Interactive Voice Response System
M2M	Machine to Machine
M-Commerce	Mobile Commerce
MIS	Management Information System
MMS	Multimedia Messaging Service
MVNO	Mobile Virtual Network Operator
NGN	Next Generation Network
P2P	Person to Person
RBI	Reserve Bank of India
SIP	Session Initiation Protocol
SMPP	Short Message Peer to Peer Protocol
SMS	Short Message Service
SMSC	Short Message Service Centre
TRAI	Telecom Regulatory Authority of India
UASL	Unified Access Service Licence
USSD	Unstructured Supplementary Services Data
VAS	Value Added Services
VASP	Value Added Service Provider
WAP	Wireless Access Protocol
3D	Three Dimensional
3G	3 rd Generation (Mobile)