



**TELECOM REGULATORY AUTHORITY OF INDIA**

**RECOMMENDATIONS**

**ON**

**ISSUES RELATING TO**

**CONVERGENCE AND COMPETITION**

**IN**

**BROADCASTING AND TELECOMMUNICATIONS**

**NEW DELHI**

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**TRAI HOUSE  
A-2/14, SAFDARJUNG ENCLAVE  
NEW DELHI - 110 029**

## Table of Contents

<b>Sections</b>		<b>Page No.</b>
Section 1	<b>Outline of Recommendations</b>	3
Section 2	<b>Introduction</b>	4-10
Section 3	<b>Issues raised in the Consultation Paper</b>	11-15
Section 4	<b>International Experience</b>	16
Section 5	<b>Views of stakeholders</b>	17-21
Section 6	<b>Analysis and Recommendations</b>	22-35
Section 7	<b>Gist of the Recommendations</b>	36-38
Annexure- I	<b>International Trends in Regulation</b>	39-42
Annexure – II	<b>Views of stakeholders</b>	43-66

## **SECTION – 1 : OUTLINE OF RECOMMENDATIONS**

- 1.1 TRAI had issued a Consultation Paper on January 2, 2006 on issues relating to Convergence and Competition in Broadcasting and Telecommunication. Open House Discussions with stakeholders were also held at Bangalore and New Delhi on 21<sup>st</sup> and 23<sup>rd</sup> February, 2006 respectively. Based on the feedback received, TRAI has finalized its recommendations on these issues and these are set out in the following Sections.
- 1.2 **Section - 2** summarizes the background to the need for this Consultation Paper. It also brings out the logic of the preparation of the Convergence Bill – 2001, the rationale for the move towards unified licensing and the problems that remain today which required to be addressed through these recommendations.
- 1.3 **Section - 3** briefly brings out the issues raised in this Consultation Paper.
- 1.4 **Section - 4** summarizes the international scenario which has already been brought out in detail in the Consultation Paper.
- 1.5 **Section - 5** summarizes the comments received from the stakeholders.
- 1.6 **Section - 6** discusses the issues and provides the recommendations of the Authority on these issues.
- 1.7 **Section - 7** lists the gist of the recommendations.

## **SECTION - 2: INTRODUCTION**

- 2.1 Convergence is a very general term and it means different things to different people. Convergence covers provision of different services through the same technology as well as provision of the same service through different technologies and platforms. Thus convergence can either mean converging technologies or converging services. There is convergence of technologies in telecom and broadcasting on account of digitalization and increasing use of IP technology. Technological convergence is inevitable due to onward march of technology and if we do not recognize it there would be waste of resources of networks – these may be able to converge as per the present law but this process will be inefficient since the law is not designed for convergence
- 2.2 At the same time there is market related convergence in Information, Communication and Entertainment markets. Thus operators in the field of pure information providers like newspapers or internet service providers are also getting into related fields of entertainment (through radio or television) and communication ( through fixed or mobile telephones). Triple play is giving way to quad play as operators give fixed line phone services, data services, video services and mobile telephones – the last service is a case of market convergence with very little technological convergence. As a result it is now possible for telecommunications networks to offer broadcasting and data services, broadcasting networks to offer telecommunication and data services and data networks to offer both telecommunication and broadcasting services.

## **Growth of Convergence**

2.3 The major technological changes that have facilitated the convergence processes are digitalization and computerization. Digitalization enables new possibilities for development and creation of services within and beyond the framework of traditional communication sectors. The developments in hardware and software have empowered digital signal processing to such an extent that with use of IP technology in information transmission, the networks and customer premises equipment have got empowered to introduce hitherto not known applications and services. Computerization has made available data processing capabilities, which can be applied for storage/ manipulation/ transmission and distribution of Television content/ Voice Communications (Phone calls). This is leading to death of distance and fundamental changes in the business plans of existing telecom and video services providers.

### New Telecom Policy 1999 (NTP'99)

2.4 The NTP'99 recognised that convergence of both markets and technologies is a reality that is forcing realignment of the industry. At one level, telephone and broadcasting industries are entering each other's markets, while at another level, technology is blurring the difference between different conduit systems such as wireline and wireless. It also recognised that the old frame-work specified in NTP'94 was inadequate and/or no longer suited to the developments that had occurred since then. NTP, 1999 had also specified Cable Service providers as one of the categories of Access providers for telecom services.

## **The Communications Convergence Bill, 2001**

- 2.5 The first move to harness the benefits of the converged technologies to meet the growing social and commercial needs in India was made when the Communication Convergence Bill, 2001 was introduced in Lok Sabha on 31st August 2001. The basic objective of the Bill was to provide a comprehensive framework for regulation of all telecommunication and broadcasting services. The idea was to have one regulatory body that would cover all aspects of telecommunication and broadcasting, including Spectrum management and Licensing – functions that hitherto were being done by the Government. The Bill also proposed to combine and bring under the purview of the proposed Communications Commission of India the regulation of content which was (and continues) to be done directly by government without any explicit regulatory and legislative framework.
- 2.6 However, the Bill could not get through the Parliament and in the absence of a statutory converged regulatory framework the TRAI recommended introduction of Unified Licensing Regime in India to keep pace with technological and market developments.
- 2.7 As per proviso to Clause 2(1) (k) of TRAI Act, 1997, Central Government can notify other service to be telecommunication service including broadcasting services. Accordingly, Department of Telecom vide its Notification S.O. 44(E) dated 9th January, 2004 notified Broadcasting Services and Cable Services to be telecommunication service. The Central Government also entrusted additional functions to Telecom regulatory Authority of India vide its Notification S.O. 45(E) dated 9th January, 2004 for making recommendation regarding provision of addressable systems, regulating maximum time for advertisements, specify norms for periodicity of revision of rates of pay channels in respect

of broadcasting services and cable services. By virtue of this notification, TRAI was appointed as a converged regulator for carriage of telecom and broadcasting services. However, the legal framework for converged carriage regulation is not fully in place.

## **Unified Licensing**

- 2.8 The basic need for moving towards a Unified Licensing Regime was on account of the development of technology, reduction in wireless technology cost, falling cost of wireless services, blurring of differences between wireless and wire line services, increased competition among these services, converging tariff for wireless services and the international trend for non service specific licenses through a process of authorization. In the first step TRAI recommended in October 2003 a scheme for Unified Access Licensing since the enhancement of Teledensity required immediate attention and could be delivered by concentrating on the unification of access services. TRAI in its Unified Licensing recommendations dated 27th October 2003 had envisaged a two-stage process to introduce a Unified Licensing Regime in the country. The first phase that entails a Unified Access Service License (UASL) at circle level has already been implemented. When this was implemented it was immediately recognized as a path breaking effort.
- 2.9 A leading Research Group, the Shosteck Group, has in its report entitled “The Indian Telecommunications Experience: its relevance for the world” (September 2004) has stated that “... In the wake of unified licensing, competition among operators expanded to encompass previously separate services – landline, fixed wireless (WLL), limited mobility (WLL-M), broadband data, and full mobility.

... Operators are focusing on converged services and converged networks to maximize cost-efficiency.” It has concluded that “India’s ‘Unified Licensing for Basic and Cellular Mobile Services’ has enabled any operator to provide any access service using any technology. With this, India has destroyed the artificial barriers that previously defined narrow classes of service, specified form of access, and de facto required separate networks”.

2.10 TRAI gave its recommendations for implementation of the second phase of Unified Licensing Regime on 13<sup>th</sup> January 2005. Before this TRAI had also been entrusted with additional responsibilities of regulating the broadcasting and cable services as indicated in paragraph 2.7 above. Thus while the first phase concentrated only on the Telecom Service Providers, the second phase recommendations also covered Broadcasting Services.

2.11 Four categories of licenses, namely Unified License, Class License, Licensing through Authorization and Standalone Broadcasting & Cable TV Licenses were recommended. It was recommended that this licensing framework except stand-alone Broadcasting & Cable TV Services shall be hierarchical in nature with Unified License being at the highest hierarchical level. Such a licensing regime would have enabled a licensee to provide any or all telecom services including broadcasting services by acquiring a single license.

2.12 After issue of Unified Licensing Recommendations on 13<sup>th</sup> January 2005, Government has already taken steps to lower entry fee and annual license fee for NLD and ILD services. Access Service providers have been permitted to provide Internet Telephony, Internet Services and Broadband Services. The access service providers can provide Broadband services including triple play i.e. voice, video and data. NLD Service providers are permitted to access the subscribers directly only for provision of Leased



Circuits/CUGs. Similarly, ILD service providers can access the subscribers directly only for provision of international leased circuits/CUGs. This enables easier implementation of the Unified Licensing Regime.

## **Consultation Paper**

2.13 While the Unified Licensing Scheme would address some of the problems of converging technologies and services the scheme does not cover other issues relating to multiple legislation as well as other regulatory issues like spectrum, content and a unified framework for regulation of tariffs, quality of service and interconnection specially in the cable television domain. Thus, some powers regarding cable operators are available with the authorised officers under the Cable Act and some powers are available with TRAI without any clear demarcation of the relative responsibilities and relationships of the two regulatory frameworks. At the same time, there have been increased levels of technology advancements in relation to VOIP – originally the quality of voice was not very good but today there is a vast improvement. On the other side, there has been a growth of technologies that permit video to be provided over the Internet. The Internet has itself grown and technologies exist for providing this service over both Telecom and Cable Networks. These have provided the basis for greater competition between Cable Operators and Telephony Service Providers. Thus, the original drivers of the Communication Convergence Bill 2001 appear to be even more relevant today. This apart, there was also need to review the Unified Licensing recommendations (in the light of the subsequent Government decision regarding NLD / ILD License Fees and permission to use the VOIP) as well as issues like lack of convergence of Foreign

Direct Investment (FDI) rules, Customs and Excise Duties and other issues that would impact on a level playing field for competition amongst various Service Providers. In line with its consultative approach, TRAI issued a Consultation Paper on January 2, 2006 for giving its recommendations to the Government on issues relating to Convergence and Competition in Broadcasting and Telecommunications. The consultation paper covered Impact of Convergence on markets, consumers and regulation; International Regulatory Developments; and Regulatory Challenges for India. The Report of the Committee set up by TRAI on issues relating to Broadband and Telephony over Cable TV Networks was also part of the paper. Comments were received on the consultation paper from a number of stakeholders.

2.14 The objective of the Consultation Paper was to examine the various issues relating to Convergence and Competition in Broadcasting and Telecommunications and to obtain structured response from the stakeholders on the same.

### **Open House Discussions**

2.15 TRAI also held Open House Discussions with various stakeholders on 21<sup>st</sup> and 23<sup>rd</sup> February in Bangalore and Delhi respectively.

## **SECTION – 3 : ISSUES RAISED IN THE CONSULTATION PAPER**

### **Comprehensive Legal Framework**

3.1 Large scale changes in the telecom and cable industries are taking place due to convergence and without a converged regulatory framework any attempts to regulate the communications/ broadcasting sectors in coming times may result in Bottlenecks, Imperfect Competition and Disputes/ opportunities for arbitrage. Thus if one service can be provided by two different routes and the license fees of one is much lower, then the tendency would be to use this alternative. Regulatory regime has to be such that the consumers and service providers should benefit from the technological advances. The regime should not create any hindrance in deployment of any technology for offering any type of telecom services including broadcasting services. At the same time due to technological developments no service providers should be able to disturb the level playing field by taking advantage of regulatory policies. To achieve these objectives, it is necessary that licensing should be service neutral and the converged regulatory regime for telecom and broadcasting services should be in place. The organisational restructuring in view of technological developments is a must, otherwise, it may be difficult to exploit the full benefits of these technological developments. In the past disputes over Wireless over local loop (WLL), Push to Talk (PTT) services have been some such examples. The prime issue for consideration, therefore, is whether there is a need for having a comprehensive legal framework to deal with various issues arising out of convergence of technologies and services. Other related issues are whether the legal framework must be developed around the Communication Convergence Bill, 2001 and whether changes may be required in the Bill especially taking into account TRAI's unified licensing recommendations dated 13th

January 2005. Another issue pertains to separate regulation of carriage and content. Keeping in view the various convergence related issues discussed in the Consultation paper and as a measure to facilitate competition and promote efficiency in operation of telecom services so as to facilitate growth in such services as per Section 11(1) (a) (iv) of TRAI Act the following specific issues were posed for consultation:-

- a) Whether there is a need for having a comprehensive legal framework to deal with various issues arising out of convergence of technologies and services? If so
- b) Whether, the legal framework must be developed around the Communication Convergence Bill, 2001? If so.
- c) Whether changes may be required in the Bill especially taking into account TRAI's unified licensing recommendations dated 13<sup>th</sup> January, 2005.
- d) Whether regulation of carriage and content should be separated, as the skill sets required for the two are grossly different?

### **Unified Licensing**

3.2 The Authority has so far tried to meet the challenges of convergence (in the absence of a converged legal framework) by making recommendations for a unified licensing regime. The Authority has been making efforts to deal with new issues arising out of convergence. To ensure smooth transition to any new comprehensive legal framework, there would be a need to ensure the compatibility of comprehensive legal framework and the Unified Licensing Regime as recommended by the TRAI and as adopted by the Government. The specific issue posed for consultation was as follows :

To ensure the compatibility of comprehensive legal frame work and the Unified Licensing Regime as recommended by the TRAI vide its recommendations dated 13<sup>th</sup> January 2005 and also after taking into account the subsequent developments should there be changes required in Unified Licensing ?

### **Spectrum related issues**

3.3 At present spectrum is being allocated in a well-defined specific manner by which the spectrum is allocated for a very specific use or application. Thus spectrum is separately allocated for fixed and mobile telephony. It is also separately allocated for each of the broadcasting application. In case the same spectrum is to be used with a new technology for the same service or a different service, the operator would have to go back to the Government and take specific approvals. The Unified Licensing System that has been proposed by TRAI does get over some of these problems. However, if spectrum is still allocated for specific services, then the full strength of a Unified License cannot be utilized. Moreover, even within the unified licensing system there is space for stand-alone broadcasting licenses. This gives rise to the issue as to whether there should be flexibility in spectrum allocation to take full advantage of new services and new technologies for existing services that may evolve with time. Accordingly comments had been sought on the following issue :

Whether there should be flexibility in spectrum allocation to take full advantage of new services and new technologies for existing services that may evolve with time?

## **Issues on which suggestions have been made by the Committee**

3.4 The Authority has been making efforts to deal with new issues arising out of convergence. Towards this end a committee was also constituted by TRAI to look into the issues relating to Broadband and Telephony over Cable TV networks. In its report the committee made suggestions on various issues. The report of the committee was made a part of the consultation paper and the issues on which the committee had made recommendations were also posed for comments of the stakeholders. These issues were:-

### Rationalisation of Differential Custom Duty Regime

3.5 Whether changes should be made in customs duties as proposed by the Committee to promote effective competition amongst telecom and cable operators?

### Restriction on use of Protocols

3.6 Whether call termination should be permitted on Customer Premise Equipments (CPEs) using any protocol recommended by ITU/IETF?

### Institutional funding

3.7 Whether the Government should intercede with the banks and financial institutions to emphasize the importance of these projects in building up the country's communication infrastructure and to provide funds to the cable industry wherever found commercially feasible?

### FDI Limits

3.8 Whether there is a need to undertake a complete review of the FDI policy for the various sub sectors in telecommunications and

broadcasting so that there is consistency in policy and a level playing field between competing technologies?

Right of Way

3.9 Right of Way to Cable operators providing digital services has already been recommended in TRAI recommendations dated 14<sup>th</sup> September 2005 on Digitalisation of Cable Television. Pending these amendments whether further action should be taken as proposed by the Committee?

## **SECTION 4 – INTERNATIONAL EXPERIENCE**

4.1 Country wise details of recent trends in convergence of regulatory frameworks had been given in the consultation paper. For convenience this has been given at Annexure I.

4.2 The salient trends are given below:

1. There is a clear international trend in the movement of regulation towards adoption of a converged regulatory framework for carriage
2. Earlier the trend was for the converged regulator to also have jurisdiction over content. However in the recent past there has been some deviation from this trend. Notably the preamble to the Framework Directive of the European Union recognizes the need to separate regulation of carriage and content.
3. In parallel there has been a trend towards a licensing regime that recognizes convergence. Different approaches have been taken to tackle this trend but the broad thrust is to have a greater scope of individual licenses to provide for multiple applications, services and technologies.



## **SECTION 5 : VIEWS OF STAKEHOLDERS**

5.1 The views of the stakeholders have been summarized and are placed at Annexure II. A brief discussion of the views is set out below.

### **Comprehensive legal framework**

5.2 All the stakeholders except one have agreed on the need to have a comprehensive legal framework for Broadcasting and Communication. However, M/s Reliance Infocomm have said that Convergence of Broadcasting and Telecom Services does not lead to an automatic amalgamation of their licensing framework. They have recommended an alternative legal framework which allows the development of Telecom and Broadcasting Service Sector on standalone basis to a level of maturity. M/s ASC Enterprises have also recommended different set of regulations for Telecom and Broadcasting. Most of the stakeholders have recommended development of comprehensive legal framework on the lines of the Communication Convergence Bill 2001 after taking into account the developments since 2001. But AUSPI and its Members have commented that the Communication Convergence Bill 2001 is redundant now and it will be more relevant to deliberate upon the changes required in Unified Licensing Regime. MTNL has also said that the legal framework need not necessarily be developed around the Communication Convergence Bill 2001. Most of the stakeholders have recommended a

common regulator for Carriage and Content. Self regulation of content has been recommended by MPA and Star India. Separation of Content and Carriage regulation has been recommended by Broadcasters and MSOs (Star, Zee and Siti Cable). Out of Telecom Operators, M/s Reliance Infocomm has recommended separation of Carriage and Content regulation.

### **Unified Licensing**

5.3 The Broadcasters / MSOs / DTH Operators (Star, Zee, ASC, Siti Cable) have stated that the Unified Licensing Recommendation are too Telecom Centric and Broadcasting was practically kept outside their ambit. Star India has stated that the regulatory framework for competitive telecom services, broadband and Internet services and Broadcast TV should be similar in key aspects such as licensing, approval process, areas of operation, annual license fees, revenue shares, pricing of services, FDI limits etc. The Telecom Operators stressed the need to ensure that existing operators are not left in a worse off position due to the new legal framework and to maintain a level playing field among existing and new operators. They have also opposed the proposal to introduce Niche operators. M/s Reliance Infocomm have requested for restoration of level playing field condition for the existing long distance operators.

## **Spectrum related Issues**

5.4 Almost all stakeholders have recommended flexibility in spectrum allocation. However, COAI have recommended allocation of spectrum for specific usage and technology. Zee Network have also recommended allocation of spectrum as per ITU Regulations. AUSPI have recommended that the spectrum requirement of the existing service providers should be met first and the new legal framework should link the principle of technology and service neutrality to the current and future National Frequency Allocation Plan. Mr. Rahul Goel has recommended that spectrum trading should be allowed. M/s IDFC have commented that long term usage right to the spectrum should be auctioned.

## **Issues covered in the Report of the Committee**

### Rationalisation of differential Customs Duty Regime

5.5 All the stakeholders have recommended rationalization of Customs Duty to ensure a level playing field. However, AUSPI and its Members have demanded that Customs Duty and other relaxations should be uniform across industry and equally applicable to operators with the same set of conditions.

### Restrictions on use of Protocol

5.6 Most stakeholders have recommended freedom in the usage of call termination protocol recommended by ITU / IETF. However, AUSPI and

its Members have stressed the need to adjust all aspects of level playing field and norms of entry fee etc. in order to ensure no worse off situation for existing operators. They have expressed an apprehension that this may become an excuse for non access providers like Cable TV operators to enter the voice market without proper licensing.

#### Institutional funding

5.7 The Telecom Operators have submitted that there is no need for the Government to intercede and the matter should be left to the market holders. The Broadcasters / MSOs / DTH Operators (Star, ASC, Siti Cable) have stated that a proper regulatory framework, consistent and long term policy for Cable TV sector will make the financial institutions and Banks to come forward for the funding.

#### FDI Limits

5.8 Transnational companies/ their subsidiaries/ NRIs (MPA, NDS, Reach, Star, Sky Cable) have recommended increase/ parity with Telecom/ removal of FDI limits. Indian companies (Zee, ASC, Siti Cable, AUSPI, Tata Teleservices) have recommended continuation of the present FDI limits.

#### Right of Way

5.9 The recommendations of the Committee have been endorsed by most stakeholders. AUSPI and its Members have commented that the

issues facing the existing ROW owners should be addressed first before adding a further population of right holders in this category.

## **SECTION – 6 : ANALYSIS AND RECOMMENDATIONS**

### **Comprehensive Legal Framework**

- 6.1 There is an urgent need for having a comprehensive legal framework to deal with various issues arising out of convergence of technologies and services. This is so because convergence is happening in a big way and if law and regulation do not keep pace with the strides in technology, the growth of telecom and broadcasting industries would suffer. A converged regulatory regime will eliminate the possibility of litigation on the account that service providers are offering services which are not covered in their licensing regime. Any regulatory hindrance in deployment of such technologies would result in not taking full advantage of technological developments which is not desirable. Almost all the stakeholders have preferred a converged telecommunication law. This is also the trend world over. The need for a converged regulator was recognized in 2001 – this need is even more urgent today.
- 6.2 The Communication Convergence Bill, 2001 provided for vesting of all powers of licensing, spectrum management, tariff regulation, content regulation, promoting competition as well as laying down technical standards with the Communication Commission of India. The Bill also proposed to set up a Communications Appellate Tribunal to hear appeals against any decision or order of the Commission.
- 6.3 The TRAI (Amendment) Act, 2000 added a proviso to Clause 2(1) (k) of TRAI Act, 1997. This proviso empowered the Central Government to notify other service to be telecommunication service

- including broadcasting services. Accordingly, Department of Telecom vide its Notification S.O. 44(E) dated 9th January, 2004 notified Broadcasting Services and Cable Services to be telecommunication service.
- 6.4 TRAI gave its recommendations for implementation of second phase of Unified Licensing Regime on 13th January 2005 wherein four categories of licenses, namely Unified License, Class License, Licensing through Authorization and Standalone Broadcasting & Cable TV Licenses were recommended. Such a licensing regime would have enabled a licensee to provide any or all telecom services including broadcasting services by acquiring a single license.
- 6.5 The majority view is that there should be a comprehensive legal framework. Although the question of what changes would be required in the framework proposed by the Convergence Communications Bill of 2001 had been posed for consultation, no specific view has emerged. One option is that to ensure smooth transition to any new comprehensive legal framework, there would be a need to ensure that the changes in the existing scheme of things are restricted to the bare minimum and change is made only on essential issues. Accordingly, while the converged regulator should have powers of tariff regulation, interconnection as well as laying down quality of service standards for broadcasting and telecommunication sectors, the power of issuing unified (converged) licenses should remain with the Government. Similarly spectrum management should continue with the Government. The alternative view could be that since the Convergence Bill of 2001 had been examined in detail by the Parliamentary Standing Committee it would be a useful starting point. The distribution of powers between the

Regulatory institutions and the Government could be taken as indicated by the Committee.

- 6.6 On considering both these options it appears best to start with a system in which there is no change in the distribution of powers. These could be considered later after the new Regulatory system has gathered some experience. Thus it is recommended that the new converged regulator should have powers similar to that of TRAI, except that these powers would not be limited or complicated by other overlapping legislation like the Telegraph Act or the Cable Act. The role of the proposed Communications Appellate Tribunal to hear appeals against any decision or order of the Commission would also be more or less similar/identical to that of TDSAT in the present scenario .

### **Content Regulation**

- 6.7 Regulation of carriage and content should be separated, as the skill sets required for the two are significantly different. Regulation of carriage is more or less concerned with technical and economical aspects/ repercussions of policies. Content regulation has to take into account the impact of content on sensibilities, morals and value system of the society. Artistic and creative persons from the fields of fine arts, drama, films etc. may be more suited for content regulation than technocrats or economists.
- 6.8 This view is also supported by international experience. For example Directive 2002/21/EC of 7 March 2002 of The European Parliament and of The Council recognizes the need to separate the regulation of transmission from the regulation of content. Even in UK there is a Content Board within the Ofcom. A committee of the main Board, the Content Board is Ofcom's primary forum for the



regulation of television and radio quality and standards. In Hong Kong regulation of carriage and content is done by separate bodies.

**6.9 Therefore the following is recommended-**

**6.9.1 A converged regulatory regime is essential to deal with various issues arising out of convergence of technologies and services. However, the division of powers/ roles/ functions between the regulator, the Government and the Appellate Tribunal should be broadly along the existing lines. The Communications Convergence Bill of 2001 would be the logical starting point but several changes would be required in the draft to reflect the existing division of powers as well to take into account the experience of regulation in the last five years.**

**6.9.2 The converged regulator should have powers of tariff regulation, interconnection as well as laying down quality of service standards for broadcasting and telecommunication sectors.**

**6.9.3 The power of issuing unified (converged) licenses should remain with the Government.**

**6.9.4 Spectrum management should continue with the Government.**

**6.9.5 There is no need to have a Communications Appellate Tribunal in place of TDSAT.**

**6.9.6 Regulation of carriage and content should be separated.**

## **Unified Licensing**

- 6.10 The prevalent international practices indicate a move towards simplified Authorization/Converged licenses. Such licensing regimes enable provision of various services, both existing and new, by the service providers without the need for separate additional licenses, with the same media being used for different services, which build economies of scale and scope. As a result, better services are made available to the consumers at cheaper price.
- 6.11 There is a broad convergence of opinion that the best way to ensure that regulation does not become a hindrance is to make regulation technology neutral. The other theme is for regulation to converge across applications, services, technologies, transmission media, and alternative consumer appliances i.e. make licensing service neutral. With technology converging, there is in fact no option but for regulation to converge.
- 6.12 It is recommended that since the legislative arrangements proposed earlier in these recommendations may take considerable time, the Unified Licensing Regime as recommended by the TRAI vide its recommendations dated 13th January 2005 must be adopted at the earliest albeit with some modifications.
- 6.13 The following are the major changes that have occurred after the Authority had sent its Recommendations
1. NLD/ ILD license entry fee has been slashed from Rs.100 Crores and Rs. 25 Crores respectively to Rs. 2.5 Crores for each.

2. Revenue Share for these licenses has come down from 15 % to 6 % of AGR with effect from 1.1.2006.
3. Access Service providers have been permitted to provide Internet Telephony, Internet Services and Broadband Services.
4. The access service providers can provide Broadband services including triple play i.e. voice, video and data.
5. NLD Service providers are permitted to access the subscribers directly only for provision of Leased Circuits/CUGs.
6. ILD service providers can access the subscribers directly only for provision of international leased circuits/CUGs

These are all trends in the direction of allowing greater convergence and also competition. In the same vein the suggestion that Cable Operators should be allowed licenses for telephony over areas smaller than a Circle deserves consideration. This is also in line with the concept of niche operators that had been recognized in the Unified Licensing Regime. In view of the above the following changes are recommended in the scheme of unified licensing already recommended to the Government

#### Registration charge for Unified License

- 6.14 TRAI in its unified licensing recommendations dated 13<sup>th</sup> January 2005 had recommended that an entry fee of Rs.107 crore should be paid for obtaining a Unified License. In addition, the Unified Licensee will have to pay the entry fee for providing access services depending upon the number of circles in which the licensee provides the access services. The spectrum charges for providing wireless services will be extra. The entry fee of Rs.107 crore was calculated after taking into account the entry fee of Rs.100 crore for NLD operation and Rs.25 crore for ILD operators. Entry fee for Unified license was calculated with a pro-rata reduction of total of

Rs.125 crore on the basis of period lapsed between issue of NLD and ILD operators and the time of issue of Unified License.

6.15 Recently, Department of Telecom reduced the entry fee for NLD and ILD services to Rs.2.5 crore for each. Based on this, the Authority considers that entry fee for Unified License can also be reduced from Rs.107 crore to Rs.5 crore and it can be further decreased to Rs.30 lakhs as given below. The entry fee beyond the sixth year has not been brought down as it is considered necessary to maintain some minimum threshold level to ensure that only serious players enter the market and there is no proliferation of such operators that could cause problems of management of the network.

**Table 1.**

<b>Reduction in Registration Charges (Rs.in Cr.)</b>						
	1st year	2nd Year	3rd Year	4th Year	5th Year	6th Year
TRAI's Unified licensing reco. dated Jan.13, 2005	107	102	92	72	32	0.3
Reduced Registration Charge after reduction in NLD and ILD entry fee	5	4.76	4.3	3.36	1.5	0.3

The other components of entry fee as mentioned above will remain the same.

- 6.16 TRAI's Committee on Broadband and Telephony through Cable TV Network had also recommended that a separate class be created in the unified licensing regime to cover small operators wanting to provide basic fixed telephony over a small area such as LDCA at a reasonable level of entry fee, similar to the niche operator concept of Rural Service Provider (RSP).
- 6.17 TRAI recommendations on 'Unified Licensing Regime' dated Jan. 13, 2005 mentioned that depending upon the choice of service provider the service area could be at national level or circle level (same as in UAS licensing regime). For niche operators it would be at the relevant SDCA level.
- 6.18 If the choice of the service area is left entirely to the operator then it may create problems of interconnection, numbering, regulation, monitoring etc. It may result in a situation that many cable TV operators in a small locality may start offering voice telephony services. Since telecom industry is a network industry, if such services are being offered by many operators in small localities then it would result in lot of interconnection related problems which may cause chaos in the sector. Earlier one of the objectives of keeping a high entry fee along with minimum roll-out requirements for access services was to deter non-serious players. Therefore, in the ULR recommendations it was recommended that the service area shall be at national level or circle level (same as in UAS licensing regime). However, niche operators, offering only fixed services were permitted at SDCA level in only those SDCAs where rural tele-density is below 1%.
- 6.19** The cable TV operators are providing the services in specific localities of big cities or in an entire city or sometimes in group of cities. The cable TV operators may not be interested in rolling out their telecom services in Unified License even in 50% of district headquarters in a circle (or any other city in lieu of district

headquarters), and therefore, the issue for consideration is that whether the rollout obligations under Unified licensing Regime should be reduced to a city level. The problem in that case will be that with the entry of so many telecom operators there could be further complications in interconnection regime. Therefore the recommendation of the Committee has not been accepted.

**Therefore the following is recommended-**

**6.19.1 Since the legislative arrangements proposed earlier in these recommendations may take considerable time, the Unified Licensing Regime as recommended by the TRAI vide its recommendations dated 13th January 2005 must be adopted at the earliest albeit with some modifications.**

**6.19.2 The entry fee for the unified license should be brought down to Rs. 5 crores (as against Rs. 107 crores recommended earlier) and further to Rs. 30 lakh after five years (as recommended earlier) as indicated in Table 1.**

**Spectrum related issues**

6.20 Increasingly spectrum could be used to cover a range of services that could cover both – telecommunications as commonly understood as well as Broadcasting. Theoretically if an operator finds a telecom service to be not profitable and wishes to provide broadcasting services, which he finds more profitable, the existing Spectrum allocation rules will stand in his/her way. The way out is to either club potential services at the time of bidding or to generally permit change of use of spectrum. This would mean that there has to be convergence on spectrum use charges for different

applications as well as a system for generalized or more flexible use of spectrum. Another approach could be to permit a new entrant to use the spectrum of an existing operator, provided he is able to compensate the operator. This would be the starting point of a market for spectrum i.e. spectrum trading. The Spectrum Policy Task force of the Federal Communications Commission of the USA had in its Report of November, 2002 recommended the permission of broad highly flexible use within the technical parameters of the allocation and to permit traditionally narrow services to lease excess capacity to other services (*FCC:2002: Report of the Spectrum Policy Task Force*). Spectrum trading is already permitted in several countries such as Australia etc.

6.21 Such flexibility in the use of spectrum is necessary to ensure that this scarce resource is always put to the best use. With the possibilities of convergence, the same spectrum could be used for alternative applications depending on developments in technology and in the market. This calls for a complete shift in the manner of allocating spectrum and its planning. International efforts are already on to make modifications in the Radio Regulations to enable more flexible use of spectrum.

6.22 TRAI's recommendations on spectrum related issues dated 13th May 2005 mentioned that Spectrum should be free of technology and usage constraints as far as possible. TRAI recognizes that though spectrum policy has to be technology neutral still the availability of equipment in particular frequency band affects this technology neutral approach, but technological developments like Software Defined Radios, different frequency radio transmitters-receivers (Tx-Rx) on a single chip etc and demand in the market will very soon remove this restriction of availability of equipment in

specific frequency bands. Ultimately, the equipments using various technologies would be available in all frequency bands where demand exists. These developments would also help in achieving seamless connectivity among various networks. It is also recognized that already the concept of service specific allocation of spectrum is not an accurate reflector of usage. The same equipment using the same spectrum can offer different type of services.

6.23 Traditionally, each service had been tightly linked to a specific form of infrastructure, spectrum and end-user equipment. Owing to technological developments, same network and spectrum is being used to offer different services. Such technological developments have rendered traditional approach of service specific licensing redundant and have necessitated technology and service neutrality in the licensing regime. To get full advantage and to extend the scope of this convergence, policy framework should encourage technology and service neutrality in spectrum allocations. TRAI's various recommendations eg. Recommendations on Unified licensing, spectrum related issues and Growth of telecom services in rural India, etc. also emphasized need of technology and service neutrality in the licensing regime. It is therefore reiterated that Unified Licensing recommendations of TRAI may be implemented and spectrum allocation should also be technology and service neutral to the extent possible

6.24 TRAI in its recommendations on spectrum related issues dated May 13, 2005 had recommended that the current position of not allowing spectrum trading may continue till the issue is considered separately through a consultation process. Regarding Merger and Acquisition the recommendations on spectrum related issues



mentioned that since the Authority has recommended that the spectrum availability to mobile operators should improve, it is expected that more and more spectrum would be available for mobile services in short and long term. Therefore depending on spectrum availability, allocation and development of market this issue shall be dealt with separately. TRAI proposes to initiate work on the issues of spectrum trading and Mergers & Acquisitions separately, once the Government takes a decision on the recommendations already made. However as a policy it is strongly recommended that there should be flexibility in spectrum allocation to take full advantage of new services and new technologies for existing services that may evolve with time.

**6.24.1 Therefore the following is recommended-**

**6.24.2 There should be flexibility in spectrum allocation to take full advantage of new services and new technologies for existing services that may evolve with time. Clubbing of services and the flexibility should be specified before bidding/assignment and not after these processes are over.**

**6.24.3 Spectrum allocation should be technology and service neutral to the extent possible so as to avail the full benefits of a converged licensing regime.**

## **Issues covered in the report of the Committee**

### Rationalisation of Differential Custom Duty Regime

The cable industry and the telecom industry are vastly different in terms of their size, entry fees and technology. However wherever they are performing similar services both should be treated as far as practicable identically. Accordingly, the Authority recommends

that the changes in customs duties should be made to promote effective competition amongst telecom and cable operators. At present there are several items which perform the same function , but are classified under one head for the cable industry and under another head for the telecom industry and accordingly are charged different duties. Therefore for all equipment where the same function is performed , either by a cable system or by a telecom system, the duty structure should be the same.

#### Restriction on use of Protocols

6.25 The Authority recommends that call termination should be permitted on Customer Premise Equipments (CPEs) using any protocol recommended by ITU/IETF. The Security Agencies should accordingly be advised to gear up for tracing and monitoring calls using any protocol recommended by ITU/ IETF.

#### License fee

6.26 This issue has been dealt with in para 6.15 above.

#### Institutional funding

6.27 The Authority recommends that the Government may suitably address the banks and financial institutions of the importance of these projects in building up the country's communication infrastructure and to provide funds to the cable industry wherever this found commercially feasible.

#### FDI Limits

6.28 The Authority has already taken a view on this issue in several of its recommendations and would again urge the Government to

undertake a complete review of the FDI policy for the various sub sectors in telecommunications and broadcasting so that there is consistency in policy and a level playing field between competing technologies.

#### Right of Way

6.29 The Authority recommends that Ministry of I&B may write letters to State Governments and Ministry of Surface Transport for providing Right of Way to Cable operators providing digital services pending amendment in the Cable Act which has already been proposed.

## **SECTION – 7 : GIST OF RECOMMENDATIONS**

- 7.1 Regulation of carriage and content should be separated.**
- 7.2 Since the proposed legislative arrangements may take considerable time, the Unified Licensing Regime as recommended by the TRAI vide its recommendations dated 13th January 2005 must be adopted at the earliest albeit with some modifications.**
- 7.3 The entry fee for the unified license should be brought down to Rs. 5 crores (as against Rs. 100 crores recommended earlier) and further to Rs. 30 lakh after five years (as recommended earlier) as indicated in Table 1 at page 25.**
- 7.4 There should be flexibility in spectrum allocation to take full advantage of new services and new technologies for existing services that may evolve with time. Clubbing of services and the flexibility should be specified before bidding/assignment and not after these processes are over.**
- 7.5 Spectrum allocation should also be technology and service neutral to the extent possible so as to avail the full benefits of a converged licensing regime.**

## **7.6 Issues covered in the report of the Committee**

### **(a) Rationalisation of Differential Custom Duty Regime**

**The cable industry and the telecom industry are vastly different in terms of their size, entry fees and technology. However wherever they are performing similar services both should be treated as far as practicable identically. Accordingly the Authority recommends that the changes in customs duties should be made to promote effective competition amongst telecom and cable operators. At present there are several items which perform the same function , but are classified under one head for the cable industry and under another head for the telecom industry and accordingly are charged different duties. Therefore for all equipment where the same function is performed , either by a cable system or by a telecom system, the duty structure should be the same.**

### **(b) Restriction on use of Protocols**

**The Authority recommends that call termination should be permitted on Customer Premise Equipments (CPEs) using any protocol recommended by ITU/IETF. The Security Agencies should accordingly be advised to gear up for tracing and monitoring calls using any protocol recommended by ITU/IETF.**

### **(c) Institutional funding**

**The Authority recommends that the Government may suitably address the banks and financial institutions of the importance**

**of these projects in building up the country's communication infrastructure and to provide funds to the cable industry wherever this found commercially feasible.**

**(d) FDI Limits**

**The Authority has already taken a view on this issue in several of its recommendations and would again urge the Government to undertake a complete review of the FDI policy for the various sub sectors in telecommunications and broadcasting so that there is consistency in policy and a level playing field between competing technologies.**

**(e) Right of Way**

**The Authority recommends that Ministry of I&B may write letters to State Governments and Ministry of Surface Transport for providing Right of Way to Cable operators providing digital services pending amendment in the Cable Act which has already been proposed.**

## **ANNEXURE I – INTERNATIONAL TRENDS IN REGULATION**

The status of convergence in regulation in different countries is briefly given below.

### **USA:**

The Federal Communications Commission (FCC) is an independent United States government agency, directly responsible to Congress. The FCC was established by the Communications Act of 1934 and is charged with regulating interstate and international communications by radio, television, wire, satellite and cable. Content Regulation is also done by the FCC.

However, provision of cable TV services requires approval/ license/ franchise at municipal level. The Telecom Companies wishing to provide IPTV services on their broadband networks have been demanding that the laws must be amended to provide for national level franchise to enable them to roll out their services. The cable industry has been opposing this demand in view of the fact that the cable industry had to undergo the time consuming and expensive process to secure city-by-city franchise over the last three decades.

Recently, the Texas state legislature has passed a bill on deregulation of telecom markets making it the first state allowing telephone companies to receive a statewide franchise in order to provide new video services that compete with cable.

## **European Union:**

Directive 2002/21/EC of 7 March 2002 of The European Parliament and of The Council lays down a common regulatory framework for electronic communications networks and services. The regulatory framework consists of this Directive and four specific Directives on related matters. The Directive, inter alia, recognizes the following:

- (a) The convergence of the telecommunication media and the information technology sectors means all transmission networks and services should be covered by a single regulatory framework.
- (b) It is necessary to separate the regulation of transmission from the regulation of content.

Accordingly the scope and aim of the directive is stated to be the establishment of a harmonized framework for the regulation of electronic communications services, electronic communications networks, associated facilities and associated services.

In pursuance of this directive Twenty Member States out of a total of Twenty Five Member States had completed the adoption of primary legislation and notified the Commission thereof by December 2004.

## **UK:**

Ofcom is the regulator for the UK communications industries, with responsibilities across television, radio, telecommunications and wireless communications services. OFCOM was created in 2002 combining the regulatory functions of the Broadcasting Standards Commission, Independent Television Commission, Office of Telecommunications, Radio Authority and the Radiocommunications Authority. Content regulation is also assigned to OFCOM



**Australia:**

On 1 July 2005, the Australian Broadcasting Authority and the Australian Communications Authority merged to become the Australian Communications and Media Authority (ACMA).

**Canada:**

The Canadian Radio-television and Telecommunications Commission (CRTC) was established by Parliament in 1968. It is an independent public authority and reports to Parliament through the Minister of Canadian Heritage. The CRTC is vested with the authority to regulate and supervise all aspects of the Canadian broadcasting system, as well as to regulate telecommunications common carriers and service providers that fall under federal jurisdiction.

**South Africa:**

The Independent Communications Authority of South Africa (ICASA) is the regulator of telecommunications and the broadcasting sectors. It was established in July 2000. It took over the functions of two previous regulators, the South African Telecommunications Regulatory Authority (SATRA) and the Independent Broadcasting Authority (IBA). The two bodies were merged into ICASA to facilitate effective and seamless regulation of telecommunications and broadcasting and to accommodate the convergence of technologies.

A number of other countries also like Malaysia, Tanzania, Botswana, Papua New Guinea, Hong Kong, Bhutan and Brazil have converged regulators – i.e. a regulator whose responsibilities cover both – telecommunications and broadcasting. However as in the case of some of the examples listed above content regulation is not always with the same regulator. In fact a neighbouring country – Bhutan - not only has a

converged regulator for Telecom and Broadcasting but the Royal Government of Bhutan has already introduced a Convergence Bill, viz. Bhutan Information, Communications and Media Act 2005 (A Bill) in their Parliament which is likely to be approved in the 1<sup>st</sup> quarter of 2006.

## **ANNEXURE II – VIEWS OF STAKEHOLDERS**

### **(I) Comprehensive Legal Framework**

1. Any framework contemplated should also ensure a level playing field for local and foreign industry players as well as embrace the protection of copyright of content. The issues of must provide and content limitation should be reviewed more favorably than they were in the draft 2001 Convergence Bill. As an industry body representing the major content providers, the MPA strongly recommends self-regulation of content by the industry rather than direct regulation by a government body. The MPA believes that a content code compiled by the industry would be sufficient to regulate content, and that if necessary, this could be lightly overseen by a regulatory body tasked with overseeing both content and carriage (Motion Picture Association).
2. The licenses to the operator/ service provider are issued under the Indian Telegraph Act (a legislation framed in 1885) and operators are regulated by the Telecom Regulatory Authority of India Act, 1997. This has resulted in conflict of opinion on licensing issues and regulation between TRAI and the service providers. Thus, it is advisable that a comprehensive legal framework, for entire electronic communication and network services, may be developed on the lines of The Communications Convergence Bill, 2001 and implemented. Taking into account the recommendations made by TRAI on Unified Licensing Regime on 13 January 2005, there may not be any changes required in the Bill. Convergence in the communications and broadcasting sector involves incorporation/integration of technological, commercial, cultural,

regulatory and geographical aspects of communications and broadcasting. It involves convergence of carriage as well as content (Mr. Rahul Goel).

3. The Broadcasting and Telecommunications system should be perceived as just another media for transmission of goods and services in the form of audio and video products. Legislation, Regulations and exploiting of this “new” media should take full advantage of the many centuries of experience of the transportation sector and about a hundred years of the electrical grid system. Ideally, all these transmission and distribution systems should have a similar regulatory structure, where possible, to enable simple and effective use of resources (Mr. Ajay Goyal).

4. The revised statute should address the following issues:-

Providing level playing field to broadcasters, service providers and network operators in terms of simplicity, practicality and empathy.

Being capital expensive, should address issues relating to Quality of Service and the mechanism for its enforcement.

Rights violation aspects and deterrents in case of violation.

Licensing procedures and their expeditious disposals with implied Right of Way.

Merger of two ministries into one Ministry of Telematics with Departments of Information Technology and Information & Broadcasting. It must be understood that Convergence of minds is necessary before Convergence of Technologies (Lt. Col. V.C. Khare).

5. If the Government is keen on pursuing the Convergence Legislation, The Communications Convergence Bill, 2001 needs to be revisited with a view to reconcile it with the licensing regime to be adopted (IDFC).
6. The regulations should be broad based so as to cover not only the existing technologies but also open to adoption of emerging technologies. There is a need for a comprehensive legal framework to ensure a predictable regulatory environment for the players to base their business plans on. Clearly defined and independent dispute resolution mechanism should be a part of the comprehensive legal framework. The regulations should be drafted using the current realities rather than The Communications Convergence Bill, 2001 as a starting point. Inputs could be taken from the legislations on convergence enacted by UK and Australia. Content and carriage regulation should be kept separate as content controls are best left to self regulation whereas regulation of carriage is technical in nature and requires application of economic and legal expertise (Star India Pvt. Ltd.).
7. The TRAI should formulate the general guidelines and policy for the Convergence Bill for the Broadcasting and Communications industry within the existing Indian Industrial Policy (Skycable Communications).
8. Having a comprehensive legal framework would be an essential element of any Licensing Policy involving complex fields such as Telecom and Broadcasting, with their own licensing procedures, FDI and ownership norms. The legal framework needs be based on both the Telecom and Broadcasting Industries structures and suitable integration of various diverse elements and specific sector related issues. The Communications Convergence bill of 2001 provides a good starting point but it needs to take into account

service related and sector related developments since 2001 in a comprehensive manner. The carriage and content need to be treated separately and also be regulated separately (Zee Network).

9. The comprehensive legal framework is always desired and it should be flexible so that any advancement in the technology can be seamlessly integrated into the basic framework. It is also important to note that legal frame once made should not be tinkered, with regard to its basic essence. The Regulator and adjudicator should be governed by the same legislation. The Communication Convergence Bill 2001 can be good referral point however the Acts enacted and amended in the intervening time frame should also be taken note of, as lot of entrepreneur efforts would have gone in building the businesses around those guidelines and codes. Different set of Regulations for telecom and broadcasting are recommended because of their diverse nature and areas of operations and their effect on general public. The Media sector comprising of Broadcasting and Cable TV services will have to be looked into with a comprehensive view of FDI, Down linking guidelines, content interconnections and the tariff orders issued from time to time so that the legislation is in line with the policy and guidelines already in place. The classification of the newer concepts like IPTV need to be made at par with cable services so that they also follow the Regulations, legislations and policies applicable to the Cable TV Networks. One cannot separate content and carriage as without the content, carriage is not effective and without the carriage the content cannot realize its full value. There have to be one regulatory framework. (ASC Enterprises).
10. There is a necessity for having a comprehensive legal framework to deal with various issues arising out of convergence of technologies

and services. The Communications Convergence bill of 2001 can be a starting point for developing a legal framework. However, massive developments have taken place over the past 5 years and substantial changes would be required in the said bill taking into account these developments and especially taking into account TRAI's uniform licensing recommendations dated 13th Jan 2005. As the skill sets of content and carriage are grossly different they need to be regulated separately. However, they should not lead to negation of the efforts of unified licensing and therefore this needs to be handled sensitively (Siti Cable).

11. There is a need for a comprehensive legal framework which deals with various issues arising out of convergence of technologies and services. It should also keep in view the subsequent changes in the licensing regime with the introduction of Unified Access Licensing in 2003 as well as the recent Guidelines issued by the Government for simplification of NLD/ILD licenses. The legal framework may be developed around the Communication Convergence Bill, 2001. However, the legal framework will have to be modified to take into account subsequent developments most especially in the arena of unified licensing. For example Clause 26 (6) of the Bill prescribed a licensing classification that is at variance with existing / prevalent practices and what is being proposed under the unified licensing regime. The proposed Convergence Authority should regulate both carriage and content. This is because in the light of the practical realities of a fast converging environment, it is undesirable for service providers to be subjected to a dual regulatory framework. This will not only result in confusion, overlaps, delays, etc, but will ultimately retard the growth of the sector (COAI).

12. The licensing framework for telecom services is comprehensive and well defined. This existing framework should be used as a benchmark for creating any kind of comprehensive legal framework keeping in mind that no undue advantage is given to the broadcasting industry. The Communication Convergence Bill, 2001 is not relevant now and there is no point in developing the legal framework around this bill. Unified licensing appears to be an alternative approach for convergence. There should be no additional regulation of content. There already exists considerable law on content regulation. These can be updated to take into account new realities of copyright, intellectual property and pending proposal to amend IT Act (AUSPI).
13. The fact of convergence of broadcasting and telecom services does not lead to an automatic amalgamation of their licensing framework. There is a need to develop an alternative legal framework which allows the development of the telecom and broadcasting service sectors on standalone basis to a level of maturity from where a common structure can then be evolved. Rather than seeking changes in the Communication Convergence Bill, 2001 it will be more relevant to deliberate upon the changes required in Unified Licensing regime. The regulation of carriage and content should be separated (Reliance Infocomm).
14. Comprehensive legal framework is absolutely necessary for convergent communications and broadcasting. The changes in telecom, broadcasting and cable industries in the last 5 years have made the Communication Convergence Bill, 2001 almost redundant. Unified licensing scheme incorporates most aspects with respect to creating a framework for convergence. There is no necessity for separate regulatory bodies for carriage and content. There can be two separate bodies under the same regulator – one



regulating carriage responsible to Department of Telecommunications and the other regulating content, responsible to Ministry of Information and Broadcasting. Within the comprehensive legal framework, differentiation among broadcast content, unicast/ multicast content and P2P shared content is required (Tata Teleservices).

15. There is a need for having a comprehensive legal framework to deal with various issues arising out of convergence of technologies and services. The legal framework need not necessarily be developed around the Communication Convergence Bill, 2001 and changes would be required. Regulation of convergence and content should not be separated. It is possible to accommodate all skill sets in the same regulatory body and it is convergence of services, which should govern the policy for benefit of consumers (MTNL).

## **(II) Unified Licensing**

1. A unified licensing regime is preferable, provided that it is applied in a consistent manner ensuring the fair treatment and unencumbered opportunities for growth of both content and carriage industry players (Motion Picture Association).
2. TRAI's recommendations on unified licensing prohibit any kind of reselling, which in our opinion should be replaced with opening up of the relevant markets within specific time duration. Any permission to resell such services may promote competition in the market, such as introduction of Mobile Virtual Network Operators etc. Further, Unified Licensing Regime should be technology neutral and should cover all types of electronic communication, present as well as future (Mr. Rahul Goel).
3. The unified licensing regime should be modified to facilitate the entry of ISPs and broadcasting & cable operators into voice

services by de-linking spectrum and prescribing a reasonable (low) level of entry fee, eligibility criteria and regulatory obligations for such licenses (IDFC).

4. The unified licensing recommendations dated 13th January 2005 laid emphasis on unifying licensing norms for the telecom industry; broadcasting, for all practical purposes was kept outside the ambit of the recommendations. This should be reviewed to ensure that both the services are not subject to uneven regulation. The regulatory framework for competitive telecom services (such as mobile voice, data services), broadband internet services and other data services and broadcast TV (such as cable, DTH, terrestrial, IPTV) should be similar in key aspects such as licensing, approval process, areas of operation, annual license fee, revenue share, pricing of services, FDI limits, single window clearance etc. Disparities such as annual license fee (6% of adjusted gross revenue for telecom services as against 10% for DTH) and licensing framework (last mile cable companies operate under a loosely defined licensing framework as against clear licensing conditions for mobile operators) should be removed (Star India Pvt. Ltd.).
5. The Unified Licensing Guidelines dated 13th Jan 2005 are incomplete without an in-depth and considered study of the Broadcasting and Media sector. The Key recommendation of the above purports to grant a Unified Licensee the rights to provide all services including Telecom (Internet, ILD, NLD, Internet Telephony, VSATs etc) and Broadcasting ( Broadcast TV, cable TV, DTH and Radio) without any serious consideration of the issues involved (i.e. FDI, Carriage norms, ownership guidelines) and is thus legally unsustainable. The recommendations on Unified Licensee remain one sided, granting the provisions of unified services to only one class of operators (access operators). IPTV provision should be

- declared as a cable TV service. This would imply that the cable TV operators be able to provide IP TV and vice versa. (Subject to FDI and ownership guidelines being met by Telecom IP operators). This would also imply that IP TV would be subject to the same down linking guidelines, FDI and carriage norms as are applicable for cable TV. The Unified licensing policy needs to consider the Interconnection of not only Telecom Networks but also for Broadcasting and cable TV. Hence the provisions of Interconnect for cable TV and satellite services being finalized separately should form a part of the recommendations on Interconnection. (Zee Network).
6. The Unified Licensing needs to be relooked into as it is tilted heavily in favour of the players who originate from the telecom regime. They have been allowed to provide all kinds of services where as the players which originate from the Broadcasting side are considered as standalone services providers and are not allowed to provide the services, which a telecom player can provide. In the forthcoming days the cable distribution services today governed under Broadcasting and Cable related laws and guidelines will be at a great disadvantage in terms vis-à-vis IPTV. The down linking policy needs to be applied to the IPTV also and thus it is important that we classify the IPTV at par with the Cable TV services and the provisions of the Cable Television Act and FDI norms of cable should also be applicable to the networks providing the IPTV (ASC Enterprises).
  7. The unified licensing guidelines dated 13<sup>th</sup> Jan 2005 are too telecom centric and ignore the realities of Broadcasting, Cable TV and DTH services. The issues that need to be addressed for level playing field are FDI limits, treating broadcasting as a separate

- class of service and clarity on the scope of activities of ISPs (Siti Cable).
8. The proposed Unified Licensing framework is fairly adequate. However there is a definite need to ensure that existing operators are not left in a worse off position due to the new legal framework. Level playing field should be maintained amongst various operators both existing and new. The proposal to introduce Niche operators is redundant and should be removed (AUSPI).
  9. The principle of no worse off for the existing operators has not been followed while framing the new licensing regime for long distance services. The matter should be taken up by the Authority with the Government to restore level playing field conditions for the existing long distance operators. The issue of licensing Niche operators needs to be reviewed and excluded from Unified Licensing framework (Reliance Infocomm).
  10. Some changes are required in the Unified Licensing, e.g., specific categories for carriage and content licensing should be included. The proposal to introduce Niche operators is redundant and should be removed (Tata Teleservices).
  11. Unified licensing may cover and include broadcast and content delivery license (MTNL).

### **(III) Spectrum Related Issues**

1. Flexibility in spectrum allocation has the benefit of meeting the needs of the market and needs to reflect the current market conditions that have been greatly altered from when spectrums were initially allocated, as well as facilitate more efficient use of this limited resource (Motion Pictures Association).

2. The allocation of spectrum should be kept flexible, so as to enable operators and service providers to implement and take advantage of new technologies that may evolve over time. To encourage competition spectrum trading may be allowed, wherein the new entrant may use the spectrum of an existing operator. A separate category of Virtual Network Operators, such as Mobile Virtual Network Operator (MVNO), may be introduced (Mr. Rahul Goel).
3. The electromagnetic spectrum is the “common property” of all the citizens, with the Government as a caretaker of this resource. Therefore, no private or other party should be “sold” this resource but only be “leased” to them with only privileges and no absolute or irreversible rights, and charged an optimum rent to meet societal needs. Once the lessee is not able to meet societal needs, due to changing market conditions, technology, etc.; this lessee’s privilege must be terminated and transferred to another organization that can meet societal needs and aspirations (Mr. Ajay Goyal).
4. A comprehensive overhaul of spectrum allocation, pricing and management practices is long overdue. A standard measure of spectrum should be developed in the form of a basic unit of measurement that delineates the unit’s frequency boundaries of the right of use as well as geographical boundaries. Defining spectrum using a finer geographic location will enable attention to be focused on specific geographic locations where spectrum is required. Spectrum should be charged on a Rs. Per MHz basis and not on a revenue share basis. Spectrum should be charged only in areas where it is likely to be scarce in the foreseeable future. Long term usage rights to the spectrum should be auctioned. Spectrum trading should be an integral part of spectrum management (IDFC).

5. The licensee holding Unified license should be allowed to use spectrum allocated interchangeable for the services it has been granted the license for (Star India Pvt. Ltd.).
6. Spectrum related issues should be under TRAI and not under the Ministry. The licence fees for Rural sector must be treated separately from the major commercial industry (Skycable Communications).
7. The following should be followed in the allocation of spectrum:
  - a) The Spectrum allocation should be governed by actual use of a service provider and in all cases on a usage based fees basis. The allocation based on sharing of gross service revenues minimizes the incentive to use the spectrum efficiently. The principle of auction of spectrum is also entirely unsuitable as it treats “Spectrum” as “Property” or commodity and leads to “Cornering of Spectrum Properties” and their market misuse.
  - b) The Spectrum allocation should continue to be governed by the “Need to use” based on technology, alternative media availability (e.g. Non-radio), contiguous spectrum needed for new services; minimizing disruption of existing users etc.
  - c) The “Flexibility” in allocation can not be construed to imply that a DTH Operator or Broadcaster would need to pay at the same levels per Mhz as a GSM operator or that if an operator has a certain bandwidth assigned for one service type (i.e. Broadcast) it can be used for cellular or CDMA or backhaul without further reference or as a part of “flexible allocation” policy.
  - d) Allocation of spectrum will need to continue to be strictly aligned in line with ITU Regulations for frequency allocation with only country specific variations being permissible. This is in any event needed for portability (e.g. cellular roaming).

- e) A service specific allocation of Spectrum based on fees based usage is a continuing necessity for the allocation of this scarce resource. The allocation of Spectrum with service specific needs to continue to address the new services (Zee Network).
8. There should be flexibility in the spectrum allocation. The check on the usage of the spectrum should be there and made public as this being a national resource should be used most efficiently and hoarding of the same should be discouraged. The process for the clearance of the spectrum and the frequency allocations should be made simpler (ASC Enterprises).
  9. Spectrum allocation policy should be flexible to take advantage of new services and technologies that may evolve in time to come. While safeguarding the existing investments and spectrums the policy needs to be evolved that enables fresh entrants under the unified licensing regime to be able to offer all the services. Optimum utilization of available spectrum which is a vital and scarce resource should be made. Levy of spectrum fee on 'usage basis' is also recommended (Siti Cable).
  10. Spectrum is a scarce resource and should continue to be allocated for specific usage and technologies so as to ensure its optimal utilization and compliance with the National Frequency Allocation Plan. Different technologies need different bandwidths for providing the same service to the same number of customers. Moreover, an interference free environment is absolutely essential for provision of wireless based services. It is thus absolutely imperative that the frequency allocations are in line with international practices. It is therefore submitted that spectrum practices in India should continue to be in line with ITU as also well-accepted international practices. This will ensure that Indian consumers are able to get the benefits of large-scale

economies, high quality interference free services, inter-operability and seamless global roaming (COAI).

11. There should be flexibility in spectrum allocation. This will create a market and facilitate more efficient utilization of the scarce resource. The spectrum requirements of the existing service providers should be met first. The principle for spectrum allocation should also be technology neutral. The new legal framework should link the principle of technology and service neutrality to the current and future National Frequency Allocation Plan (AUSPI).
12. The spectrum standardized for new technologies such as Wi-Fi/Wi-Max by the ITU should be delicensed and made available to the existing operators. There should be a clear roadmap giving a time bound schedule for availability of spectrum upon reaching predefined subscriber-base (Reliance Infocomm).
13. There should be flexibility in spectrum allocation. The spectrum requirements of existing service providers should be met first. Further recommendations:-
  - Efficient spectrum allocation and management machinery
  - Technology neutral judicious allocation of spectrum
  - No discrimination
  - Sufficient upfront allocation
  - No spectrum trading
  - Usage of spectrum for different applications to be permitted
  - No holding back of available spectrum (Tata Teleservices).
  - There should be flexibility in spectrum allocation (MTNL).



## **Issues on which suggestions have been made by the Committee**

### Rationalisation of Differential Custom Duty Regime

1. Customs duties should provide a level playing field and effective competition between telecom service providers and cable operators (Motion Pictures Association).
2. A level playing field for both telecom and cable operators is necessary to foster effective competition. The Government of India, as per its commitment under the Information Technology Agreement at WTO, reduced the customs duty on all the specified IT products to zero. On the same lines the customs duty for the items required by the cable operators may be reduced to zero (Mr. Rahul Goel).
3. Reduction in the customs and other duties for DTH reception equipment should be a matter of no less priority than similar reductions for cable TV reception equipment, in order to ensure equality of access to everyone in India regardless of where they live (NDS).
4. The suggestion merits consideration from the viewpoint of creating a level playing field (IDFC).
5. Rationalisation should be there to ensure a level playing field. Given the significantly high levels of investments required to operationalise the voice, video and data services, minimal burden by way of customs duty should be imposed on all platforms alike (Star India Pvt. Ltd.).

6. Custom Duty for the telecom and broadcasting including MMDS equipment should be reduced further. MMDS equipment must be duty free (Skycable Communications).
7. For rolling out telephony services over cable network, additional equipments required such as Media Gateways/Internet Telephony Soft Switches should be included in the hardware list for rationalization of customs duty (Hathway).
8. The customs duty should be rationalized to NIL (Zee Network).
9. In order to provide level playing field there should be parity in both the sectors (ASC Enterprises).
10. The custom duty on cable related items and equipments including digital decoders should be brought to NIL (Siti Cable).
11. The custom duty regime needs to be rationalized so that items having the same functional use come under the same classification and are subject to the same rate of custom duties (COAI).
12. Custom duties and other relaxations should be uniform across industries and equally applicable to operators with the same set of conditions (AUSPI).
13. Custom duties and other relaxations should be uniform across industries and equally applicable to operators with the same set of conditions (Reliance Infocomm).
14. Custom duties and other relaxations should be uniform across industries and equally applicable to operators with the same set of conditions (Tata Teleservices).

### Restriction on use of Protocols

1. Permission to cable operators to terminate calls on CPE's using any protocol recommended by ITU/ IETF would give them an avenue to provide services by utilizing latest technology. Thus, it is advisable that the call termination should be permitted on the CPE's using protocols as recommended by ITU/ IETF (Mr. Rahul Goel).
2. Yes (IDFC).
3. There should be freedom in call termination protocol (Zee Network).
4. There should be freedom to use the protocols recommended by the ITU/IETF (ASC Enterprises).
5. There should be complete freedom to the usage of protocol (Siti Cable).
6. Call termination on CPE should use SIP protocol (COAI).
7. It is important to first address all aspects of level playing field and norms of entry fee etc. in order to ensure no worse off situation for existing operators. This should not become an excuse for non access providers like Cable TV operators to enter the voice market without proper licensing. It is necessary to take a comprehensive licensing view before permitting termination of calls on all kinds of CPE or making any additional changes to the licenses (AUSPI).
8. This should not become an excuse for non access providers like Cable TV operators to enter the voice market without proper licensing. At the cost of operators having borne high entry fee, license fee etc. it is not desirable to create a parallel competing market thriving on artificially sustained arbitrage opportunity (Reliance Infocomm).

9. It is necessary to take a comprehensive licensing view before permitting termination of calls on all kinds of CPE or making any additional changes to the licenses (Tata Teleservices).
10. Call termination should be permitted on CPEs using any protocol recommended by ITU/ IETF (MTNL).

### Institutional funding

1. In the converged scenario, cable operators would be required to upgrade their existing equipment and hence their capital requirement would be augmented. To ensure easy access to fund by the cable operators, the TRAI may take up the matter with the Government and request them to frame a special loan/ funding policy (similar to funding in SSI's, agriculture etc.) for cable operators and small telecom operators (Mr. Rahul Goel).
2. No. There appears to be no reason for government intercession to induce banks and financial institutions to undertake due diligence and finance commercially viable projects (IDFC).
3. Once a proper regulatory framework is in place that treats all carriage networks in a non discriminatory manner, funding from financial institutions and banks would be easier to come by and simply depend upon the attractiveness of business. Government intervention may not be needed (Star India Pvt. Ltd.).
4. Financial Institute funding is a must for development of national industry. Competition would compel banks to provide loans to cable and broadcasting industries (Skycable Communications).
5. Any reemphasis on the importance of funding for the sector, to banks as well as policy fora is welcome (Zee Network).

6. The lack of clarity and standards on the revenue sharing model between the broadcasters and the cable industry and the freeze on the price per subscriber without the control on the inputs to the cable industry does not augur well in the eyes of financial institutions. The clear-cut implementable policies on the distribution margin, content sharing etc will make the financial institutions and banks to come forward for the funding (ASC Enterprises).
7. The cable industry should be classified as a priority sector and the benefit of Institutional and Bank funding should be extended to the cable industry. There is need for consistency and long term perspective while formulating policies for cable TV sector which would inspire much needed confidence for banks and financial institutions to extend their help to this sector (Siti cable).
8. It is the bankability of the projects that will ensure a sustained flow of institutional funding (COAI).
9. Institutional funding should be left to the market forces for looking into the viability (AUSPI).
10. It should be left with the market forces to determine viability of projects and their funding (Tata Teleservices).
11. There is no need for the Government to intercede (MTNL).

#### FDI Limits

1. The differing limits of FDI are inconsistent with any move towards convergence. A level playing field must be provided to both the telecommunications and broadcast sectors to ensure effective competition between sectors, and ensure consumers' rights to access the service of their choice at the most competitive price. In

- particular, the current FDI limits of 49% for cable TV and 20% for DTH must be raised to be in harmony with those of telecommunications sectors (Motion Picture Association).
2. Any increase in FDI in broadcasting and cable TV sector would be most welcome, as it would lay a level playing field for operators and promote competition (Mr. Rahul Goel).
  3. The FDI limits for DTH and other delivery methods should also be brought in line (NDS).
  4. Disparities in FDI limits will be significant factors in any decisions by overseas operators to provide services in a converged environment. The degree of differences in FDI limits associated with licences that use one technology or another to provide similar services will override considerations of efficiency and effectiveness in the decision making process, with the result that the outcomes are not the best decisions for the converged industry, the economy as a whole, and the consumer. FDI limits remain a deterrent to market entry by overseas operators. Complete removal of FDI limits on operators in the converged environment would be the single most effective step that could be taken for attracting foreign investment into the telecommunications and associated sectors (REACH).
  5. Yes. This suggestion merits consideration for creating a level playing field (IDFC).
  6. There is a need to review the FDI policy for various subsectors in telecommunications and broadcasting. Parity must be established between FDI limits telecom, cable and DTH (Star India Pvt. Ltd.).
  7. The NRI businessmen must have 100% ownership in the broadcasting and telecom industries (Skycable Communications).

8. The FDI in the fields of Media and Telecommunications has been set at different limits owing to the potential of the two fields in affecting the lives and thoughts of people and the fields of “Media” and “Telecom” or Infrastructure are different and the FDI as well ownership norms for these two need to be; and continue to remain different. This would also be in line with the policies followed in other countries such as USA, European Union, Japan, Australia, etc where convergence has already happened (Zee Network).
9. The FDI norms for the Telecom and Broadcasting related businesses cannot be same. Convergence by itself cannot be a means to dilute the provisions, which govern two different fields i.e. Media and Telecommunications. The IPTV should subscribe to the FDI, down linking policy, programming code and the carriage norms as in the case of the Cable TV services (ASC Enterprises).
10. In the emerging scenario with IPTV enabling Telecom providers to virtually become Cable operators the issue of separate FDI limits for Cable and Telecom services needs to be addressed. Media (Broadcasting and Distribution industry) is a sensitive sector and in all countries the foreign investment in this sector is regulated keeping in view the social, cultural and security considerations. In telecom industry 74% FDI is permitted whereas in cable distribution 49% is the limit. Therefore, a telecom company which also wishes to provide IPTV services through cable should also be subject to FDI limit of 49% as raising the FDI limit from 49% to 74% would be against the basic policy of restricting FDI in media sector (Siti Cable).
11. Consistency is desirable but it should not disadvantage any sub sector of the industry (COAI).

12. The present policy with the specified FDI limits for various sectors/ services should continue. Regulation may converge to all new convergent technologies with full freedom within the FDI limit (AUSPI).
13. The FDI limits have been determined for the various sectors with certain reasoning in mind. The present policy with the specified FDI limits for various sectors within the telecom industry should continue. The Government may specify appropriate FDI limits for other sectors that emerge as a result of convergence (Tata Teleservices).
14. Cable industry is reaching a very large number of households and is in a position to carry programmes which influence public opinion of large segments. Hence FDI should be considered on very conservative lines for such industry (MTNL).

#### Right of Way

1. Any such move by the TRAI would benefit the cable operators/ cable industry (Mr. Rahul Goel).
2. No private or other party should be “sold” a right of way but only be “leased”, and charged an optimum rent for this privilege. When the lessee is not able to meet societal needs, due to changing market conditions, technology, etc.; this lease should be appropriately terminated and transferred to another organization that can meet societal needs and aspirations and/or the original owner or their estate (Mr. Ajay Goyal).
3. There should be an equal right of way for access to individual/ collective antenna for reception of DTH satellite services as for IPTV now and as proposed for cable operators subject to reasonable and



- non-discriminatory structural safety, electromagnetic compatibility/ non-interference and local planning requirements (NDS).
4. There should be availability of Right of Way for Digital Cable Operators in line with the provisions contained in the Communications Convergence Bill, 2001 as recommended by TRAI in its recommendations dated 14th September 2005 (Star India Pvt. Ltd.).
  5. The recommendation of TRAI dated 14th September 2005 pertaining to the grant of Right of Way to cable operators / MSOs for providing digital services is fully endorsed (Zee Network).
  6. The right of way as provided to the telecom players should also be provided to the Cable TV services on a non-discriminatory basis (ASC Enterprises).
  7. The recommendations of the Committee are fully endorsed (Siti Cable).
  8. There is a need to standardize both the charges for ROW as well as the time period within which the clearances are granted (COAI).
  9. Telecom operators have acquired ROW permission after upfront payment of huge amounts of entry fee/ license fee. The issues facing the existing ROW owners i.e. telecom service providers should be addressed first before adding a further population of right holders in this category (AUSPI).
  10. The issues facing the existing ROW owners i.e. telecom service providers should be addressed first before adding a further population of right holders in this category. There is no mention about facilitating ROW for broadband service providers. Broadband should be given the status of essential service (Reliance Infocomm).

11. The issues facing the existing ROW owners i.e. telecom service providers should be addressed first before adding a further population of right holders in this category (Tata Teleservices).
12. Cable operators have reached almost every house. However, if cable industry still requires ROW, it may be considered (MTNL).