



सत्यमेव जयते

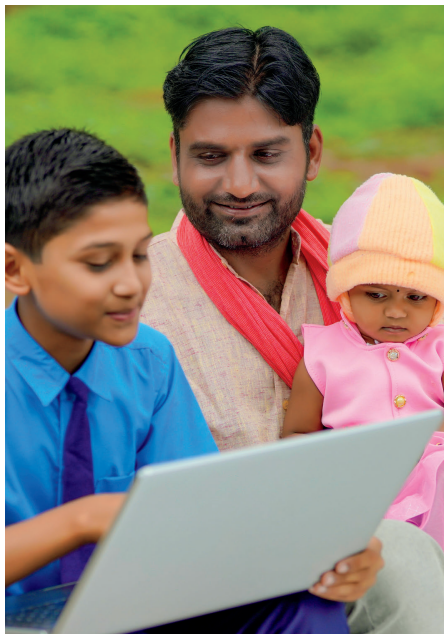
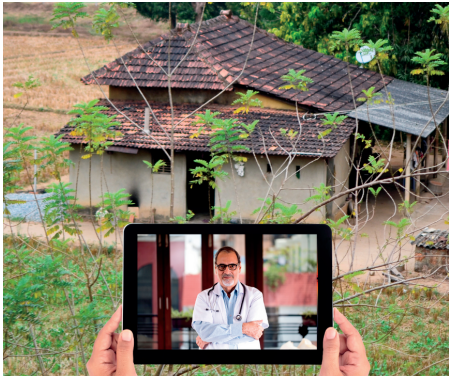
# TELECOM REFORMS - 2022

## WIRELESS LICENSING



DEPARTMENT OF TELECOM

# Wireless for Inclusive Growth





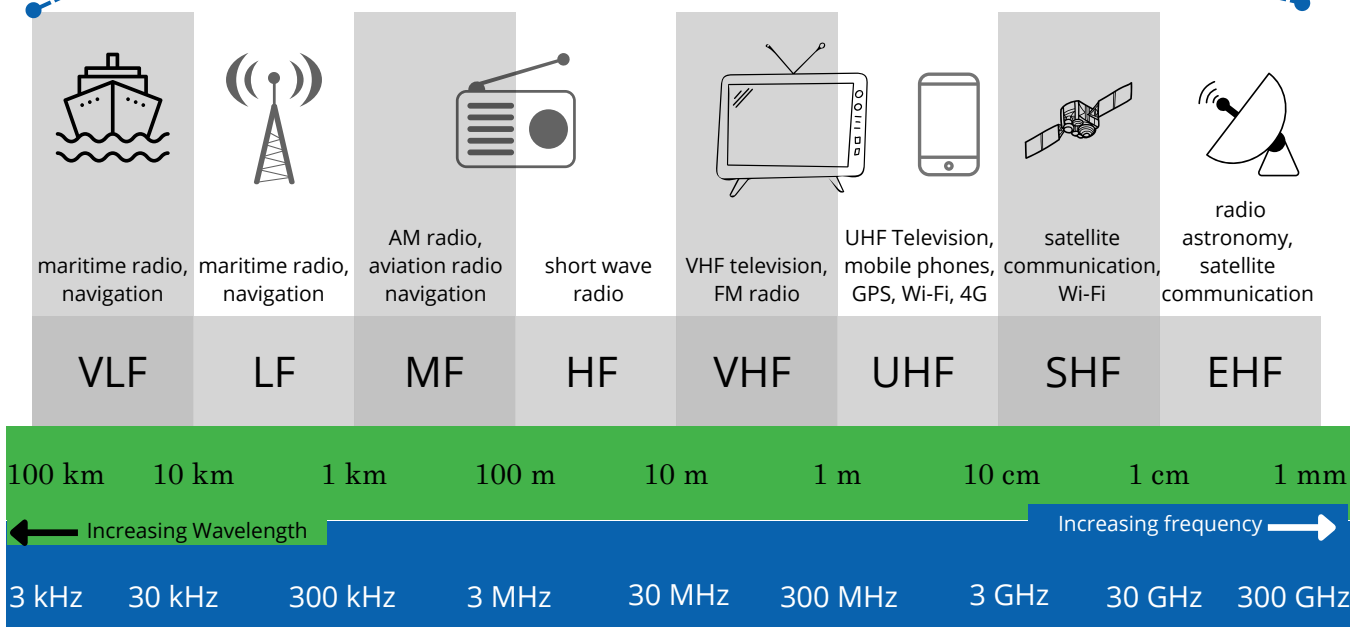
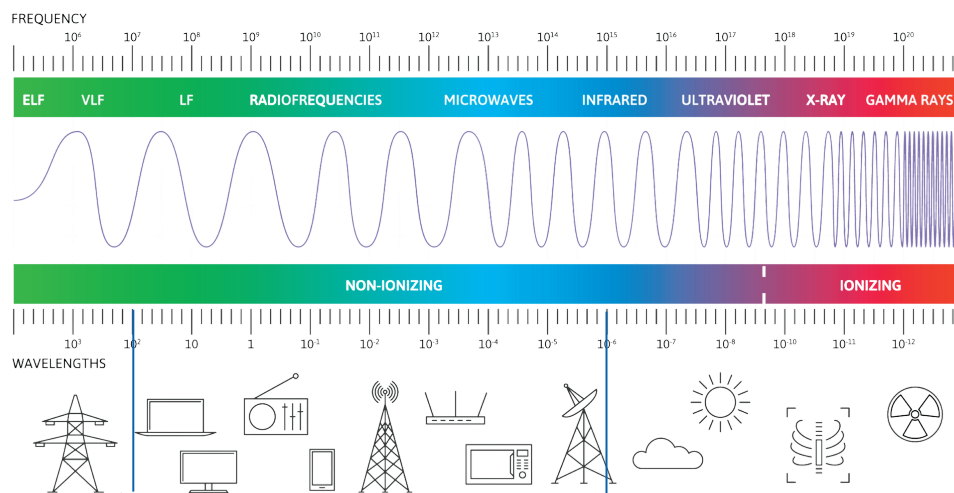
# SPECTRUM & ITS MANAGEMENT



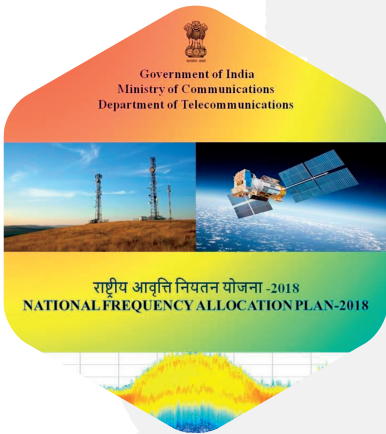
All forms of communication require a medium. The medium can be through wire or wireless/ radio waves.

The entire spectrum of radio waves is grouped into various bands. Radio wave is characterized by two primary parameters- (i) the amount of information it can carry; and (ii) the distance it can travel. Generally, lower frequency waves travel farther but carry less information. Higher frequency waves travel less but carry more information.

## ELECTROMAGNETIC SPECTRUM



Spectrum is a finite natural resource. It is precious and must be managed effectively. Generally, a license is required to use spectrum. For general public use, some frequency bands are allowed for use without any license. Broadly, the following are the tasks of spectrum management-



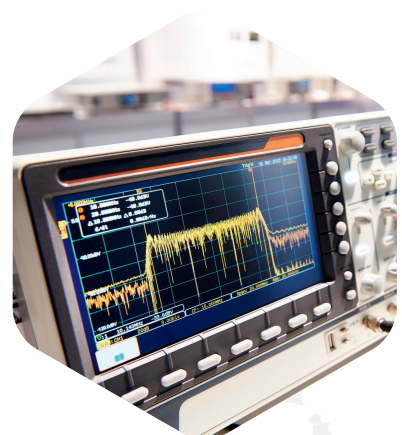
**Policy and planning**



**Licensing and assignment**



**Telecom Tower Clearance**



**Monitoring to prevent/ resolve interference**



# BACKGROUND TO REFORMS

---

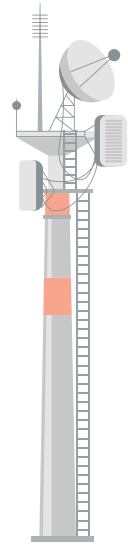


The two dominant philosophies of the government's policy initiatives are 'Antyodaya' and 'Atmanirbhar Bharat'. Antyodaya, for inclusive development and to connect the unconnected. Atmanirbhar Bharat, for innovation and indigenous technology. With these two basic objectives, the following reforms have been undertaken. These reforms will also facilitate ease of doing business and ease of life of the citizens.

- Simplification in telecom tower clearance process- faster expansion of mobile towers
- Simplification in import process of telecom equipment- faster deployment of networks
- Rationalization of charge for satellite telephony service- affordability and remote accessibility of satellite phones
- Online and easy licensing process- faster, faceless, seamless delivery of license
- Digitation of old records- online auto-renewal of license
- Delicensing of various frequency bands- promotes innovation, manufacturing & export, easy availability of device



# TELECOM TOWER CLEARANCE



All telecom towers need technical clearance from DoT.

The clearance is given to

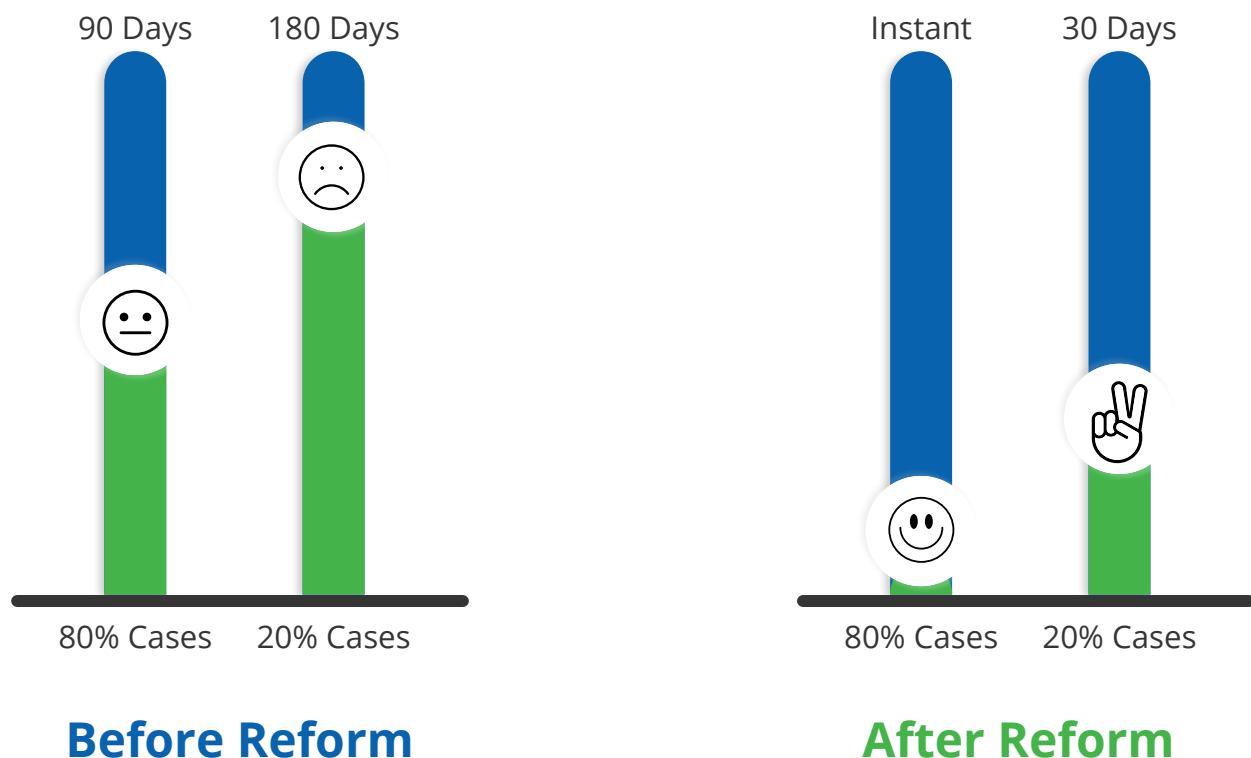
- (i) avoid hazards to the navigation of aircraft; and
- (ii) to avoid radio interference.

Before the reform, the clearance process was semi-online and scrutiny based. It was time-consuming too.

Now, the entire process has been made online. Scrutiny-based clearance has been replaced with self-declaration-based clearance. The majority of the towers are cleared instantaneously. Few cases, mainly the towers located very close to Airports and other strategic locations, are cleared within a maximum period of 1 month.

With this reform, the Service providers have quicker rollout of networks. This is helping to connect the marginalized, rural people and also improving the quality of service.

## TIME TO CLEAR





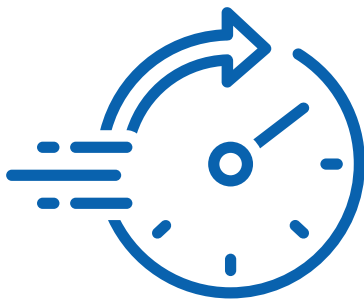
# 5G TOWER REGISTRATION



To enable quicker deployment and achieve greater coverage 5G cells will be deployed on existing street furniture such as street lights, electricity poles etc. The requirement for a formal application for SACFA for such cases has been done away with.

Under the reform initiatives, the clearance for such cases has been replaced with simple registration which can be downloaded instantly. The processing fee has also been reduced by 90%.

The reform will reduce the transaction cost of the service providers. This will reduce their compliance burden and save a lot of time. The subscribers will get greater coverage and a seamless experience.



## FASTER CLEARANCE

A simple registration-based process was introduced that can be downloaded instantly.

### Processing Fee

It was ₹ 1000 before the reforms

₹ 1000

### Processing Fee

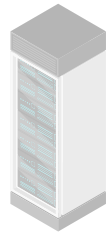
It is reduced by 90% after reforms

₹ 100

**Before Reform**

**After Reform**

# BRINGING TELECOM EQUIPMENT INTO THE COUNTRY MADE EASY



To ensure that only authorized user can bring wireless equipment from outside the country, import license is issued from DoT.

Previously, the entire import license process was manual and scrutiny based. It was time taking too.

Now, the entire process has been made online. Scrutiny based clearance has been replaced with self-declaration based clearance. It is now available instantaneously.

With this reform, there will be quicker deployment of equipments by the Service providers. It will help in improving the quality of service.





# RATIONALIZATION OF SATELLITE TELEPHONY SERVICE CHARGES

Satellite telephone is the most convenient means of connecting the people in remote, inaccessible locations. The user can connect to their desired ones directly through satellites. No mobile tower, fibre is required.

Previously, the charges for the service providers for using the spectrum, was formula-based and hefty,

Now, the charging method has been revised. It is a small percentage of their revenue. In absolute terms, the charge has got reduced drastically.

With this reform, there will be attractive business opportunity. This will create healthy business environment and competition. The service will be affordable. The marginalized ones will be part of the mainstream.



Huge Financial Burden on TSPs

**Before Reform**



Healthy Business Environment

**After Reform**

# ONLINE, SEAMLESS LICENSING PROCESS

Generally, a license is required to use spectrum. Various types of use categories are covered under different licenses. It includes, FM, Community radio, use by various businesses/ factories etc. for their own needs, and many more.

Previously, the licensing process was semi-online. The receipt of application and delivery of service was through online means. The internal processing was manual. Besides, the entire process was completed in multiple stages. There was intervention from the licensor's end at every stage.

Now, the entire process has been made online. Intervention from the licensor is limited to first stage only. Other stages are user-driven. Associated approval/ clearances are available instantaneously, as soon as user submit compliances.

With this reform, there is drastic reduction in the service delivery cycle. The license could be received within two months, compared to previous timeline of around 1 year. The entire process is seamless, faceless and transparent

## Delivery Cycle



**Avg. time - one year**

**Before Reform**



**Avg. time - two months**

**After Reform**



# DIGITISATION OF RECORDS AND AUTO-RENEWAL OF LICENSE

The old license records were in physical form or in standalone computers. Such records needed to be digitized and migrated to new online system. Then, old licensees could avail the facility of online services.

Special drive was taken to digitize the old physical records. In a record time, around 2 lakh records were digitized and migrated to new system.

Now, the records are available in the new online system. The old users may avail the service of renewal, modification etc. of such licenses. The renewal has been made auto-renewal. Just by making requisite payment, the renewal certificate can be generated instantaneously.

With this reform, there is drastic reduction in the service delivery time. The entire process is seamless, faceless and instantaneous. There is massive resource savings in terms of man-power, use of paper.



**Before Reform**



**After Reform**

# DELICENSING OF VARIOUS FREQUENCY BANDS

Certain frequency bands are permitted for use by the general public, without any license. The equipment is generally low-powered. It works within a short distance. Such devices are used in almost all areas of our life. The popular ones are WiFi routers, Bluetooth devices, RFID tags etc.

Recently three policy reforms have been made in this delicensing category.

- (i) Additional 1 MHz spectrum delicensed (867-868 MHz), over the existing 865-867 MHz;
- (ii) 9 kHz- 30 MHz delicensed for inductive applications;
- (iii) Conditions of delicensed use of 433-434.79 MHz revised;

1 MHz additional spectrum in 867-868 MHz and revised regulations in 433 MHz band will help in better equipment availability. The bands are very useful for Internet of Things (IoT) devices. Such devices will be used more and more in Smart Cities, Smart homes, Smart agriculture, e-Health, Smart education etc.

The delicensing of the 9 kHz-30 MHz band will help in the proliferation of inductive devices such as wireless chargers, proximity sensors, personal identification, animal tracking, anti-theft system etc.

The above reforms will also promote local manufacturing, innovations and development of indigenous technologies.



**Medical Implants**



**Animal Tags**



**Wireless Charging**



# TESTIMONIALS

---



The recent reform in WPC, DOT regarding issuing of licences to Indian Railway are appreciated at large. Introducing the online Saralsanchar portal enhanced our efficiency in commissioning of communication networks through ease of doing business. This reduces the burden of offline processing of different applications at our end also.

**Ministry of Railways**



Airtel was provided with the allocation letter for the designated frequency band within hours. E band allocation was given along with spectrum as promised. In my over 30 years of first-hand experience with Department of Telecom, this is a first! Business as it should be. Leadership at work- Right at the top and at the helm of telecom.

**Sunil Bharti Mittal,  
Founder and Chairman,  
Bharti Enterprises**



On behalf of Community Radio Association (CRA), I take this chance to complement and appreciate the team of Ministry of Communication, WPC, Government of India for introducing the Saralsanchar Portal for the benefit of Community Radios and other stakeholders. The procedure adopted has eased the registration and revision of licences of Community Radios across the country. The efforts of Ministry of Communication is highly appreciated.

**President,  
Community Radio Association**



We compliment and appreciate the team of Ministry of Communications, WPC Wing, Government of India for introducing the Saralsanchar Portal for the benefit of Satellite Industry and other stakeholders. The procedure adopted has eased the Registration and Revision of licences of Teleports/DSNG Vans across the country, especially in case of Temporary Events using DSNGs.

**Planetcast Media Services Limited  
(India's largest Teleport/DSNG  
operator)**

# BE THE CHANGE



## Advisory on the proper use of Wireless jammer and booster/ repeater

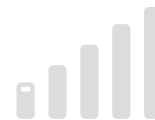
### WIRELESS JAMMERS



Wireless jammer or signal jammer intentionally jams/ blocks authorized signals such as cellular communications (2G/3G/4G etc.), personal communications (WiFi etc.), navigational communications (GPS etc.) by radiating strong radio energy of similar frequencies.

It is unlawful to advertise, sell, distribute, import or otherwise market signal jamming devices in India, except as permitted under the guidelines

### SIGNAL REPEATERS/ BOOSTERS



A mobile signal booster/ repeater is a kind of amplifier, apparently used to improve cell phone signal reception. However, unauthorized use of mobile phone boosters can adversely interfere with, disrupt public telecommunication services by jeopardizing the quality and coverage of such services. This, not only cause inconvenience to mobile phone users but can also hamper access to emergency call services from mobile phones, which creates a risk to public health and safety.

It is unlawful to possess, sell, and/ or use a mobile signal repeater/ booster by any individual/ entity other than the licensed Telecom Service Providers..

### Applicable Laws:

The Indian Telegraph Act, 1885 (Section 20 & others);

The Indian Wireless Telegraphy Act, 1933 (Section 6, 6.1 & others);

The Information Technology Act, 2000;

Any other Security Guidelines/ provisions of the Government;

**If you have any information w.r.t. unlawful possession/ sale/ use of the above devices, please inform Wireless Monitoring Organization (WMO), Department of Telecom for necessary action in the matter.**

**Telephone: 011-2905-4712**

**e-mail: [info.wmohq@gmail.com](mailto:info.wmohq@gmail.com)**



## DoT planning faceless WPC procedures, revamp in the works



Ashwini Vaishnaw, minister of communications and information technology. (File Photo)

1 min read · Updated: 17 May 2022, 02:39 PM IST

Gulveen Aulakh

- The reforms will be part of the overhauling exercise being done by the department of telecommunications internally as it looks to simplify procedures and provide ease of doing business to the industry

## DoT wireless wing cracks down on illegal signal boosters in Delhi

Illegal mobile signal repeaters have become a major nuisance and are one of the biggest reasons for customers facing network issues like call drops and low data speeds.

Written by PTI

February 22, 2021 9:31:07 pm



These illegal repeaters are installed by individuals or establishments at homes, offices to boost mobile signals.

The wireless monitoring wing of the Department of Telecom has identified 88 illegal mobile signal boosters in the national capital and removed 70 of them in the last three days, a senior official of the department said on Monday.

## DoT issues advisory against use of signal jammers and repeaters by private organisations and individuals

ET Bureau · Last Updated: Jul 04, 2022, 01:40 PM IST

### Synopsis

Not just jammers, the DoT has deemed the use of mobile signal repeaters and boosters by individuals as unlawful. The memo said that the unauthorised use of repeaters can adversely interfere with and distort public telecommunication services by jeopardising the quality and coverage of such services.



The Department of Telecommunications (DoT) has issued an advisory against the use of cellular signal jammers, GPS blockers or other signal jamming devices by the general public deeming it illegal unless specifically permitted by the government.

In a memorandum issued in public interest on July 1, the DoT clarified that only states, union territories, defense forces and central police organisations can possess and use jammers approved by the government.

Ads by Google

Send feedback

Why this ad?

## Sale of illegal repeaters, boosters: DoT cautions e-commerce companies to abide by rules

PTI · Last Updated: Apr 17, 2021, 09:27 PM IST

### Synopsis

The Department of Telecom (DoT) had roped e-commerce businesses on the issue on several occasions, and had also made it clear that these companies cannot shrug off their responsibilities merely by claiming that their role was limited to that of a facilitator of the marketplace.



The telecom department has warned e-commerce companies over illegal facilitation and sale of unauthorised mobile signal boosters and repeaters on online platforms, and has asked them to adhere to the rules. The Department of Telecom (DoT) had rapped e-commerce businesses on the issue, on several occasions, and had also made it clear that these companies cannot shrug off their responsibilities merely by claiming that their role was limited to that of a facilitator of the marketplace.

Buy Galaxy Tabs Range now and get 50% off on Keyboard Cover.

Popular in Telecom

- Vodafone Idea board meet on Oct 21 to consider fundraise via convertible bond issue to vendor
- India slips a rank in mobile, fixed broadband speeds

## DoT's wireless monitoring wing brings down 140 illegal mobile signal boosters in Delhi

PTI · Last Updated: Mar 02, 2021, 09:55 PM IST

### Synopsis

We have conducted awareness campaigns with which people are made aware, not to use illegal mobile signal boosters. During the campaign, people voluntarily surrendered and removed 140 mobile signal boosters and reported about improvement in network connectivity in their areas. DoT Wireless Monitoring Organisation Engineer Incharge Dhanendra Kumar Rai told.



The wireless technology monitoring group of the Department of Telecommunications (DoT) has brought down 140 illegal mobile signal boosters during a week-long raid in the national capital. The raids were conducted between February 18 and 24 in several parts of Delhi, including Connaught Place, Hauz Khas and

Nehru Place.

"We have conducted awareness campaigns with which people are made

WORD Monitor

Unlock your blog's revenue potential

Streamline Monetization Site Speed and More

GET STARTED

### Popular in Telecom

- Vodafone Idea board meet on Oct 21 to consider fundraise via convertible bond issue to vendor
- India slips a rank in mobile, fixed broadband speeds

## Beware! Illegal mobile boosters can attract heavy fines

Despite regular raids by DoT (Department of Telecommunications) across the country, and strict laws against the use, selling and possession of mobile signal repeaters, the proliferation of such illegal equipment is rampant

SHARE TWEET WHATSAPP



As part of the recent crackdown, some 70 illegal repeaters were removed





**Ministry of Communications  
Department of Telecommunications  
Sanchar Bhawan, 20 Ashoka Road  
New Delhi- 110001**