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MAGAZINE ON E-GOVERNANCE

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JULY 2017 | VOLUME 13 | ISSUE 07

CELEBRATING
150th

MAGAZINE ISSUE

SINCE 2005

PART 1

Special Focus
elets 20th Smart City Conclave
Chandigarh 2017



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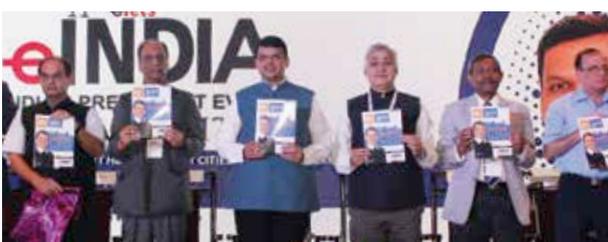
elets 20th Smart City Conference

It is indeed a matter of great pride and pleasure to present before you Elets Technomedia's 20th Smart City conference in Chandigarh, the 'City Beautiful'.

Pioneering Smart City Conferences in India, Elets Technomedia has come a long way since 2010. Apart from organising conferences on ICT for governance, health, education and the BFSI sector, Asia and Middle East's premier media and technology research organisation has organised dedicated smart city and urban development conferences across the country.

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CELEBRATING 150th MAGAZINE ISSUE

SINCE 2005
PART 1

eGOV PAST, PRESENT, AND FUTURE

Throwing light on how e-Governance has been shaping up a new India at the administrative level, along with industry collaboration, over the years with innovation and use of ICT, ensuring ease in the government system for the common man, Elets has seen it all during its odyssey of 12 eventful years. It's been truly an enlightening experience for one and all to explore the nation's growth and emergence as a developed nation at the world stage.

This 150th magazine issue is a flashback of our endeavours dedicated to documenting of the big transformation of modern India and understanding the present and future of eGovernance.

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Our Publications and Initiatives



CONNECTING THOUGHT LEADERS

Founded in 2005, eGov magazine is published in both print and online formats. Innovative use of ICT in Governance is at the heart of our all eGov initiatives.



FOR TOP VIDEOS
OF THE MONTH

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Smart City Summit

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11th eINDIA

P P Chaudhary,
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Ministry of Law and Justice; and Ministry of
Electronics and Information Technology



Urban Development Summit

K T Rama Rao, Hon'ble Minister IT,
Municipal Administration & Urban
Development, Telangana

eGov – A Journey of 150 issues!

यूँ तो हो सकता नहीं आसमाँ में एक सुरास्र, एक पत्थर तो तबियत से उछालो यारो।
(*Though one can't make a hole in the sky, Try to put your heart flinging that stone.*)

When we started the egov magazine in 2005, the idea was considered well ahead of its time by most of the people in the Government and the ICT industry I interacted with. The Indian IT industry was expanding at a scorching pace then, making me brood if there's a way IT could address the common man's problems.

We knew one-day that the Government will have to use IT in a big way if life of a common man has to become simpler and corruption-free.

We started off with the aim of documenting the e-governance initiatives by visiting various parts of the country. We also started inviting international e-government / e-governance experts to write on what journey of e-governance is expected to happen in India.

The aim was to start a dialogue between various key stakeholders of egov ecosystem -- government, technology providers, civil society, academia and citizens on how IT can help transform citizen services in the country. We also aimed to document best practices so that each government organisation does not have to reinvent the wheel.

We felt that there was a need of creating a face-to-face platform for the egov community and that's how our eIndia conference was born. The eIndia conferences received tremendous response over the years and they became a key platform of the country for dialogue on e-governance between various State governments, Central government departments, private sector and other stakeholders. As we launched the magazine, we realised we needed to be present online too to reach out the larger global audience. We started our egov website with just magazine's content. Later, news items, exclusive stories, trends and policies on e-governance were getting updated, which results into more than 7 million hits on our website.

Since the egov space was in a nascent stage in the country, requests were made to commence training programme from government organisations and requests for organising workshops on egov also started happening. We realised early the importance of getting deep into thematic issues of IT implementation, leading to creation of sister publications of egov magazine -- 'ehealth', 'digitalLearning' and 'The Banking and Finance post' magazines.

We also started Smart City conferences in 2010 to bring a focussed attention on how ICT can solve the exponential growth that the urban India was witnessing. We've covered a long journey so far and our 20th Smart City conference is happening at Chandigarh on 28 - 29th July 2017.

We also went outside India to create knowledge-sharing platforms with other countries, with eAsia conferences in Bangkok, Kuala Lumpur, Colombo and Sri Lanka and seminars in Beijing, Geneva, Tunisia, Cambridge (UK), Denver (US), Dubai, Bahrain and several other countries.

The journey was treacherous to start with. And, every day brings its new challenges.

Inspite of this, we've made it our mission to organise Smart City conference in every 100 proposed smart cities announced by the Government of India. Aware of it being a daunting task, we are determined to spread awareness about technology's role in governance.

We've also made our mission to reach out to every Indian state, organising conferences on ICT in health, education, financial inclusion and related sectors in five years. As we complete our 150th issue journey of egov, I thank all past and present employees of elets who played a key role in reaching here. Thanks to all well-wishers in government, private sector and other stakeholders who have encouraged us a lot and gave energy to our team to march on.

Last but not the least, thanks to my parents, relatives and friends who supported financially and morally to make this Mission egov 150 possible!

Looking forward to the next Mission 150!

> MAGAZINE

It compiles ICT-related advancements being introduced, exercised by various government organisations via eGovernance module.

> NEWS

Dealing with various key developments and policy-related decisions that define Indian governance style at large, this section throws light on the most important aspects.

> WEBSITE

With a reach of sixty lakhs, the website is pushing the Digital India campaign of the Government of India. It highlights various dimensions of anything and everything related to the changing trends of governance in India .

> EVENT REPORTS

This segment narrates the discussions and deliberations of participants at the occasional conferences held nationally or internationally.

> CASE STUDIES

It deals with in-depth detail of various projects being implemented in any part of the country, worth inspiring others in providing solutions.

> VIDEOS

The youtube channel 'EletsTV' deals with live recorded versions of tech-experts and key decision makers who participate in key debates or discussion of Elets knowledge conferences.

> INTERVIEWS

This section highlights various stakeholders, bureaucrats and policy makers influencing governance in the country.



DR RAVI GUPTA

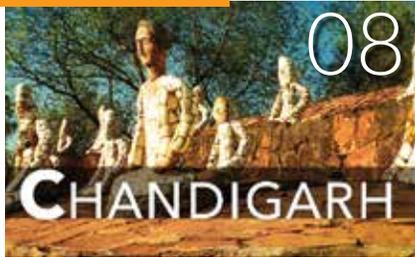
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Founder and Managing Director
ABM Knowledgeware

Transforming Governance in 110 towns and cities in Andhra Pradesh



eGovernments Foundation in association with the Government of Andhra Pradesh recently implemented its open source DigiCity platform in 110 Urban Local Bodies across the state.

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16 READY TO USE URBAN GOVERNANCE APPLICATIONS



- Open APIs
- Open Source
- Free to use
- Mobile First
- 325 cities across India

STAKEHOLDER FEEDBACK

“DigiCity has become an integral part of governance processes in AP. The dashboards enable us to make informed decisions in real-time and drive efficient usage of municipal resources. The PuraSeva mobile application has enabled a deeper connect with our citizens across our cities and towns.”



K. Kannababu
Director of Municipal Administration
Government of Andhra Pradesh

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eGovernments Foundation (eGov) was established in 2003 with the objective of transforming urban governance leveraging technology. The foundation has a team of technical and municipal domain experts who have developed the 'DigiCity platform' that provides citizens with easy & transparent access to government services and drives efficiency in Urban Local Bodies.

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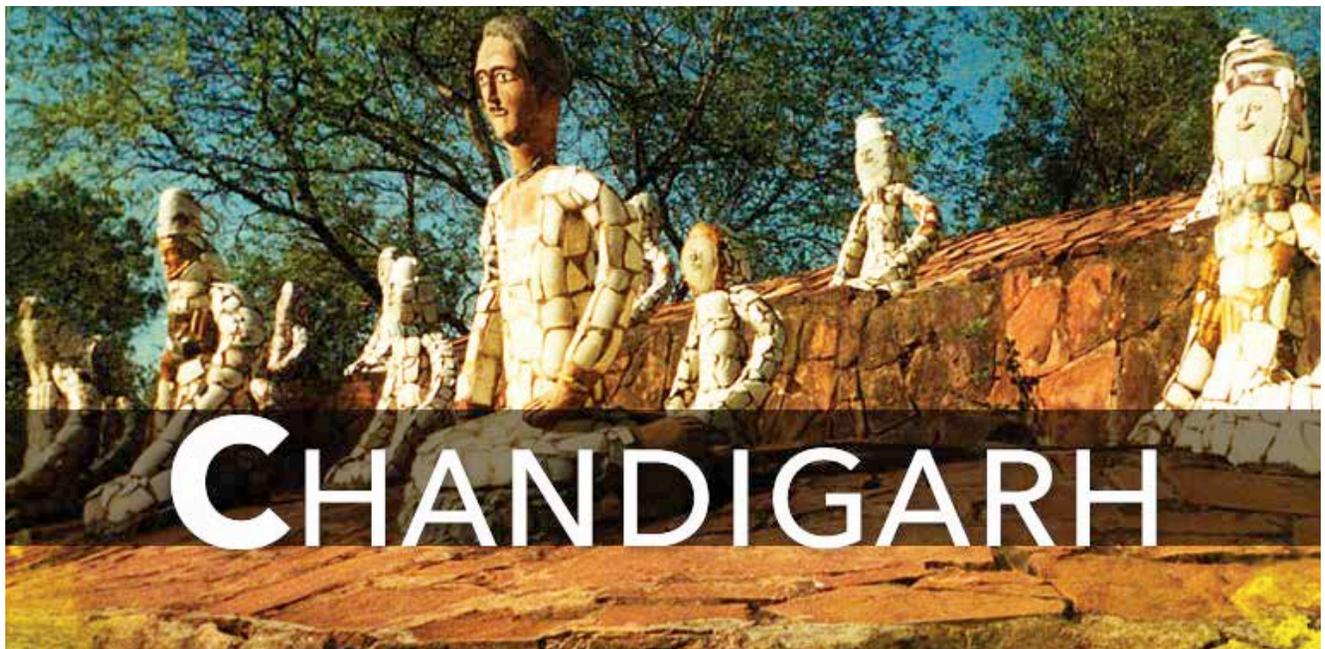
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Chandigarh

The Most e-Ready City of India

The idea of Chandigarh was conceived by country's first Prime Minister Jawaharlal Nehru at a time when the nation needed to see a dream – of a harmonious and prosperous life - in clean and green environment, a happy place where one could lead life simply. Sixty five years down the line, the entire purpose of Smart Cities project is to achieve this aim, writes **Priya Yadav** of Elets News Network (ENN).



Rock Garden, Chandigarh

Independent India's first planned city Chandigarh has always been way ahead of other cities in providing a high standard of living to its citizens. Now with the 'City Beautiful' all set to get more Smart, the Municipal Corporation of Chandigarh is rapidly rolling out smarter ways of living life. Most recent of these is Smart Parking, made

operational last June, allowing citizens to book their parking slot online before actually driving in.

Another 'Smart' project is the Smart City Operations Centre, a project under Smart City Innovation Centre (SCIC) at Punjab Engineering College campus, which was also inaugurated on the same day by V P Singh Badnore, Chandigarh Union

Territory Administrator and Member of Parliament Kirron Kher.

The Centre records and provides data of various services of the civic body in real time. The functioning of electricity poles, CCTV cameras, traffic movement, garbage collection, street sweeping, movement of buses is monitored from a centralised control room and real time data can be accessed and even controlled from a mobile phone.

“Urbanisation is the biggest challenge that the society is facing. Along with taking care of senior citizens, latest technologies could be provided to the new generation to keep up with the requirements of today’s world,” said Badnore at an event.

“The key objectives of this project are to establish a living lab and urban observatory for smart city solutions, skill development and capacity building for Smart Cities, innovation centre and startup hub for Smart Cities. There are various systems which are influenced by this project viz. Solid Waste Management, Smart Traffic, Smart Environment, Smart Lighting and Public Transport,” said Purushottam Kaushik, Senior Advisor-McKinsey and Adjunct Faculty.

The project has achieved its first milestone of establishing a “Living Lab and Urban observatory” and “Innovation Centre” with active collaboration between Chandigarh Smart City Special Purpose Vehicle (SPV) and global Multi National Companies (MNCs) and leaders of Smart City solutions.

Even as the civic body has ambitious plans of providing world class amenities to its citizens, the spirit of the city, as envisioned by its planner, famous Swiss French architect, Le Corbusier, has remained intact. Credited to have been country’s

French Company to implement Smart City Project in Chandigarh

The board of directors of the Special Purpose Vehicle for the Smart City Project have finalised a French company, as the project management consultant. The firm will take up in the first phase, special cases under the Area-Based Development (ABD) plan of Sectors 16, 17, 19, 22, 35 and 43. It will focus on smart parking, 24x7 water supply, smart metering for electricity and water connection, bicycle tracks, disabled-friendly sidewalks besides developing parks and installing street lights.



‘Wealthiest City’, ‘Greenest City’, ‘Cleanest City’, all indicators of a prosperous lifestyle, Chandigarh was recently also credited to be also an ‘Ideal City’. Jonathan Glancey of BBC reported in an article about Chandigarh.

“Of all the world’s ideal cities, Chandigarh has done remarkably well, offering striking monumental architecture, a grid of self-contained

neighbourhoods, more trees than perhaps any Indian city and a way of life that juggles tradition with modernity. While history tells us ideal cities are mostly best left on paper, Chandigarh – perhaps one of the least likely – appears to have succeeded against the grain,” wrote Glancey.

What perhaps distinguishes the city from rest of the country, by and large, is the fact that government beats the private sector in providing better services to its citizens. Be it health, education, recreation or hospitality. The best health services, at cheapest rates, are rendered by Chandigarh Administration’s hospitals and health clinics.

The best schools in the city are government-run and often have the highest cut off percentage, the best colleges too are run by the government. Same is true for hospitality where the hotels run by Chandigarh Administration give the private sector hotels a run for their money.

The City Beautiful is not just pretty to look at – it has sharp brains too. One of the most e- ready cities, the citizens do not make serpentine queues at sarkari offices – e-Sampark centres have revolutionised the way people interact with the government.

Most bills are deposited online or cashless. Nearly six lakh people deposited electricity bills this year through e-Sampark. It was also used to pay 3.78 lakh water bills online. e-Sampark was initiated to bring together the services of all the departments under a single umbrella and give citizens of Chandigarh a “multi-service” - “single-window” experience apart from eradicating the undue harassment met by the citizens due to lack of transparency.

Chandigarh’s green cover is the envy of anyone living outside it. Carefully

SPECIAL STORY

planned and constantly nurtured, the verdant environ of the city has earned it the sobriquet of City Beautiful. The forest cover in UT Chandigarh is 48.03 square km and another 9 sq km area is under tree cover. The total green cover of Chandigarh as per India State of Forest Report 2015 is 57.03 sq km which makes a staggering 40.73% of its total geographical area.

The beautifully landscaped gardens like Shanti Kunj, Rose Garden, Botanical Garden, the Sukhna Wildlife Sanctuary are tourist attractions in their own. And the Municipal Corporation loves to celebrate this proximity to nature.

For this, every year, the famous Rose Festival is held in March at Rose Garden and Chrysanthemum Show is organised in December second week at Terrace Garden which sees a stunning display of over 15,000 flower pots.

For a city known for its wide roads, uninterrupted traffic, the increasing number of vehicles has put on a load that the city, designed for less than five lakh people, is finding it hard to bear.

The wide and well maintained roads are seeing frequent road blocks and rush hour blues. While an underground Metrol Rail project has been sanctioned a decade ago, it is yet to see light of the

The Chandigarh Smart City Limited has called for expression of interest to introduce public bicycle sharing system. As per the plan, 10,000 bicycles will be bought for 600 busy points in the city.

day. The administrative and civic authorities are not waiting with hands folded. An alternative transport system has been planned and executed i.e. use of bicycle.

A critical project of Smart City, the construction of dedicated cycle tracks has been done to facilitate bicycle sharing in the city. A survey was done and it was decided to construct 90 km of new cycle tracks that will cover the

entire city in addition to the 82 km of already existing tracks.

The Chandigarh Smart City Limited has called for expression of interest to introduce public bicycle sharing system. As per the plan, 10,000 bicycles will be bought for 600 busy points in the city. This will allow the residents to commute from point A to point B by cycles that will be fitted with GPRS system. A control room will be set up to monitor the movement of cycles.

One sector has gained the most in the smart city plan – nearly 90% of funds will be spent on its development alone. Sector 43, which has a lot of vacant land to offer will see coming up of an exhibition centre, a convention centre, an iconic arena, an art museum/ and gallery, hotels and services apartments, office space for incubation and skill development centre, integrated roadway, food, beverage and entertainment district, affordable housing, a hostel facility and a children playground.

Chandigarh is carrying forward its legacy of association with France. The French Development Agency AFD has offered to provide technical cooperation in the field of Sustainable Urban Mobility and has signed a Memorandum of Understanding (MoU) with the UT Administration for the same.

The AFD has offered assistance to implement the Smart City project by providing recommendations on institutional operational and financial structuring of the project and by organising workshops between experts and Chandigarh authorities.

One of the key features which distinguishes Chandigarh from rest of the country is its efficient waste disposal. It is a city which has its roads not littered with overflowing garbage bins or heaps of garbage dotting the lanes. Instead, the garbage is collected





from door-to-door and taken for processing.

Chandigarh's 1.05 million people generate about 400 tonnes of solid waste every day. The city employs 4,085 sweepers which is 2.65 sweepers per km of road. More than 95 per cent of Chandigarh's population is plugged into a sewage network and there is no mess of overflowing drains or open drains.

Also people littering parks and public places are dealt harshly by the Municipal Corporation (MC). Last year, the MC issued 3,543 challans to people found littering in public spaces and earned Rs six lakhs in fines.

"Waste processing is a basic and fundamental feature of any city. I do not consider it as a smart feature at all. For any place to be recognised as a city, it should have a robust waste processing system in place," said Municipal Commissioner Baldeo Purushartha.

Under the smart city proposal the

Capital of two States, Chandigarh, is one of the most e-ready cities. Residents interact with the government in a smart way – eSampark centres have been opened in almost every sector which offer 78 services to citizens.

civic body has laid stress on improving Solid Waste Management. City targets scientific disposal of all solid waste by 2020. Two bio methanation plants are coming up and other local

waste to energy compost solutions are being explored.

In order to ensure better management of municipal solid waste in the city, the civic body has in association with the Chandigarh Animal Welfare and Economic Development Society built 'Sehaj Safai Kendra' and 'Khad Banao Kendra' at several places in the city. Residents of the sectors have been asked to dispose of their household garbage or horticulture waste at these designated places only.

Capital of two states, Chandigarh, is one of the most e-ready cities. Residents interact with the government in a smart way – eSampark centres have been opened in almost every sector which offer 78 services to citizens. From water and electricity bills to filing of property tax, eSampark centres take all kinds of payments while making it easy for residents to pay their bills.

Now a mobile app is allowing residents to pay bills from their phone itself, making life extremely comfortable. This means that residents do not have to queue up even at eSampark centres.

The city is advancing towards a modern way of getting admissions – eCampus is the new thing that is unfolding. An online admission portal has been started and as a pilot project six government and six private colleges' admission will be done online. This means that from getting a prospectus to the admission and depositing fee, the entire procedure will be done online. The same is being replicated in schools.

"eSchools and eCampus are the next new thing – technology is helping in reducing interaction of citizens with government staff. Now mobile apps are also being launched so that entire admission can be done from the phone," said Anil Prashar, Head of Society for Promotion of IT. 



Le Corbusier, the renowned Franco-Suisse architect, who planned Chandigarh city.

“Though largely thought to be original creation of Le Corbusier, the city’s first planning was done by Albert Mayer, an American architect.”

City Beautiful and Its Sobriquet

Born out of the pangs of country’s partition, need for a capital city Chandigarh was acutely felt after unified Punjab’s capital, Lahore, went to Pakistan. Country’s first Prime Minister Jawahar Lal Nehru envisioned a new capital city for Punjab in India that would represent the very spirit of independence that the country had attained, writes Priya Yadav of Elets News Network (ENN).



Chandigarh city is also known as the City Beautiful.

It was meant to be a city that was a joy to live in- an example of urban planning and architecture. World renowned Le Corbusier, a French Swiss architect of international repute, understood the passion behind these sentiments and created a city that is now considered the most futuristic city of all times the world over.

“Let this be a new town, symbolic of freedom of India, unfettered by the traditions of the past.. an expression of nation’s faith in the future,” said Pandit Jawaharlal Nehru, country’s first Prime Minister.

Though largely thought to be original creation of Le Corbusier, the city’s first planning was done by Albert Mayer, an American architect.

American firm, M/s Mayer, Whittlessay and Glass was commissioned in 1950 to prepare the master plan for the new city. Mayer advocated the concept of City Beautiful, an architecture concept that was popular in America during 1890s and 1900. He is believed to have said, “We want to create a beautiful city”. The phrase was used as a logo in official publications and has now become the city’s sobriquet.

The City Beautiful movement in America, which inspired the city’s creator, was a reform philosophy of North American architecture and urban planning which intended to introduce beautification and monumental grandeur in cities. It was felt that such beautification could promote a harmonious social order that would

increase the quality of life. Its reflection is easy to trace in the city with the unique architecture of its landmark buildings like the Capitol Complex, the Assembly Hall, Gandhi Bhawan in Panjab University and others.

“Chandigarh is very proud of its architectural legacy and massive efforts are being made to conserve and preserve its heritage buildings,” says Anurag Aggarwal, Home Secretary, Chandigarh Administration.

Sixty five years after it was envisioned and came into existence, Chandigarh, has earned the sobriquet richly. And it is not just for its architectural grandeur. It is a city that is bestowed with healthy 'lungs'. A vast, impressive green belt threads its way through the city, end to end. This is a network of sprawling gardens and parks that are thickly wooded and beautifully maintained. Manicured hedges, trimmed grass, flower beds blooming with seasonal flowers, these parks are tourist attractions in themselves.

Chandigarh is perhaps the only city that celebrates flowers. Come December, when the city turns into a feast for eyes with chrysanthemums in full bloom, the



Le Corbusier

Terraced Garden hosts the annual Chrysanthemum Show. Organised by Chandigarh Municipal Corporation, the flower festival sees a footfall of staggering 1.5 lakh visitors over a period of three days.



Chandigarh city at the time of planning by Le Corbusier.

The horticulture wing of the civic body, that organizes the show, nurtures over 12000 pots of several varieties of Chrysanthemum and arrange these in alluring designs in the garden for benefit of visitors. A competition held invites private entries from institutions, colleges, schools, residences and awards are cherished by the recipients as most prestigious.

“We are working on a horticulture policy that will streamline the maintenance and development of parks in the city. These are extremely popular among city residents and lot of effort is being poured into developing these to gain international recognition,” says B Purushartha, the Municipal Commissioner.

City residents are equally possessive about the city’s parks and gardens and join hands with the civic authorities for their upkeep. The flower beds are always full of blooming flowers and perhaps it is one of the few cities where none from public plucks them. “Residents contribute equally in maintaining the parks and green spaces and are very proud of these. The citizen engagement in upkeep of neighbourhood parks is amazing,” says Asha Jaswal, the city’s Mayor.

It is not just the Chrysanthemum show

that is gaining international recognition. The Rose Festival, held every February-March, in the season of roses, is also a sensation. It is a complete carnival with camel rides in the Zakir Hussain Rose Garden which has the credit of being Asia’s largest. Sprawled over 30 acres, the garden has 50,000 rose bushes of 1,600 different species. The trees dotting the garden have medicinal values.

The Rose Festival sees the garden converted into a place of gaiety and mirth as people get together to celebrate the beauty of roses and spend time with family. “The new horticultural policy is factoring in the entertainment activities in city’s gardens to ensure there is minimal damage to the beauty of the garden,” says the Chief Engineer, Municipal Corporation, NP Sharma. The Smart City project aims to enhance this experience of interaction with nature with its emphasis on green cities.

Chandigarh is set to polish its already shining image of being the cleanest, greenest, city that is truly free of traditions of the past. It is a city that has fulfilled the promise of being “an expression of nation’s faith in the future,” as Jawaharlal Nehru dreamt. A “beautiful city” as Albert Mayer envisioned. It is a city that has arrived on the global scene acknowledged as the “ideal modern city” of the world. 



Anurag Aggarwal
Home Secretary
Chandigarh UT Administration

“Command and Control Centre is the very spirit of smartness. The primary objective of the centre is to bring an improvement in the quality of the life of the citizens.”

Chandigarh Administration Making ‘City Beautiful’

Chandigarh Administration is looking at modernising Sector-17 in a big way. Work is on for conservation of Capitol Complex, and also for expanding the Le Corbusier Centre, says **Anurag Aggarwal**, Home Secretary, Chandigarh UT Administration, in conversation with **Priya Yadav** of **Elets News Network (ENN)**.

Chandigarh is already ahead of other States in terms of planned infrastructure and civic amenities, what would ‘Smart’ status entail for the residents?

The Smart City project is a scheme for leap-frogging the city from one stage of development to another. We are poised for that. Whatever we are doing under the Smart City project, be it making cycle tracks, smart signage, mobile apps, is in that direction. Facilitating the residents is the prime focus so that their lives become easier and better in terms of living standards. For this, we are ensuring all services are upgraded. For instance, not only are we looking at providing 24x7 water supply across the city and ensuring state-of-the-art technology for sewage treatment is used but also we want to improve the quality of water, make tertiary water better and available to all people.

What are other plans of the administration under the Smart City project?

We are looking at modernising Sector-17 in a big way. Work is on for conservation of Capitol Complex. We are expanding the Le Corbusier Centre, a new museum is being made. The aim is to not just to look at modernisation but also conserve the heritage buildings. The house of city’s first chief architect Pierre Jeanneret has been converted into a museum dedicated to his

works in the city. Similarly the office of Le Corbusier from where he worked has been converted into a museum. Apart from protecting the heritage legacy of the city, we are working big time in modernising all infrastructure. For this Smart City Operations Centre, a project under Smart City Innovation Centre (SCIC) has been inaugurated.

What would be the role of newly inaugurated Command and Control Centre?

The Command and Control Centre is the very spirit of smartness. The primary objective of the centre is to bring improvement in the quality of the life of the citizens. The idea is to establish a living lab, an urban observatory for smart city solutions, skill development and capacity building for Smart Cities, innovation centre and startup hub for Smart Cities. Various systems which are influenced by this project include Solid Waste Management, Smart Traffic, Smart Environment, Smart Lighting and Public Transport. A lot of data will be generated which would be eventually made available to the citizens. This will empower the residents and help them plan better and smartly. For instance, if someone has to take a bus and he has prior information on traffic on a particular route, the bus movement, seat availability, he will be empowered to take a better decision about how to commute. elets.gov

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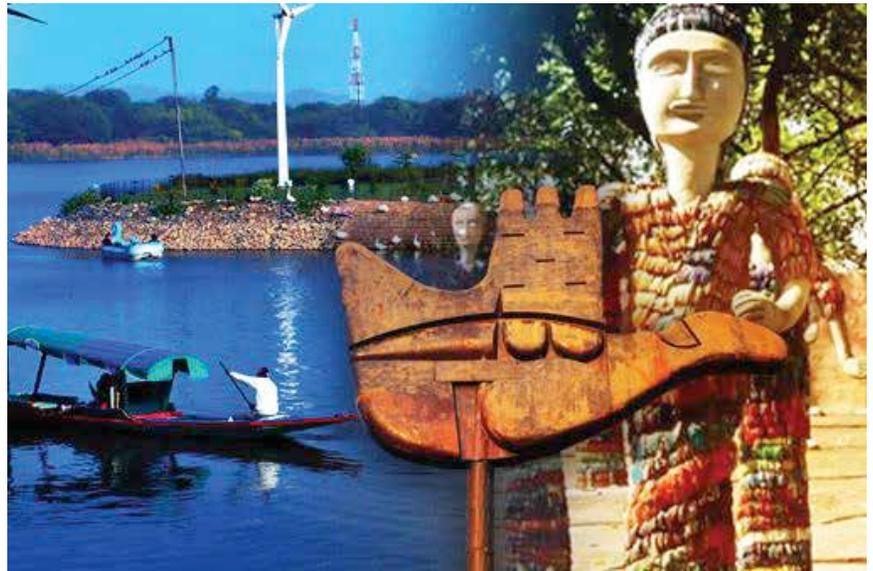
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Baldeo Purushartha
Commissioner, Chandigarh Municipal Corporation.

Citizens' Role Key for 'Smart' Chandigarh

An endeavour is being made to provide smart solutions for the convenience of the public while ensuring an effective service delivery and efficient monitoring, based on people's feedback and a time-bound grievance redressal system, tells **Baldeo Purushartha**, Commissioner, Chandigarh Municipal Corporation and the Chief Executive Officer (CEO) of Chandigarh Smart City Limited in conversation with **Priya Yadav** of **Elets News Network (ENN)**.



“Citizen participation is an important component of Smart City and we want more and more residents to come forth and join hands in the development of the city.”

What does the tag of Smart City mean for the residents of the city?

Under the Smart City project we are looking at improving the basic infrastructure that goes in improving the quality of life of city's residents. This means smart solutions for a clean and sustainable development. We want basic infrastructure to be developed like improving the potable water distribution round the clock, the use of Supervisory Control and Data Acquisition (SCADA) system for distribution and installation of smart meters.

We are looking at improving the quality of waste water and setting up a parallel system for its distribution network. A separate line is being worked on for the distribution of recycled water. Even as its availability will improve for non-drinking purposes, we are augmenting the treatment facility which means that its quality will also improve.

Waste management is an important component of the Smart City project. What efforts are being made on this front?

Waste management is an integral and

essential component of any place to qualify as a city. Otherwise any dwelling will not be eligible to be called a city. We are working towards streamlining the Solid Waste Management system. Already we are making fuel pellets from the waste and now focus is on the organised way of garbage collection. We are using technology for better monitoring. There is a dedicated control room which monitors that all garbage bins are being cleared, all streets are being swept. Besides we are using machines to clean roads in many sectors. Eventually all the sectors will be covered by the control room monitoring disposal of garbage.

How is the power supply going to improve in the city?

We are already providing power supply around the clock across the city. Yet, efforts are on to further improve the situation. Increasingly, solar power is being preferred with technology to make more and more use of it. Smart meters are being installed that will help consumers get real time



“We are looking at improving the quality of waste water and setting up a parallel system for its distribution network. A separate line is being worked on for the distribution of recycled water.”

updates of their power consumption and will help them plan use of power. Work is on to get cables underground even as streetlights are being upgraded from traditional bulbs to LED. Smart poles are also being put up for better power saving.

What are the parameters that define Smart City and smart way of life for people?

The main objective of the Smart City project is to improve the quality of life of people. This is all inclusive of efficient urban mobility and public

transport so that people get real time updates of the bus movement. An overall improvement in the delivery of health services for all sections of society – be it children or the elderly. Also provision of high standard of education for children across all sections. There should be safety and security of citizens, specially for women, children and the elderly. Robust IT connectivity and digitalisation of all services is also a target for the convenience of residents.

Chandigarh has very active residents who take keen interest in its development. How is that helping the Smart City project?

Citizen participation is an important component of Smart City and we want more and more residents to come forth and join hands in the development of the city. We are making an attempt to give smart solutions for the convenience of the public. Besides effective service delivery and efficient monitoring, we are emphasising on feedback from the people and redressal of grievances quickly, in a time bound manner. We are also looking at single citizen administration interface so that complaints can be addressed efficiently and smoothly. 



Amit Talwar

Additional Secretary
Transport, Chandigarh UT Administration

Chandigarh's Transport Undergoing a Makeover

Chandigarh, described as the City Beautiful in common parlance, is known for its easy accessibility as well. The city, which has its compactness as one of its key features, is made extremely easy to access, courtesy, the exhaustive coverage by the Chandigarh Transport Undertaking, writes **Priya Yadav of Elets News Network (ENN)** in an interview with **Amit Talwar**, Additional Secretary, Transport, Chandigarh UT Administration, who who says that CTU is not just ensuring good connectivity to other States but providing an excellent local bus service to the residents which has made their life much easier.



“Chandigarh Transport Undertaking is moving towards a unified service of buses. This will allow monitoring the movement of buses in real time, getting data and making it available to the commuters to smoothen their commuting experience.”

How has Chandigarh Transport Undertaking grown over the years?

CTU was formed in 1966 with a fleet strength of 30 buses only. Now the fleet strength has grown and so has the connectivity to Punjab, Haryana, Delhi, Himachal Pradesh, Jammu and Kashmir, Uttar Pradesh and Rajasthan. The local operations are an integral part of CTU and cover 80,000 kms in providing city and sub-urban services.

What is the future of transport in the city?

We are moving towards an intelligent

transport system. An agreement has been signed between CTU and SGS India Pvt Ltd and Tekia Ingenieros, a Spain based consortium, to implement the intelligent transport system. This will allow CTU to manage and control its fleet of buses in the city completely online. This means that the residents will be able to get a seamless reliable and authentic information on bus arrival and departure timings, besides improved commuter service.

What are the other plans of CTU to improve commuter's travelling experience?

We are introducing smart cards that will

Highlights of City Bus Guide App:

- Source and Destination (All routes, stops and timings): Enter source and destination and get all the routes between them, along with bus timings and stops
- Bus routes with all day timing – Get route details from starting point to end point with timings. User can get any bus time details which the bus operates on throughout the day.
- Bus Stops with all day timing – Get the next buses coming on this stop with time details
- Send Feedback: User can send feedback by clicking on the feedback menu from the app and along with name, phone number, email user can submit his feedback regarding CTU services, buses, timings, fares etc
- User can get fare details for AC and non-AC buses by clicking the bus fares menu from the app
- User can directly call the CTU helpline from the helpline menu
- The bus pass menu offers all the details about the CTU bus pass, including daily pass, student pass etc.

help in cashless bus service facility, adding more buses in the fleet, setting up more depots and improving IT structure. We are looking at establishing a centralised control system to track buses across the city through GPS and display real time arrival time of each bus on the screens at the bus stands.

In this era of smartphones, what are the mobile apps that people can use for commuting through CTU?



“The UT Administration, under its Smart City project, is introducing electric buses that will facilitate creation of green corridor. We are looking at acquiring few electric buses in the next few months.”

We are committed to provide public services, “anywhere, anytime and on any device”. For this, myChandigarh mobile app has been introduced which is a gateway to the hub of smart mobile applications – City Bus Guide. City Bus Guide is an interactive mobile application which acts as a pocket guide to provide information related to CTU buses routes, stops and timings on the fingertips of the daily bus commuters. It lets search for available buses between any two bus stops by choosing the starting point and destination point. The app provides real

time transit information – such as the location of the closest bus stop with the soonest arriving bus.

How will you make the operations of CTU smarter?

Chandigarh Transport Undertaking is moving towards a unified service of buses. We are in the process of setting up an exclusive command and control centre that will cater to the transport department and will be a centralised monitoring and operating system for the buses. This will allow monitoring the movement of buses in real time, getting data and making it available to the commuters to smoothen their commuting experience.

What plans do you have to bring in an environment-friendly technology?

The UT Administration, under its Smart City project, is introducing electric buses that will facilitate creation of green corridor. We are looking at acquiring few electric buses in the next few months. For this, a trial run has commenced already. Under the integrated mass rapid transit system, strengthening of the local bus service is one of the key areas of focus. ctugov.in



Mukesh Anand

Chief Engineer
Chandigarh UT Administration

“Corbusier’s own office in Sector 19, where he used to work on designs of the city, has been converted into a museum that houses all the furniture he personally used- his sketches, drawings and work plans.”

How ‘City Beautiful’ Is Developing Holistically

He has been mandated to implement on-ground the ambitious vision that Chandigarh administrators have envisaged for the City Beautiful. Being the head of all the projects and their execution, **Mukesh Anand**, Chief Engineer, Chandigarh UT Administration, today holds vast grassroots experience, and shares it all in conversation with **Priya Yadav** of **Elets News Network (ENN)**.



What kind of development can the residents look forward to under the Smart City Project?

We are looking at the holistic development of the City Beautiful (as Chandigarh is commonly described as). The city was developed in the 50s and what we are planning now, will rejuvenate it. There are a lot of projects underway to make it happen. For instance, Sector 17 (of the city), which has seen a decrease in the footfalls after a large number of malls have come up in and around the city, is all set to undergo a vast change. An urban park will come up behind the iconic Neelam Cinema, which will be sprawled in nine acres. The present stadium and

open area around it will give way to the urban park that will have cycle tracks, open cafeteria, food court, skating rink and badminton court.

An exciting feature would be provision for community watching of sports matches. Big screens will be put up in the urban park that will allow large spectators to enjoy cricket matches etc, together. Another project is to connect Sector 17 to Rose Garden through an underground subway.

What are the plans to make the city more accessible and easy to navigate for outsiders?

The most common complaint we faced in the past was that all the sectors in

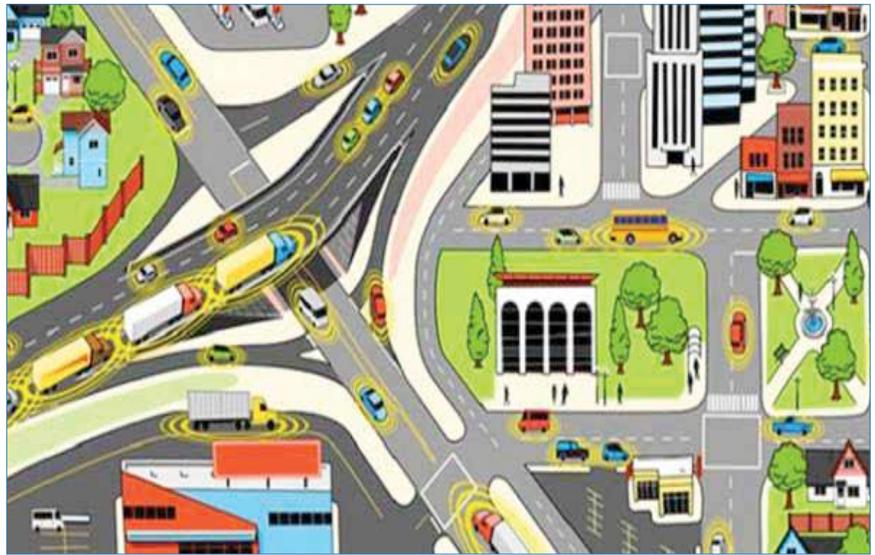
the city look just alike. The uniformity in buildings and common plan for all the sectors made it difficult for those coming out of the city to navigate easily. Now, under the Smart City Project, we have put smart signage at all the intersecting roads along with the logo of Smart City under it. The city has been comprehensively covered and the feedback from people has been very good. This has simplified its navigation and people can easily locate their destinations now.

The city has many heritage buildings built by its famous French architect Le Corbusier, what are the plans to conserve these?

We are very sensitive to the heritage that the city has. It has been built by a master – Le Corbusier- who was known to be par excellence and Chandigarh has many of his masterpieces. The Capital Complex has Heritage Grade I ranking given by the UNESCO. This is equivalent to that granted to the Red Fort. A massive conservation exercise is underway to conserve and preserve these buildings. The plan includes the Punjab and Haryana High Court, Secretariat, Assembly Hall, Open Hand – all of these will be preserved using latest techniques by March next year.

What are the tributes being paid to the memory of city's famous architects?

We have meticulously conserved and preserved the legacy of its creators – Le Corbusier and his cousin Jeanneret. The house of Chandigarh's first Chief Architect, Pierre Jeanneret, has been converted into a museum. The Swiss born architect Pierre Jeanneret, a cousin of Le Corbusier, designed most of the government housing, schools, colleges, shopping centres, Gandhi Bhawan, Panjab University. He lived in a self designed house in Sector 5 that



has now been converted into a museum. Corbusier's own office in Sector 19, where he used to work on designs of the city, has been converted into a museum that houses all the furniture he personally used-his sketches, drawings and work plans.

How is the urban mobility set to change?

A lot of options are being weighed to reduce the increasing congestion on roads. Metro rail was one of the options but now it is being seen if it is feasible at all. As an alternate transport plan, bicycle sharing is being planned. Cycle tracks are being made across the city, in several sectors the work is complete while in others it is still on. The city will be covered by over 10,000 cycles and their movement and operation will be monitored and controlled in a control room. This is the most environment-friendly and healthy way of commuting around the city. The city's architectural design and compactness makes bicycle sharing a very feasible way of commuting.

Increase in the city population is making demands on power supply, how will this challenge be tackled?

We are going to put into place comprehensive IT network that will also help people get their power consumption pattern in real time. Smart meters are being installed that have several power saving features. For instance, it will generate and relay data of power consumption on minute-to-minute basis. Also peak time power consumption tariff will change. This will allow the consumers to study, analyse their consumption patterns and plan the use of gadgets judiciously.

Chandigarh is a green city and there is a plan afoot to have green buildings. What is that?

More emphasis is being laid on having buildings that are environment-friendly and green. Even the existing buildings are being fitted with solar power panels and energy efficient gadgets. A green and intelligent building is coming up by the UT Administration that will have all the features that are environment-friendly. For instance, the bricks used for its construction would be ash bricks, the gadgets used will have five-star rating, it will be fitted with solar panels and will be energy efficient. It is part of a plan to have smart buildings. 



Anil Prashar

Head of Society for Promotion of IT in Chandigarh (SPIC)

Chandigarh Leading IT Transformation Race In India

Chandigarh has seen a revolution in the way its residents today interact with the government. There are no serpentine queues in government offices. Instead, residents prefer to log online and do cashless transactions. Now even school and college admissions are being done online, marking a leap in the use of technology for the purpose of governance and administration, writes **Priya Yadav** of **Elets News Network (ENN)** following an interview with **Anil Prashar**, the man who has ensured implementation of all these projects and is the Head of Society for Promotion of IT in Chandigarh (SPIC).

“The UT Administration has set up e- sampark centres across the city and as many as 78 citizen services are being provided at these centres.”



What is the mandate of SPIC?

SPIC has been set up under the Department of Information Technology, UT Administration, for implementing the various plans of the Administration to promote the IT industry in the city. The idea is to promote application of IT in UT in accordance with the IT policy of the administration. Also, we promote e-governance, software exports, create IT infrastructure, generate jobs in IT and to

facilitate the establishment and functioning of data processing centres. We provide consultancy services and impart training in various disciplines of IT.

What is the level of e-readiness among city residents and what are the facilities that the administration is giving to promote it?

People in Chandigarh, by and large, are

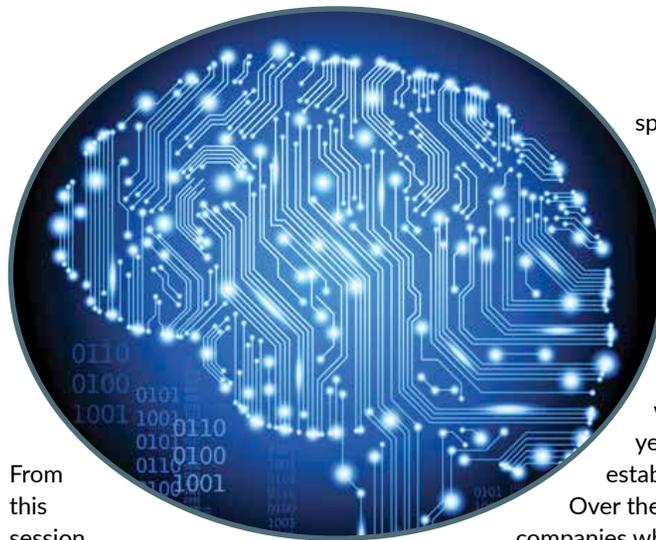
highly e-ready. They like to interact with the government the e-way instead of queuing up in offices. The UT Administration has set up e-sampark centres across the city and as many as 78 citizen services are being provided at these centres. These are being added by the day. The response from public has been extremely good and every day we see lakhs of transactions being done at e-sampark centres. People are paying their electricity, water, telephone bills and even paying property tax at these centres.

Now, we are going a step ahead and for those who don't want to even go to a neighbourhood e-sampark centre can go online or download an app that will allow you to do all transactions from your smart phone. This is of great benefit to people and will help in taking the load off the e-sampark centres or government offices. Now everything is going to be made online – for example from generation of electricity bill to paying it and getting its receipt-- all will be done online. This will facilitate people and they will not have to wait for the last minute to pay bills.

What are the projects that SPIC is working on to make people's lives easier?

We make a lot of apps that come in very handy for governance and for people to avail government services. Apart from apps for availing all e-sampark centre services on your smartphone we have come out with apps for various departments. For instance, we have developed an app for the transport department that allows commuters to check the routes and schedule of both local and long distance buses.

What is the next best thing happening on the e-governance front?



From this session onwards, we have made the admission process online. E-campus is set to change the life of students and their parents as the entire admission process can be done from your smartphone and people do not have to run from one institute or school to another physically. Even the prospectus of colleges is available online and can be downloaded instead of having to pay for individual college prospectus. To begin with, six government and six private colleges are going to have online admissions and subsequently all colleges will be taken into ambit. All technical institutes are doing admissions online. Similarly, the same will apply for school admissions and this will not just bring about ease for people but also transparency in admission procedure.

All these initiatives are also helping us ensure, besides providing comfort to people, that all fee is paid cashless. The city is fast moving towards cashless transactions and this is just one step in that direction.

How has been the success of the incubation centre?

The SPIC IT Enterprise Development Centre was thrown open in 2002 to promote small IT companies in setting up their facilities and to assist young professionals in setting up their entrepreneurship by providing shell

space in Chandigarh. Internet bandwidth connectivity has been provided by STPI for software export. These IT companies are expected to shift to other locations within next three years after establishing themselves.

Over the years, several companies which started at the incubation centre have become very successful.

What are the other projects where SPIC is giving support?

SPIC provides entire support to Registration and Licensing Authority (RLA) Services operations. It provides all consumable items to RLA and maintain data card printer used for printing of smart cards. We give complete maintenance to application software and database. SPIC issue registration certificates, driving licence, conductor licence and trade certificates on smart cards.

What steps are being taken to make the youth and the under-privileged IT empowered?

We are running education programmes not just for the youth but all sections of society, including housewives, senior citizens and all those who find themselves IT crippled and wish to learn. Under the Chandigarh IT Reach Out Programme, a computer training is being given to children at Madarasa in Manimajra and to children at Bal Bhawan in Sector 23. This is a free soft skills programme for the underprivileged children. A basic programme is being run in 81 schools of the city which is free and mandatory for all students of class 9th, 10th and 11th. 



Ashis Sanyal

Former Consulting Editor, eGov

“This relentless effort on the part of the eGov team earned them quickly a distinction of an important non-state actor who strived to bring the news to the interested public about what was happening in the country on the e-Governance front.”

A Journey of **13 Years and 150 Issues** – Ashis Sanyal

Anybody, who is somewhat associated with print magazine eco-system, would immediately appreciate how difficult it is to regularly publish 150 issues uninterrupted, writes **Ashis Sanyal** Former Consulting Editor, eGov.

The eGov magazine, organised published by Elets Technomedia, is now preparing for its 150th issue. It is very heartening news and it is a permanent record of great achievement for Ravi and his team. Anybody, who is somewhat associated with print magazine eco-system, would immediately appreciate how difficult it is to regularly publish 150 issues uninterrupted, each ranging from 48 to 64 pages, especially on a subject, which deals with the then (e-Governance started in a focused manner in Department of Electronics and Information Technology (DeitY) around 2002) a green field activity for the entire Government of India. Personally I have great memories of this e-Gov magazine, including about 18 months tenure as its Consulting Editor around 2011, after my retirement from the active service.

I still remember the day in December 2004, perhaps 18th December, in Jaipur, where a three-day Summit was being held on Capacity Building and Training for Panchayati Raj Institutions, IT enabled e-Governance for Panchayats, in the presence of the then Central Minister Shri Mani Shankar Aiyar. After I came down from the dais, completing my presentation on the concept of CSCs in Panchayats, a

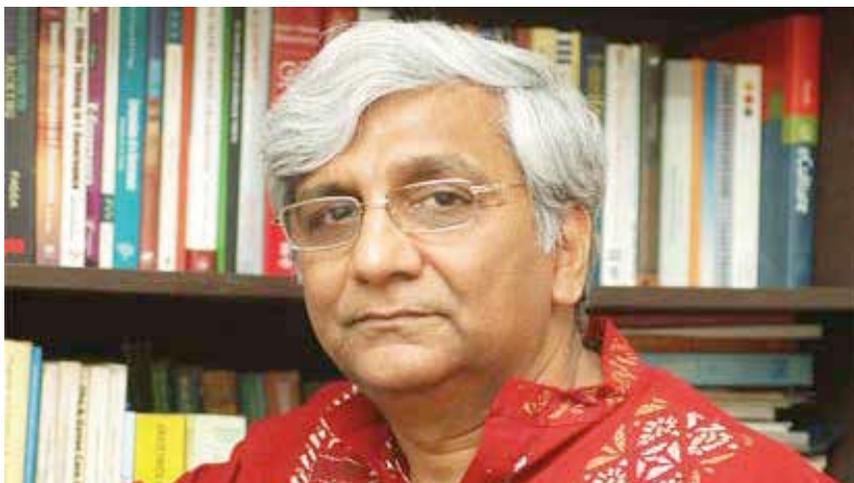
young girl approached me and identified herself as Anuradha from the Centre for Science, Development and Media Studies (CSDMS). She requested for some discussion time on the concept of a new magazine that CSDMS was planning to start, solely on the subject of e-Governance.

To be honest, at that time I had the fair share of doubts about the sustainability of such a print magazine on emerging and that time a ‘narrow’ subject of electronic governance, which I expressed to Anuradha later in our hour-long discussion. Anyway, that discussion on December 18, 2004 in Jaipur started my association with eGov magazine right from the time when it was being conceived. Interestingly, till that time I had not met Ravi Gupta personally and just knew about CSDMS! eGov magazine, belying my initial doubts, since it was brought out first time in early 2005, gained strength over the next few issues and by next one year or so it became a magazine of substance, among all the stakeholders, including the policy makers in the government. In the Department of IT, under the able stewardship of Mr Chandrashekhar, the then Joint Secretary (currently President of NASSCOM), we were launching several e-Government initiatives one after another and the

eGov magazine almost became the sole platform, (except skeletal information occasionally going into the regular print media), to disseminate the detailed information of these programmes and projects to the public, through well-written articles by the team eGov.

Subsequently, success stories and interviews with the eGov champions from the States started getting published regularly, which served as the guiding beacons for the fresh practitioners and aspirant champions of the discipline. During those initial years, a young team of enthusiastic technology journalists, recruited by Ravi, strolled consistently in the corridors of the many government department buildings at any hint of an e-Governance project being planned by the departments, to bring early news to the magazine. This relentless effort on the part of the eGov team earned them quickly a distinction of an important non-state actor who strived to bring the news to the interested public about what was happening in the country on the e-Governance front. Looking back, currently when media is agog with so much excitement about electronic governance and digital India, I can now appreciate it better the great role played by the eGov magazine, the lone media outlet during those initial years, in spreading the positive vibes on the subject. It was so much necessary at that time.

Soon the second important aspect of communication and awareness was taken up by the eGov team, which marked initiation of another important era in spreading the message of electronic governance in the country, that is national-level conferences, christened 'e-India' conference, solely dealing with the subject of e-Governance. The team eGov established a regular knowledge-sharing platform in the form of focused national-level conferences, dedicated to the use of Information and



Communication Technology (ICT) in the areas of governance, health and education. Within a year or two, conferences organised by eGov team became the country's premier knowledge sharing platform on ICT for governance, education and health, where most of the champion project executors, thought leaders, senior officers from governments and ICT industry discussed and exchanged the current and future scenario of ICT proliferation in India in various sectors.

In a couple of years, beyond the Annual National Conference on eGovernance organised by the Government of India, e-India conference became the second best platform in the country where one could showcase the achievement or learn the discipline. e-India conference is always accompanied by a very well organised Exhibition, showcasing the software and hardware products and services in areas of ICT for governance, health, education and so on.

For the initial 2-3 years, attendance in e-India used to be so huge that to accommodate several parallel technical sessions and the huge exhibition area, soon the standard conference venue of India Habitat Centre was replaced by larger venues like Ashoka Hotel, Taj Palace Hotel, Pragati Maidan in Delhi, Hitek City Hyderabad and eventually it

moved out of the country to Bangkok, Kuala Lumpur, Colombo, Dhaka, rechristened as eAsia Conference! I remember, once attending the 'curtain raiser' event on the previous evening of the 3-Day e-India Conference at the Taj Palace hotel, Mr Chandrashekhar and myself were taking a tour of the huge exhibition pandal at the hotel's sprawling lawn (seldom they rent out the lawn for a pandal!) Mr Chandrashekhar remarked: "I am really amazed observing the organising and PR capability of Ravi Gupta" and I immediately seconded him. Eventually, I had attended till 2011 most of the National and International conferences organised by eGov team and I was also flabbergasted many times by appreciating Ravi's cool demeanor in organising such a large international events with preparation time sometimes lasting for months.

I remember once at the conference venue Ramada hotel in Bangkok, a significant number of vegetarian Indian delegates were having serious problems with the South-Asian type conference lunch menu, right on the day one! We did not know what transpired between Ravi and the hotel management; thereafter we had yellow dal tadka, rajma, cauliflower curry, channa masala etc in the lunch for the next two days!



By that period, for better operational and financial conveniences, the Elets Technomedia was established and it took over the affairs from CSDMS. Conferences steadily increased in many numbers and got geographically spread over the country in the form of regional conferences on focused subjects, like Urban Planning, Cyber Security, Smart City etc. The scorecard of the eGov team in the area of knowledge-sharing conferences is mind-boggling; over 200 conferences so far in which 1,00,000 footfalls, over 4,000 different speakers in those 200+ conferences! In all these events, the eGov magazine played the vital role by meticulously documenting the conference proceedings and regularly disseminating all the related pre and post event information.

The eGov went with the time and online version of the eGov magazine had seen light of the day few years back. It quickly became very popular among eGov practitioners and the

current monthly viewership is staggering 500,000!

Soon a well-designed portal followed to facilitate the activities related to numerous conferences organised throughout the year. Further, for many years now eGov team is carrying out evaluation of the outcome of successfully running eGov projects by an expert Jury and instituted proficiency awards for government departments, PSUs, industry and NGOs for meritorious projects in different categories.

Seventeen years for a national programme like e-Governance, to be deployed in a large country like ours, may be a small period of journey but for a print magazine to gather and disseminate useful information of 8,000 to 9,000 of the printed pages over 13 years cannot be a small feat.

During this 13 year-period, I suppose every IT secretary from our 35 States and also from the Central Government must have shared their experience on the pages of eGov magazine, including the Mission leaders of the Mission Mode Projects under National

eGovernance Plan (NeGP). Every leading OEM expert from India must have explained on its pages the features of the company products. Leaders in the eGov and ICT4D consultancy agencies have reflected their opinions and strategic suggestions on the pages of eGov magazine. The copies of eGov magazine must have reached to each and every person who mattered in the implementation of e-Governance in the country.

Viewership of the online eGov magazine has already been mind-boggling high. The eGov team should draw immense pride from the fact that in this large country of so many government departments, Ministries, PSUs in the States and Central Government, their magazine stands towering high as a lighthouse, to throw light on any related issue on the subject of electronic governance. Even after 13 eventful years, none could come near to them!

On the eve of 50th issue of the magazine few years ago, I suggested Ravi that there could be a useful compendium by selecting 50 valuable time-tested articles published in all the 50 issues and it would a good reflective historical document on how the subject e-Governance was thought through in the country by the eGov champions in the initial years. He immediately agreed, requested me to undertake the editing work and sent me the soft copies of all the 50 issues within a week! I regret even today that I could not take up the work due to other commitments. But I still hold that view...today whatever has been there successful in the area of e-Governance in the country...that has been surely reflected sometime, somewhere, between the covers of some issue of the eGov magazine!

Kudos for the milestone of 150th issue dear friends! 

Urban Infrastructure



Urbanization is set to rapidly transform India. To contribute to the nation's progress, Tata Projects has ventured in to this business sector. The BU is involved in constructing buildings, airports, urban transport systems and hydro projects. It has multi-disciplinary teams and international tie-ups to design and build smart cities. Leveraging its collective experience and expertise, the BU is geared to deliver on-time and within budget, while adhering to strict quality & safety norms.

The BU has forayed into Smart Cities. We have put together products and services for securing cities under Smart City Security Solutions.

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 SINCE 1996. ■



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 YEARS
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Greetings from



**RAVI SHANKAR
PRASAD**

Hon'ble Minister of Electronics and
Information Technology
Government of India



On the Occasion of eGov's Historical 150th Magazine Issue

"I am glad to know that eGov, Asia & Middle East's premier and India's first magazine on e-Governance, has reached the landmark 150th issue in July 2017.

It is indeed a commendable feat for a magazine, which is dedicated to eGovernance and being published for last 12 years uninterruptedly. We, under the leadership of Hon'ble Prime Minister Shri Narendra Modi, are trying to transform the country through 'Digital India' programme and changing people's lives through technology while rendering government services to the citizens.

In this context, eGov magazine is playing an important role. It was told to me that eGov magazine, published by Elets Technomedia Pvt Ltd, has documented eGovernance success stories across India for more than a decade. I congratulate them for doing this.

I hope eGov magazine continues to create awareness on the use of ICT for good governance and help in creating a connect between the government and industry, while highlighting views and opinions of the citizens of our country on the importance of e-Governance for good governance.

Best wishes to the eGov magazine for its all endeavours in future."



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m the Leaders



**MUKHTAR ABBAS
NAQVI**

Hon'ble Minister of State for Minority Affairs
(I/C) & Parliamentary Affairs
Government of India



On the Occasion of eGov's Historical 150th Magazine Issue

"I am pleased to know that eGov Magazine is coming up with its 150th edition. eGov Magazine has played an important role in creating awareness on e-Governance initiatives in the country.

I congratulate eGov Magazine for completing its 12 years of journey and for coming up with the 150th edition.

Over the years, eGov Magazine has documented initiatives across India and also highlighted the initiatives taken by industry to make India's e-Governance mission a success.

I wish the entire team of eGov Magazine good luck and many more success and also congratulate all the readers of this magazine."



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e gov
CELEBRATING
150th
MAGAZINE ISSUE
SINCE 2008

On the Occasion of eGov's Historical 150th Magazine Issue

Wishes from
S N TRIPATHI
Additional Secretary
Ministry of Micro, Small & Medium Enterprises
Government of India

"eGov magazine has played an important role in creating awareness on eGovernance initiatives across India. I congratulate eGov for completing landmark 12 years of journey and for coming up with the 150th issue, which is very best for any magazine which is dedicated only to eGovernance. Over the years, it has documented eGovernance initiatives across India and also highlighted the initiatives taken by industry to make India's eGovernance remain a success. I wish these good facts and many more successes."

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- 1 **S N Tripathi**, Additional Secretary, Ministry of Micro Small & Medium Enterprises, Government of India
- 2 **Prajakata L Verma**, Joint Managing Director, CIDCO
- 3 **Ashok Kumar Meena**, Commissioner-cum-Secretary, Department of Electronics and IT, Government of Odisha
- 4 **Sanjay Deshmukh**, Secretary, Medical Education and Drugs Department, Government of Maharashtra
- 5 **Dr Vinay Sahasrabudde**, BJP Vice President & Rajya Sabha MP
- 6 **Padma Jaiswal**, Secretary, Co-operation Department, Government of Goa
- 7 **Dinesh Waghmare**, Secretary, Social Justice, Government of Maharashtra
- 8 **Ashok Dalwai**, Additional Secretary, Deptt of Agriculture, Cooperation and Farmers' Welfare, Ministry of Agriculture, Government of India
- 9 **Tejaswi S Naik**, Collector, Barwani, Madhya Pradesh
- 10 **Prem Narayan**, Deputy Director General, Unique Identification Authority of India (UIDAI) Ministry of Electronics and Information Technology
- 11 **Ranvir Prasad**, MD, Uttar Pradesh State Industrial Development Corporation, Commissioner and Director Industries, Government of Uttar Pradesh

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CELEBRATING
150th
MAGAZINE ISSUE
SINCE 2008

On the Occasion of eGov's Historical 150th Magazine Issue

Wishes from
PRAJAKATA L VERMA
Joint Managing Director
CIDCO

"It is my pleasure to be invited to attend Chhatrapati Shri Chhatrapati Shivaji Maharaj Vastu Sangrahalaya (CSMVS) organized by Data TechnoMedia Pvt Ltd. I appreciate the efforts of the team to publish eGov Magazine which covers a number of issues related to the development of the country. The magazine is a good platform for bureaucrats, corporates and consultants to highlight their initiatives which are necessary for urban services. My best wishes to eGov team for bringing 150th issue of the magazine."

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150th
MAGAZINE ISSUE
SINCE 2008

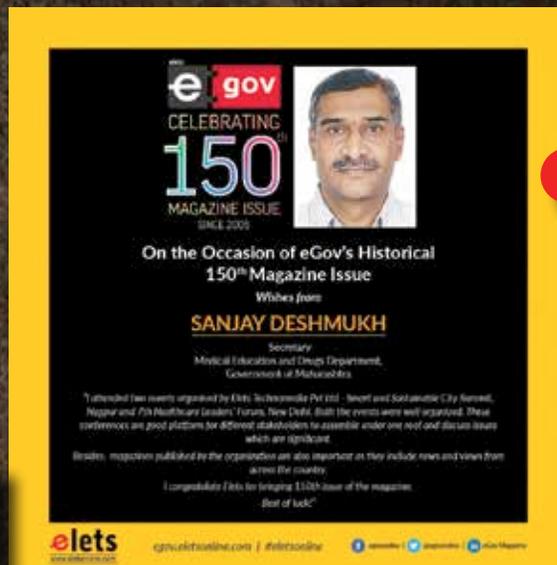
On the Occasion of eGov's Historical 150th Magazine Issue

Wishes from
ASHOK KUMAR MEENA
Commissioner-cum-Secretary
Department of Electronics and IT,
Government of Odisha

"I congratulate e-Gov for bringing out its 150th edition of the magazine. The e-Gov team is doing a commendable and wonderful job in terms of taking the e-Ranacy to masses by making them aware on new digital, IT based innovations and services which are transforming our society in fundamental ways. The service and platform which e-Gov magazine has provided brings tremendous impact with regard to awareness and it is really commendable. I think the journey of e-Gov magazine reflects what exactly has been happening in the field of digital initiatives that the country has undertaken. We all are on an exciting digital journey indeed. I am sure the e-Gov magazine will contribute further to promoting awareness on increasing the adoption of IT and various digital platforms among the common public in general and amongst the government officials in particular. I wish the e-Gov team all success."

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CELEBRATING
150th
MAGAZINE ISSUE
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On the Occasion of eGov's Historical 150th Magazine Issue

Wishes from
SANJAY DESHMUKH
Secretary
Medical Education and Drugs Department,
Government of Maharashtra

"I attended two events organized by Elets, TechnoMedia Pvt Ltd - Smart and Sustainable City Forum, Nagpur and 7th Healthcare Leaders' Forum, New Delhi. Both the events were well organized. These conferences are good platform for different stakeholders to assemble under one roof and discuss issues which are significant. Besides, magazine published by the organization are also important as they include news and views from across the country. I congratulate Elets for bringing 150th issue of the magazine. Best of luck!"

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CELEBRATING
150th
MAGAZINE ISSUE
SINCE 2008

On the Occasion of eGov's Historical 150th Magazine Issue

Wishes from
DR VINAY SAHASRABUDDHE
BJP Vice President & Rajya Sabha MP

"We live in eGovernance era, eGovernance Magazine like eGov has a vital role! When the nation and the society at large is transforming and moving towards an e era, e public life, e governance, e administration, everything is in pace with the times, in such a situation Magazine like eGov has an important role to play for the people. Because it is not that whichever is it is good, there should be certain platform which can educate and aware the masses. So, Magazine like eGov has a vital role to play. It also gives support to the IT systems. From now, whatever work you have already done and your contribution to it is certainly priceless contribution."

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On the Occasion of eGov's Historical 150th Magazine Issue
 Wishes from
PADMA JAISWAL
 Secretary, Co-operation Department, Government of Goa

"I congratulate elets on publishing their 150th edition of July 2017 issue of e-Gov Magazine. The eGov Magazine have made a valuable contribution and provides insight towards spreading awareness and news of many achievements made so far in promoting financial inclusion through technology and innovation. Digital literacy is an important driver of innovation, competitiveness and growth. The advancement and adoption of digital technology and the new business models will create the economy to achieve precise health, insurance development, medical and living more measurements in India. Healthcare, Farm Technology, through its publications is driving and enhancing the knowledge dissemination, in various sectors. eGov magazine has been doing a wonderful job by publishing good aspects of government and corporate successes, which are the core contributors of a growing society. I extend my best wishes for this noble cause that they are working on. May many more success stories thrive in this arena."

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On the Occasion of eGov's Historical 150th Magazine Issue
 Wishes from
TEJASWI S NAIK
 Collector, Harwad, Madhya Pradesh

"eGov has been a partner in eGov's journey to make it to Smart cities. We started the attempt together through a very successful event 'Smart Bharat' in August 2015 which was the first such event of international scale in the smart cities competition. This established an early on as a very potent contender to be part of the first list of smart cities, which eGov eventually made it to with first column. I personally feel that there is scope for a program in India for sharing of ideas, best practices concerned with Urban sector which is changing fast. There is a need to create a common vision through experience sharing so that areas of same or not repeated and successes are repeated and built upon. I think eGov with its energetic leader Mr. Ravi Gupta and enterprising team consisting of likes of Sowik, provides that platform effectively. That is a great service to our Urban sector!"

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On the Occasion of eGov's Historical 150th Magazine Issue
 Wishes from
DINESH WAGHMARE
 Secretary, Social Justice, Government of Maharashtra

"It is a great honor which facilitates gathering of stakeholders in different fields from 150 countries to Smart Cities. It has helped many Govts to effectively formulate their policies and implementation of projects in optimal and efficient manner in different sectors. I wish elets TechnoMedia a super-successful journey ahead and more strength in policy making in the Government Departments across the country."

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On the Occasion of eGov's Historical 150th Magazine Issue
 Wishes from
PREM NARAYAN
 Deputy Director General, Human Identification, Authority of India (DIDAG), Ministry of Electronics and Information Technology

"At the outset, I convey my congratulations to eGov Magazine and its team for carrying with 150th special issue. The magazine and its loyal organization, Mr's elets TechnoMedia, is providing best platform to all sectors whether it is Information Technology, Government, Smart Cities, Smart Facilities, Smart Banking and Smart Education for over three and half decade. The magazine has so far showcased the best practices implemented in across India through its various publications (eGov Magazine) in the global platform. I am also happy to know that, Mr's elets TechnoMedia has also shared their new ventures to promote several other best practices in the arena of current 'Make in India' movement. I once again compliment to the dynamic leadership of Dr Ravi Gupta, CEO, Mr's elets TechnoMedia and its dynamic team comprising, Mr. Gautam Debroy and others."

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On the Occasion of eGov's Historical 150th Magazine Issue
 Wishes from
ASHOK DALWAI
 Additional Secretary, Dept of Agriculture, Cooperation and Farmers' Welfare, Ministry of Agriculture, Government of India

"I was when my first with eGov magazine during my presentation in Maharashtra IADW. Our journey dates back in 2014, when elets TechnoMedia hosted one of its landmark event in Lucknow, Maharashtra, under the leadership of one of the most eminent personalities and former Secretary, eGov magazine and its loyal organization, where I got a scope of exploring the vision on the future of eGov and what would be the next experience thereafter. The Knowledge Exchange, towards common food and good performing of who is rich of the industry across the country and Maharashtra, etc. studies on the different patterns of best and need practices of eGovernment. I have been both able enough to attend several other initiatives of elets TechnoMedia, following this, which was excellent and unique in their own way. Over the years, while reading eGov magazine I have been a part of their journey towards continual sustainable growth, which gives me a successful feeling in an era of digital revolution. It's an arena, that bears in yielding for the industry under the versatile and dynamic leadership of our CEO, Dr. Ravi Gupta. I congratulate them for their 150th edition and wish them many more success come."

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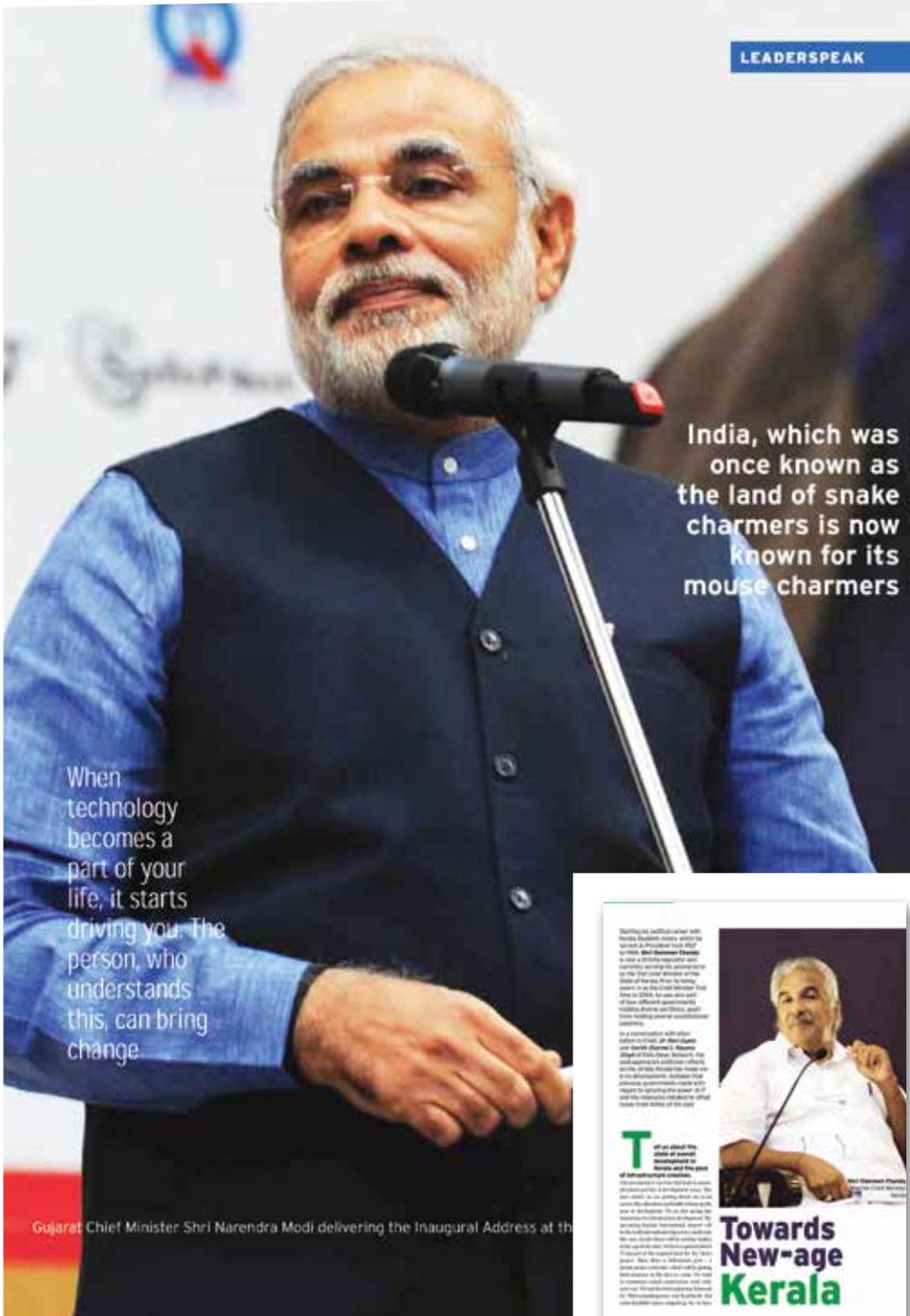
11



On the Occasion of eGov's Historical 150th Magazine Issue
 Wishes from
RANVIR PRASAD
 IAS, Uttar Pradesh State Industrial Development Corporation, Chairman and Director Industries, Government of Uttar Pradesh

"Ever since the eGov Magazine has been at the forefront in bringing out knowledge to eGovernment particularly in government sector. Many of us in government trust it as the primary source of information. It highlights the exciting development across the country. So that we can get inspired and we can emulate some of the best practices in the sectors. I wish eGov Magazine continues to perform its function fearlessly in future. Best wishes for 150th year edition."

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India, which was once known as the land of snake charmers is now known for its mouse charmers

When technology becomes a part of your life, it starts driving you. The person, who understands this, can bring change

Gujarat Chief Minister, Shri Narendra Modi delivering the Inaugural Address at the



SPECIAL INTERVIEW

The emphasis will be on the usage and heavy implementation of the already established projects for development of smart communities



'We Serve Masses Anytime, Anywhere'

Established in 2008 for expediting the public process to serve the citizens better at all levels in Gujarat, the Gujarat Chief Minister, Shri Narendra Modi, is an interviewee with Dr. Jitendra Singh, Gujarat Chief Minister.

During the last few years, the government has been working on various projects to improve the quality of public services. How do you see the progress so far?

Dr. Jitendra Singh: The government has been working on various projects to improve the quality of public services. The progress has been significant. The government has been working on various projects to improve the quality of public services. The progress has been significant.



Towards New-age Kerala

Dr. Jitendra Singh, Gujarat Chief Minister, is an interviewee with Shri Narendra Modi, Gujarat Chief Minister.



Reaching out to Northeast India

The Ministry of Development of North Eastern Region (DoNER) has launched a CSR project which aims at providing various facilities to the people of the region. The project is being implemented in various states of the region.

eGov Flashback

Orissa: The Emerging ICT Destination

In early 2009, Bhubaneswar, Bhubaneswar and Puri were chosen by the Government of India for geotagging of these cities as information technology (IT) destinations of the country. Software Technology Parks of India (STPI) and National Information Centre (NIC) facilities were established in Bhubaneswar to catalyse growth. Infosys established its Development Centre in Bhubaneswar in 2008. It was the first Development Centre of Infosys outside Bangalore. Mahindra Satyam came to Bhubaneswar in 2010. The city now looks back, forward.

In a recent survey, the World Bank ranked Bhubaneswar among the top three cities of India for ease of setting up and doing business, at USD 275 million, the software and IT services exports for 2014-16, India shows amongst the top ten cities of India. The IT exports from Orissa reached a growth of 40 percent over the previous year, despite the economic slowdown. Companies are yet to undertake to achieve software exports of USD 1,000 million in 2017.

The State has done very well in the last few years, in terms of creation of IT infrastructure and in attracting reputed IT companies to Bhubaneswar for setting up their Development Centre, strictly learning over 200 acres of land became the first notified IT Special Economic Zone (SEZ) in the State and is operational since early 2009 with the inauguration of TDC Development Centre. It currently employs more than 10,000 professionals and is expected to grow to 20,000 by 2015. The IPRIC Development Centre is ready in all aspects and will be operational in the current financial year. Chief Minister



Shantanu Prasad, Chief Minister, Government of Orissa
The Hon'ble Chief Minister of Orissa

Perfecto Technology amongst others who are setting up their business units in the SEZ. KPN Infosys Corp has agreed a Memorandum of Understanding (MoU) with the State government for leasing its 100-acre land in Orissa for establishing an IT SEZ over 30 acres of land in the city. The State Government is also planning for six IT investment Region (IR) in Bhubaneswar. The IR supported by the Government of India would comprise of the IT parks, major technical and management schools, core infrastructure and the related eco-systems to foster investment, accelerated growth and employment opportunities in the IT

POLICYMAKER'S PERSPECTIVE



M Venkatesh Naidu
Union Minister for Urban Development, Housing & Urban Poverty Alleviation, Information & Broadcasting

India's Urban Development Witnessing a New Beginning

There is a major shift in approach towards urban development in the last two years with citizen participation, incentivising reforms and ranking of cities, said M Venkatesh Naidu, Union Minister for Urban Development, Housing and Urban Poverty Alleviation and Information & Broadcasting during the Smart City Summit, Rajkot.

India is witnessing a major shift in the approach towards urban development in the country with more citizen participation and reform paving the way for emergence of a new urbanised India.

Participating in the three-day Smart City Summit Rajkot, organized by Rajkot Municipal Corporation in association with Elets Technology Pvt Ltd, Noida, the Union Minister for Urban Development, Housing & Urban



K T Rama Rao, Minister, Municipal Administration and Urban Development, Information Technology

POLICYMAKER'S PERSPECTIVE / K T RAMA RAO

Redefining Telangana Through Urban Transformation: KTR

Telangana government seems to have undertaken several initiatives in the urban space, can you share some of the prominent ones with us and how will it be the idea behind creating 21 new districts?

Telangana State has been in the forefront of all major urban initiatives, says K T Rama Rao, Minister, Municipal Administration and Urban Development, Information Technology, in an exclusive interview with Elets Technology, in an exclusive interview with Elets Technology while sharing how the government plans to redefine the State and transform its capital Hyderabad into a global city. Excerpt:

Telangana has been one of the major states in the country which has undertaken several initiatives in the urban space. We are in the process of creating 21 new urban districts to create structured urban growth.

The idea of creating 21 new districts is to ensure that the state is able to meet the needs of the people. These urban districts will transform Telangana. This will reduce the pressure on Hyderabad. We will have the provision in the state development authority and Hyderabad Urban Development Authority and Hyderabad Urban Development Authority. We are also creating 21 new urban districts to create structured urban growth.



K T Rama Rao, Minister, Municipal Administration and Urban Development, Information Technology

They have created more than 3,000 toilets under the Saachhi Vidyalaya scheme.

VISHNU DEO SAI
Hon'ble Minister of State, Ministry of Steel Government of India

INDIA'S ECONOMIC GROWTH



Vishnu Deo Sai, Hon'ble Minister of State, Ministry of Steel Government of India

SPECIAL INTERVIEW



Nitin Gadkari
Minister for Road Transport and Highways, Government of India

Expanding India's Transport Horizon

The Ministry of Road Transport and Highways is planning to invest \$300 billion in various infrastructural projects across the country. The Ministry has also introduced a bio-fuelled public transport system in Nagpur, says Nitin Gadkari, Minister for Road Transport and Highways, Government of India, in conversation with Poulad Chakraborty of Elets News Network (ENN).

What have been some of the key achievements since you took over as the Minister for Road Transport and Highways, and Shipping?

During the past three years, all the key 15 projects, including 12 ports, Cochin Shipyard, and others, have registered a growth of over 4,000 crore, we are improving further with the help of international consultants. Our ports are developing at a very fast pace to ensure creation of state-of-the-art infrastructure facilities.

Besides, over 282 projects worth Rs 3,80,000 crore were sanctioned due to various reasons, which we have been able to complete.

When I took over, the rate of road construction was 2 billion per day, which improved to 54 bn in three months and now it has reached 30 bn a day. We have set a target of 40 bn per day. We are extremely conscious to environment conservation and that is why we have introduced ethanol, biodiesel and biogas, which are cleaner and environment friendly fuels. Nagpur has already introduced bio-fuelled buses in its public transport system.

"Prime Minister Narendra Modi is a great visionary with exemplary administrative abilities. He tries to implement and follow up the progress of each project."

Nitin Gadkari, Minister for Road Transport and Highways, Government of India

The Emergence of a Smart India

SHRI YOGI ADITYANATH
Hon'ble Chief Minister
Uttar Pradesh

UTTAR PRADESH
17 August 2017



SMT VASUNDHARA RAJE
Hon'ble Chief Minister
Rajasthan

KOTA
8-9 September 2017



SHRI DEVENDRA FADNAVIS
Hon'ble Chief Minister
Maharashtra

PIMPRI-CHINCHWAD
3-4 November 2017

SHRI VIJAYBHAI RUPANI
Hon'ble Chief Minister
Gujarat

VADODARA
21-22 September 2017



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ADITYA VISWANATHAN



THE BROADER AND IMPORTANT PURPOSES OF RURAL AND URBAN ECONOMIC OPTIMIZATION

Please share some insight on USD funds. Are they primarily meant to fund the ongoing program? Or do they have a specific role to play in the long-term vision of the government? The key government program in terms of rural development is the Pradhan Mantri Kisan Samiksha Yojana (PMKS), which is a flagship program. It is aimed at providing financial support to farmers and rural entrepreneurs. The government is also focusing on infrastructure development in rural areas, such as roads, irrigation, and power supply. These initiatives are crucial for improving the living standards and economic growth of rural communities.

COAL
ANIL SWARUP

E-AUCTION for TRANSPARENCY

The bottom line is to bring transparency and technology will not be limited only to the auction but will be used extensively in the department and in Coal India, affirms Anil Swarup, Secretary, Ministry of Coal, Government of India, in conversation with *ET* Editor Anil Kumar and Navneet Singhani

The bottom line is to bring transparency and technology will not be limited only to the auction but will be used extensively in the department and in Coal India, affirms Anil Swarup, Secretary, Ministry of Coal, Government of India, in conversation with *ET* Editor Anil Kumar and Navneet Singhani

ADITYA VISWANATHAN

e-Governance- The Strongest Tool for Advancement

J Satyanarayana, CEO, National Institute of Smart Government (NISG)

You have recently received 2017 United Nations Public Service Awards for the category of 'Improving Transparency, Accountability and Responsiveness to the Public Service' for 'e-Governance Project'. Please tell us about this project and how it has impacted the public service?

J Satyanarayana is an Officer of the Indian Administrative Service (IAS) of the 1977 batch. He is responsible for shaping the NISG as a Centre of Excellence in e-Governance at the national level, especially in the states of Andhra Pradesh, project development, and capacity building for e-Governance. He has pioneered the implementation of popular projects like e-Seva, e-CARD, and e-Provisionment in the state of Andhra Pradesh.

Aditya (NISG) project has immensely transformed the way people file their company returns from year to year. It is all digital today. It is a great experience. We will not miss the days when we had to go to the office and file our returns. We will miss the days when we had to go to the office and file our returns. We will miss the days when we had to go to the office and file our returns.

SPECIAL ARTICLE

Smart Cities of the Future: India's Rise

Samer Sharma
Editorial Director, Smart Cities Development, Government of India

Realizing the potential of urban centres in the country's economic development, India is already in the process of making them 'Smart' and it seems to have been accepted that a Smart City requires a well-thought-out plan to make it actually work, says Samer Sharma, Assistant Secretary (Smart Cities), Ministry of Urban Development, Government of India, in conversation with *ET* Editor Navneet Singhani

Looking at the Smart Cities Development, Samer has recently in a video, he said "Urban areas will continue to grow and expand, and smart solutions will be implemented. India has to develop smart solutions."

Looking at the Smart Cities Development, Samer has recently in a video, he said "Urban areas will continue to grow and expand, and smart solutions will be implemented. India has to develop smart solutions."

IN PERSPECTIVE

Rajiv Gupta

The level of sustainability that is required, the technological ecosystem can be brought in to create the necessary ecosystem. This process is essential for smart cities to be developed for the future. The smart cities provide necessary services to the citizens of the smart cities, as well as to the rest of the country. It will be a big step towards the smart cities and smart solutions.

e-Governance is paving way for smart cities as more and more people are using their mobile devices to access services from the government. How do you see this development?

In the future, the prime drivers of the country will be cities. This does not imply that we should ignore the villages but the focus will be on cities.

eGov Flashback



KINTS Advanced IoT solutions are the future of smart and safe cities

Solar Powered Wireless Surveillance Solutions have applications in mining, agroforestry, oil and gas, dams and reservoirs, borders and military, sporting events, stadiums among others. Kints is the market leaders in solar powered wireless surveillance technology. In association with Comexys, KINTS brings in the most valuable and new age products based on IoT technology to create safer and smarter cities.

KINTS is a part of Bangalore-based KS group, a fast-growing organization operating in Power, Infrastructure, Mining, and IT. Advanced IoT platforms such as smart streetlighting and smart light poles help reduce crime rates. Integrated hardware and software platforms can manage IoT devices and sensors such as parking meters and traffic lights.

SilverSpark, our IoT management software, provides 3D site mapping and real-time 3D simulations and control of IoT devices.

SilverEye, an integrated smart light-pole equipped with IP, FHD, PTZ CCTV cameras and a Wi-Fi chip for connectivity and wireless surveillance, has full HD video, analytics, recording, and can be used for traffic and parking management.

Othello is a new safety system that can detect gunfire and identify shooters and potential threats in real time. The system is equipped with IP HD cameras with a range of 180°.

Raphael is a smart SOS system with VoIP technology and IP HD cameras.

Command centres get real-time feeds of SOS regions and flashing beacons help emergency services navigate.

Whistle LED is a wireless, customizable, smart highway streetlight alert system that can be used to indicate emergencies, accidents ahead, detours in advance. It can be controlled by the command centre or wirelessly, by emergency vehicles.

ParkSens is a IoT-powered smart parking sensor system powered by 3 sensors. ParkSens works with the Whistle LED system to indicate available/occupied/ disabled parking spaces.

In-Pole-EVC is the future of modern street lighting. The smart pole is an innovative, all-in-one streetlight that incorporates a charger for electric vehicles, video surveillance camera, Wi-Fi, parking payment solution and intelligent LED street lighting. When all of these elements are combined, they create the world's smartest, most convenient and modern street lighting solution - a perfect solution for cramped and environmentally friendly city centres. The In-Pole-EVC is available as both a complete streetlight and as a separate installable extension for existing streetlights.

AirSens is an air-quality sensor system that enables real-time reading and alerts of parameters from variety of sensors such as noise, CO₂, CO, tVOC, humidity, and other particles. egov.in

Q&A with N S Kalsi

IT secretary Punjab



Government of Punjab has realized the potential of Information Technology for SMART (Smart, Incentive, Accountability, Responsive and Transparent) governance. The secretary IT, Mr. N.S. Kalsi, through the unique citizen service concept 'Balamukh' is trying to streamline the way government services are offered to citizens. The government is aiming to provide around 120 services to the citizens of Punjab in an integrated way through the Balamukh service centers. The centers are being created and maintained with the help of Balamukh Divisions at the district level. The division IAS officer and IAS of Punjab Information Limited oversees the e-Governance activities in his role as an in-house service within a unit team.

Q: Punjab Government has taken many key initiatives in e-Governance. Would you like to elaborate the e-Governance plans of the State for the benefit of our readers?

A: Government of Punjab is committed to provide a responsive and effective administration for the welfare of the public. The Government envisages scenarios where every citizen shall be able to access the benefits of Information Technology.

Currently, Punjab government has been taking several positive initiatives for providing good governance across the State to use the power of Information & Communication Technologies (ICT) to transform the citizen government interface to a meaningful manner. On the top of the list are the public hearing and service guarantee departments. Improving the delivery of citizen services at the existing edge level, especially by establishing one-stop-shops for providing all Government services as an integrated manner. Another the major strategic initiatives taken by the Government of Punjab under the e-Governance plan.

Already, more than 13 essential services of the Deputy Commissioner's office have been made available to citizens under the SmartShops project in all 17 DC offices as an integrated manner. This facility is now being extended to the sub-divisions as well with an aim to provide easy services to the general public right now to later but hence place. The Government is planning to open more than 250 delivery channels for providing services of most departments as an integrated way.

There are four key factors with a view to reach the grassroots levels, i.e. connectivity and other to the sub-division (i.e. citizen database, database, property database and land database. As a pre-requisite, the State Government is not details for the establishment of State Area Network for (SAN) Data centre for covering all the districts, sub-division level and District Headquarters in the whole State. Punjab Information & Communication (PINC) and Administrative Cells have taken up simultaneously. The major benefit of e-governance is that with Department of Information Technology (DIT), Government for the implementation of State services Plan (SIP) under the State Projects (SIP) in all districts implementation of the State's SmartShops in the whole State.

Q: What role Punjab Information & Communication Society (PINC) is playing in the implementation of e-Governance?

A: Punjab Information & Communication Society (PINC) is acting as an arm of the Department of Information Technology for the implementation of e-Governance projects in the State Government in touch with Department of Information Technology (DIT), Government for the implementation of State services Plan (SIP) under the State Projects (SIP) in all districts implementation of the State's SmartShops in the whole State.

Q: How do you see the future of ICT in your state?

A: There are traditional digital literacy campaigns have been. One of the important of the State Government (PINC) project which is going to bring to ICT, to improve citizens' connectivity and service. There is going to be more focus on the citizens' digital literacy.

Q: In J&K, we see a paradigm shift regarding the role of ICT in your state?

A: There are traditional digital literacy campaigns have been. One of the important of the State Government (PINC) project which is going to bring to ICT, to improve citizens' connectivity and service. There is going to be more focus on the citizens' digital literacy.

Bihar is on Cusp of IT Revolution

N K Sinha
Commissioner, Commercial Tax Department
Principal Secretary, Information Technology
Government of Bihar

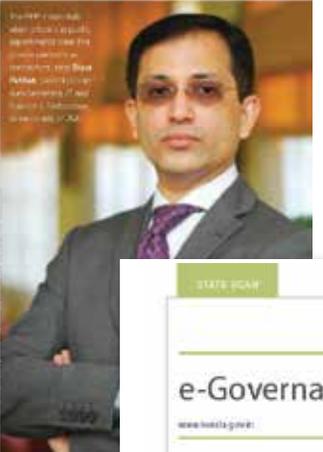


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J&K Steady on IT Path

Bijul Pathak
Commissioner, State Security, IT and Science & Technology, Government of J&K



Q: How do you see the future of ICT in your state?

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e-GOVERNANCE SERVING THE

Machhusudan Padhi
Commissioner, Civil Services
Information Technology Dept



Q: How do you see the future of ICT in your state?

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e-Governance in Kerala

Dr. A. M. S. Iyer
IT SECRETARY, GOVERNMENT OF KERALA



Q: How do you see the future of ICT in your state?

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eGov Flashback

Dr Aruna Sharma, Additional Chief Secretary and Development Commissioner, Panchayat and Rural Development Department, Madhya Pradesh

BANKING LICENCE Must for Post Offices

It is high time we brought non-core banking financial institutions into core banking network, as opening new bank branches in unbanked areas for commercial banks is both time-consuming and cost-intensive exercise, says **Dr Aruna Sharma** in conversation with **Gautam Debroy** of Elets News Network.

In terms of financial inclusion, how would you define "inclusive"?

It is a broad term which should be given positive meaning. Being poor and being unbanked are not the same. It is not just about being poor but also about being unbanked. It is about providing the services to the unbanked population. It is about providing the services to the unbanked population. It is about providing the services to the unbanked population.

MP is known to be a pioneer in financial inclusion. You have also adopted innovative solutions (e-Sampark) method. What is the message behind it?

It is a message that we should not just be poor but also unbanked. It is a message that we should not just be poor but also unbanked. It is a message that we should not just be poor but also unbanked.



Sanjay Jaju, Secretary, Information Technology & Communications Department, Government of Andhra Pradesh

MEE SEVA SETTING NEW STANDARDS FOR e-GOVERNANCE

Mee Seva has come a long way. Now it is being adopted by e-District MSP project. Please tell us about the key achievements in this project so far.

The key achievement is that we have been able to provide services to the citizens through a single window. We have been able to provide services to the citizens through a single window. We have been able to provide services to the citizens through a single window.



Vijay Singhal, Sugar Commissioner, Government of Maharashtra

Productivity Efficiency Transparency

It is an imperative for the sugar industry to improve its productivity and efficiency. It is an imperative for the sugar industry to improve its productivity and efficiency. It is an imperative for the sugar industry to improve its productivity and efficiency.



Detail us about the key initiatives being implemented using IIS.

The key initiatives are related to the productivity, efficiency and transparency. The key initiatives are related to the productivity, efficiency and transparency. The key initiatives are related to the productivity, efficiency and transparency.

Rajesh Agarwal, Principal Secretary, IT, Government of Madhya Pradesh

eGov will Hinge on S

What is the role for e-governance in a government, setting up of networks or a kind of network, or changing it into digital? Rajesh Agarwal in an interview with Sumit, Sumant of Elets.

In Maharashtra Government is one of the early adopters of modern technologies. How is the government leveraging technologies like Social Media, Mobility and Cloud for e-governance?

The government is leveraging technologies like Social Media, Mobility and Cloud for e-governance. The government is leveraging technologies like Social Media, Mobility and Cloud for e-governance. The government is leveraging technologies like Social Media, Mobility and Cloud for e-governance.



MUKESH KUMAR MESHRAM

Creating Conducive Environment for Tax Payers in UP

Good governance as a concept has evolved in recent times but governance as a relationship between the state and citizens has always been pivotal to the existence of humanity. Ease of doing business has become a precondition for realisation of the objective of good governance, says Mukesh Kumar Meshram, Commissioner-Commercial Tax Department, Government of Uttar Pradesh, in an interview with Arpit Gupta of Elets News Network (ENN).



FACE TO FACE **BHAVESH KAUSHAL**



Digital Punjab at Work

The Government of Punjab has been moving well towards creation of a knowledge society. What is the status of use of ICT for better delivery of government services to the citizens in the State?

The Government of Punjab is fully focused to deliver of services to its citizens in a quick, free and non-bureaucratic manner. We have created the Punjab Right to Service Act, 2011 which empowers the citizens to hold the government service within its stipulated timeframe. In present, 200 services of 20 departments have been notified under the Act. These services are being delivered across the country through ICT enabled 161 Service Centres, 104 Service Centres, 163 Self-Service Kiosks and 22 State Transport Centres. In order to meet the need of citizens of 2017, we have implemented the service in very quick.

In Government Plan (2017), Punjab has the highest target for ICT services delivery for 47 high tech cities of 11 departments. The focus is on providing of digital services across the state through the State Portal. In the next 10 years shall be delivered with the minimum cost and the maximum reach.

What are the major e-Governance initiatives being implemented in the State of Punjab?

A new initiative is being undertaken to provide providing government services online to the citizens. It is being implemented across the State through ICT enabled 161 Service Centres, 104 Service Centres, 163 Self-Service Kiosks and 22 State Transport Centres. In order to meet the need of citizens of 2017, we have implemented the service in very quick.

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URBAN DEVELOPMENT **MALAY SHRIVASTAVA**

Strengthening to Empower



The Urban Development and Environment Department of Madhya Pradesh is making efforts to ensure improved housing for the poor and social services for the citizens at large. With the Smart Cities being poised to become smart cities, the Department is not leaving any stone unturned to make the dream into a reality. The Principal Secretary, Urban Development Department, **Malay Shrivastava**, shares his plans with *CityNews* Desk of *City News Network (CNN)*.

What kind of IT initiatives have you undertaken to improve citizen-centric services?

The Government of Madhya Pradesh has already launched 'Chief Minister Yojana' as well as 'Smart Cities' which cover all the departments. The completion of digital cities and smart cities of the department is being undertaken. There are four levels - L1, L2, L3 and L4 in computing system which is the best way to think for reduction of corruption. There is complete work done across and it is in state that it is automatically implemented.

In order to ensure complete 'Chief Minister' or the 'Chief Minister' as a result of the implementation of the initiative and the completion of the work.

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IN PERSON

Healthcare Just a Click Away

Sujata Saunik, Principal Secretary, Public Health Department, Government of Maharashtra

Public Health Department, Government of Maharashtra



How do you visualize the changes in your department?

Government of Maharashtra
Public Health Department
Checklist of Health Services

Healthcare is vital operational areas for your department. How the lack of connectivity network hampers the department's initiatives?

The connectivity is one of the major issues in the providing services in the rural areas. The department has already approached BSNL.



Healthcare is vital operational areas for your department. How the lack of connectivity network hampers the department's initiatives?

The connectivity is one of the major issues in the providing services in the rural areas. The department has already approached BSNL.

POLICYMAKERS' PERSPECTIVE / **NAVEEN JAIN**

e-Governance Boost for Healthcare in Rajasthan

Backed by out-of-the-box ideas, the Medical and Health Department of Rajasthan has been using various management techniques to think differently in order to improve health care delivery system, says **Naveen Jain**, Secretary, Department of Medical and Health Services, Mission Director, ICMR and CEO State Health Assurance Agency, Government of Rajasthan. In an interview with *City News Network (CNN)*.



How e-governance is relevant to the Medical and Health Department of Rajasthan? What are the key benefits the department can draw from a governance initiative?

Healthcare is a complex and multi-faceted system. The Government of Rajasthan has been using various management techniques to think differently in order to improve health care delivery system. The key benefits of e-governance are: 1. Improved service delivery. 2. Reduced cost. 3. Increased transparency. 4. Improved patient satisfaction. 5. Reduced corruption. 6. Improved efficiency. 7. Improved accountability. 8. Improved quality of care. 9. Improved access to services. 10. Improved health outcomes.

What are the new initiatives undertaken by the department to help patients?

The Government of Rajasthan has been using various management techniques to think differently in order to improve health care delivery system. The key initiatives are: 1. e-Health. 2. e-Procurement. 3. e-Complaints. 4. e-Feedback. 5. e-Transparency. 6. e-Accountability. 7. e-Performance. 8. e-Service. 9. e-Access. 10. e-Healthcare.

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ANIL GARG | POLICYMAKER'S PERSPECTIVE

IT Initiatives Giving Boost to UP Elections



Uttar Pradesh has come up with innovative election based mobile apps and portals, which have changed the election scenario this time, says **Anil Garg**, Additional Chief Electoral Officer, Uttar Pradesh in conversation with Arpit Gupta of Elets News Network (ENN).

GOVERNMENT
BIRUDHAN BEEKARI

Every government initiative becomes 'non-functional' and 'suboptimal' unless you default to the folk level!



Capacity building is a very important part of any programme. However, it is not enough to have a programme on paper. It has to be implemented in a way that it reaches the people who are the beneficiaries. It is not enough to have a programme on paper. It has to be implemented in a way that it reaches the people who are the beneficiaries. It is not enough to have a programme on paper. It has to be implemented in a way that it reaches the people who are the beneficiaries.

SPECIAL INTERVIEW | RANIL KUMAR BARNWAL

Jharkhand Set to be the New IT Hub



Growth of Information Technology and Industrial advancement are the two key factors essential for the development of Jharkhand. Government of Jharkhand is keen to amalgamate with domestic and international investors and the above mentioned factors will help in doing that, says **Ranil Kumar Barnwal**, Secretary, Department Information Technology & e-Governance, Government of Jharkhand, in conversation with Gautam Debroy of Elets News Network (ENN).

FACE TO FACE | N RAVI SHANKER

Uttarakhand Gears Up for e-Governance



Adoption of e-Governance in Uttarakhand may be a little slow, says **N Ravi Shanker**, Chief Secretary of the Hill State of Uttarakhand, in an interview with Gautam Debroy of Elets News Network (ENN).

POLICYMAKER'S PERSPECTIVE

Tech-Driven Swachh Bharat – A Reflection of New India



Swachh Bharat Mission is imperative to the transformation of India's urban landscape. Leveraging Information and Communication Technology (ICT), this unique initiative is bringing in efficiency, better supervision and building new synergies with citizens to help achieve the targets set under the ambitious initiative, says **Praveen Prakash**, Mission Director of Swachh Bharat Mission and Joint Secretary, Ministry of Urban Development in conversation with Shivani Tyagi of Elets News Network (ENN).

Tell us how successful the Information Technology Development Agency (ITDA) is in Uttarakhand?

ITDA is a very important role in the development of Uttarakhand. Since the inception of the State since 15 years back, we look technology as the harbinger of change and to promote the IT initiatives, ITDA has been set up to provide guide and monitor various projects, provide expert inputs, evaluate and monitor State IT initiatives and projects under the National e-Governance Plan (NeGP).

There are a few challenges that hinder optimal performance of ITDA, being an initial state since that has already launched various IT initiatives. Even though we do go ahead with NeGP, the initial steps to attract investment did not lead the desired results. It was in reality an account of the fact that provisions were adopted haphazardly without any proper plan. It was also because the development process of IT in Uttarakhand, which is still under the process of being defined.

However, now we have sufficient experience and we can also learn from the experience of other states of NeGP implementation. The Government of Uttarakhand intends to harness the full potential of ICT for improving the quality of life of its citizens, bring in accelerated social and economic development, and ensure transparency in the governance decisions.

What has been the adoption of IT in various government departments of the State?

The Government of Uttarakhand is now using IT in most of its departments – whether it is revenue, finance or transport, we are using IT everywhere. The government aims to accelerate IT adoption amongst various state agencies – all leading to an ideal 'e-governance' through efficient, service oriented, and effective administration, automatic, non-corruptive and year-on-year growth approach.

IT has a substantial presence in the Tourism Department, because this is one of the major departments pushing our socio-economic development. Recently, we started looking into the National Digital Information Network (NDIN) project, which aims to provide connectivity to all the government services across the state by December 2016, by using the existing capabilities and extending it to the concerned areas.

'The Government of Uttarakhand is now using IT in most of its departments – whether it is treasury, finance or transport, we are using IT everywhere'

We are engaged with the Department of Telecom of the Government of India for the implementation of NeGP in Uttarakhand. The NeGP project is being funded by the Universal Service Obligation Fund (USOF) Fund with contributions from private telecom operators. However, for land-based services, companies will have to set up their own infrastructure at the ground level.

Interestingly, 3G/4G has selected Haridwar for the NeGP implementation as the first phase. Haridwar is also important from the tourism potential angle.

Tell us about the mobile network connectivity in Uttarakhand.

Frankly speaking, most of the areas in the state are devoid of mobile network connectivity. The Telecom Department has also been requested to cover the deficit areas within the state through their terrestrial services.

Can you share how Swachh Bharat and Smart City Mission are being integrated to change the urban landscape of the country?

Swachhness is the pre-requisite for becoming a smart city. These cities have to set an example for others to follow.

First, to implement 100% biometric attendance system for employees of the Swachh Bharat Mission in 20 cities selected in the first round of the Smart

"We have collaborated with Google Maps to provide toilet locating service in Delhi-NCR region through our app. There is a provision for providing feedback as well."



TECHNOLOGY V K GAUTAM

Cloud Bursts in Maharashtra



The State has been a front-runner in terms of transparency in governance and overall efficiency in citizens service delivery, says **V K Gautam**, Principal Secretary – Information Technology, Government of Maharashtra, in an interview with **Poulani Chakraberty** and **Arpit Gupta** of **Diets News Network**.

How do you see the current IT policy framework of the State?

Maharashtra is the first state to release a dedicated e-governance policy. The e-Governance Policy was drafted by a 10-member e-Governance Committee under the chairmanship of Poulani Ch. V. V. B. Bhaskar and approved by the Cabinet. The Policy aims to maintain and strengthen the leadership of the state in the area of e-governance and take it towards e-governance. The Policy would enable citizens to avail various services online, or at a place near their homes, without having to visit government offices at various points. The policy would enable government to function more efficiently and more towards a people's environment.

What is your take on this in Maharashtra, the introduction of e-governance?

Maharashtra State Data Centre as Departments of the State Government were about automation. The flexibility offered by the Cloud is

What is your take on this in Maharashtra, the introduction of e-governance?

Maharashtra is a large population of 11 crore, out of which approximately 1 crore has mobile phones. The State has to reach all these people who are not connected to the internet. The State has to reach all these people who are not connected to the internet. The State has to reach all these people who are not connected to the internet.

Maharashtra is one of the 10 states achieving best in e-governance.

It is a matter of pride for Maharashtra.

Q&A with Rajeev Chawla

Secretary, e-Governance
Government of Karnataka, India



What are the 3 critical factors for Bhoomi's success in Karnataka?

for Bhoomi were the

undertake then Chief clearly and in all public that this was for the State may be no officers and had to be limited time. political will in the budget consecutive it from time e Will: The p was geared t. Right from etary to the ers, there was

all the taluks for last four years. However, the project is not up scaling in different States. This certainly is not an issue of technology or the software. The main challenges are the following:

- Lack of administrative will to take up the projects in most of the States:** The officers either get transferred on their own or are shifted by the State Govts. This results in a situation where the incumbent is not able to or is not willing to go forward in a planned meticulous way thus all the components of the projects are not handled properly.
- The lack of involvement of the Revenue officials right from the village official level.** This is leading to a situation where the data is not getting validated resulting in either non-discontinuation of the manual system or after discontinuation of the manual system coming back to

Ajay Bhushan Pandey
Deputy Director General, UIDAI, Government of India

eKYC will Initiate UID Services

What is your take on this in Maharashtra, the introduction of e-governance?

With the UID, the government will be able to connect citizens with various state government departments as a single point of contact. This will be a great step towards digital India. All the services will be available on the UID. The UID will be a single point of contact for all the services. The UID will be a single point of contact for all the services. The UID will be a single point of contact for all the services.

What challenges did you face in implementing the UID initiative in a populous city like Mumbai?

There were several challenges in implementing the UID initiative in a populous city like Mumbai. The challenges were related to the infrastructure, the data, and the people. The challenges were related to the infrastructure, the data, and the people. The challenges were related to the infrastructure, the data, and the people.

REGION FOCUS: KERALA



'Change-management is difficult to handle'

"We believe that for a state like Kerala, which has 100 percent literacy and large number of people living outside the state, high tele-density and computer literacy is a must for evolving a knowledge society, where e-Governance becomes fully successful," says **P H Kurian**, IT Secretary, Kerala (India) to **Anuradha Dhar** of **egov**.

What is the biggest challenge for the e-Governance projects in the State?

The biggest challenge for the e-Governance projects in the State is the change-management. The change-management is difficult to handle. The change-management is difficult to handle. The change-management is difficult to handle.

What are the immediate plans of your department for e-Governance?

The immediate plans of our department for e-Governance are related to the infrastructure, the data, and the people. The immediate plans of our department for e-Governance are related to the infrastructure, the data, and the people.



P H Kurian, IT Secretary, Kerala

POLICYMAKER'S PERSPECTIVE

Raipur Citizens

The Power Behind Smart City Mission

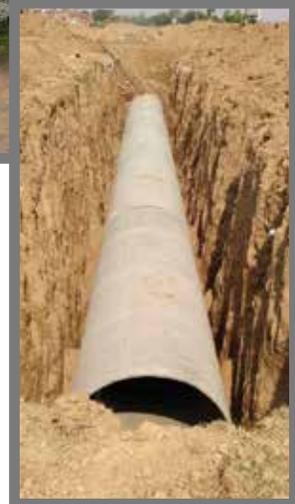
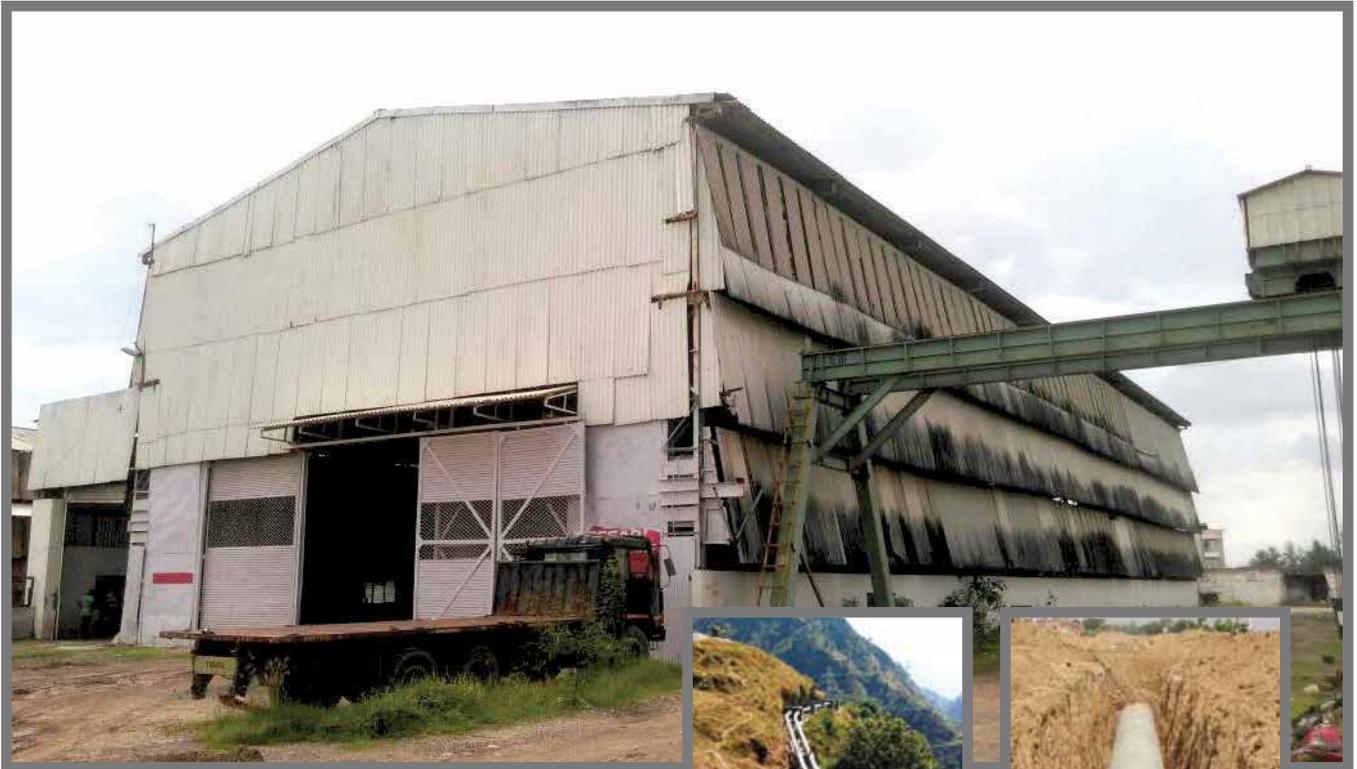


Citizens are becoming an integral part of the Raipur Smart City Mission. The citizens are becoming an integral part of the Raipur Smart City Mission. The citizens are becoming an integral part of the Raipur Smart City Mission.

eGov Flashback

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INDUSTRY SPEAKERS / NOSHIN KAGALWALA

Data Analysis is the Key to Success: SAS



Data is the new oil of the digital economy. The analytics market in India is poised to double from current \$4 billion to \$2.3 billion by the end of 2017-18. Hence, it comes as no surprise that both the government and organisations across various industry segments are embracing analytics as it has become a strategic imperative for them, says Noshin Kagalwala, Managing Director, SAS Institute (India) Pvt. Ltd. in conversation with Elets News Network (ENN).

Prove give us an overview of the company?

SAS is the leader in business analytics software and services, and the largest independent vendor in the business intelligence market. SAS has over 18,000 employees and customers in 140 countries. Our software is installed at more than 10,000 hospitals, government and university sites, 31 efficiency organisations in the US, 12,000 retail stores in 100 countries.

SAS Institute (India) Pvt. Ltd. is a wholly owned subsidiary of SAS Institute Inc. Has been in India since 1997 and consists of a strong team of over 100 highly qualified technology and domain experts helping customers address their business challenges through effective use of business analytics. SAS products and solutions are widely and successfully used by organisations of all sizes and used by the government - both central and state - across the globe as well as in India.

What solutions and products do you offer for Indian companies?

SAS has comprehensive solutions for a large number of industries, solutions are broadly classified into the following:

Business Intelligence and Analytics - Solutions such as SAS Visual Analytics that empowers even non-technical users the right information when they need it, when they want it. It allows users to discover data, create and share interactive reports and monitor key metrics in real time.

Advanced Analytics - SAS advanced analytics is infused with a edge, innovative algorithms that let customers solve their most difficult problems and quantify opportunities around themselves.

Customer Analytics - Our comprehensive marketing intelligence that enables you to gain deep insights into your customers, who they are, which help you better understand their. Message delivery and engagement.

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INDUSTRY PERSPECTIVE

IL&FS Technologies: Integrating smart technologies with infrastructure



Over years, IL&FS Technologies have formed strong partnerships and alliances to create an ecosystem of global smart infra solutions. The company's value proposition to the city authorities is the unique ability as a System Integrator to aggregate and deploy these global solutions in Indian conditions, says Durga Prasad, Chief Executive Officer, IL&FS Technologies Ltd. in conversation with Elets News Network (ENN).

IL&FS Technologies Ltd had a strategic partnership with Smart City Development Authority for Smart Towns and Smart Villages. What is your vision of the EC?

As part of one of India's largest infrastructure conglomerates, IL&FS Technologies (ITD) will be able to take advantage of the new wave of smart town and infrastructure solutions. We are looking at smart infrastructure solutions with technology as per to 2017-18. The major implementation of Smart infrastructure solution in the form of Smart Urban Authority, Public Utility and Smart Governance.

We believe that the key to success of a Smart City depends on the Smart section building and operational efficiency. How do you see the role of Smart Urban Authority, Public Utility and Smart Governance?

Smart City depends on the Smart section building and operational efficiency. How do you see the role of Smart Urban Authority, Public Utility and Smart Governance?

What are your goals for smart cities in India for 2017-18?

IL&FS Technologies has an ecosystem to address when it comes to delivery

IL&FS has been a pioneer in Smart Cities in smart infrastructure solutions. How do you see the role of Smart City Development Authority for Smart Towns and Smart Villages? How do you see the role of Smart Urban Authority, Public Utility and Smart Governance?

The vision is transforming India with the 'Smart India' infrastructure and is the key to the success of Smart Cities. Smart City is a smart city and smart infrastructure. Smart City is a smart city and smart infrastructure. Smart City is a smart city and smart infrastructure.

33 enr | eletsnews.com | 1 January 2017

Uber—Taking Public The Last Mile

One big mobility solution that we bring to the table is complementing public transport. If your train or subway or bus doesn't get you all the way home, Uber will take you that last mile, says Shweta Rajpal Nohel, Public Policy Head, UBER, in conversation with Manish Arora of Elets News Network (ENN). Excerpt:

Uber appears to have revolutionized urban mobility. Tell us about your journey in India so far.

India is the second largest market for us globally, and is growing at an incredible pace. Our journey in India started over three years ago with Bangalore. The growth since then has been phenomenal. We started with three employees in Bangalore, we now are a 100+ people strong team currently operating in 20 Indian cities with over 100,000 active partners on our platform. We started and scaled up Uber with engineering centers in India and Bangalore to help us build our product in India. We started to focus on transportation technology for India. Some of our innovations will focus on the last mile of Bangalore to help us build our product in India. We started to focus on transportation technology for India. Some of our innovations will focus on the last mile of Bangalore to help us build our product in India.

32 enr | eletsnews.com | 1 January 2017

FINANCIAL INCLUSION ON MOBILE PLATFORM

Pramod Saxena
Chairman & MD, Origin Services India Pvt Ltd

What is the main focus area for Origin? Tell us about the work you are doing in India?

Origin was started in July 2014 with a vision to provide financial services to the masses of India through a Virtual Network for Personal and Social Connections. Origin started its operations in 2015. The idea of starting Origin originated from the very personal experience of the founder and large number of other users. We wanted to bring the entire process into one platform. The idea of aggregation was to enable the user to get done transactions on payment which he makes to various service providers. It helped in reducing the various. We have an end-to-end service like credit and payment transfer and we have created our own proprietary solution. We see the last step in India to help in credit transfer with our solution.

Please tell us about your firm's work with other organisations?

We have various partners with a bank, MNC and company called OneClick which is a credit transfer solution. We have various partners with a bank, MNC and company called OneClick which is a credit transfer solution. We have various partners with a bank, MNC and company called OneClick which is a credit transfer solution.

Tell us about your business model?

Our business model is based on value added services. We are the only company in India to link our value services with National Payment Corporation of India (NPCI). Origin has been successful in helping its partners, which could be able to access the market to reach the entire market. Origin has multiple options for partners to connect with business using their own PC which has internet connectivity. They can also connect with business using our mobile application. We are looking at the option to connect with mobile application to reach the entire market.

Please tell us an interesting fact?

OneClick is a unique cash based value added service which is a credit transfer solution. We have various partners with a bank, MNC and company called OneClick which is a credit transfer solution.

34 enr | eletsnews.com | 1 January 2017

INDUSTRY SPEAKERS / AMIT KHANNA

'Go Green' With NComputing Solutions



Computing solutions can reduce the acquisition cost, power requirement and maintenance cost significantly, says Amit Khanna, Director Business Development, NComputing India in conversation with Pratiksha Sharma of Elets News Network (ENN).

NComputing is working with the government on different IT projects. Can you tell us something about ICT?

We have been working with different government for the past 4-5 years. We have already implemented large infrastructure and communication technology (ICT) projects in India. We are working on different ICT projects in India. We are working on different ICT projects in India. We are working on different ICT projects in India.

32 enr | eletsnews.com | 1 January 2017

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eGov Flashback

Government Projects On the Horns of a Dilemma!

A hybrid management of business applications is a development for government agencies, as it is critical for complex variety of environments projects' says **Arjun Bansal**, Head- Centre of Excellence for e-Governance, Infosys Software

Government has with unique challenges when you think of the diversity of their needs. It is not just about building legacy systems, but also about building new systems. The main challenge is to build a system that is flexible enough to handle a wide range of applications. This is where the dilemma comes in. On one hand, you have the need for legacy systems that are stable and reliable. On the other hand, you have the need for new systems that are flexible and scalable. This is where the dilemma comes in. On one hand, you have the need for legacy systems that are stable and reliable. On the other hand, you have the need for new systems that are flexible and scalable.



Arjun Bansal
Head-Centre of Excellence for e-Governance, Infosys Software

Advantages
• High level of security and compliance
• Scalability and flexibility
• Cost-effective
• Easy to integrate with existing systems

...making the possibility of application...
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SPECIAL FEATURE

Enabling Superior Service Through Datacentres and Mobile Security

A...
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Manjit Chahal
Managing Director

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COMPANY PROFILE



Cyberfort Technologies
Securing the digital world



Dr. Amit Kumar
Managing Director

...to build on existing...
...to build on existing...
...to build on existing...

Product Categories

Cyber Security

Vodafone India Limited

About Us
Vodafone India, a member of the Vodafone Group, commenced operations in 1994 through a partnership between Vodafone India and the Government of India. The company has since grown to become one of the largest mobile operators in India. The company has a strong presence in the Indian market and is committed to providing high-quality services to its customers.

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Categories of Product

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ABOUT VODAFONE BUSINESS SERVICE

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THE INDIA AND THE IMPACT OF DIGITAL

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Helping Governments Implement e-Governance

One of the world's largest telecom companies is now working on a wide range of a governance projects

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Governments are...
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Dr. Amit Kumar
Managing Director



SPECIAL FEATURE

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SPECIAL FEATURE

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eGov Flashback

Deploying Integrated Monitoring & Management Solutions

Maharashtra is one of the most forward looking states in the country, where it comes to ICT adoption by the government to deliver G2C, G2B and G2E services

MSRM&A & SOC

Over the last few years, Maharashtra has emerged as one of the most forward looking states in the country, where it comes to ICT adoption by the government to deliver G2C, G2B and G2E services. Maharashtra is one of the most forward looking states in the country, where it comes to ICT adoption by the government to deliver G2C, G2B and G2E services. Maharashtra is one of the most forward looking states in the country, where it comes to ICT adoption by the government to deliver G2C, G2B and G2E services.

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Vibha Agrawal
Senior Business Partner, CA Technologies
...entire activities and other management of...
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Accelerated Power Delivery and Reform

The Maharashtra State...
...The Maharashtra State...
...The Maharashtra State...

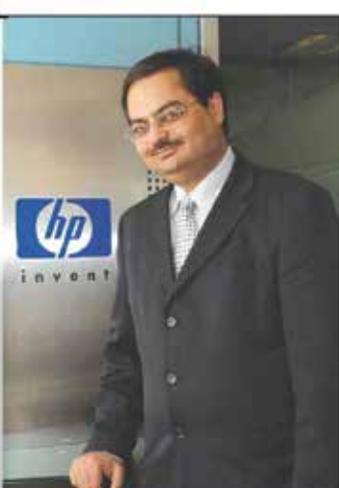
Maharashtra Water Resources Department

Maharashtra Water Resources Department...
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NEWS & VIEWS

NATIONAL (CORPORATE)

Apple has...
...Apple has...
...Apple has...



Anil Mishra
Country Category Manager - Enterprise Client Solutions
Personal Systems Group
Hardware Products India Sales Pvt Ltd

...The state...
...The state...
...The state...

Suman Bose
Managing Director - India, Siemens Industry Software (India) Pvt.Ltd, Industry Sector

DRIVING EFFICIENCY THROUGH AUTOMATION

Tell us about your plans for the Indian market. What is the most exciting for Siemens as far as the Indian operations are concerned?

...The need for IEDs can be gauged by the fact that...
...The need for IEDs can be gauged by the fact that...
...The need for IEDs can be gauged by the fact that...



Suman Bose
Managing Director - India, Siemens Industry Software (India) Pvt.Ltd, Industry Sector

FEATURE

Green Engineering

Engineering plays a vital role in developing products that are smarter, better, simpler, lighter, safer and more energy-efficient

The...
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SHARD BANSAL

Experts are of the view that...
...Experts are of the view that...
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...The need for IEDs can be gauged by the fact that...
...The need for IEDs can be gauged by the fact that...
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DMS and e-Governance

IEDs facilitate e-Governance with...
...IEDs facilitate e-Governance with...
...IEDs facilitate e-Governance with...

DMS and education

The need for digitizing...
...The need for digitizing...
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...The need for digitizing...
...The need for digitizing...



YIPIN TUTEJA
Managing Director - India, Siemens Industry Software (India) Pvt.Ltd, Industry Sector

"Though there can never be paperless departments, governments can still have 'less paper' departments."

COVER STORY

Technology to Enable Power Sector Reforms: An Indian Perspective

www.eletsonline.com



EXECUTIVE

With a demand target of 100 billion units in 2012 and power demand of 10,000 MW, India, it is expected that India needs to add nearly 20,000 MW of generation capacity by year 2012 to meet the demand. In 2007-08, the government set a target to add 10,000 MW of power capacity in the next five years. However, in the past five years, the government has added only 10,000 MW of capacity. The government has to add 10,000 MW of capacity in the next five years to meet the demand.

NEWS & VIEWS

INDUSTRY

In-Office 3D/4D Monitoring Through Smart Grid
The use of smart grid technology has been increasing in the power sector. Smart grids are used to monitor the power flow in real-time. This helps in identifying the location of faults and in taking corrective actions. Smart grids also help in reducing the loss of power and in improving the efficiency of the power system.



Digvijay Singh Chaudhary
Vice President, Sales
Cybernet, India

It is an honor to be invited to speak at this event. I am sure that the event will be a success. I am looking forward to meeting you all and discussing the challenges and opportunities in the power sector. I am sure that we can find solutions to these challenges together.

ERP

COMPANY PROFILE
SAP is a German software company that provides enterprise resource planning (ERP) software. SAP's software is used by companies of all sizes to manage their business processes. SAP's software is known for its reliability and security. SAP's software is also known for its flexibility and scalability.

REPORT: INDUSTRY TRENDS

Providing End-to-e-Government Solutions/Service

Prakash Rane, Managing Director, ABM Knowledge Services



Prakash Rane pioneered several trend setting concepts/projects in e-Governance in India with products and solutions developed by ABM. These concepts are mainly in the area of IT enabling citizens/consumer services.

administration reform. We believe that e-Governance is a basic delivery mechanism to the citizen as much as roads, ports or airports. The only difference is that it is the most scalable basic infrastructure required for the economic progress of a country. Today, the most important challenge for the government of India is to provide e-Governance services to the citizen. This is the only way to improve the efficiency of the government and to reduce the cost of the citizen.

ABM has a goal to be one of the leaders in providing end-to-e-Governance solutions in India. We are currently working on several projects in this area. We are also working on developing new products and services in this area. We are confident that we can provide the best solutions to the citizen.

According to me, what is the level of progress made by India in the past few years in carrying forward e-Governance? What are the major challenges faced by the government in carrying forward e-Governance?

e-Governance initiatives are needed to be successful, only when the necessary infrastructure is in place. The citizen is not interested in e-Governance unless the infrastructure is in place. The government has to invest in the infrastructure and to ensure that the infrastructure is of high quality. The government has to ensure that the infrastructure is available to all citizens.

Last 5 years have definitely seen a rising enthusiasm in delivery levels of government-related and state-level services. However, e-Governance is still in the early stages. The government has to invest in the infrastructure and to ensure that the infrastructure is of high quality. The government has to ensure that the infrastructure is available to all citizens.

What is the government's vision and goals of e-Governance?
ABM envisions e-Governance to be an all-time-round service delivery to the citizen. It should be achieved by IT, enabling citizens services with maximum efficiency and cost-effectiveness.

Events Watch

14 Nov, 2011 National Energy Summit New Delhi, India 15-16 Nov, 2011 National Energy Summit New Delhi, India 17-18 Nov, 2011 National Energy Summit New Delhi, India 19-20 Nov, 2011 National Energy Summit New Delhi, India	21 Nov, 2011 National Energy Summit New Delhi, India 22-23 Nov, 2011 National Energy Summit New Delhi, India 24-25 Nov, 2011 National Energy Summit New Delhi, India 26-27 Nov, 2011 National Energy Summit New Delhi, India	28 Nov, 2011 National Energy Summit New Delhi, India 29-30 Nov, 2011 National Energy Summit New Delhi, India 01 Dec, 2011 National Energy Summit New Delhi, India 02-03 Dec, 2011 National Energy Summit New Delhi, India	04 Dec, 2011 National Energy Summit New Delhi, India 05-06 Dec, 2011 National Energy Summit New Delhi, India 07-08 Dec, 2011 National Energy Summit New Delhi, India 09-10 Dec, 2011 National Energy Summit New Delhi, India
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SPECIAL FOCUS

Fujitsu PalmSecure Contactless Biometric Authentication

Contactless biometric sensors are a boon to the various government programmes that require an authentication and answers to the call of public hygiene. Fujitsu's PalmSecure authentication uses the vein of the active blood flow in the vein of the palm. Since the biometric characteristics required to be authenticated reside inside the body, it is extremely difficult to duplicate or imitate, making it ideal for various defence and other key information programmes.

Key Features
Today, government and financial institutions are aggressively looking towards use of biometrics to register the users and give them access to various programmes and services like Finance, Loans, Energy, Health, Insurance, and more. Card, ATM, Lockers, etc. Such initiatives in a way make an account of bringing transparency to the system and increasing the cost of operation. However, it also brings in the issue of public hygiene of using the same sensor and maintaining the same acceptance rate at a large scale.

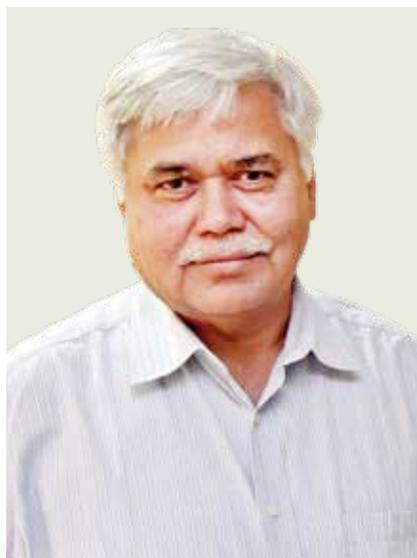
Key Features
Contactless Biometric Sub-Image Size: PalmSecure from Fujitsu provides the answer to these issues. PalmSecure is now available in India.

How it Works
The PalmSecure sensor assesses the structure of the pattern of veins in the palm of the human hand with the utmost precision in a fraction of a second. The sensor analyses the special characteristics of the infrared light that is emitted through the palm vein - it absorbs some infrared light. This



- Virtually Frictionless: as a non-contact sensor, it is ideal for use in crowded areas and for people who are wearing gloves, etc.
- Hygienic: As a contactless sensor, it is ideal for use in crowded areas and for people who are wearing gloves, etc.
- Hygienic: As a contactless sensor, it is ideal for use in crowded areas and for people who are wearing gloves, etc.

eGov Flashback



R S Sharma

Chairman

Telecom Regulatory Authority of India (TRAI)

TRAI – Expanding Horizon of Telecommunication in India

Use of new technology always changes the working dynamics and enhances competition. The current competition between telecom providers has made the data services affordable for the common citizen of India, says **R S Sharma**, Chairman, Telecom Regulatory Authority of India (TRAI) in an interview with **Gautam Debroy** of **Elets News Network (ENN)**.



“It is important that all applicable systems are tested before commencement of commercial services because a licensee has to ensure that its service meets the Quality of Service (QoS) standards prescribed by the Licensor or Telecom Regulatory Authority of India (TRAI).”

TRAI has made a host of recommendations to improve the telecom sector so far, what exactly is the mandate of TRAI to ensure a better quality of voice calls?

The traditional ways of assessing voice quality have been through periodic reporting by Telecom Service Providers (TSPs) audit of quality of service by independent agencies and drive test of mobile networks. In the new initiative of TRAI to assess voice quality, greater reliance has been placed on technology in communicating with consumers, in consonance with the vision of Digital India.

In this regard, TRAI recently launched the TRAI MyCall Mobile App, which empowers user to rate the voice call

experience and share it with TRAI. User can also share the environment in which he is using the network and the kind of problem he is facing during the conversation such as noise or audio delay or a call-drop.

Do you think setting up of Ombudsman or a similar authority, as suggested by TRAI, could really address consumer grievances?

The TRAI, in March 2017, after examining the issues related to grievance redressal in the telecom sector gave its recommendations to the Government, which inter-alia suggested setting up an office of a telecom Ombudsman. These recommendations, based on an intensive stakeholder

consultation were based on a clear finding that the existing mechanism to address telecom consumer grievances is inadequate, given the quantum and nature of such grievances. TRAI has made recommendations to restructure the grievance redressal mechanism into a three-tier mechanism, with the TSPs themselves, forming the first grievance response level. The Authority's recommendations for establishing an independent and appropriately empowered structure, in the form of an Ombudsman, for resolution of grievances of telecom consumers also covers aspects such as the functions, structure, powers and funding of such an office of the Ombudsman.

It does not envisage taking away any of the existing channels of redressal which the consumers may seek to resolve their grievance.

The Authority's suggestion for creation of an Ombudsman is out of its firm conviction that establishing an independent mechanism for grievance redressal would be a small, but gainful effort for all stakeholders of the Telecom Sector.

When can we expect recommendations for net neutrality?

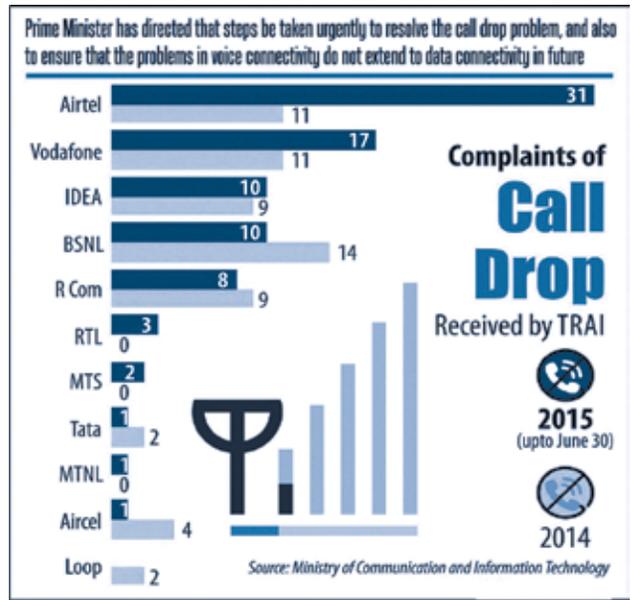
Before finalising any recommendations to the government, TRAI has to undertake public consultation on the issue, including open house discussions at one or more cities, depending on the

importance of the issue. Views of all stakeholders need to be considered and decisions have to be taken in a transparent manner. TRAI has undertaken one round of open house discussions on the issue of net neutrality. Further, these discussions are planned at Bengaluru this month and in Delhi next month. Considering this, the recommendations on net neutrality are expected to be finalised by October, 2017.

How do you perceive the views expressed by Telcos on network testing?

It is important that all applicable systems are tested before commencement of commercial services because a licensee has to ensure that its service meets the Quality of Service (QoS) standards prescribed by the Licensor or Telecom Regulatory Authority of India (TRAI). Failure on part of licensee to adhere to the Quality of Service standards is liable to be treated as breach of terms and conditions of license.

As per the general practice, before the

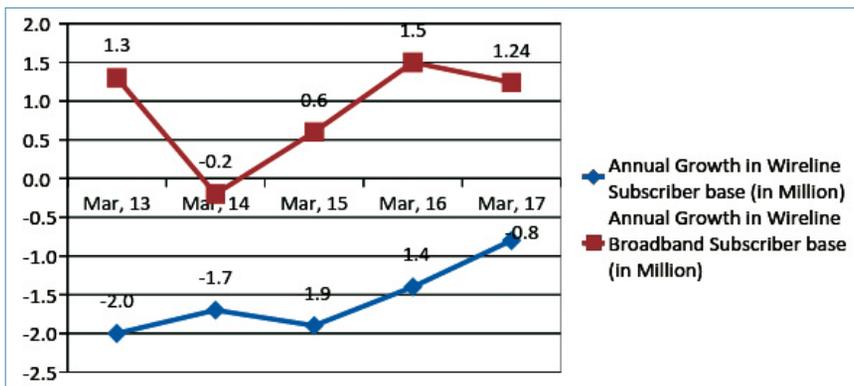


commercial launch of services, TSPs use test Subscriber Identity Module (SIM) Cards to check the quality of its network. Till date, need was not felt to specify various aspects of testing such as definition of test cards, limit of test cards, testing duration etc. TRAI has issued a consultation paper on the subject in May 2017. TRAI will issue its recommendations to Department of Telecom (DoT) after completion of the consultation process.

The number of landline subscribers is witnessing a decline whereas mobile phone subscribers are increasing across India, how do you view this situation?

In India, since the beginning of the new millennium, while wireless penetration rate has witnessed exponential growth, the wireline penetration rate has dwindled in the country.

Wireless networks were introduced in India in 1994. As wireless telephony grew in the country, it led to an initial increase in the wireline network traffic (due to complementarities) and then a steady decline in the wireline network (due to dominance of substitution effects).



While consumers have embraced wireless networks for a voice solution, it needs to be remembered that wireline networks have some inherent strengths which cannot be matched by wireless networks. As more and more customers are seeking high speed data (internet) services, wireless networks are increasingly finding it tough to meet the ever-rising data demand, particularly in a spectrum constrained sector.

In the event of catastrophes, when wireless radio networks could be choked or unavailable altogether, wireline networks become a robust alternative.

- Wireline telephone handsets connected through copper pair are powered by the central exchanges and, therefore, continue working even during prolonged power cuts.
- As more and more customers are seeking high speed data (Internet) services, wireless networks are increasingly finding it tough to meet the ever-rising data demand, particularly in a spectrum constrained sector. Wireline networks, on the other hand, can deliver much higher speeds of data transfer because the central equipment (e.g. network edge routers) and wireline cables have much larger bandwidth capacities.



Subscriber base of wireline telephony and wireline Broadband services* and their annual Growths

As on the last day of	No of Wireline Subscribers (in Million)	No. of Wireline Broadband Subscribers (in Million)	Annual Growth in Wireline Subscriber base (in Million)	Annual Growth in Wireline Broadband Subscriber base (in Million)
Mar, 12	32.2			
Mar, 13	30.2	15.1	-2.0	1.3
Mar, 14	28.5	14.9	-1.7	-0.2
Mar, 15	26.6	15.5	-1.9	0.6
Mar, 16		17	-1.4	1.5
Mar, 17	24.4	18.24	-0.8	1.24

*Source: TRAI's monthly Press Release on Telecom Subscription Data

The table above depicts the subscriber base of wireline telephony and wireline broadband services and their annual growths. The chart depicts the annual growth of wireline telephony and wireline broadband services in a graphical manner.

(iv) It is widely believed that ubiquitous broadband access can be made possible only through wireline infrastructure (built on copper pair and optical fiber cable) because of its capacity and, therefore, when it comes to broadband, wireless networks will remain a complement to, rather than a substitute for, wireline networks. In a nutshell, wireline networks promise much better delivery of high-speed data services to consumers than the presently available wireless networks.

(v) To promote investment in, and adoption of, wireline networks (so that they may become an effective vehicle for the delivery of high-speed Internet in the country), the Authority has decided to prescribe FTC (fixed termination charges) as well as MTC (mobile termination charges) for wireline to wireless calls as zero in the IUC

What's your take on the competition among telecom providers ever since Reliance Jio's introduction in the market?

TRAI has always encouraged healthy competition. It has kept the prices in check and at the same time resulted in increase of usage. This, in turn, has always boosted revenues of the industry as a whole. The telecom sector witnesses fast technological evolutions. Use of new technology always changes the working dynamics and enhances competition which ultimately increases the use of telecommunication across all spheres of activities. This will, in turn, increase the efficiency, effectiveness, GDP of the nation and also be beneficial to the consumers. Telecom services now are no longer an elite's preserve. It is now the basic infrastructure for 'Digital and less cash India'. The current competition has made the data services affordable for the common citizen of India. 



Dr Ajay Bhushan Pandey

Chief Executive Officer

Unique Identification Authority of India (UIDAI)

Aadhaar, a Medium to Empower Common Man: UIDAI CEO

Aadhaar has empowered the common man in a big way and this is the reason why more and more services are opting for Aadhaar authentication. It removes duplicity, removes fakes and bogus and empowers people, says **Dr Ajay Bhushan Pandey**, CEO of Unique Identification Authority of India (UIDAI), in conversation with **Gautam Debroy** and **Kartik Sharma** of Elets News Network (ENN). Excerpts:



“Aadhaar helps in curbing black money, money laundering and all other illegal activities. It helps government in saving money by stopping various leakages.”



What role Aadhaar is playing currently in the country?

Aadhaar is now the most credible identity in the country. More than 116 crore and 99 per cent of adults have been registered with the Aadhaar. More than 75 per cent of school-goers have their Aadhaar identity. Now, Aadhaar is a verified proof which is used across sectors. Today, with Aadhaar you can open bank account and can easily get PAN card too.

Through Aadhaar, many services can be accessed in a hassle-free manner.

Earlier, people were to provide a lot of documents to prove their identity. Today, the same can be done through the Aadhaar number. For opening a bank account, Aadhaar number can be used for authentication. With the use of biometrics, eKYC comes to the bank and the account can be opened easily.

Earlier, for getting passport, a lot of

documents were required but now with the help of Aadhaar, the time for issuance of passport has decreased.

Before Aadhaar, a lot of time was spent on queues at the Public Distribution System (PDS) shops, but now rations are being given only on the basis of Aadhaar. The ration shopkeepers cannot divert ration meant for people because of the biometric authentication.

Aadhaar has empowered the common man in a big way and this is the reason why more and more services are opting for Aadhaar authentication. It removes duplicity, fakes and bogus and empowers people.

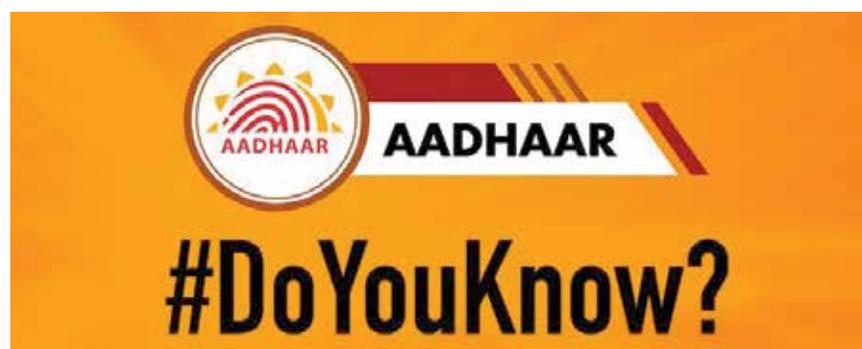
How is Aadhaar acting against money laundering?

While the citizens have been empowered, it is also saving lot of government money which was earlier siphoned away. During the last three years, the government has saved a total amount of Rs 56,000 crore.

According to a World Bank report, if Aadhaar is used in all government welfare programmes, more than \$11 billion could be saved every year which is almost equivalent to Rs 70,000 crore per year.

What purpose linking Aadhaar with the bank accounts is set to serve?

Once you link Aadhaar with the bank account it serves many purposes. On many occasions, we have seen benami (unknown) accounts or unscrupulous people opening bank account for fraudulent purposes. Now all these things would be curbed when banks are linked to Aadhaar and accounts are opened through Aadhaar authentication. It helps in curbing black money, money laundering and all other illegal activities. It helps the



#DoYouKnow?

"Aadhaar has been hailed as the world's largest and most sophisticated domestic biometric ID program."

- Paul Romer, Chief Economist, World Bank

government in saving money by stopping various leakages.

With such a huge task in hand, how do you propose to enroll every citizen of India?

We have already enrolled 116 crore people and will continue to do so. Along with enrollment, we need to update people's information. Every citizen must update their address in the Aadhaar card. People who want to change their surname after marriage also need to be updated. For this purpose, we have set up Aadhaar enrollment centres all across India. People can go to any of the centres and authenticate themselves with biometrics. Now with Aadhaar Act in force, any organisation which is asking Aadhaar on a mandatory basis could be required by UIDAI to have Aadhaar enrollment centres. For bank accounts, Aadhaar is necessary. So we have asked banks to have Aadhaar

enrollment centres in their premises. It will help people to enroll as well as update their address whenever required. We are asking all departments, who are asking for Aadhaar on a mandatory basis, to have Aadhaar enrollment centres.

Is there any threat perception as well while managing such a huge database?

Yes, of course, threats are always there. We are aware of the threat perception and we do take all necessary precautions for data security. We ensure that there is no breach in the security system. According to the Aadhaar Act and Information Technology Act, any attempt to breach Aadhaar security system is punishable of imprisonment up to 10 years. We have very strong legal provisions. We have a strong technological infrastructure, so that data remain safe and secured. gov.in



Dr Ajay Kumar

Additional Secretary, Ministry of
Electronics & Information
Technology, Government of India

India's Way of e-Governance Affordable & Inclusive Way of Digital Transformation

The digital transformation is happening in a very affordable and inclusive manner, says **Dr Ajay Kumar**, Additional Secretary, Ministry of Electronics & Information Technology, Government of India, in an exclusive interview with **Souvik Goswami** of **Elets News Network (ENN)**.



“We are in the most exciting phase of e-governance in the history of this country. IT is bringing great transformation in the governance spectrum.”

India has come a long way in terms of e-Governance, what is its present scenario and future of e-Governance?

We are in the most exciting phase of e-governance in the history of this country. IT is bringing great transformation in the governance spectrum. We have been using technology in government in the past as well. However, what we see now is a digital tech-led transformation as never before. For example, Direct Benefit Transfer (DBT) which is powered by digital technology is now helping crores of people to receive benefits at a click of a button. Earlier, benefits would flow from the Central to State governments to

the district administrations to the block administration and then to the panchayats and eventually to the beneficiaries. At each stage, lots of costs and time would be spent in the layers of bureaucracy, for the transfer of money. The important thing is the scale at which DBT has been implemented in the Government. DBT has been extended to over 250 schemes and 36 crore transactions saving Rs 50000 crores. It is proposed to extend DBT to 90 crore transactions across 500 plus schemes this year and to State Government benefit transfer as well. The scale of implementation is truly transformative.

Government has set up a real-time online marketplace for public procurement

called Government eMarketplace (GeM). This in my opinion, will change the public procurement for all times to come not only in India but all over the world. The World Bank is actually studying our model of public procurement. GeM enables vendors to change the prices dynamically. GeM also ensures that payments to the vendors are made online. It ensures transparency in the whole procurement process. Our experience shows that procurement prices of goods and services are nearly 10 to 15% lower than the traditional methods. It also helps in reduction of corruption. Government has already mandated that all goods and services on GeM should mandatorily be procured only from this platform. Many State Governments across the country have also adopted GeM for their procurements.

Take, for example, the e-National Agriculture Mandi (eNAM) portal. Earlier the farmer was constrained to sell his produce in the local mandi. On eNAM, he has the whole country as his market and he can sell as per the best offered prices. 350 mandis and 36.4 lakh farmers are already using eNAM. 585 mandis across the country are proposed to be integrated on the portal this year.

Likewise, Aadhaar has been a game changer for so many ways. With over 116 Aadhaar and nearly 3 crore e-authentications every day, transformation is taking place. When the Supreme Court needed a mechanism which would ensure fake SIM cards should not be issued, it directed all the telecom operators to link all their subscribers with the Aadhaar number. Be it scholarships, DBT, Ration card, LPG subsidy, or MNREGA by linking all these schemes to Aadhaar-- the government has ensured fakes and duplicates are removed and genuine eligible persons are benefitted in a transparent way. By linking scholarships with Aadhaar, not only fake candidates vanished but also the fake schools which were claiming



these government scholarships earlier were eliminated.

Through Jeevan Pramaan scheme, the person doesn't have to visit banks to submit life certificates. Now they can do it remotely.

The advancement of technology is being used in e-governance. First example is Cloud where it is possible to host and scale rapidly and reduce costs. In NIC, we have a Cloud First policy implying that all applications hosted in NIC in last three years have been only on Cloud. Instead of developing stand-alone applications, Common Applications are developed and hosted to Cloud which enable multiple users across various Ministries/ organizations to use these without having to redevelop these. One such example is Biometric Attendance System implemented across several thousand government offices in Central and State Governments at practically negligible software costs and adding a new office is as simple as opening an email account. Cloud based Online registration System and eHealth systems are changing the health scenario in India. These were first implemented in AIIMS, Delhi. Now, any hospital can use the application for hospital management and online appointment for patients by merely creating an account and downloading the e-hospital system. This is technology-

based transformation. Nearly 150 government hospitals have already adopted these systems. Scholarship portal is one such example where 25 schemes of several ministries' scholarships have been brought on the same platform and over 1.25 crore students avail of this facility.

There is a huge push to the digital payments which benefits e-governance and the society at large. The digital transformation is happening in a very affordable and inclusive manner.

An important aspect of this transformation is the focus on affordability, inclusion and focus on weak and the poor. The technologies like e-authentication through Aadhaar, Digital locker, BHIM or Aadhaar based payment systems are available at zero costs. eSign has brought down cost of digital signature from say Rs 1000 per year to Rs 1 per signature.

Reaching out the unreachable, do you think that has been the biggest success of e-governance mission in India?

The use of digital technologies in India is different from the places world over. In other countries, World over, e-governance has mostly focused on

efficiency and productivity. We additionally focus on providing basic developmental needs of the citizens. Health, education, skilling, financial inclusion, agriculture, electrification, cooking gas, among others which are essential for improving quality of life.

Common Service Centres (CSCs) are playing a major role in ensuring the inclusivity of people in the rural areas. Through Digital Saksharta (DISHA) programme, people are being made digitally literate. About 1 crore people have been made digitally literate and under the PM Grameen Digital Saksharta (PMG DISAH) programme, 6 crore additional people are being made digitally literate. Importantly, PMG DISHA programme is going to be training people in villages which are far away from municipalities and urban areas thereby ensuring that the remotest villages are covered.

How do you view the electronic manufacturing scenario in India?

Five years back, new investment in electronics manufacturing was unthinkable. Existing units were folding up. There has been a huge change especially in the last few years. Importantly, interest in electronics manufacturing is by both MNCs and Indian companies. 80 new mobile manufacturing and component manufacturing units have come up in last 2 years. The per annum mobile production has grown from 6.5 crore units to 17.5 crore units. Nearly 250 new investment proposals involving investments of nearly Rs 1.4 lakh crores are in pipeline. With increased production, important of several electronic products like mobile phones, LED lights, LED/LCD TVs among others have started declining despite increase in domestic demand. We also have a solar fab and a LCD fab proposals which are work in progress.

India is currently the most happening country in the world in terms of



investment in the electronics manufacturing segment. Make in India programme, policy initiative by Government, differential duty incentive, electronic manufacturing clusters, all these have been welcomed by the industry. The government has been very supportive. The government has given the confidence that they are there to support the manufacturing industry.

Where do you see electronics manufacturing in India in the next five years.

Electronics manufacturing is at a take-off stage. In the next five years, you can see two to three times growth of the industry. More new companies will come, the existing companies will continue to add. A lot of Indian companies will also start entering this area. We have seen a lot of interesting trends recently. Many electronics manufacturing companies are coming up with the IPOs too. This is new trend and shows how the electronics industry is shaping up.

What programmes will be on the anvil in the next two years in terms of digital transformation?

The focus is to achieve one trillion digital economy at the earliest for which several new steps are proposed to be taken. A high level industry round table was held recently wherein several new initiatives

were discussed. There is electronics policy version 2.0 which is proposed. It will be formulated and put up for consultation. There are proposed software product policy, a policy framework for data security. Innovation is the key to take this transformation further.

Connectivity has been an issue. What according to you are the challenges in the digital transformation and how do you plan to overcome it?

A lot of work has happened to improve the connectivity both from the private and public sector. Optical fibre has been laid in nearly 1 lakh panchayats. States like Andhra Pradesh have a model of taking fibre to home.

Digital technologies change at a frantic pace. Consequently a challenge is to keep pace with this continuous change. There is a huge need for human resource skilling and re-skilling. We have the resources and ability to become the technology human resource hub of the world. But that is only possible if we are able to skill our people in large number in quality. To continue leadership position in the IT sector in the next 20-30 years, we have to skill our human resource and framework for technology. Building effective infrastructure also has to be on priority. 

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Dr Sameer Sharma
Additional Secretary
Ministry of Urban Development
Government of India

“A total of 90 cities have been selected under the Smart Cities Mission so far. Funding is available for 100 cities.”

Smart Cities Changing Landscape of India

The cornerstone of the Smart Cities Mission is integration. During the Smart Cities challenge, cities used integrated planning to prepare the Smart City proposals. Citizen involvement has to be continued as part of this integration, says **Dr Sameer Sharma**, Additional Secretary, Ministry of Urban Development, Government of India, in conversation with **Gautam Debroy** of **Elets News Network (ENN)**.



Smart Cities Mission has completed two years, what is your observation of the progress made so far?

During the journey of two years, the Smart Cities have learned how to plan and engage the citizens effectively. Most importantly, we have left the cities to define their own version of ‘smartness’ depending on their level of development, availability of resources, wish list of residents and aspirations of

citizens. The Indian Smart Cities Mission adapted and redefined the global discourse around ‘Smart Cities’ to create its own unique take on a ‘Smart City’, one that features but is not centred exclusively on technology and includes a strong emphasis on area-based development, citizen preferences, and basic infrastructure and services.

The focus now is on implementation. During the planning phase integrated implementation is the defining

feature. So we have integrated smart solution deployment, smart road development, etc.

It seems many of the city administrations are finding it difficult to implement Smart Cities projects due to shortage of funds. Are you taking any steps in this direction?

Presently, there is no shortage of funds for implementation of Smart City proposals. For future requirements, we are encouraging cities to explore



innovative financing mechanisms such as municipal bonds and use of Value Capture Financing (VCF) tools. The Ministry is actively supporting cities by providing technical support for credit rating, transaction advisory services for issuance of municipal bonds, and review of VCF tools that can be used. All Smart Cities have undergone credit rating and many are in the advanced stage of issuing bonds and implementing VCF tools. Pune has already floated a bond for Rs 200 crores.



“The Ministry is actively supporting cities by providing technical support for credit rating, transaction advisory services for issuance of municipal bonds.”

Have you set any timeframe to implement the Smart City projects?

We want to show substantial progress on ground within one year and cities have identified 261 high impact projects to be completed by June 2018.

What are the challenges that are coming ahead of project implementation?

The cornerstone of the Smart Cities Mission is integration. During the challenge, cities used integrated planning to prepare the Smart City proposals. Now they have to also integrate implementation. Thereafter, design of projects and developing bid

documents is the major challenge. Additionally, citizen involvement has to be continued as part of this integration.

Are you planning to announce any more cities as Smart City?

A total of 90 cities have been selected under the Smart Cities Mission so far. Funding is available for 100 cities.

What are your suggestions for the city administrations implementing Smart City projects?

Our experience with implementation is that decisive and committed bureaucratic leadership at the State and city level will play an important role for the implementation of the Mission. Additionally, citizen involvement will lead to best outcomes.

What are your plans to get foreign investment for Smart Cities projects?

Cities have issued tenders for a large number of projects and foreign companies should participate in the tenders. We are also considering engagements between the States/Smart Cities and private companies. [egov](http://egov.gov)



Dr Manjit Singh

Principal Secretary
Local Self Government
State Mission Director - Smart City
Mission & AMRUT
Government of Rajasthan

“The Rajasthan Government is going to spend a huge amount - about Rs 15,000 to 20,000 crores - to improve sewage treatment and water supply projects in about 100 cities in the next four to five years.”

Rajasthan Pioneering the Smart Cities Mission

The concept of developing Smart Cities is not a short-term goal but long-term plan involving a detailed planning for ensuring the cities are cleaner, safer, and affordable believes **Dr Manjit Singh**, Principal Secretary - Local Self Government & State Mission Director - Smart City Mission & AMRUT, Government of Rajasthan, in conversation with **Kartik Sharma** of **Elets News Network (ENN)**.



Hawa Mahal, Jaipur

You have been one of the key officers working for the Government of Rajasthan with rich experience of working with several departments, how do you perceive good governance?

I have been in the services for 30 years now and, fortunately, I had the opportunities to work in several departments in various capacities including Transport, Tourism, Excise, Urban Development, and others. As far as the Urban Development Department is concerned, I have been working in this sector for almost 12 to 13 years. Rajasthan is indeed a big State. The Government of India has initiated a number of flagship programmes including the Prime

Minister Awas Yojana, Swachh Bharat Mission, Smart Cities, Atal Mission for Rejuvenation and Transformation (AMRUT), National Urban Livelihood Mission, etc and we are trying our best to implement these schemes in the best possible manner. We are focussing on delivering the projects on time, ensuring maximum benefits to public in the State.

Which department has been the most challenging one for you in career so far?

Challenges are everywhere. One should be determined to face the challenges and streamline the systems. We should have that will to perform and keep the public faith intact. When I was in the

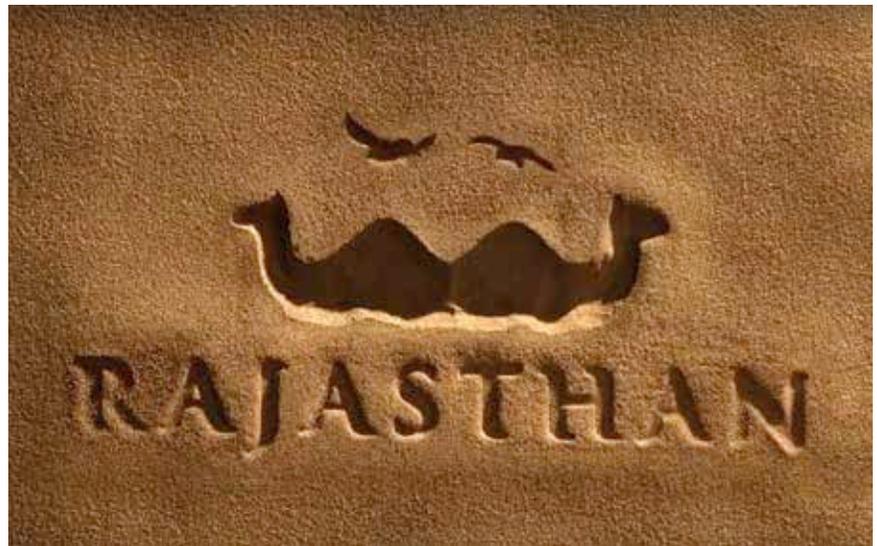
Transport Department, we had introduced online ticketing system for buses. We were the second State to implement such a project. I also got a chance to work in the Excise Department and introduced online licensing process switching over to conductor system and licensing system.

How do you envision the concept of Smart City projects in the State?

The concept of developing Smart Cities is not a short-term goal but long-term plan involving a detailed planning for ensuring the cities are cleaner, safer, and affordable. It also needs efforts to make cities suitable for different investments. We are glad that we are well on the track when it comes to implementation of the projects of making all the four cities of Rajasthan smarter. Soon, all the four cities will be better places to live with improved infrastructure, better housing, cleanliness, and waste management systems among other features. We are making efforts to make the best of Information Technology. The State of Rajasthan has been pioneer in LED-based street light project. Master Plan for all ULBs is in place. Further, we are also working on e-governance projects. Besides, we are also in the process of declaring our urban areas Open Defecation Free (ODF) in next two-to-three months. Besides, the State Government is also working on making cities cleaner with proper sewage and garbage treatment mechanism. The Rajasthan Government is going to spend a huge amount - about Rs 15,000 to 20,000 crores - in improving sewage treatment and water supply projects in about 100 cities in the next four-to-five years.

What are the challenges you face while implementing the projects?

We have several bodies involved in decision-making when it comes to the



implementation of the projects. This has been one of the major challenges for us and it is everywhere, which many a times delays the work. But we try to ensure the synchronisation of these processes and make efforts to fasten the decision-making in the best possible manner.

How are you making the best of Information Technology?

In collaboration with the IT department of the State, we are implementing Smart Raj Project - an e-governance project -- which allows us to have online services for every Urban Local Body through single window system. There are several modules which allow us to streamline various functions like collection of property taxes, management of assets, and collection of advertisement funds. There are various services which are online and can be subscribed by people. People can seek various permissions online and save time and energy.

How crucial is the public transport to make a city smarter?

We are working on increasing the number of city buses enabled with GPS

and CCTVs in major cities. The Bike Sharing Project has been one of the most innovative projects by the Rajasthan Government. We have started this project in four smart cities and they are working fine. We believe this project will ensure easy, eco-friendly and economical transportation for the people.

What are your plans to improve the conditions in other cities of Rajasthan?

We are making efforts to make every city of Rajasthan a Smart City. In the four cities, selected under the Smart Cities Mission, the rate of implementation of project will be faster, but we are not going to ignore other cities of the State. We are focused on making these cities cleaner and greener. We will ensure that all the best practices are in place in remaining cities of the State.

What message would you like to give to young officers?

I encourage young officers to work hard and keep taking new initiatives. Believe in yourself, be committed to your work and make every possible effort to deliver what you are supposed to deliver. 



Dr Rajendra Kumar

Principal Secretary, Youth Welfare and Sports Development Department
Government of Tamil Nadu
Managing Director
Electronics Corporation of Tamil Nadu (ELCOT)

“Internet of Things has the potential to lead to a truly connected world and enable real time responses to various events and situations.”

Transforming the Government Digitally: Challenges and Opportunities

India is witnessing a great digital transformation today in all spheres of economy and society. Digital technologies are being deployed by both the public and private sectors to increase efficiencies, transform business processes and deliver greater value to their stakeholders. The government has launched the ambitious Digital India programme with the goal of transforming the government and the economy using digital technologies, observes **Dr Rajendra Kumar**, Principal Secretary, Youth Welfare and Sports Development Department, Government of Tamil Nadu, Managing Director, Electronics Corporation of Tamil Nadu (ELCOT).

How are these digital technologies going to impact governance in the coming decade? How are the existing business processes and public service delivery models going to change? What are the challenges in such a transformation?

In this article, I examine these aspects with specific reference to the advent of the latest technologies such as cloud, big data, analytics, social media, mobile, automation, Internet of Things (IoT), Artificial Intelligence (AI) and Robotics. Some of these technologies are rapidly becoming mainstream and are significantly impacting the industry and the way applications are being developed and deployed in various domains.

Some of these new technologies are already being used by the government to make the delivery of public services more efficient and improve the government-citizen interaction.

For example, the Mobile Seva project

of the Government of India has significantly improved access to public services by bringing a large number of them on the mobile platform. The Digital India programme has also made cloud as the platform of choice for many departments for efficient use of computing resources and quick deployment of applications.

The government is also using social media effectively to communicate with the citizens and other stakeholders. MyGov.in platform is being used by many departments to solicit views of all stakeholders on various government programmes.

Industries in several sectors have already started using these technologies to increase efficiency, reduce costs and improve their customers' experiences. For example, automation of repetitive and rule-based tasks is causing a significant disruption in the information technology (IT) services industry causing fears of layoffs.

Government processes can be

re-engineered to take advantage of automation to make the delivery of services more efficient and accessible.

Big data and analytics are being used by a number of industries to generate new insights into consumer behaviour and offer customised services. The government departments can also effectively use these technologies to analyse patterns in citizen demand for various services and tailor delivery mechanisms accordingly.

Internet of Things has the potential to lead to a truly connected world and enable real time responses to various events and situations. Missions such as smart cities can very effectively exploit IoT to deliver a truly seamless and connected urban infrastructure and improve the living experiences of citizens.

What are the enablers to such digital transformation of the government in future? There are four critical factors that can help the government in fully exploiting the emerging technologies to become more efficient and dramatically improve the quality of governance and delivery of services to citizens and businesses.

First, the government must have a clear and long-term digital strategy aimed at taking full advantage of the potential of these technologies. The digital strategy must aim at end-to-end transformation of the entire business processes and not just the service delivery interface.

Secondly, leadership is critical to such a digital transformation of the government. Presence of leaders capable of understanding the full implications of the emerging technologies of the future and driving change within the organisations accordingly to transform business processes and public interface is extremely important.

The government should also involve



capable leaders from the private sector to drive this transformation.

Thirdly, achieving a government wide transformation would require massive capacity building and skilling of the government workforce. Presently, these capabilities are singularly lacking in government organisations despite recent efforts in this direction. Capacity building is required at all levels across the entire government and not just in the specialised units dealing with computerisation.

This would entail creating and sustaining an organisation wide digital culture and focus on change management to ensure that the entire organisation is committed to digitally driven transformation.

Finally, such a massive programme would need the holistic involvement of all the stakeholders, in particular the citizens and businesses and the industry partners to succeed. The citizens and businesses, who are the primary beneficiaries, would need to enhance their digital literacy to take full advantage of a government wide digital transformation.

The efforts being undertaken to make the citizens digitally literate under the Digital India programme augur well for such an endeavour in future.

What are the challenges that the

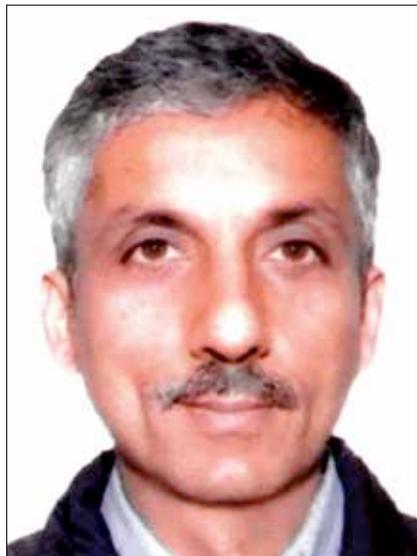
government might face in making this transformation a reality? The key challenges include developing leadership and building workforce skills, finding adequate financial resources, addressing security concerns and developing a digital culture within the organisation and amongst the stakeholders.

The government would also need to put in place a suitable legal framework to drive the digital transformation. These challenges need to be adequately addressed to make this entire endeavour a success.

The emerging technologies present a great opportunity for us to transform our governance digitally to make all services truly online, end-to-end, connected and integrated in the next decade. We must overcome the challenges in achieving this vision through strategic planning, devoting adequate resources, building capabilities at all levels, developing and deploying appropriate applications and involving all the stakeholders.

We are the world leaders in IT and it is the right time that we take the lead to use these technologies for transforming the quality of governance in the country. 

(The author is a senior IAS officer in Tamil Nadu. He has earlier led the formulation and implementation of the Digital India programme in the Government of India. The views are personal.)



Sudhir Rajpal

Principal Secretary
Department of Industry and
Commerce, Government of Haryana

“About 160 acres have been given for a rail coach refurbishing factory in Sonapat. The project costing Rs 600 crore would be set up in the Industrial Estate of Barhi in Sonapat district.”

Haryana Marching Ahead in Ease of Doing Business

From a State known as ‘Food Bowl’ of the country to making rapid strides in establishing industry and fascinating international players, Haryana has come a long way. The emphasis is now increasingly on ensuring that projects get cleared and pave way for their execution with ease and in record time, says **Sudhir Rajpal**, Principal Secretary, Department of Industry and Commerce, Government of Haryana, in conversation with **Priya Yadav** of **Elets News Network (ENN)**.



Haryana has improved its ranking to 6th position from 14th in terms of ease of doing business, what measures have been taken to make this possible?

Several reforms have facilitated this improvement in ease of doing business. Several measures have been taken to bring transparency into the system. For instance, everything has been made online so that proper monitoring and

tracking can be done. Also we are trying to provide land at cheaper rates to the industry and are ensuring that other key necessities like adequate power, proper connectivity etc is maintained to facilitate their growth. Emphasis is also being laid in providing cheaper power to the industry and charges have been reduced. Incentives are also being provided by the Chief Minister to mega projects coming into the State.

What are the reforms that are being implemented by the department to facilitate industry?

The Department of Industrial Policy and Promotion has also outlined business process reforms on which the States will be ranked on. Haryana has taken a lead in implementing these reforms in real spirit. We have introduced a single window system for all clearances – there is a time bound clearance system which is being monitored on daily basis. A single roof mechanism has been put into place to facilitate the industrialists and entrepreneurs so that they are encouraged to come and set up industry in the State. There is a provision of giving deemed clearance after 45 days and officers have been empowered at all levels to take decisions and ensure there is no pendency that is allowed to pile up.

Processes are being made easier for environmental registration and clearance, obtaining utility permits for water and electricity, paying taxes and access to information and transparency.

What is the vision for Haryana's future?

We are trying to further improve the ranking of the State from current sixth position to top position. All departments have been asked to jointly work towards the target. The Department of Industrial Policy and Promotion will carry out evaluation exercise in October and departments are working in advance to ensure ground implementation of various services, usage and feedback. A Rapid Assessment System has been developed to take feedback through SMS from the customers about various services being provided by the department. This would help in providing real time feedback about quality of services being delivered.

Key features to improve industry in Haryana

- Ease of doing business rank improved from 14th position in 2015 to 6th position in 2016
- Power tariff slashed by Re 1 per unit for the industry
- Single window system introduced for setting up industrial projects
- Transparency ensured by making all government procedures online for better monitoring and tracking
- Incentives given by the Chief Minister to mega projects
- Providing cheaper land to the industry

How has the single window system helped in improving the ease of doing business?

This has really helped as all departments related to giving clearances are working in cohesion that is spelling ease and comfort to the industry. Now all applications pertaining to industrial clearances are routed through Haryana Enterprises Promotion Centre which has nodal officers to ensure time-bound clearances under one roof. At least 12 departments are working in coordination under one roof to provide services. These are Department of Labour, Haryana State Pollution Control Board, Town and Country Planning, Urban Local Bodies, Industry, Haryana State Industrial and Infrastructure Development Corporation, Uttar Haryana Bijli Vitran Nigam, Public Health Engineering, Forest, Revenue and Excise and Taxation.

What are the mega projects that are going to be set up in the State?

A lot of domestic and foreign firms have evinced interest to set up base in the State. We have given land, 105 acres, to a leather cluster that will come up in Sohna, Gurgaon. Major leather industries across the country have shown interest to set up units here. It will attract Rs 500 crore investment and will be an integrated production centre with all the facilities like common facility centre, testing centre, design studio, ready to use factory sheds and infrastructure like roads and electricity.

About 160 acres have been given for a rail coach refurbishing factory in Sonapat. The project costing Rs 600 crore would be set up in the Industrial Estate of Barhi in Sonapat district. The project would refurbish 500 to 700 railway coaches every year. The component of manufacturing will be added to the project subsequently.

In Rohtak, a defence unit will come up at 10 acre land. Mishra Dhatu Nigam Limited, an enterprise of the Ministry of Defence will set up its unit in Industrial Model Township. An Armour Fabrication Unit will come that will manufacture several types of armoured vehicles. The airport at Hisar is going to be a defence aviation hub.

A 300-acre footwear park is coming up in Rohtak. Dalian Wanda Group, one of China's most prominent developers, have signed a Memorandum of Understanding with Haryana to develop Wanda Industrial New City. Wanda plans to develop industrial townships and retail and residential properties in Haryana. China Fortune Land Development is also looking at setting up an integrated industrial model township at Sohna, Gurgaon. egov.gov



Mugdha Sinha

MD, RIICO and Commissioner, Delhi Mumbai Industrial Corridor (DMIC)



“While specialisation allows you to work in a certain area efficiently, exposure to other sectors help you expand your experience and serve people from different walks of life.”

Mugdha Sinha – Streamlining Industrial Development in Rajasthan

The Rajasthan State Industrial Development and Investment Corporation (RIICO) is working as a catalyst for Delhi-Mumbai Industrial Corridor by developing industrial areas, says **Mugdha Sinha**, MD, RIICO and Commissioner, Delhi Mumbai Industrial Corridor (DMIC), in conversation with **Kartik Sharma** and **Harshal Desai** of **Elets News Network (ENN)**. Excerpts:



You have been an IAS officer in Rajasthan for 18 years. How has been the journey so far?

My journey so far, can be best described as ‘one of continuous learning and simultaneous delivery’; ‘of motivating as a leader and contributing as a team member’. The diversity and nature of work has been both amazing and equally challenging, never a dull moment.

While implementation of government schemes, taking governance to the last man standing as District Collector in four absolutely diverse districts (especially in a State like Rajasthan where the civil society is very aware) gave me an insight into the aspirations of the common man and their expectations from the government. Working at the Centre in the Ministries of Textiles and Commerce gave me an international exposure to trade and industry, where I was involved in some

crucial trade negotiations and policymaking.

I also consider myself fortunate to have worked as staff officer to the Hon Chief Minister in the State and also to the Union Commerce & Industry Minister in the Centre where I was exposed to the dynamics and nuances of policy making, enabling me to be an informed participant and contributor in an entire lifecycle process of democratic functioning from the grassroots to the policy making end of the spectrum.

You have worked in four different districts of Rajasthan, what challenges did you face?

I consider myself lucky to have got an opportunity to serve in four very diverse districts, each with its own very unique character, composition and challenges. In Bundi, my first district, we leveraged its tourism potential and the civil society's active involvement and enthusiasm by using the local Bundi Festival, documenting the 300 old baoris or stepwells in the district, highlighting its rock paintings and creating a buzz around tourism. Based on our work on Stepwells we got a budget of Rs 2 crores for renovation of stepwells in Bundi. The civil society's active engagement created 'Shiksha Aapke Dwar' into a mass movement for enrolment of children into school. We initiated schemes like 'Sarathi Yojana' for helping needy individuals with aid in kind where no government scheme existed. Being a rice rich district, it gave me an insight into farmer's issues and politics around irrigation and need for conversation and optimal utilisation of water.

However, my next postings at Hanumangarh and Sri Ganganagar also primarily agrarian like Bundi but with a different system of canal irrigation and problems of rich landowners with poor tenant farmers gave me interesting insights into inter state water issues.



“In Jhunjhunu district, we clamped down heavily on illegal mining, illegal extraction of ground water (since most parts of it were in dark zone)”

Since both were bordering districts to Punjab and Haryana, the law and order issues also assumed a different dimension, with challenges sometimes getting triggered from across the border. Implementing Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA) scheme in both these districts required customizing them to the character of the district with premium on scarce land and hence we looked at innovative ways of using MNREGA labour for canal lining.

In Jhunjhunu district, we clamped down heavily on illegal mining, illegal extraction of ground water (since most parts of it were in dark zone) and also on encroachment of lands of SC/ST by land mafias, because of which I was transferred.

The districts require you to both lead by example as in cricket and to work as part of the team of officers as in football, what you do where depends on the demands of the situation.

Being a popular officer of the State, what advice would you like to give to young IAS officers?

Being part of the Indian Administrative Service is indeed a rare opportunity and I am extremely grateful for this chance and honour and I hope to strive continuously to make it worthwhile for generations to aspire to be here in the service of the people and the constitution of the country.

My experience of Jhunjhunu, has emboldened my resolve, for it validates that fairness, justice, truth and voice of people matter in the long run. I also believe that you can do every right thing within the ambit of rules and regulations and that both 'honesty and efficiency' can co-exist and must be given a chance and encouragement.

For those who look up to being in the Civil Service, I only hope you are here for the right reasons of serving the people as their trustee with full transparency, accountability, responsiveness and sense of

responsibility. Because our dedication and commitment to what we call the people, is actually for the society of which we will be a part at the age of 60. So it is for us and everybody around that we strive and there is no 'us and them'. If you understand that, the service will give you satisfaction and society will appreciate your contribution.

My talisman is a couplet I read on a temple wall in Bundi- "*Jo apne pad se kaam karte hai, wo kabhie na kabhie bhutpurv ho jaate hai. Par jo apne karm se kaam karte hai, wo sadev abhutpurv rehte hai.*"

Do not fear in the advancement of your duty; let your conscience and constitution of the country be your guiding light. As some one has said-

"Satya pareshann so sakta hai, parajit nahi."

Did you face any challenges being a woman officer?

An Officer is trained to be one. The faculties of mind, and heart and the many qualities becoming of an officer that we bring to our assignments do not have a gender. Therefore, if we continue to be anonymous (and let our work speak), professional, transparent, accountable, responsive, responsible, compassionate, and officer like at all times, people will continue to see us as one irrespective of whether we wear the pant or sari with bangles and bindi.

I say this because I have worked in two out of four districts where no women had served before as DC since more than six decades of independence and it did not matter that I was a woman because I was an officer first and always. The challenges are built around perceptions; break the perceptions and ceilings with your work.



You have worked both in the Central and the State government. How was the experience?

Like I said earlier, after having worked in the State for around 12 years I went on Central Deputation to the Centre and worked there for 5 years, and now am back to the State. Our system of service in the country has been so beautifully designed that an officer in his/her entire timespan in the job, is able to move seamlessly from implementation to policy; from state to centre; from one area of specialization to another, gathering both in-depth knowledge and aerial perspective across sectors that every new task turns out to be a value addition both for the officer and the assignment.

I have been extremely lucky to have worked in four very diverse districts and been exposed to work of three different Ministries-Textiles, Commerce and DIPP at the Centre. It was gratifying to work in staff positions of CM's office and Union Minister's Office; to rub shoulders with the common man and with International dignitaries all at the same time. With phenomenal exposure and learning also comes phenomenal sense of responsibility and I hope to offer this to the very people who have made it all possible.

Which sectors are close to your heart?

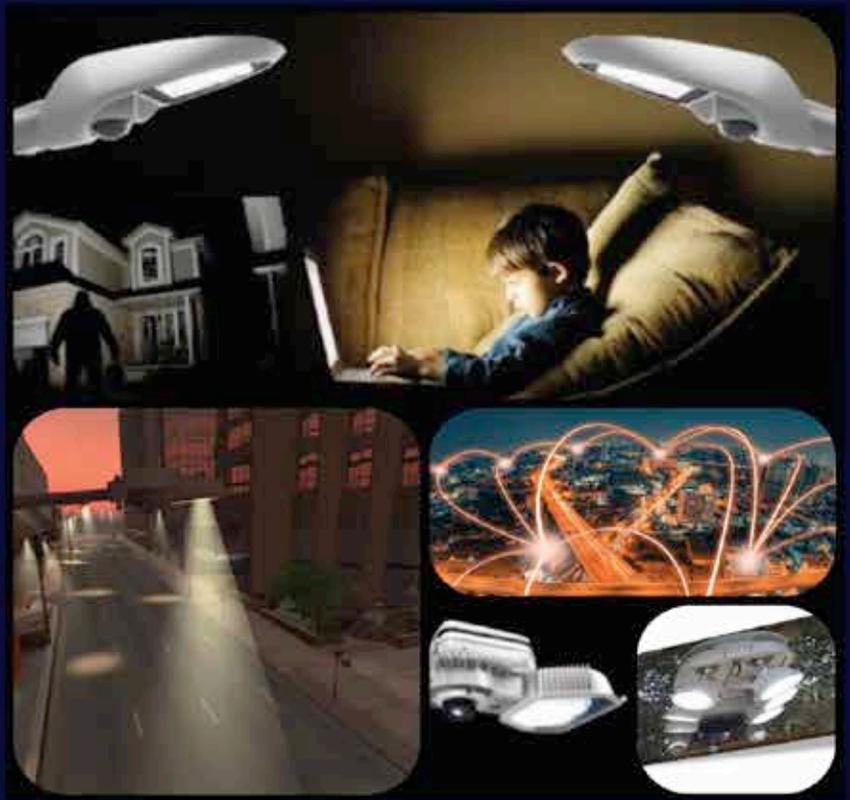
I love my WORK, whatever assignment be it. Every 'new' assignment is an exposure into a sector I have not had exposure to before and hence the novelty to understand its nuances is both challenging and refreshing. As for an opportunity to continue to specialize in the 'same' sector, give you a more in-depth and 360 degree understanding of the issue and perhaps with more time to nurture ideas and to take them to their logical conclusions, which is also very satisfying. Currently, I am doing the latter, having moved from Udyog Bhawan GOI to Udyog Bhawan GOR, I hope to leverage my previous experience to my current assignment.

You are now assigned additional charge as Commissioner of DMIC. How will it affect your work?

Commissioner DMIC is a full fledged and not additional charge and it synergizes perfectly with the work I do as MD RIICO, as we are both catalyst for industrialization and investment in the State. New opportunities under DMIC and experience of RIICO will be mutually beneficial to both organizations. 



THE WORLD'S SMARTEST POLE



All-in-one intelligent LED street light with EV charging, CCTV, Wi-Fi, and a parking payment solution



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Ajoy Kumar Singh
Secretary, Higher and Technical
Education and Skill Department
Government of Jharkhand

“We have given six polytechnic to the private parties. We constructed the entire structure and handed over the private parties. We have given a long-term lease of 30 years.”

Jharkhand Leading in Higher, Technical and Skill Education

The Government of Jharkhand is in the process of establishing digital library and smart classrooms in the State's higher educational institutions. The State government is also upgrading libraries and establishing Wi-Fi in all the universities, says **Ajoy Kumar Singh**, Secretary, Higher and Technical Education and Skill Department, Government of Jharkhand, in conversation with **Gautam Debroy** of **Elets News Network (ENN)**.



Tell us about the steps taken by the government to improve higher and skill education in Jharkhand.

We have taken a lot of new initiatives in higher, technical and skill education, which resulted in the improvement of our gross enrollment percentage from 13.4 to 15.5 per cent. More than 1.25 lakh enrollments have taken place after our initiatives. Enrollment in the technical education institutes has also increased because of the State government's efforts.

For higher education, we have opened new universities in the State – both in the public as well as the private sector. In the government sector, we have opened Raksha Shakti University which is the third such university in the country after the ones opened in Gujarat and Rajasthan. We are also establishing Veer Bahadur Singh Purvanchal University and Shyama Prasad mukherjee University in the State. Overall, four universities will be established in the government sector in Jharkhand.



Ashish Kumar Singh
Principal Secretary
Public Works Department
Government of Maharashtra

PWD – Ensuring Maharashtra’s Growth With Infrastructural Development

The Nagpur-Mumbai Super Communication Expressway is an ambitious project of the Maharashtra Government which would connect 24 districts, 26 talukas and 392 villages from Nagpur to Mumbai, says **Ashish Kumar Singh**, Principal Secretary, Public Works Department, Government of Maharashtra, in conversation with **Poulami Chakraborty** of **Elets News Network (ENN)**.

“Navi Mumbai would see more infrastructure development in the coming years due to the new international airport and Mumbai Trans Harbour Link coming up soon.”



How is PWD contributing to the growth of Maharashtra?

Good roads are economic arteries of any region and provide an important link between production and consumption. For a country like ours, which is transitioning from a developing to a developed nation, development of roads is crucial, as they constitute the infrastructural backbone that connects

farms and raw materials to industries and markets, makes tourism a viable business and act as economic prosperity corridors. The Public Works Department (PWD) of Government of Maharashtra is charged with operating, maintaining and improving specifically entrusted National Highways, all State Highways and major district roads along with bridges across the State. PWD, Maharashtra, thus, manages 90,947 km of Highways across

the State. Our objective is to ensure that our road infrastructure is dependable, durable and safe.

The Public Works Department is also entrusted with other infrastructure works in the State like development of Smart Cities to improve the quality of life of citizens, repair and restoration of heritage structures and construction of various government buildings, including hospitals, schools, courts, office buildings and residences. These contribute significantly to the economy of the State.

The Government recently announced to construct Nagpur-Mumbai highway, what are the expansion plans for this project?

The Nagpur-Mumbai Super Communication Expressway is an ambitious project of the State Government and would connect 24 districts, 26 talukas and 392 villages from Nagpur to Mumbai. It would boost agriculture and related activities, attract globally competitive manufacturing industries to the backward regions of Vidarbha and Marathwada and would lead to sustainable rural development. The Detailed Project Report (DPR) for the project is done and we are currently evaluating the Request For Proposals (RFP) for the project. The actual construction of the project is expected to start by the year-end.

Do you see any major challenges in the day-to-day operations of your department?

Yes, there are a few operational challenges. The major challenge that we face is in ensuring quality of road construction. It is difficult to award contracts based on Life Cycle Costs for government projects considering that the contracts are awarded on L1 basis. Consequently, the cost of maintenance increases exponentially if the initial construction is not done ensuring the best quality measures in place. We also

face issues with enforcing contracts. Prolonged litigation, challenges of expeditious dispute resolution and lack of a well defined mechanism results in cost and time overruns very often.

What key projects PWD has in store for launching in the coming years?

We have decided to take up construction of 10,000 kms of roads on hybrid annuity basis this year. We would focus primarily on timely implementation of works awarded under this model and ensure that the existing road works are in good condition round the year. The Public Works Department is entrusted with the construction of the Chhatrapati Shivaji Maharaj's statue off the coast of Mumbai

“Nagpur is picking up in terms of its infrastructural growth due to its central location in the Indian geography.”

in the Arabian Sea. We are targeting to complete this project over the next three years. The Bandra government colony is being planned to be redeveloped as a Smart City in the next couple of years, Versova Bandra Sea Link project, which is an extension of the Bandra Worli Sea Link and forms a part of the Coastal Road project in Mumbai, is also under implementation.

Monsoon sometimes plays havoc on the infrastructure, what new measures has been adopted to counter this State?

We have undertaken structural audit of all the bridges for the first time in the

State to reduce their vulnerability during heavy rains. In fact, we have dedicated an administrative vertical specifically for the maintenance of bridges to ensure safe commute across the State. We have also awarded annual maintenance contracts for the first time for maintenance of roads, which is a complete shift from the sporadic maintenance contracts that lacked accountability. We believe that these AMCs would ensure road quality throughout the year, irrespective of the weather.

Nagpur as a region is picking up really fast in terms of infrastructural growth, which other cities will pick up in this competition further?

Nagpur is picking up in terms of its infrastructural growth due to its central location in the Indian geography. The development of Multi-modal International Hub Airport at Nagpur (MIHAN) would further promote growth of Nagpur as a major investment destination. Pune, Nasik and Aurangabad are also attracting new investments from major manufacturing giants. Regional connectivity would get a significant boost due to the Nagpur Mumbai Super Communication Expressway and bring most of the Tier-II cities close to Mumbai. Also, Navi Mumbai would see more infrastructure development in the coming years due to the new international airport and Mumbai Trans Harbour Link coming up soon.

What is the vision of your department for coming years?

The department's vision for the coming years is to deliver on our commitments for building roads on time, while ensuring quality and cost efficiency, and bringing in greater transparency. We envisage each and every individual, be it from the remotest village of Maharashtra, to have access to good quality roads and achieve prosperity. 



Kaustubh Dhavse

Joint Secretary, Chief Minister Office and Officer on Special Duty to Chief Minister, Government of Maharashtra

“We are the first state in the country which has made significant progress in Smart Cities projects. Nagpur is already on the verge of completing the Smart City project.”

Maharashtra Leading Indian IT Revolution

Maharashtra’s War Room has been the single most successful initiative from the Chief Minister’s Office to speed up stalled projects and add a sense of urgency and efficiency to overall project execution, says **Kaustubh Dhavse**, Joint Secretary, Chief Minister Office and Officer on Special Duty to Chief Minister, Government of Maharashtra, in conversation with **Kartik Sharma** and **Harshal Y Desai** of **Elets News Network (ENN)**.

What was the idea behind ‘Aaple Sarkar’ initiative started by the Maharashtra Government?

The Government of Maharashtra had revealed its plans to focus on Information Technology and Digital Transformation in the very first meeting which was chaired by Chief Minister Devendra Fadnavis in November 2014. The CM had highlighted government’s vision to ensure that technology plays ‘significant’ role in the overall development of the State.

‘Accountability, Efficiency and Inclusion’ were the three key elements, the government decided to focus on during its tenure in Maharashtra, and the Chief Minister was of the opinion that technology is a great enabler and could give impetus to government’s efforts to ensure and strengthen the aforesaid three elements.

At that particular time, departments were busy in building their digital space in the form of web portals and several other electronic services. These departments were actually working in silos. The new government was quick to understand the issue and decided to create an integrated one single brand called ‘Aaple Sarkar’ which could bring all the departments together. The CM was keen to focus on Grievance Redressal Management more as he

wanted to listen to the people of Maharashtra and understand their issues. Later, the government brought the revolutionary ‘Right to Service Act’ and today 376 end-to-end services are online. ‘Aaple Sarkar’ initiative has been extremely successful project.

What is the purpose of government’s MahaNet Programme?

Digital connectivity is another area which the Government of Maharashtra wished to streamline within the State. The CM always believed that without connecting the rural Maharashtra with the mainstream IT system, the dream of overall IT advancement could not be completed.

MahaNet is a part of BharatNet Project. Under this project, the Government of Maharashtra will digitally connect 29,000 Gram Panchayats. The programme will positively affect the education and healthcare ecosystem and will ensure better access to governments’ services and markets. With this programme, the Government of Maharashtra will be able to distribute necessary information in the best possible manner to people residing in remote villages.

What is the progress in Mumbai Wi-Fi Project?

It has been another successful programme of our government. Mumbai has become the first city to have Wi-Fi connectivity in public places. As our CM has commented, Mumbai Wi-Fi is India's largest public Wi-Fi service and it is one of the largest globally too.

The state government has also laid extra fibre when it was laying the fibre for CCTVs infrastructure. The wise move allowed the government to install Wi-Fi services within six months after installing the CCTVs without digging the road again.

What is the progress of Smart Cities in Maharashtra?

We are the first State in the country which has made significant progress in Smart Cities projects. Nagpur is already on the verge of completing the smart city project. The government has lined up 10 cities in Maharashtra which will become 'smart' very soon.

The way we planned the implementation part has actually become an example in the country.

To make a city smarter, it is of utmost importance to use our resources efficiently. For example, if you are creating infrastructure for CCTV, it should be ensured that work is not done from scratch to create infrastructure for Wi-Fi. Further, the city should have excellent solid waste management, streamlined traffic management system, amazing citizen services, etc. Special Purpose Vehicles (SPVs) are paving the way to faster implementation.

'eGovernance' is also an essential part of any Smart City and in order to ensure efficient and transparent eGovernance, the State Government is also planning to have a data base of individuals which will allow it to offer its services to citizens in a speedy manner.

We have several transport options in Mumbai – local trains, mono, metro, buses and taxis. We are working on Unified Mobility Card and making efforts to streamline the transportation within the city.

Are there any plans to build a dedicated web portal for Direct Benefit Transfer (DBT) scheme?

Yes, the Maharashtra Government is in the process of building a DBT Portal. This will allow the government to streamline the process. We have deliberated on this six month ago and formed a committee to ponder over this further. The committee is headed by Additional Chief Secretary, Finance, D K Jain. We brought secretaries of the four key departments which have



maximum beneficiaries under different DBT programme i.e., Higher and Technical Education, Social Justice, Women and Child and Tribal. With the help of these departments, we are working on streamlining the DBT process within the state – avoiding any kind of human intervention. The portal will be launched very soon.

What differentiates the Maharashtra Government with other States when it comes to implement various projects at a rapid speed?

Our CM is an evolved leader who

delegates the work among his team. He has been able to demonstrate amazing ability to empower people in his team. Private players, who never wanted to come to Maharashtra to do business, are now showing willingness to start their projects in the state. They are happy with the kind of decision are being made. And the credit goes to our honourable CM. He has been able to create conducive environment for all. We have to also credit our IT Department under the leadership of V K Gautam, Principal Secretary – IT, Government of Maharashtra who has been able to translate CM's vision in reality. All in all, it is a great team work.

We have heard a lot about the CM's War Room? Can you please elaborate how effective it has been?

The War Room has been the single most successful initiative from the Chief Minister's Office to speed up stalled projects and add a sense of urgency and efficiency to overall project execution. It has also played a very important role in the speedy implementation of all our urban and rural projects. Our War room has received national recognition and several States are in touch to replicate the same.

What are your plans for the future?

We want to deliver what we commit. We will be focusing on implementing government schemes and projects in the next two years. We have also created IT Corporation and we are working on establishing this corporation as one of foremost IT companies in the country. We will ensure that our Chief Minister's vision is executed to the tee. Further, you must be aware that we are also working on building India's second International Finance Centre (IFC) in Mumbai, which will be set up in Bandra-Kurla Complex. 



Neeta Verma

Director General
National Informatics Centre

“Initiatives like DigitalLocker, Scholarships, MyGov, eHospital and even GeM (Government eMarketplace) are powered through NIC National Cloud. NIC is expanding Cloud services to its other Data Centres operating at National and State levels.”

NIC: Connecting Government Infrastructure for Better Service Delivery

The ‘Cloud First Policy’ of the government has initiated a fundamental shift in the way government uses IT to manage services and achieve its objectives. This has helped in achieving a high order of consolidation of resources and overall cost savings for the government, says **Neeta Verma**, Director General, National Informatics Centre, in conversation with **Gopi Krishna Arora** of **Elets News Network (ENN)**.



What has been the role of National Informatics Centre (NIC) in setting up a robust ICT infrastructure in India?

NIC is providing state-of-the-art and secured ICT infrastructure to the government. It has been offering ICT infrastructure services to the government for the last four decades, right from network internet access, data centres, cloud, cyber security to messaging and video conferencing.

NIC has always been striving to deploy world-class technologies for the

government ICT infrastructure. The first data centre for the government was set up by NIC in 2002. Email services commenced in 1993-94 even before the advent of the internet in India and World Wide Web (www) services for the government were introduced by NIC in 1996.

Presently, NIC is operating email and SMS services for the entire government network with over 15 lakh email ids and a monthly traffic of over 44 crores. More than 1,200 e-governance applications are integrated with the NIC SMS platform to extend the reach of government services.

We have set up national data centres across India as well as mini data centres in States to help the government deliver services in a secure, scalable fashion on 24x7 basis. Video conferencing (VC) services of NIC are used by the government with an average of 25,000 multisite studio conferences and over five lakh site hours of VC sessions being held annually.

What is the present status of National Cloud Meghraj initiative? How important is National Cloud as the core of this initiative?

The Meghraj initiative of the government envisaged using Cloud to accelerate delivery of e-services in the country while optimising ICT spending. The first National Cloud was set up by the National Informatics Centre in 2014. The 'Digital India' programme came soon after with a vision to transform India into a digitally empowered society and knowledge economy. The 'Cloud First Policy' of the government has initiated a fundamental shift in the way government uses IT to manage services and achieve its objectives. This has helped achieve a high order of consolidation of resources and overall cost saving for the government.

NIC has realised the potential of using the platform approach for defining and developing common software or structures which could be customised and rolled out. Using the platform approach, NIC National Cloud has become an effective means of provisioning services by the government. Software as a Service (SaaS) offerings can easily be defined over National Cloud and used for faster provisioning, agility and scaling of services.

We talk about ICT Infrastructure for the government to facilitate a Governance across the

Central Government, State Governments, and districts and subdistricts. How much progress has NIC achieved so far?

NIC through its core ICT infrastructure and application teams at central, State and district level has been developing and facilitating a variety of major ICT programmes and projects of the government reaching till the grassroots level, especially those under the Digital India initiative.

The Cloud enables provisioning of ICT Infrastructure in an optimal manner. Cloud services also offer departments the ability to implement projects quickly since they do not have to go into procurement and commissioning of infrastructure. It is evident from the fact that during the launch of the Digital India programme, various initiatives went live in a span of short time.

What is your strategy for the expansion of cloud services?

The National Cloud was launched in 2014. This was the first National Cloud setup under 'Meghraj'. We have got overwhelming response for availing cloud services. In just one year, we had over 600 government users and projects already running through this cloud. Today, almost all the Digital India initiatives are powered through this cloud. Around 11,000 virtual servers have been allocated to various Central and State government departments. Initiatives like DigitalLocker, Scholarships, MyGov, eHospital and even GeM (Government eMarketplace) are powered through NIC National Cloud. NIC is expanding Cloud services to its other Data Centres operating at National and State level.

What has been the response from the State Governments to National Cloud? What are the challenges involved in dealing with the States?

The States have shown a lot of interest in using National Cloud Services. A number of States have launched important initiatives such as eVidhaan, Treasury, Transport, Police modernisation etc. To encourage use of cloud computing, an initiative to set up mini cloud nodes in NIC State Data Centres has now been undertaken. These cloud nodes will be used for hosting State government applications as well as help districts in launching their respective initiatives. This will eliminate the need for setting up servers in district centres where maintenance and upkeep is costly and challenging. Cloud would provide a variety of hosting environments on demand and enable delivery of citizen services specific to their districts leading to a lot of innovations.

What are some of the high impact projects that are being initiated by NIC in recent times?

eProcurement, eHospital, PFMS, NREGA Soft, RCH, MyGov, ePDS, ePanchayat, Soil Health Card, mFMS, eCourts, National Scholarship Portal, eHospital, Swachh Bharat, eCounselling, ePrisons, Transport are some of the flagship projects of NIC.

eProcurement (GePNIC) caters to the procurement requirement of over 350 government departments and organisations. So far 23.18 lakh tenders worth Rs 31.86 lakh crores have been processed using the platform.

MyGov brings the government closer to the common man using an online platform for exchange of ideas and views, involving the common citizen and experts with the ultimate goal to contribute to the social and economic development of India. Over 44 lakh registered users have contributed towards it and continue to engage with the government on different issues of national importance. m.gov



Dana Kishore
 Managing Director, Hyderabad
 Metropolitan Water Supply and
 Sewerage Board

HMWSSB in a Mission Mode to Secure Water Future of Hyderabad

Hyderabad has been at the forefront of developing city amenities and infrastructures to cater to the growing needs of citizens. Under Telangana Chief Minister Chandra Sekhar Rao, the Hyderabad Metropolitan Water Supply and Sewerage Board (HMWSSB) has been given the mandate to secure the water future of Hyderabad and HMWSSB is working in a mission mode to achieve that target, says **Dana Kishore**, Managing Director, Hyderabad Metropolitan Water Supply and Sewerage Board, in conversation with **Biswajit Sahoo** and **Rakesh Kumar Roy** of **Elets News Network (ENN)**.

“JAL App, or ‘Jaldi Action Le’ app, is an internal information system to help linemen capture complaints about water supply, sewage, billing, pollution etc, using their Android smartphones.”



Hyderabad has acquired the image of a global city and the Hyderabad Metropolitan Water Supply and Sewerage Board (HMWSSB) has been playing a major role in ensuring operations of citizen-centric service modules. What initiatives have been undertaken by HMWSSB for the Greater Hyderabad Municipal Corporation (GHMC) areas?

The Hyderabad Metropolitan Water Supply and Sewerage Board (HMWSSB)

has been mandated to supply potable water to its stakeholders along with planning, designing, construction, maintenance, operation and management of the water supply system. After the formation of GHMC, the mandate to serve around 35 lakh population has been increased to approximately one crore, as the area increased from 164 sq km to 646 sq km. Last year, the Government of Telangana decided to add 190 villages and municipality areas into the HMWSSB fold. It is the biggest

challenge to ensure drinking water supply to all and we are happy that HMWSSB has been supplying potable drinking water to 1.25 crore people. To meet these challenges, HMWSSB has taken up augmentation of water supply infrastructure works and initiated Water Supply Distribution Network Project (WSDP) for the peripheral areas of GHMC. HMWSSB has successfully completed 1,800 sq kms of pipeline laying work, and targets to complete this ambitious project six months ahead of the deadline. This project was launched at an estimated cost of Rs 1,900 crores, out of which the Housing and Urban Development Corporation Limited (HUDCO) has funded Rs 1,700 crores while Rs 200 crore came as the budgetary support from the State government. HMWSSB has constructed 56 big reservoirs.

What steps have been taken by HMWSSB to ensure water supply to each household?

The Government of Telangana has launched ‘Mission Bhagiratha’ to ensure supply of potable drinking water to each household. HMWSSB is working on a mission mode to achieve the target. Through this project, drinking water will reach to each poor and underprivileged household at a cost of Re 1 per connection per home. Apart from the HUDCO loan to improve the water supply system in GHMC and Hyderabad area, HMWSSB has earmarked Rs 628 crore to improve the water supply system in 183 ‘gram panchayats’ and seven municipalities in the periphery of Hyderabad. HMWSSB was awarded the project and it plans to complete the work by June 2018 to ensure nearly five lakh households and seven lakh people get potable drinking water.

HMWSSB is also working on securing the future supply of water to the Hyderabad city. Can you elaborate this plan?

Hyderabad has been at the forefront of developing city amenities and infrastructures to cater to the growing needs of citizens. Hussain Sagar and Himayat Sagar were constructed in 1920 to supply water to the Hyderabad city. However, these two water reservoirs now cater only 15 per cent water required by the city. Telangana Chief Minister Chandra Sekhar Rao has given a new vision to HMWSSB to secure the water future of Hyderabad. As per this vision, HMWSSB has drawn up a mega plan to secure water for generations and plans to construct two mega water reservoirs of 20 TMC (thousand million cubic) capacities each on two sides of the city. These reservoirs would supply water from the Godavari and Krishna reservoirs. These two mega projects would ensure that



Hyderabad gets a secured water supply for the next 50 years even in less rainfall or drought seasons and meet the water demands adequately on time.

Which initiatives has the Board taken to improve the sewage system of the GHMC cities?

HMWSSB is responsible for the sewage, sewage disposal and sewage treatment works including planning, designing, construction, maintenance, operation and management of all sewage and sewage treatment works under its earmarked area.

What is the role of JAL app in increasing efficiency of HMWSSB? What are the other steps taken to modernise and enhance operations of the system?

JAL App, or ‘Jaldi Action Le’ app, is an internal information system to help linemen capture complaints about

water supply, sewage, billing, pollution etc, using their Android smartphones. Launched by HMWSSB last year, it allows capturing of complaints by 500 linemen mobilised in the field through a geo-tagged snapshot. Complaints are immediately relayed to the managers concerned through GPS for taking prompt action. HMWSSB also replaced its software tools with improved dashboard-based software solutions to empower its water managers to address the operation and grievance.

HMWSSB has also taken up GIS mapping of its assets along 2,000 kms stretch initially. The Supervisory Control and Data Acquisition (SCADA) system has been implemented by HMWSSB in transmission areas of water supply. The board has now plans to expand the distribution system in SCADA. To address the revenue loss due to unaccounted water flow as a major concern, HMWSSB initiated three different pilot areas under smart water grid management to monitor the water supply and flow and user process.

Has HMWSSB initiated any stakeholder consultation approach to bring in trust and transparency to the operation?

The Hyderabad Metropolitan Water Sanitation and Sewage Board is the first ever organisation in India which has introduced public monitoring of its citizen services tools through the third party audit process. For the first time, the board has utilised 150 resources to monitor the efficacy of the grievance redress system tools of the Water Board. They were engaged with public directly to gather feedback. Based on their recommendations, HMWSSB has engaged 35 G-MITRAs (Grievance Monitoring and IT Related Assistants) to assist its field functionaries in addressing public grievances and IT empowerment. 



Ravi Aggarwal
 Managing Director
 Rajasthan State Gas Limited (RSGL)

RSGL Leading The Clean Energy Revolution In Rajasthan

Rajasthan State Gas Limited (RSGL) has developed blueprint for involving dynamic strategies to optimise natural gas availability through domestic gas, LNG, waste to biogas, developing industrial clusters for providing anchor loads to the gas pipeline infrastructure, LNG hubs at strategic locations and setting CNG and LCNG corridors connecting all the key cities in the Rajasthan, says **Ravi Aggarwal**, Managing Director, RSGL, in conversation with **Kartik Sharma** of **Elets News Network (ENN)**.

“RSGL has joined hands with the industries in Rajasthan for win-win situation by convincing them for better price realisation through high quality of product produced by using natural gas which ensures less carbon and uniform heating and uninterrupted supply.”



Business Transfer Agreement (BTA) signed for CGD Kota Transfer by Ravi Agarwal, MD, RSGL and P K Pal, Chief Executive Officer, GAIL Gas in the auspicious presence of Hon'ble CM GoR and Hon'ble Minister of State (IC), MoPNG.

RSGL has become a showcase for the industries in adopting innovative model for meeting State aspiration. Please Elaborate.

The Government of Rajasthan is implementing various reforms that are germane to the ease of doing business

and has identified development of the gas infrastructure as a key agenda for economic growth and systematic planning of industrialisation to meet socio- economic aspiration of the people. The State Government has generated key enablers for all the industries through single window clearance, allotting plot at strategic

locations and making workable solutions for RSGL and end users. The collaborative efforts with the industries are being ensured by synchronizing gas availability as per the project planning. The involvement of RSGL with the user industry for optimising the cost for the technology opted and in space use besides other commercial aspects has earned excellent rapport with the customers. RSGL is involved with the government for a systematic development of energy needs for Smart Cities and industrial clusters through setting up CNG corridors and retail infrastructures.

Availability of gas is a concern for the industrial revolution in the State. How RSGL is taking up steps in changing Rajasthan industrial scenario?

The availability of clean energy is the key issue for systematic development of identified industrial clusters. The State Government has authorised RSGL as a nodal player for setting retail gas infrastructure in the State through the collaborative efforts with the government and the industries.

RSGL has rather adopted collaboration as a key driver with Rajasthan State Industrial Development and Investment Corporation (RIICO) in developing identified industrial clusters. RSGL has also taken up connectivity to the M/s Global Ceramic at Ghiloth to setup state-of-the-art ceramic zone and the project involving decompression unit, transportation of natural gas through the cascades from Neemrana to the M/s Global Ceramic premises has been completed in record time.

RSGL has developed blueprint for involving dynamic strategies to optimise natural gas availability through domestic gas, LNG, waste to biogas, developing industrial clusters for providing anchor loads to the gas



RSGL signed MoU with RIICO to expand the natural gas downstream distribution network in Rajasthan.

“RSGL is involved with the government for a systematic development of energy needs for Smart Cities and industrial clusters through setting up CNG corridors and retail infrastructures.”

pipeline infrastructure, LNG hubs at strategic locations and setting CNG and LCNG corridors connecting all the key cities in the Rajasthan.

After opening CNG corridor between Delhi and Jaipur, what is the plan of RSGL for setting up a similar corridor connecting other key cities?

RSGL opened first CNG highway between Delhi to Jaipur (along NH-08) as per Government of Rajasthan

budget mandate by commissioning mega CNG Station at Neemrana and Daughter Booster Station (DBS) at Kukas near Jaipur. RSGL has entered into agreement with Indian Oil Corporation Limited (IOCL) for augmenting CNG in the State. Business Transfer Agreement (BTA) between RSGL and GAIL Gas Limited for transfer of Kota CGD assets in favour of RSGL was signed on 18th April, 2017 in presence of Hon'ble Minister of State (I/C), Ministry of Petroleum and Natural Gas and Hon'ble Chief Minister, Government of Rajasthan.

RSGL has taken proactive steps for setting CNG Corridor connecting Bhilwara-Chittorgarh/Udaipur, Kota-Jaipur and inter-state CNG Corridor between Kota-Mumbai to become front runner State in setting CNG Corridor connecting important key cities. The breakthrough technology is planned for making gas available through the long tube cascades in the identified industrial clusters along Neemrana –Jaipur, Kota-Baran-Jhalawar, adjoining areas of Ghiloth and Chittorgarh-Bhilwara-Udaipur sectors.

Affordability of clean fuel in comparison to other competitive fuel at a less price is dampening factor for the industries. How RSGL is addressing this issue?

At one point where polluted fuel like husk, High Speed Diesel (HSD) etc is discouraging industries for switching over to Natural gas, RSGL has joined hands with the industries in Rajasthan for win-win situation by convincing them for better price realisation through high quality of product produced by using natural gas which ensures less carbon and uniform heating and uninterrupted supply. No one now doubt about the capabilities of RSGL in taking up challenges which may sound impossible as earlier. RSGL has demonstrated its capabilities to transform impossible into improbable and then into probable. RSGL has become a model for country, a business entity fulfilling state aspiration for meeting socio economic aspiration of the people.

How can the State Government contribute to the development of World Heritage Cities like Jaipur and Udaipur?

The source of gas for the Geographical Area (GA) of Jaipur and Udaipur is to be ensured for the development of CGD network. The non-availability of gas connectivity leaves a vital and an important gap between the CGD entity



The collaborative agreement was signed between Indian Oil Corporation Limited (IOCL) and RSGL in the presence of Aparna Arora, Principal Secretary, Government of Rajasthan to augment additional CNG requirement.

“RSGL has demonstrated its capabilities to transform impossible into improbable and then into probable. RSGL has become a model for country, a business entity fulfilling state aspiration for meeting socio economic aspiration of the people.”

and agency responsible for providing trunk transmission gas line connectivity. In context of Rajasthan, Jaipur is the capital and largest city of the State of Rajasthan and Udaipur is most sought after tourist destination of the State.

Jaipur, also known as the Pink City of India, which has a rich history of modern civilisation, art and culture. The city was planned according to Indian Vastu Shastra.

The architecture, culture, and planning of Jaipur is complex and unique. Udaipur is a beautiful city, known for its picturesque lakes, also called ‘the City of Lakes’. Udaipur has many more attractions that catch the attention of the tourists with their charm. The massive forts of Udaipur attracts tourists with their sheer structure and architecture. The beautiful temples create a sense of aestheticism with their spiritual ecstasy.

There is need for cohesive approach involving the State Government, PNGRB and the entities responsible for setting transmission pipeline for synchronising completion of gas infrastructure, CGD network and the industries for using gas in the desired time cycle. egov.gov



AKSH-Emerging Global Leader in Enabling Simple Innovative Smart Living

With a heritage dating back to 1986, AKSH has been at the forefront of optical communications technology.

Envisaged with a sole purpose of providing cutting edge in-house technology solutions in the domain of Optical Fibre, AKSH Optifibre Limited has emerged as a leading global player and the world's only integrated manufacturer of Optical Fibre, Optical Fibre Cables, Fibre/ Aramid Reinforced Plastic (FRP / ARP) rods and e-Governance and banking kiosk services for smarter living.

Strongly positioned in high-tech markets, AKSH combines an innovative range of smart products, services and technologies with prolific know-how in the telecom market- providing all types of optical fibre cables and accessories for the telecoms - voice, video and data transmission - industry.

AKSH presently owns four state-of-the-art manufacturing facilities, three located in Rajasthan and one at Dubai. The two manufacturing facilities located at Bhiwadi specialise in manufacturing of Optical Fibre and Optical Fibre Cables. The facility located at Reengus, specialises in production of FRP/ARP rods. To meet the increasing demand of FRP Rods, a dedicated facility has been established at Dubai, UAE.

AKSH Optifibre Limited has been awarded turnkey Live line installation



of 2600 km (Phase I - 1200 km, Phase II - 1400 km) of All Dielectric Self Supporting (ADSS) optical fibre cable by Bhutan Power Corporation Limited (BPCL).

ADSS Project Phase I for connecting all district headquarters and 131 Gewogs (Group of Villages) is completed. On this successful completion, Government of Bhutan awarded Package II (ADSS project Phase II) in 2012 under National Broadband Master Plan to connect remaining 74 Gewogs of Bhutan to achieve the 100 per cent connectivity in all parts of the country.

e-mitra is an ambitious e-governance initiative of Government of Rajasthan, which is being implemented in all 33 Districts of the State using Public-Private Partnership (PPP) model for convenience and transparency to citizens in availing various services of the government and private sectors under a single roof at their door steps using an e-platform.

AKSH has also forayed into Smart

City projects with a vision for planned development and progressive growth in various cities of the country, in sync with the Smart Cities Mission of the Government of India. Recently, it was awarded the Jaipur Smart City Project, a project led and implemented by Jaipur Smart City Limited, (JSCL) with a vision to combat and manoeuvre the growing requirements of Jaipur city by making a planned implementation of development schemes to meet its objective of providing safety and security solutions and to facilitate the citizens as well as civil administration of Jaipur.

The project envisages development of Smart City solutions and state-of-the-art City Operation Centre, where AKSH shall deploy the OFC network to install the Smart City Wi-Fi network, Smart LED Lighting system for energy efficiency, IP based surveillance system with vehicle identification and counting, Environment sensors for monitoring the environment, smart parking system, and smart communication.

AKSH has a strong human resource centre with more than 600 employees. With the ever changing needs of the customers and ever-growing volumes, AKSH has maintained and upheld the concepts of Value Engineering and Product Enhancement. AKSH went Public in the year 2000 and is listed on National Stock Exchange (NSE) and Bombay Stock Exchange (BSE). [egov](http://www.egov.gov)



George Kuruvilla
Chairman and Managing Director
BECIL

BECIL Spreading Wings in Digital India & Smart Cities Spectrum

Broadcast Engineering Consultants India Limited (BECIL) is ready to fit in most of the e-governance initiatives by leveraging Digital India & Smart Cities Mission, says **George Kuruvilla**, Chairman and Managing Director, BECIL, in conversation with **Souvik Goswami** of **Elets News Network (ENN)**.

What role do you foresee for BECIL in India's digital transformation process?

BECIL is into the broadcast engineering domain. We look after the television and the radio production. We also look at the transmission of TV, radio and satellite and cable television. Whatever we are doing has a lot of synergy with the telecom and the IT.

So, we have entered telecommunication, last mile connectivity, fibre connectivity

and ICT-based e-governance projects. In due course, we also realised that in many locations Radio Frequency (RF) can be used to connect one place to another place. I also find BECIL getting involved in the fibre technology whereby we can use the power of networking, power of radio frequency, the coding and the inscriptions technique. The storage is becoming smarter with the introduction of technology. We realised that every State government and the institutions will require data storage. They will require a

“BECIL is meetings various startup companies which are dealing with new technologies and also with the analytics provider working in this space. We are looking at the homegrown analytics companies.”



proper mechanism to maintain the records, dynamic websites, management information system, payment gateways. The e-governance is going to overtake everything. In all these areas, BECIL fits in. We can handle end-to-end solutions of all these areas.

Which are the focus ministries for you to take BECIL to the next-level in terms of providing e-governance solutions?

Be it for municipalities or for Aadhaar, anything which will help in the delivery of the services to the common man, BECIL is part of that. We not only provide the manpower but also train them. We are getting ourselves involved in the areas where technical equipment is involved.

In the education sector, recording of the content takes place in TV and radio studio. We manage that. After that, the storing and managing that content, streaming of the content and thereafter learning the content whereby the content is available at a central location or in the cloud whereby people anywhere in the world can access their content, we can help in all these areas. A lot of poor students, who cannot afford expensive education, can benefit from our services. So, the connectivity and the delivery part of it, storage and streaming part can be managed by BECIL.

Telemedicine is the need of the hour whereby you can connect primary health departments to the district health centres. Many scanning devices are present and the question today is how to connect these machines and data to a central location so that doctors can provide the right advice to the patients. It requires last mile connectivity and we find that we can play an important role in that.

We are also looking at broadband connectivity where fibre cannot reach due to difficult terrain and heavy



vegetation. In such areas, RF can be used. We are already participating in various tenders regarding this. All these can be connected through broadband rather than point-to-point connectivity. After that we can work towards providing Wi-Fi in near about places.

What is your vision for Smart Cities?

The most important thing for Smart Cities is control and command centre. Every smart component has to get connected to the control centre. We are into this domain where we are providing a platform to connect all the services and then doing analytics and arriving at the best decision. No other government organisation has gone into this space of data analytics. BECIL has taken the lead in this area. I have been personally doing meetings with startup companies which are dealing with these technologies and also with the analytics provider working in this space. We are looking at the homegrown analytics companies. Each Smart City will also be comfortable to have a set up put up by a government unit. It will reassure the companies for leakage, theft issues of data. Public Sector must play an important role in

having this platform under their control or under the Municipal Corporation so that data doesn't get leaked out to unauthorised people.

What role do you foresee for BECIL in e-governance five years down the line?

On one side, we will be providing the technology because we understand the end product. We know the tech and we advise accordingly. Last mile connectivity, sensors, Internet of Things devices and their manufacturing can be given to BECIL. We are also in the set top box manufacturing role and we are in touch with various chip companies. We play a pivotal role in technology part of the e-governance in Smart Cities. In the next five years, we will be greatly involved in the integration and implementation of smart city projects. There is a huge requirement for managed services. In the next 10 years, there is a huge requirement for trained manpower for getting these projects implemented and also trained manpower to manage, sustain and run the systems. We want to play an important role as a managed service department. 



A Venu Prasad
 Managing Director
 Punjab State Power Corporation
 Limited (PSPCL)



“We are now planning to reduce our power rates to Rs 5 per unit as a result of which we would be able to compete with the private players.”

PSPCL Making Punjab Power Sector ‘Smart’

PSPCL has launched smart meters to put a check on power thefts in the rural regions of Punjab. Together with these private firms, PSPCL has invested Rs 20 crores for the installation of these Residential Fire Meters, says **A Venu Prasad**, Managing Director, Punjab State Power Corporation Limited (PSPCL), in conversation with **Poulami Chakraborty** of **Elets News Network (ENN)**.



How has been the journey of power sector in Punjab?

Punjab is a power surplus State with a power generation capacity of 13,900 mega watt units on a yearly basis. During the current year, we have recorded a peak demand of 11,900 mega watts till 10th July, which is the highest till date. It is 2,682 lakhs units per day, which is the highest recorded demand unit in the recent past. Five years ago, we were facing deficit, however with the help of Independent Power Producers (IPP) or Non- Utility Generator, we are now in a better position with surplus energy supplies. In terms of growth, there is a steep growth in the demand in the recent

times, which is about 7.5 to 10 per cent, year-on-year basis.

In 2015, the Central Government agreed to release Rs 800 crores for Punjab under Deen Dayal Upadhyay Gram Jyoti Yojana (DDUGJY) with a view to upgrade the rural power sector. With the advent of DDUGJY, it enabled us to ensure round the clock supply of electricity in the rural areas, besides ensuring metering at all levels, strengthening transmission and distribution and several others.

What key projects PSPCL is planning to launch soon?

PSPCL has measured an overall growth of 10 per cent consumption of power

supply in Punjab, which also demarcates the growth of demand as well as supplies, resulting in seamless connection of power in the region. In terms of power generation, Punjab has three plants in Bhatinda, Ropar and Lehra Mohabbat, of which we are planning to shut down the Bhatinda plant, which is about 25 years old. With more and more independent generators in the market, we are now trying to have more and more PPS.

Though, as of now, we don't have any plan to have any independent thermal plants to cater the growing demand. However, in the coming two to three years, we are likely to have a critical unit thermal plant at Ropar of 800 mega watt capacity. Also, PSPCL has launched smart meters in association with a power firm, to put a check on power thefts in the rural regions of Punjab. PSPCL, together with these private firms, have made an investment of Rs 20 crores for the installation of these Residential Fire Meters.

Do you think there is a huge competition in the power sector due to the advent of private players?

As such there are no major challenges due to private players. Our main aim is to assure affordable round-the clock power supplies to commercial, domestic and industrial consumers. As a symbiosis, it should be ideally a mixture of thermal, solar and hydropower to keep a balance in the growth at 10 per cent per annum.

How do you compare the growth of PSPCL vis-a-vis the growth of the infrastructure in the country?

We are ready to ensure growth and updation in our system to develop a digital culture as the nation is embracing it in a big way. Recently, we have tied up with Paytm to provide online bill payments facilities for the consumers of the State. PSPCL has



“In the next three months, we are planning to introduce RTGS or NEFT collection of bills for customers, for bills amounting to Rs 1 lakh or more.”

already introduced e-Payment facilities on its website through banking service providers. There is a surge in online bill payments owing to its easy interface for end consumers.

Secondly Punjab today, is a power surplus State with significant dependency on private players as well as notable contribution from our own State thermal power plants. For any industry in a region to grow and develop significantly, it is important to have strong power supply, which we already have. We are now planning to reduce our power rates to Rs 5 per unit as a result of which we would be able to compete with the private players.

How is PSPCL planning the growth of power sector in Punjab?

The key and foremost strength of PSPCL is that we have surplus power generation and strong transmission. However, in distribution level, we are having certain problems regarding feeder. We are unable to provide good quality, uninterrupted power supply to the end consumers. Hence, we focus to provide quality and seamless power supplies to our consumers as a priority. We are planning to introduce smart meters to ensure accurate meter reading and billing to avoid power theft and other related adversities.

This also takes us a step ahead on e-governance, given our staff does not need to visit any consumer to ensure accuracy in power reading. At the same time, our consumers also need not visit our office to pay their bills, owing to our online bill payment system. In the next three months, we are planning to introduce RTGS or NEFT collection of bills for customers, for bills amounting to Rs 1 lakh or more. We have officially partnered with State Bank of India for our payment collections.

As a matter of fact, PSPCL is inclined to adopt any change that empowers our society with clarity, seamless connectivity and better quality supplies. With this aim, we wish to see enhanced growth in the power sector of Punjab. 



Dr Vikram Jindal

Municipal Commissioner, Kota Municipal Corporation, and Additional Chief Executive Officer, Kota Smart City Limited, Kota.

“The Department of Information Technology & Communication (DoITC) is building an integrated Command-and-Control Centre. This centre will take feed from CCTV cameras across the city.”

Kota Marching Towards a Smarter Future

Kota Municipal Corporation is strengthening the police department by equipping police personnel with solutions that can allow them to issue eChallan and track any vehicle with the help of CCTV cameras, says **Dr Vikram Jindal**, Municipal Commissioner, Kota Municipal Corporation, and Additional Chief Executive Officer, Kota Smart City Limited, Kota, in conversation with **Kartik Sharma** and **Harshal Desai** of **Elets News Network (ENN)**.



What are the key components of a 'Smart City'?

I am of the opinion that cleanliness is the most important component of a 'Smart City'. If a city is clean, its waste disposal management is smart and efficient, and the garbage is handled resourcefully – we can claim that we are on the right track to become a smart city. Second noteworthy component of a smart city is making it encroachment-free. We need roads which are wide enough to enable people travel without hurdles. Besides, we should have enough open spaces – parks, pavements and gardens for citizens where they can stroll and exercise.

These might not be the so-called traditional components, but I believe these are the basic necessities and are of great importance to make a city smarter.

Which areas are you planning to focus on in Kota?

Our requirements for making the city of Kota smarter are completely different from the rest of the world. We have to streamline the basic system and, at the same time, make the most of available advanced information technologies to ensure smart policing, smart mobility, smart street lighting, etc.

We are focussing majorly on strengthening the police department through solutions that can help police personnel issue eChallans and track vehicles using CCTV cameras. We are also working on streamlining our transportation system and are determined to make the best of available GPS technology which will allow people to know the exact location of their buses and book their tickets online. We have been working on building modular bus shelters across the city which will be equipped with a toilet, a bicycle sharing platform, a small shop, etc. The modular design can be installed instantly. We are also planning to install a tracking system to monitor the waste.

Open drains are a big issue in Kota. We are now planning to make parking spaces over these drains to expand parking spaces in the city. Further, in the health domain, we are trying to digitise health records of citizens and link it with Aadhaar cards. The Corporation is also exploring possibilities of creating libraries and book banks for common man.

Beautification of the city's Dussehra Ground is another major project we are working on. It will be built as a huge complex.

What initiative has the Municipal Corporation taken to go paperless?

We are ambitiously working on making Kota Municipal Corporation paperless. This is something which I personally feel will boost the efficiency of the Corporation and strengthen transparency in our operations. We will be assisted by BSNL in this project and if everything goes well, in the next one month we will start using the same.

What are your plans to boost tourism in the city?



Kota will soon have designer garbage bins across the city

We have planned to develop a ring road around the Kishore Sagar lake. We have a river and a couple of water bodies in Kota. We have created several parks around these water bodies. We are trying to connect the Canal Road with Kishore Sagar lake and further with riverfront and parks. We plan to develop a track along these areas. We also have plans to build a chain of restaurants along this track. There are plans to beautify the Chambal Garden as well.

Please apprise us of the Command-and-Control Centre?

The Department of Information Technology and Communication (DoITC) is building an integrated Command-and-Control Centre here. This centre will take feed from CCTV cameras across the city and will be used by both Municipal Corporation and the police department.

What inspired you to join administrative services and leave medical profession?

I loved medical profession. But I wanted to contribute to the society through administrative services. I want to ensure that people visit a doctor less frequently. I am determined to ensure an environment where people can lead a hygienic life. I am aiming at creating a society where people are more alert on possible medical implications and they can be educated enough to avoid some of the medical issue.

What inspires you to execute your responsibilities? What message would you like to give to IAS officers and aspirants?

A Municipal Commissioner can do a lot to improve the city and its people. I just want to ensure that I take every right step to do this. I would like to make the most of this opportunity and deliver to the people of Kota.

I am a very health-conscious person. I believe that a healthy mind lives in a healthy body. I suggest all to give due importance to their physical health. Do exercises daily. 



Dr Vinod R Rao

Commissioner
Vadodara Municipal Corporation

“We started with Swachh Vadodara Campaign wherein we become one of the 10 cleanest cities.”

Vadodara Goes for Cleanest to Greenest to Smartest City

Gujarat's Vadodara city has been ranked 10th in the 434 cities and towns under Swachh Survekshan-2017. The improvement has largely become possible due to involvement of citizens, voluntary organisations and opinion-makers towards maintaining cleanliness in the city. **Dr Vinod R Rao**, Commissioner, Vadodara Municipal Corporation, shares his insights with **Hemangini Kanth Rajput** of **Elets News Network (ENN)** on building the city to take up projects for making it Greenest to the Smartest City.

How did you manage to make the city clean at first?

I have always believed that making a city clean is one of the responsibilities of corporation. But it is also the collective responsibility of all including corporation and citizens to make city clean and green.

With this philosophy, as one we all have together taken up the entire responsibility of making the city clean. Whatever loopholes, in terms of our resources, strategic interventions in terms of process engineering, reforms we did, whatever we could as a corporation in development of our city by taking up the accountability part of making the city clean.

Some of our initiatives include:

Getting entire streets cleaned in a planned manner, reaching areas which were not maintained to monitor and plan cleanliness drive, making attendance systems more accountable through bio-metric face recognition devices, introduced “Ratri safai” in prominent locations and ‘Multiple

safai’ drive on different stretches of roads, launch of e-rickshaws-the vehicles christened as ‘Swachhta Patrols’, motivating and honouring Swachhta mitra (cleanliness staff) for their continuous effort and sacrifice in making the city clean.

Also, we came up with different contests such as locality contest, school contest, contests on festivals to promote and aware public about the importance of cleanliness.

In order to make Vadodara a clean city, we have decided to make it containers-free. There were different places in the city where containers were placed which attracted more garbage and created unhealthy environment. Such places were known in the name of ‘katchra Peti Naka’. Observing this situation, we drastically reduced the number of containers to the extent that it reduced by more than 60% and remaining 40% will be removed in the coming days.

What other Smart City initiatives have been taken to make Vadodra smarter?

I strongly believe that a soft city cannot be a smart city. Softness of city is measured by persuasiveness of the city to violate the law and rules. The more you are soft to violent laws, the more the city goes down in terms of vulnerability index. It includes violation of traffic norms, encroachment norms, construction norms, pollution control norms, etc.

In Vadodara, we have around 250 green spaces, more than 40 lakes and ponds. Along with that, we have come across many encroachments which have been now removed from all such areas in last nine to ten months to make these places more clean, environment friendly and green to practice high density plantation. To make such places clean we have also accommodated slums dwellers to other areas with their ownership of pukka houses.

With maintenance and proper monitoring of those lakes, it helped in flood management and water management in surplus rainy seasons in the city.

With such developments what sort of security and safety is kept in mind by the corporation?

Primarily, safety and security falls within the domain of Commissioner of Police. There are some major areas they are working on including:

Traffic Management: In this, corporation and police are working as partners for all the planning and execution which includes traffic junction, widening of roads, removal of temporary hawkers, planning traffic movement, etc.

Usage of CCTV Camera Network: Both-Corporation and police have our CCTV network projects. The City Control Centre is about to get ready in next three months. And, as a team



Laxmi Vilas Palace, Vadodara.

we'll have access to CCTV network which would help us monitor the conditions of roads, cleanliness, etc. around the city and on the other hand, the police can monitor the crime rates, traffic violations, etc around the city.

Encroachment removal: We are very proactively attending issues of particularly the communal sensitive areas, and other areas. We try to find the areas where there is possibility of encroachments, narrow roads as such elements add up problems in the city.

Vadodara has been very active to take up different projects for the development of the city, are there any projects where VMC has faced challenges?

Of all the initiatives that the Municipal Corporation takes up, Urban Housing projects are the most complicated project in the city. And, this has multiple dimensions of complications which includes:

People in most of the locations are reluctant to take the help provided by the corporation.

Moving slum dwellers and accommodating them is also one of the difficulties to move them to

prime or posh areas. To make project viable and to execute it in time limit is one of the challenges. Litigation sometimes leads to stay orders of land for a year arising of various issues after construction orders.

What is the action plan of VMC?

VMC is working with a medium term vision which we have started converting into action. One is physical infrastructure to create futuristic infra taking 20 to 30 years of consideration of city. Second, is environmental infrastructure.

City's branding depends on its core competencies and strengths. And, we look forward to create opportunities and potential in Vadodara. Important thing is to have capability to convert vision into action to make yourself successful, develop your city and evolve as a brand.

We started with Swachh Vadodara Campaign wherein we become one of the 10 cleanest cities. After achieving this milestone success, we have organised a function in which around 50,000 people gathered and joined and supported cleanliness drive by cleaning the public streets. [\[Video Link\]](https://www.youtube.com/watch?v=...)

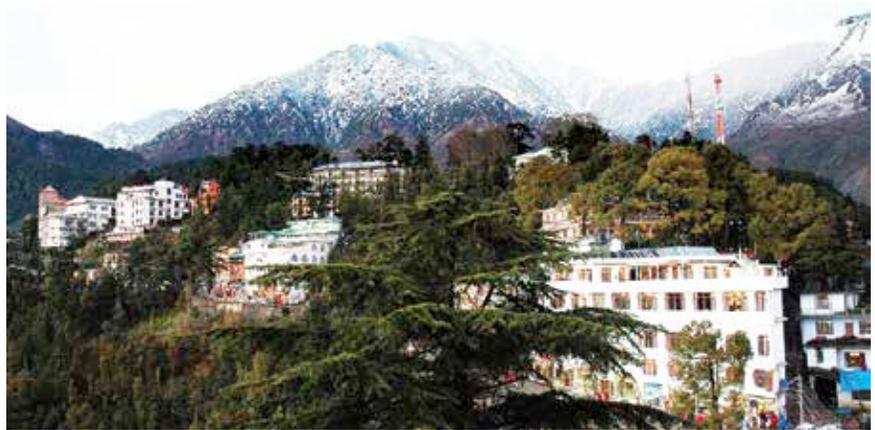


Lalit Jain
Commissioner
Dharamsala Municipal Corporation

“We have ‘Swachhata doot’ (cleanliness representatives) to undertake the segregation of waste and to make people aware about garbage segregation. We also want to set up waste to energy plant for which we are in the process for getting forest land.”

Dharamsala Seeks to be World Class City

Dalai Lama has an abode in Dharamsala due to which a lot of foreign tourists are coming to Himachal Pradesh. If Dharamsala is developed as a Smart City, a good-will would flow from here to the outside world that India is developing world class cities, says **Lalit Jain**, Commissioner Dharamsala Municipal Corporation, in an exclusive interview with **Gautam Debroy** of **Elets News Network (ENN)**.



What are the best smart initiatives adopted by the Dharamsala Municipal Corporation?

We are making smart roads which are properly paved, it will have boulders and proper drainage system too. Hilly areas require different kind of roads. So, we are making roads by interlocking coloured tiles. There would be street furniture, street lighting, safety features like edge lines, reflectors, traffic signals and warning signs on these roads.

Since hilly areas have little space for children to play, we are building parks. Although, the hilly areas assume the nature of a big park, still people require parks to jog and for children to play.

We want to map the entire city for property tax collection through GPS mapping. We are introducing a software system called e-Nagarpalika to make all the citizen services online. We are also building houses for poor here, as in Dharamsala we don't have any slum. We have identified 144 families who don't have homes and for whom we are building these houses.

We are developing Tulip garden in association with the Asian Development Bank (ADB). City's livelihood centres are being developed in association with national urban livelihood programme. We are also developing a war museum in the Smart City.

In future, we would like to have a

Waste Management Plant which will convert waste to energy. We are in the process of getting forest land clearance for this plant.

What is your next plan of action?

We have Rs 600 crore projects under Public Private Partnership (PPP) mode, namely indoor stadiums, cultural centres, development of a market, convention centres, e-toilets etc. We have received a grant of Rs 180 crore from the Central Government, Rs 20 crores have been given by the State Government.

In near future, we will be having project management consultant (PMC) in place. They would chalk out the DPR and all other necessary things.

What initiatives have you taken to adopt cashless economy and Digital India?

We are going to put all the services online. Citizens will start paying everything online. We will be having software for providing e-governance services which will also empower citizens with information about online procurement. By this way, all these activities will support and enhance digital India concept.

What challenges are you facing in Dharamsala while adopting smart initiatives?

Recruiting qualified people is always a challenge here since it is far from the big cities. We have roped in NIXI which is a Government of India corporation to develop software. Our IT department is also helping us.

What schemes are you taking for Swachh Bharat?

As a pilot basis, we have started door-to-door garbage collection in



some of the areas and it will be replicated throughout the city. Our 140-odd street sweepers clean the streets everyday in the morning. We have 'Swachhata doots' (cleanliness representatives) to undertake the segregation of waste and to make people aware about garbage segregation. We also want to set up waste to energy plant for which we are in the process for getting forest land.

Are you roping in any foreign companies for developmental projects?

Anybody is welcome here. They can come and give their ideas. If their project is selected by the board, we have no problem. Board of the Smart Cities is headed by the commissioner. So, once the project is approved, we start implementing it.

What differentiates Dharamsala from other cities across India?

It is a beautiful place. Secondly, Dalai Lama has an abode in Dharamsala. We have lot of foreign tourists coming here. If Dharamsala is developed as a Smart City, a good-

will would flow from here to the outside world that India is developing world class cities.

Have you ever met Dalai Lama to discuss the concept of Smart City?

The Tibetan administration as well as the Corporation, they have regular interactions and whatever are the sentiments of the Tibetan government, they are conveyed to Dharamsala Corporation and the Smart City. Representative of Tibetan government sits in the Corporation as a nominated member and hence, we have an indirect communication with His Holiness.

What are the challenges you are facing in implementing Smart City projects?

We need qualified people in Dharamsala. The Central Government should also help us in preparing the RFPs in a formal manner. Their people come, they survey the area and they can charge us for this. RFP is in float. We are slow but it can be faster, if we get help from the Government of India. egov.gov



Dr Basant Garg
 Commissioner
 Municipal Corporation of Jalandhar

Jalandhar's Odyssey to Turn 'Smart'

Jalandhar made it to the third list of Smart Cities under the Centre's flagship programme of Smart Cities Mission. Though barely two months in office as the city's Municipal Commissioner **Dr Basant Garg**, an IAS topper of the 2005-batch, already has his fingers on the city's pulse. In conversation with **Priya Yadav** of **Elets News Network (ENN)**, he revealed about his plans to turn Jalandhar into a Smart City.



Devi Talab Mandir, Jalandhar

“The Internet of Things will be extremely useful in the efficient delivery of services to the citizens, be it basic amenities like waste management system, water or power distribution etc.”

What is the status of the Jalandhar Smart City project?

The Municipal Corporation of Jalandhar (MCJ) got its company registered in November 2016. The Special Purpose Vehicle (SPV) formed will do the planning, give approval to the works, release funds, operate and evaluate the projects to be carried under the Smart Cities Mission. Proposals have been invited for the Project Management Consultant (Consultancy Services) for assisting Jalandhar Smart City Limited (JSCL) in implementing Smart City Projects.

What kind of challenges you foresee in transforming the city to a smart one?

As the first step towards efficient delivery of citizen services, we are providing online services to reduce the physical interaction with the government staff. This will reduce the load on the limited government staff besides facilitating the people in paying bills etc at the click of a button. We are coming out with apps for the same. Already people are paying electricity, water bills online and are even filing property tax online. Citizen

facilitation centre have been set up and more will be added.

What are the elements that you think are essential for a Smart City?

We are in an age where the dynamics of the environment are changing very fast on account of the computerisation and internet. The Internet of Things will be extremely useful in the efficient delivery of services to the citizens, be it basic amenities like waste management system, water or power distribution etc. The integration of technology in achieving the targets of Smart Cities Mission will accelerate the pace of projects and improve their quality and efficiency.

Jalandhar has always been known for its sports industry, what are the plans to develop it further?

Plans are afoot to make Jalandhar a magnet for sports activities. For this, a multi-purpose stadium is on the anvil that will promote sports and cultural activities, a multi-purpose arena that will be a commercial hub for promoting



the city's sports goods. This will be complemented with various education facilities and health institutes. There is also potential to develop Sports Rehabilitation and Injury Centre.

How do you propose to improve the water supply and good sewage system, the basic amenities, to residents?

We are looking at increasing the efficiency of the system by replacing pumps and parts of water lines, by providing Supervisory Control And

“A multi-purpose stadium is on the anvil that will promote sports and cultural activities, a multi-purpose arena that will be a commercial hub for promoting the city’s sports goods.”

Data Acquisition (SCADA) system which enable better control and monitoring of water supply system. We will be installing advanced type of automated meter reading and also introduce smart billing and collection system.

For improving the sewage system we will have to replace sewage lines that have become outdated. Modern machinery will be used to clean sewerage. For real time monitoring of sewage, sensors will be put at manholes. To maintain cleanliness, we are increasing the number of public toilets. egov.gov

Imam Nasir Mausoleum, Jalandhar





Sonal Goel

Commissioner, Faridabad Municipal Corporation and CEO, Faridabad Smart City Limited

“We carry door-to-door collection of garbage. Recently, the Government of Haryana has floated a tender to MoU for integrated Solid Waste Management System.”

Faridabad En Route to Smart Development

Apart from being the largest city and largest corporation in Haryana, Faridabad also contributes to the development of economy in the entire National Capital Region (NCR), says **Sonal Goel**, Commissioner, Faridabad Municipal Corporation and CEO, Faridabad Smart City Limited, in conversation with **Gautam Debroy** of **Elets News Network (ENN)**.



What initiatives are being adopted by Faridabad Municipal Corporation for the Smart City project?

Faridabad has been selected in the second round of the Smart Cities Mission. We have engaged a Project Management Consultant (PMC) through an international competitive bidding to design, develop and implement smart city projects. Based on the Area Based Development (ABD) and pan-city components, Faridabad was able to get into the Smart Cities' list. The Union Ministry of Urban Development has sanctioned a total outlay of Rs 2,600 crore that includes Rs 2,100 crore for ABD and Rs 470 crore for pan-city development mission.

Under ABD, urbanisation, re-development and rejuvenation have been the major focus areas whereas in the pan-city components, it is mainly IT-based solutions and Solid Waste Management.

With the vision of transforming Faridabad to a cleaner and greener city by introducing smarter ways of living, Faridabad Smart City Limited (FSCL) has started several measures to implement the projects as identified in the Smart Cities challenge proposal.

Here, I express my thanks for the support and guidance of our visionary leader and Hon'ble Chief Minister of Haryana Shri Manohar Lal Khattar. I also thank Union Ministry of Urban Development and State Government

of Haryana for extending their support.

So what is your next plan of action?

Faridabad has initiated several measures to implement smart city proposal in a planned and phased- manner. A blueprint for implementation of various projects has been prepared. FSCL envisages investing Rs 648 crore by 2017-18 in almost 10 sub-programmes. Some of the major development projects that will be implemented include smart road, smart e-toilet, open air gym, rainwater harvesting, generating 15 KW power from solar energy, integrated command and control centre etc. We have also adopted some long term measures that include rejuvenation of Badkhal Lake and Lakefront Development, Barhai Talab etc.

We have also planned several initiatives using IT solutions. At pan-city level, it is proposed to develop smart traffic and transit management system with an effective IT system, using latest technology such as SCADA system for leak management of water supply, automated online water quality monitoring system, provision of smart toilets and smart solid waste management, wi-fi, underground cabling, solar rooftops and LED street lighting etc.

What distinguishes Faridabad from other cities across India?

Faridabad is the largest city and largest corporation in Haryana. Known for its industry, it also contributes to the development of economy in the entire NCR region. If we talk about connectivity, construction of Badarpur flyover, and extension of Delhi Metro up to Ballavgar is significant. With this, a synergy has been evolved for industrial development. Metro connectivity from Mujasser to Central Secretariat has also given a facelift to the city. I believe, Faridabad is a potential city which was first selected as a Smart City by the Government of Haryana.



Our proposals like creating a multi-model hub and linking different modes of transportation including railways, metro rail and highways will make Faridabad very different and special from other cities.

How do you perceive Digital India and cashless economy?

After the Government of India and Government of Haryana mandate, the Faridabad Municipal Corporation is also trying to implement many initiatives. We have started online payment of taxes, setting up of ward level offices. We have made available a toll-free number. There is an emphasis for a proper citizen grievance redressal system. We have already signed a Memorandum of Understanding with the National Institute of Urban Affairs for setting up innovation Hub for 'Urban WASH' solutions in Faridabad. We are also starting a mobile application that integrates all the city services, providing more availability to citizens.

What initiatives have you undertaken for Swachh Bharat Mission?

With the help of Janagrah (an NGO) we have created a Swachhta app. Being the largest city in Haryana, more than 700 metric of garbage is generated everyday in Faridabad. At present, the city is lacking an integrated solid waste

management system, though we have a partly functional site at Bhandwari, where garbage of the city is being transported.

We also carry door-to-door garbage collection. Recently, the Government of Haryana floated a tender to MoU for integrated Solid Waste Management system. In the recently held Swachhta Survekshan 2017, initiated by the Government of India, Faridabad has been selected as the fastest moving city at the national level in terms of ranking in the Swachhta survey. Through the guidance and support of our visionary chief minister, contributions made by citizens, political leaders of the city as well as the State government, we were able to achieve this.

What challenges do you face while implementing Smart City projects?

Faridabad has a major challenge to revive the Badkhal lake. In Faridabad, a city with more than 15 lakh population, we have a major issue of encroachment. The most significant challenge, I think, not only for Faridabad but for all cities across India, is of funding. Arranging Rs 1,600 crore for implementation of projects on PPP basis and land monetisation is a major challenge for us. Our Corporation is not a surplus organization. But of course we are trying to overcome these challenges. 



Prakash Rane

Founder and Managing Director
ABM Knowledgeware

“ABM evaluates the emerging technologies for its fitment to its solutions and client’s need in an ongoing manner and take pragmatic decisions of incorporating the same from time to time.”

ABM Knowledgeware Realising the Smart City Dream in India

ABM Knowledgeware’s deep domain knowledge in urban sector after providing several solutions in this space is probably the most unique and irreplaceable advantage that ABM possesses for realising the dream of Smart Cities in India, says **Prakash Rane**, Founder and Managing Director, ABM Knowledgeware in conversation with **Poulami Chakrobaorty** of **Elets News Network (ENN)**.

How is ABM Knowledgeware contributing for e-Governance in the country?

ABM Knowledgeware has experience of more than 19 years exclusively in e-governance sector. Credible industry bodies have endorsed our undisputed leadership in e-Municipality segment in India.

Our undying spirit to give customers return on their investment in e-governance projects has brought us today at this height. It has therefore made us the first choice by the major

States of India for e-Municipality and many more e-Governance solutions.

ABM’s various e-government solutions deliver 28+ million citizen services per year compared to 4.2 million in 2010 and still growing. To name some of the projects; Roll-out of e-Municipality services and solutions covering around 750+ Urban Local Bodies (Municipal bodies) in Maharashtra, Madhya Pradesh and Bihar, ABM Smart Governance solutions running in seven Smart Cities which are approved under Smart City Initiative by Government of India. Department of Defence, Ministry of



Defence, for roll out part of its e-Municipality solutions in all the Cantonment Boards pan-India. We are currently doing projects of varying sizes in 11 States in India.

Smart City is one of the dream visions of Prime Minister Narendra Modi. How is ABM Knowledgeware contributing in serving the industry in fulfilling this dream?

Various tracks of Smart Cities like Command Control Centre, smart healthcare, smart education, smart transport, smart environment etc. have components that are part of or needs integration with ABM's smart governance solution. Our solution has ready plug-ins for such integration giving Smart City customers the most required integrated suite of solutions. Thus, Smart Governance or E-Municipality is the foundation for any Smart City and needs a key focus and priority while planning projects under Smart City initiatives for the city.

ABM's Smart Governance solution is a comprehensive integrated enterprise solution catering to all citizens-centric, revenue-centric and back-office services of any municipality or organisation governing the Smart City. This solution provides Anytime, Anywhere, Services to citizens, business entities and other stakeholders, facilitates online payments, SMS and email alert and notifications. Being developed on SOA architecture, it can be easily integrated with GIS, Digital Signature, other government initiatives like NSDG, SSDG, eTaal, CSCs etc. Solution also offers services on Mobile App and supports regional language apart from English.

Our deep domain knowledge in urban sector after providing several solutions in this space is probably the most unique and irreplaceable advantage that ABM possesses for realising the dream of Smart Cities in India.

What are your expansion plans?

To start with, we plan to expand our e-Municipality business in more States. It includes long term relationships with customers by giving increasingly better quality of service and retaining the patronage of these important customers, adding more States as customers, blending technology with more reforms, maintaining proper processes and a sound value system to address various challenges may be encountered in the Urban Sector reforms.

We have already established our presence in 11 States pan-India by winning prestigious customers in these regions. We will continue with the strategy of collaboratively working with large and reputed IT companies. This is yielding positive results.

“We are also looking forward to working on initiatives like Ease of Doing Business, leveraging empanelment with NICS I for projects in different States.”

ABM evaluates the emerging technologies for its fitment to its solutions and client's need in an ongoing manner and take pragmatic decisions of incorporating the same from time to time. Thus, it keeps enhancing its existing key offerings. As ABM has a number of ambitious propositions under its wing, it endeavours to enhance pre-existing offerings with regular upgrades on their technology.

We are focusing now on our new segment 'Cyber Security'. It enables users to work faster with a highly secure, yet simple to use remote access

solution. Through cyber security offering, the customer gets security anywhere, multifactor authentication, multi-location and hybrid cloud, web security anywhere, compliance & fast on boarding. We are also looking forward to working on initiatives like Ease of Doing Business, leveraging empanelment with NICS I for projects in different states.

What challenges do you face in your operation and what are your strategies to address the same?

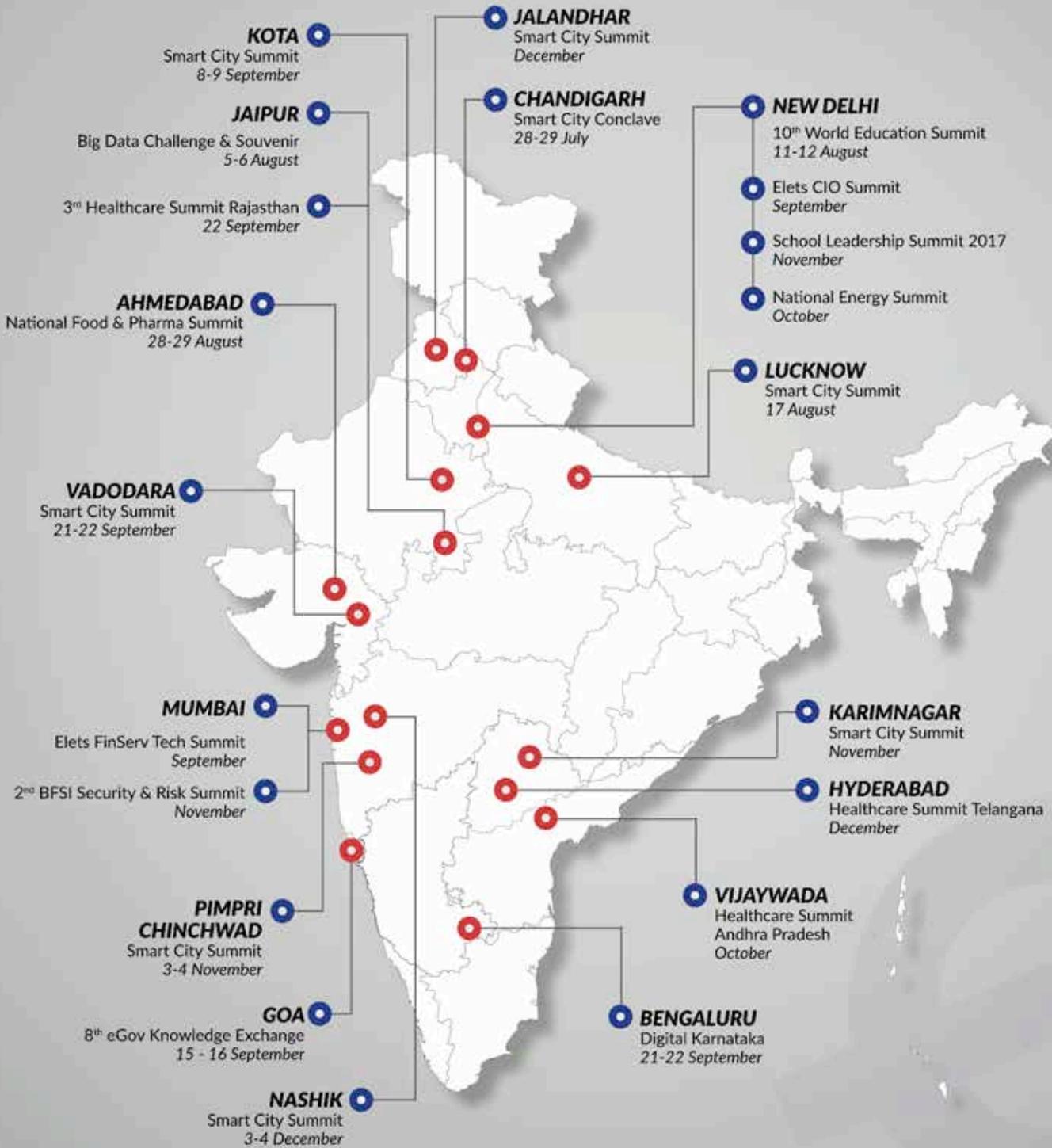
We face following challenges and we make sure that we address them well:

E-government projects are very demanding into project management for tight control over timelines and cost. This poses a challenge when we scale to multiple States in parallel without compromising of our USP i.e. impeccable delivery and continuous guidance to customers about their side of project and change Management. We address this challenge by grooming potential leaders for giving higher responsibility and adoption of process based project execution.

Maintaining healthy cash flows from multiple projects in multiple geographies which is necessary for smooth operations. This is also a serious challenge. Given the procedural delays in payments and hesitancy by users to take firm stand on sign offs required to process payments. This is being addressed by working closely with customers and their consultants to understand the requirement of project outcome and stringent adherence to contract conditions.

Quality Manpower – The segment where we operate is more difficult segment than export oriented IT companies. We continuously groom potential leaders and try to keep good pipeline of leaders by continuously exposing them to the higher level of executive management. 

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Innovative solutions from concept to commissioning



BECIL a profit making Government of India Public Sector Enterprise, established in the year 1995 provides consultancy & turn-key solutions in the field of Broadcast Engineering & related fields. BECIL has pool of in-house specialists and vast reservoir of experts in Radio / Television Broadcasting & associated fields BECIL caters to national & international clients & also performs advisory role for MIB & TRAI on broadcasting related matters.



Our Services :



- Setting up of **Common Transmission Infrastructure (CTI)** for FM Phase-III Bidders.
- Setting up of **TV Broadcast Systems**.
- Providing **Pro AV Consulting Services** for Auditoriums / Conference Hall/ Board rooms.



- Setting up of Audio Studios for Pvt. FM Broadcasters and Community Radio Stations (CRS) and Designing & Planning **Acoustic Treatment**.
- **Audit of Digital Addressable System (DAS)** deployed by Distribution Platform Operators (DPOs).
- **Manufacturing of 50 Watt FM Transmitter**.



- Undertakes **SITC of specialized Video Surveillance** and Access Control Systems.
- Providing **Electronic Spectrum and Cyber Space Monitoring & Analysis System**.
- Providing **Social-Media Relationship Management (SRM) Services** to Government Departments.

Major Projects :

- Supply and commissioning of 2 numbers of 1000 KW MW AM Super Power, solid-state transmitters at Rajkot and Chinsura for AIR external services.
- Establishment of **Common Transmission Infrastructure (CTI)** for FM Phase-II & Phase-III Broadcasters.
- **Setting up of TV Studios** for Rajya Sabha, Lok Sabha, Rashtrapati Bhawan and various Universities.
- Setting up of **Up-Link System** for Lok Sabha Channel.
- **Establishment of Pvt FM. Studios** for Radio City, Radio Mirchi, Malayala Manorama, Mathrubhumi, Dainik Jagran, Dainik Bhaskar, Indigo FM, Positive Radio.
- Setting up of **Electronic Media Monitoring Centre (EMMC)** for Ministry of Information & Broadcasting.
- Setting up of **e-Class rooms** at IIM Indore.
- Setting up of **transmission infrastructure** for over 62 Community Radio Stations (CRS) across the country.
- **Video Surveillance & Access Control Management System** for Government Organizations.
- **SITC of Spectrum Monitoring and Analysis System**.
- Establishment of **Secured IT Data transfer Network**.
- **Pro AV Projects** for National School of Drama (New Delhi), Rajasthan Vidhan Sabha (Jaipur), Gaiety Theatre (Shimla), National Institute of Technology (Surathkal, Karnataka).
- **Auditorium projects** for Gaiety Theatre (Shimla), Indian Institute of Science (Bangalore), Auditorium (Jamia Millia University), Stage lighting and furnishing of IGCIC (Phoenix, Mauritius), Police Auditorium (Jammu).
- Providing **Social-Media Relationship Management (SRM) Services** to Ministry of Information and Broadcasting and other Government Departments.



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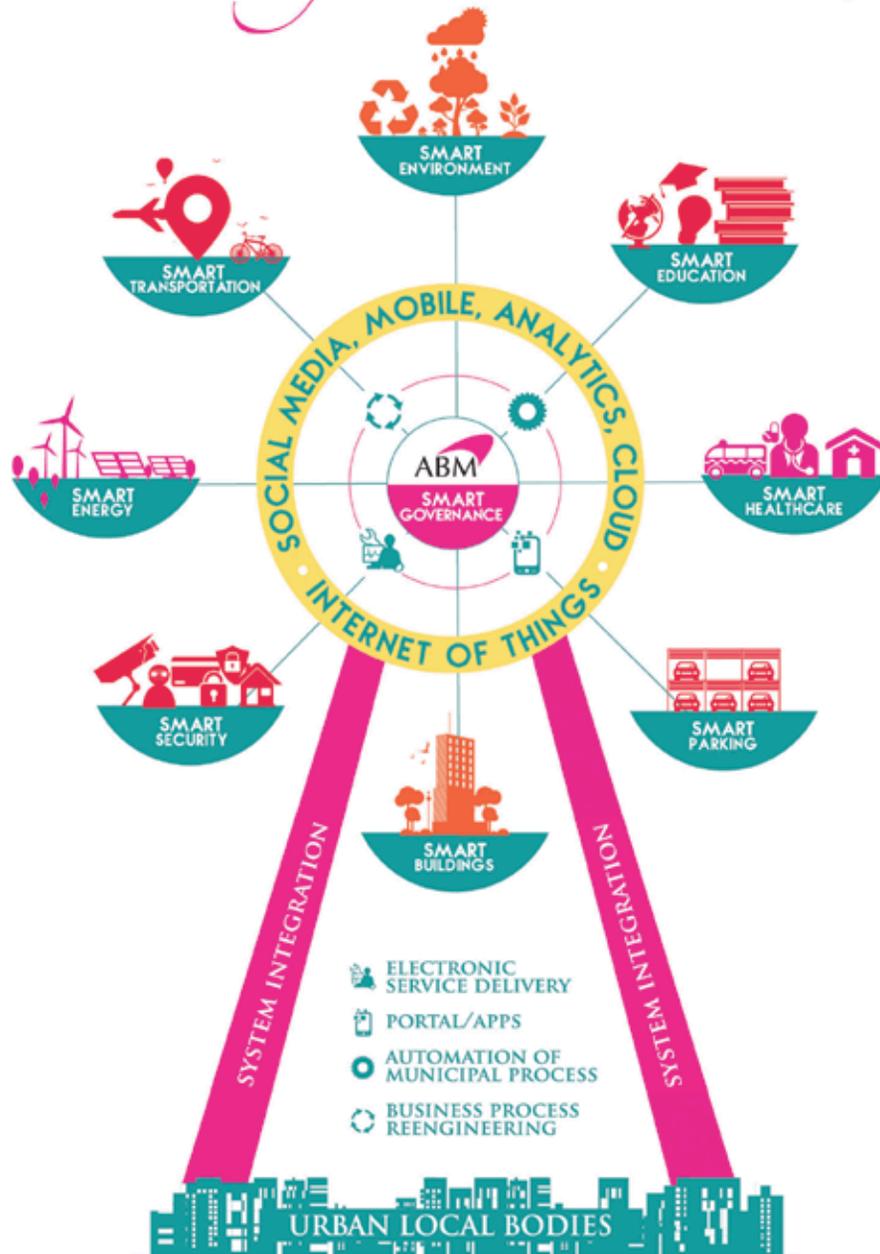
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ABM - making the cities Smarter



ABM is leader in e-municipality segment in India with several successfully sustained projects. 750+ Urban Local Bodies which include many from the initial 100 Smart Cities are our esteemed customers. ABM's various e-municipality solutions deliver millions of Citizen Services every year. Several states have selected ABM for a state-wide rollout of e-municipality projects as we competed with reputed MNCs and Indian IT firms. ABM's e-municipality projects are quoted as exemplary case studies in various prestigious journals & international research reports and have bagged awards from credible international organisations, central/state governments, Industry associations and reputed media publications. **ABM is the perfect fit for making the cities smarter.**

- Emerging India Finalist: CNBC TV 18
- Founder- MD listed in "50 inspiring Entrepreneurs of India" : Economic Times
- 25 most powerful SAP solution provider: CIO STORY, US
- Top 10 Emerging IT companies in India: NASSCOM

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