

CONFERENCE REPORT



SMART & SUSTAINABLE CITY SUMMIT NAGPUR

Nagpur Laying Roadmap of Indian Smart cities

Hosted by Nagpur Municipal Corporation



Organised by Elets Technomedia Pvt. Ltd



"THANK YOU"

FOR PARTICIPATING IN **SMART AND SUSTAINABLE SUMMIT - NAGPUR**







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Karam Chand Thapar & Bros. (Coal Sales) Ltd.

















































Mumbai



























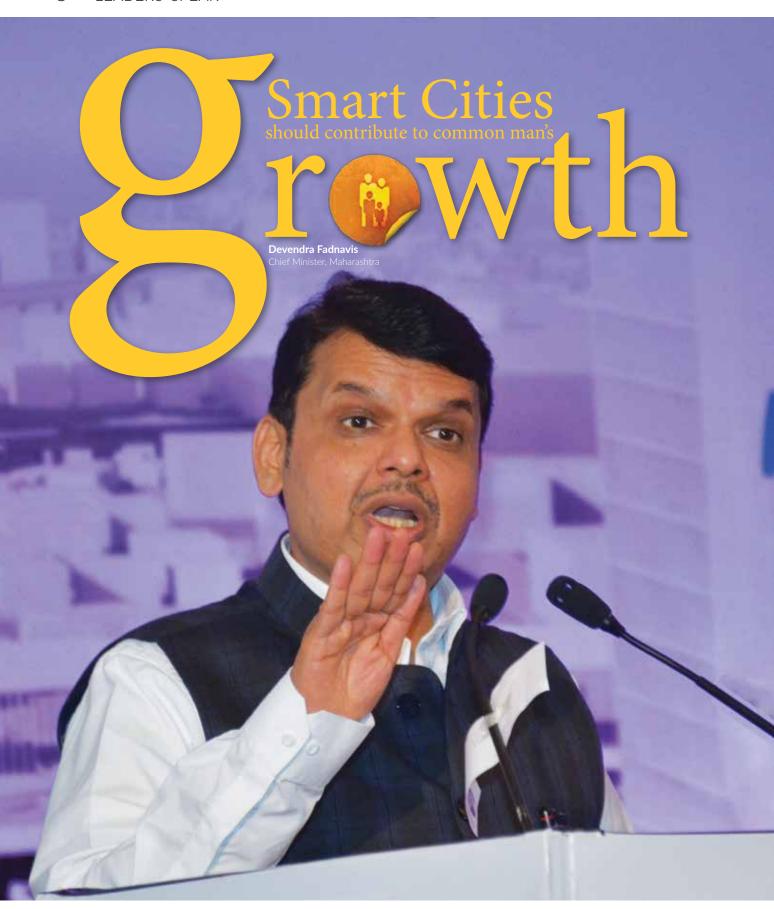
When Nagpur pondered Smart and Sustainable City initiatives

A two-day conference held in Nagpur, Maharashtra recently highlighted and discussed various initiatives, challenges, and advantages related to Smart Cities.

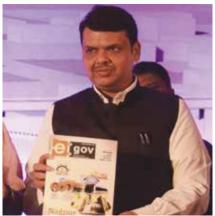
Inaugurating the conclave, Maharashtra Chief Minister Devendra Fadnavis deliberated on various issues including the government's approach, Smart Cities Mission and its benefits, and the initiatives being undertaken to bring ease in common man's life. Also gracing the occasion was Union Minister for Road, Transport and Highways, and Shipping Nitin Gadkari who shared his vision on Smart Cities and effective road, transport infrastructure.

At the summit, the Nagpur Municipal Corporation's Commissioner Shravan Hardikar, Mayor Nanda Jichkar, Maharashtra Government officials, Central Government officials, State officials and dignitaries from foreign countries like Sweden, France, and Spain were also present. The summit hosted several panel discussions on Prime Minister Narendra Modi Government's ambitious programmes such as Swachh Bharat, Aadhaar-linked transactions, Intelligent Transport Management System (ITMS), Internet of Things (IoT) as the facilitator for overall smart infrastructure, among others. Various companies linked to development of Smart Cities also showcased products on the occasion.

As Elets Technomedia, with Nagpur Municipal Corporation as its host partner, organised the big extravaganza from April 7-8, we bring to you its glimpses:







<u>Devendra Fadnavis launching the eGov</u> magazine special issue

aharashtra Government is in the process of laying a 1,200 km long fibre network in Nagpur, Chief Minister Devendra Fadnavis announced recently while inaugurating the Elets Smart and Sustainable Summit in Nagpur.

Praising Nagpur Municipal Corporation's work in the Smart City , Fadnavis emphasised that Smart city initiatives should be planned in such a way so that development of common people could be accomplished while solving the challenge of urbanisation.

The summit was organised by the Nagpur Municipal Corporation (NMC) in association with Elets Technomedia Pvt Ltd.

Also present on the occasion was Minister for Road, Transport and Highways, and Shipping Nitin Gadkari. "Whatever Smart City initiatives we are taking up, it should have the quality to enhance people's lives. The basic essence of a smart city is public participation. Every single technology can change the landscape of the city. Authorities should try to engage people using the technology. In that way, we can have a collective wisdom through which we can make the city smarter at a greater speed," said Fadnavis, adding that the ICT's backbone--infrastructure of the city--should be planned to reach people faster.

Also present at the summit were NMC Commissioner Shravan Hardikar, Mayor Nanda Jichkar, officials from the Maharashtra Government, Central Government officials, officials from other states and dignitaries from countries like Sweden, France, and Spain.

Launching special issue of the eGov magazine, the chief minister said: "The basic motto of a Smart City is accessibility and affordability. Without them, Smart Cities cannot be created. Every programme of Smart City should work towards increasing the efficiency and transparency of services, which in turn should benefit the poorest in the society."

As the capital city of Maharashtra has already been selected in the Smart Cities Mission, he said, the State Government is developing metro network covering 200 km of Mumbai.

While stating to make Mumbai a safe city, the State Government has installed 6,000 cameras across the city, Fadnavis said. Through these cameras, smart traffic is being evolved where traffic cops no longer issue manual challans. 500 hotspots in the city have already been created, making it India's first wi-fi city.

Laying importance to the waste management, Fadnavis congratulated Nagpur Commissioner Hardikar for a better solid and liquid waste management. Witnessing the success of Nagpur waste management model, Mumbai has started replicating it. Through Smart City initiatives, the state government is planning to cut the tariffs of utilities like water to make it affordable for the poor as well, the chief minister revealed.

to supply Lithium-ion battery technology to automobile sector



Nitin Gadkari Union Minister for Road Transport, Highways, and Shipping

nion Minister Nitin Gadkari has revealed that the Indian Space Research Organisation (ISRO) will provide lithium-ion battery technology for automobile sector. The technology will be provided free of cost to private sector for mass production.

"Lithium-ion battery is very important. We have decided to provide ISRO developed lithium-ion technology to everybody so that costs can be reduced," said the Minister for Road, Transport and Highways, and Shipping while participating at the Elets Smart and Sustainable City Summit in Nagpur in April.

Stating that the Central Government is also planning to set up a research institute where a laboratory will be established, especially focusedf on pollution-less fuels, he said, the Transport Ministry plans to run 50 buses on Bio-CNG in Nagpur. "About 600 to 800 auto rickshaws will also be converted to Bio-CNG soon."

Gadkari also said his ministry is also emphasising on LNG and methanol for fuel. "Within three months, we will start electric auto rickshaw and buses in Nagpur. We are going to start 320 electric taxis on experimental basis here. Nagpur is the first city where air conditioned green buses are running on bio-ethanol because we want to protect the interest of rural and agriculture sector."

Speaking on transport system in Smart Cities, the union minister said the

central government had also taken a decision to use multi-modal transport system in Smart Cities under which the airport, railway station and bus station would be set up at the same place. "This project will be implemented in Nagpur and Varanasi on a trial basis at a cost of ₹ 1,000 crore."

The minister also informed the audience that the Nagpur metro project is the first project in the country 75 per cent of the solar power.

The National Highways Authorities of India (NHAI) will construct eightkilometre hyperloop transportation that would have direct connection from Wardha road to Hingna Square on Orange City Street in Nagpur, Gadkari announced during the summit.

It will also be the first pilot project in the country and NHAI is all set to invite tenders for the project. "The project will help the civic body to augment its revenue."

He also hinted at another pilot project aimed to create a centralised and integrated infrastructure facility linking bus stops, metro stations and railway stations in the city.

Stating that the centralised facility could either come up at Ajni or Khapri, while shifting the main railway station to Khapri, Gadkari said, would be part of Multi-Model Hub and Smart City project.



MAYO



RS'CONCLAVE





NANDA JICHKAR

Mayor of Nagpur

EXCERPTS:

- Projects like green buses, recycling of waste, cement roads are being undertaken in Nagpur.
- 24/7 water is being provided to the Nagpur citizens.
- E-rickshaws and LED projects are being implemented.
- International airport at Nagpur will soon be constructed.
- Many initiatives are taking place for e-governance.



KISHORE RAI

Mayor of Bilaspur

EXCERPTS:

- In Chhattisgarh's Bilaspur, underground water treatment plant is already in place.
- Under the Atal Mission For Rejuvenation and Urban Transformation (AMRUT) scheme, surface water will be provided to the residents at a cost of Rs 212 crore.
- By using surface water, underground water can be preserved for the future generations.
- We have started using e-governance in our projects.



ASHA JAISWAL

Mayor of Chandigarh

EXCERPTS:

- Replacement of LED lighting has started in Chandigarh.
- Areas like Green Belts, neighbourhood parks, all the roads are in the process of LED replacement.
- By the end of this year, no dark places will be left in Chandigarh.
- Use of latest technology in cleaning the underground sewage is in place.

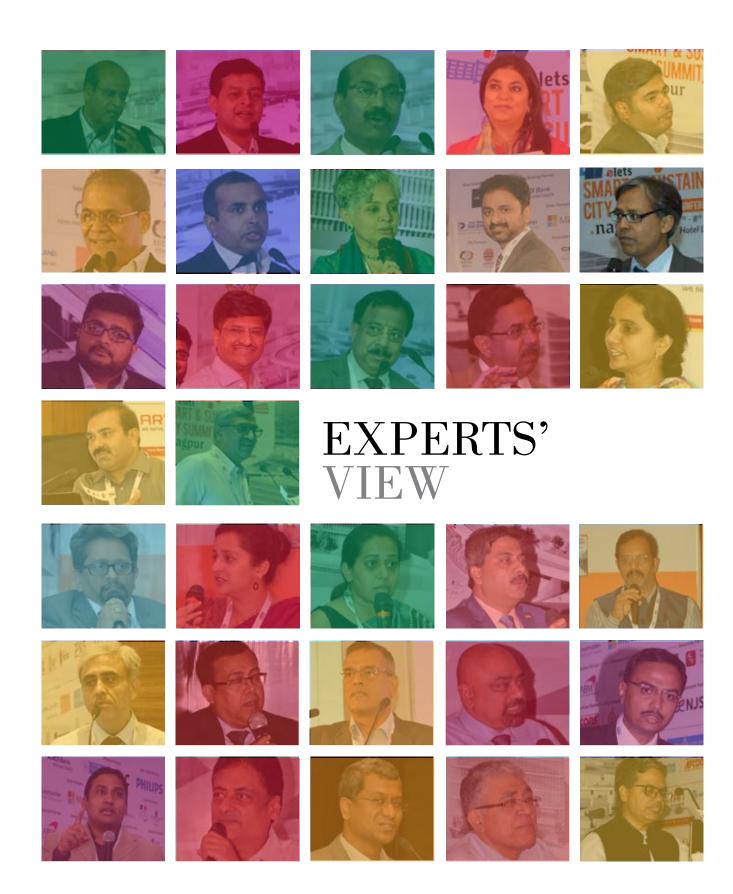


PRAMOD DUBEY

Mayor of Raipur

EXCERPTS:

- We want less people to visit the Municipal Corporation office.
- A single smart card for various utilities like electricity bills, transportation etc has been introduced.
- Air conditioners will be installed at bus stops under the Public Private Partnership mode.
- As a pilot project, 12-15 bus stoppages will be made air conditioned.
- Urinals and ATMs will be provided alongside the air conditioned bus stops.



NAGPUR ON TOP: REALISING THE BIG SMART CITY DREAM





V K GAUTAM

Principal Secretary, Information Technology Department, Government of Maharashtra

- A city's first test for smartness is to build its own capital.
- · Nagpur can really build human capital.
- Solid waste management, parking, traffic and transport management need to be developed.
- · Nagpur smart system is a sustainable system.
- Nagpur has become the first city in the country with internet connectivity in 775 Gram Panchayats and wi-fi hot spots.



KAUSTUBH DHAVSE

Officer on Special Duty for Chief Minister of Maharashtra

- The primary objective of Smart Cities Mission is to create effective and efficient cities.
- The basic principle of this mission is the creation of a mechanism to use resources more sparingly and efficiently while creating a system which is more sustainable and liveable.
- We want to create a holistic collaborative system which rides fundamentally on the ICT backbone.



SHRAVAN HARDIKAR

Commissioner, Nagpur Municipal Corporation

- Under the Smart Cities Mission, citizen is important and not the agency implementing the smart city project.
- The mission is aimed at making people's life easier.
- For installing 12,000 km of fibre, NMC is just digging 300 km of road.
- The optical fibre project will be implemented in just one-year time.
- NMC is working on urban mobility project.



ARUN LAKHANI

Chairman, Vishwaraj Infrastructure Limited

- We have taken revolutionary steps like the 24/7 water supply and proper sewerage system in Nagpur.
- With the help of the government, we were able to evolve structures which are robust, transparent and hence sustainable to make visions come true.



ANIL NAIR

Managing Director, Digitisation Acceleration, Cisco

- Different departments need to come on the same platform to make a city smart.
- Appropriate technology and command centre need to be developed.
- · Cybersecurity threat needs to be taken care of.
- The government needs to provide incentives so that environment can be protected.



HARSH CHITALE

CEO, Philips Lighting

- · Lighting has enabled intelligent smart devices.
- · Lighting has become digital through LED.
- Sensors can now be installed in LED lighting.
- Light can be controlled to get desired results.
- Nagpur is going to be the first city in India which is going to take steps towards smart lighting.



N V PUJARI

Senior General Manager, Bank of Maharashtra

- Bank of Maharashtra has maximum number of branches in Maharashtra.
- The bank has business of more than ₹ 250,000 crore.
- With digitisation and core banking solutions, we are reaching more and more citizens.



RAGHU ALLURI

Director, NCC Limited

- We have undertaken a project of providing water to every home in Telangana.
- Earlier, such projects used to take five to six years to start.
- We are starting this project in 700 villages of Telangana in just 23 months.
- Now, there is a lot of emphasis on quality and timely completion of projects.



VINEETA SHETTY

Executive Editor, Smartcity Citizen

- Role of citizens is very important in smart city mission.
- We should learn from Europe in terms of co-creation of smart districts. Barcelona is an example of that.
- Mohalla Samitis in some States help in localising the budget.



NILESH MAYEKAR

Head-Government Business, Maharashtra-Goa, ICICI Bank

- We are the leaders in various forms of banking.
- We were the first bank to launch ATMs in the Indian banking system.
- In 2008, we have launched first the mobile banking app in India.
- Last year, we launched the robotic banking. This year we are launching digital village in Nagpur.

SMART TRANSACTIONS IN THE ERA OF DIGITAL INDIA, SMART CITIES & DIGITAL PAYMENTS





· We lack proper infrastructure.

- · Physical integration is important before the digital integration.
- · Proper policy for inter-departmental integration needs to be developed.





MILIND DHARMADHIKARI

Practice Head- IT Risk & Security Management Services, Suma Soft Private Ltd

- IT Infrastructure of Smart Cities should be protected since it involves confidential information.
- · Physical assets should be secured.
- · Unauthorised tapping of fibre/power line infrastructure should not happen in Smart Cities



SANJAY CHAHANDE

Deputy Director General, UIDAI-Mumbai

- · Aadhaar Pay is a unique solution that enables merchants across the country to facilitate cashless purchases for the customer with their thumb and Aadhaar number.
- · Cardless transactions at shops, merchants and offices have increased due to Aadhaar Pay
- The application works on a low cost android phone with attached finger biometric device.



ASHWANI KUMAR

Chairman and Managing Director, Dena

- · After demonetisation, the whole system is geared up for digital payments.
- · BHIM app, UPI, RuPay, Aadhaar Pay are facilitating digital payments.
- · Dubai has gone far ahead in Blockchain technology.

SMART AND SUSTAINABLE MOBILITY



Principal Secretary, Transport Department, Government of Gujarat

- The biggest challenge is to manage urban chaos in a smart way.
- Using ICT to change the urban chaos is smart mobility.
- Hub and spoke model of urban transport should be developed.





SUSHANT NAIK

National Head-Government Affairs, Tata Motors Limited

- Europe took nine years from conceptualisation to delivery of Euro 4 to Euro 6 cars. India has taken the challenge in just three years.
- This year India will become BS4 in terms of fuel.
- By 2020, we will be leapfrogging from Euro 6 as well.
- Our automobile segment is committed to this vision.



IRAVATI DAMLE

Public Policy Leas-West, Uber India

- One-in-five trips which originate in Uber autos end at metro stations.
- By increasing the occupancy of Delhi cars by two people, more than 50% of the 27 lakh cars plying on Delhi roads can be reduced.
- The solution of solving the chaos is better utilisation of assets on the roads and right sharing.



PRANJALI DESHPANDE

Programme Manager, Institute for Transportation and Development Policy

- There has to be a control centre to manage traffic chaos.
- There has to be a unified approach for implementing the projects.
- Nagpur Metro should be connected through feeder buses run by the agency running the city buses so that no competition arises and the commuters benefit from them.

INDUSTRY PRESENTATIONS





RAHUL SAVDEKAR

Director-Industry Solutions (Government), Microsoft

- · India should start looking at unified apps.
- One single app launched by the Government of India will make life easy for the citizens.
- For Smart City initiatives, we need policy enablement, ICT innovations and targeted intervention.
- Messaging apps have surpassed everything today. This can give a new way the citizens interact with the government.



ALOK KAPOOR

Assistant Vice President (Urban Transport and Railways), Tata Reality and Infrastructure Limited (TRIL)

- In Nagpur, we have developed a big centre where TCS software employees work.
- To make the city smart, we have to make commercial spaces where people can go and work.
- In Maharashtra, we have developed a number of highways.
- For Mumbai, we have proposed three-four projects to provide last mile connectivity.



DIPAK KUMAR BASU

Deputy General Manager, Indian Oil Corporation Limited

- We are the energy provider of India.
- We have contributed for environment, energy as well as the infrastructure.
- From 1st April, 2017, we have already implemented PS4, Euro 4.
- We started LPG connection free of cost for Below Poverty Line users three months ago. We want to create smokeless environment. We have issued 56,000 LPG connections so far.



GOVIND CHAUHAN

Executive Director, ABM Knowledgeware

- Every city has a distinct flavour and challenges of its own.
- Smart city projects need to be looked upon as a complete solution of hardware and software.
- Lot of data creation is required.
- Projects need to be planned in a proper way, one needs to study every city to know about its challenges.

SMART INFRASTRUCTURE AND SMART HOUSING FOR SMART CITIES





P K GERA

Managing Director, GACL

- Every citizen is a customer of the government.
- Citizen must be heard, governance must be transparent and accountable.
- Effectively connecting the citizens with the government is important.
- Everybody wants to be a part of India's success story because we are a democracy with the right demography and demand.



SUBRAT PANDA

President, Construction, KCT Group

- We are trying to build state-of-the-art multi-speciality hospital in Nagpur.
- We are trying to provide infrastructure right at the doorsteps of people.
- Ideas like solar energy are getting developed so that infrastructure is self sustainable.



ANIL NAIR

President, CREDAI

- Nagpur Municipal Corporation has come up with an excellent idea of creating a special cell for affordable houses where sanction is given in just eight days.
- There are 4,000 units of houses that we are developing in the fringe areas of Nagpur which will contribute to the smart city concept.
- Some of the housing units have green buildings, solar plant etc.



BALAJI RAMAN

Chief Executive Officer (M&G), Indus Tower

- We are in the business of providing connectivity in various cities of Maharashtra.
- For the last seven eight years, we have invested ₹ 3,000 crores in the State.
- If the communication devices are working in Maharashtra, every three to four calls go through our network.
- We want to jointly create endeavours for the citizens in terms of quality of life.

ISO 37120 BENCHMARKING OF NAGPUR WITH GLOBAL CITIES





RAHUL BAGADIA

Secretary, Nagpur Smart City Council

- Through 100 parameters across 17 sectors, we measure the implementation of smart city initiatives of the city administration. In case of Nagpur, 82 parameters were met.
- We tracked 40 departments within NMC and outside NMC to collate all the information we were looking for.
- It is hoped all the data becomes available for more effective planning.

SWACHH INDIA FOR A SMARTER INDIA





SUNIL CHAVAN

Addl. Commissioner, Thane Municipal Corporation and CRO, Thane Smart City Limited

- We approached the builders to make them use the secondary treated water for construction.
- We are sensitising architects to save water.
- We are putting a layer of ICT tools in water supply, starting from pumping station to the house.
- Many NGOs are doing good work in constructing toilets in Thane.



RAKESH KUMAR

Director, NEERI

- Empty godowns have been used as parking space.
- Through "Internet of Pipes", we are able to find leakages beforehand. We know where the leakages are going to take place.
- We have done water safety plan in four-five cities where we identify places which are more vulnerable to leaks.
- · Nagpur is home to great innovations.



SATYAJEET RAUT

Director-Strategy, Vishwaraj Infrastructure Limited

- A sewer treatment plant of 200 million litres per day capacity is near completion and is being developed with 100 % private investment
- Vishwaraj will develop this plant in two years.
 There is a 30-year maintenance and operations obligation.
- The corporation will pay us the investment and operations part.
- The thrust is on re-use of water. The operator can approach bulk buyers to sell this water.



EFFECTIVE WASTE MANAGEMENT FOR SMART CITIES





B JANARDHAN REDDY

Commissioner, Greater Hyderabad Municipal Corporation

- We have introduced a concept called 'Unite the Family, Divide the Waste'.
- On 26th January, we counselled families which fell apart and united 156 families, and also segregated the waste.
- We identified 1,116 vulnerable garbage points in Hyderabad.
- We identified the source of garbage and counselled them through community counsellors.



P CHANDRA MOULISWAR REDDY

Commissioner, Kadapa Municipal Corporation

- There is a lack of sustainability in the waste management system.
- · Waste can be easily recycled.
- For effective management in the smart city, people participation is essential.
- Sustaining the mechanisms which are already introduced is necessary.



SANJAY S DESHMUKH

Additional Commissioner, Municipal Corporation of Greater Mumbai

- Many five star hotels have started disposal plant of their own to tackle the waste matter.
- They are odourless plants and they are using the manure for their own gardens.
- Smaller hospitals, societies, and hotels have joined this system.
- Through this movement along with other initiatives, a cleaner Mumbai will become reality in the coming years.



WATER MANAGEMENT FOR SMARTER URBAN LOCAL BODIES





T BHOOBALAN

Commissioner, Bidar Municipal Corporation

- We are providing 24/7 water connections.
- We are deploying new overhead tanks so that leakages can be checked.
- We are planning to reuse water for agriculture and other household activities.
- We have converted a social forestry by planting 2,000 fruit bearing trees on barren land.



DR UDAY KELKAR

Managing Director, NJS Engineers India Private Limited

- We wanted to develop a guidance document for India-specific need.
- We brought everybody in and developed a consensus and made a document on recycling of water in India.
- Water and energy is in nexus. We need to minimise the energy loss and water loss while recycling it.
- Generation of electricity should also be considered.



FARHAT QURESHI

Head, Social Welfare, Orange City Waters

- The main motto of the Public Private
 Partnership is to involve people in the project.
- We involved people though mohalla and group meeting, school and college programmes, being a part of various religious programmes.
- Through special programmes, people got aware about cleanliness drive.
- People approached the concerned authority to change their sewer system.



MAHARASHTRA'S TRYST WITH SMART CITY DREAM





SHWETA RAJPAL KOHLI

Director, Public Policy, Uber India and South Asia

- Uber operates in 700 cities across 75 nations.
- Over four lakh driver partners are registered in India in a short span of three years.
- Maharashtra is the only state in the country, where we have launched Uberpool in two cities namely Mumbai and Pune.





Rajat Bansal

Commissioner, Raipur

- Raipur Change Rovers is a team of volunteers who wanted to work harder for the city.
- They came into existence much before Raipur's Special Purpose Vehicle was formed.
- People can approach the administration to report unclean toilets and authority will use all its resources to make it clean.



Atika Chona

Director (Communication), Scania India

- Scania believes in energy efficiency, alternative fuels and electrification from waste fuel
- Scania is working in various cities for BRT corridors
- Customisation can be done to live with the best efficiency
- We have solutions running on biofuel, ethanol etc



Shrikant Phanse

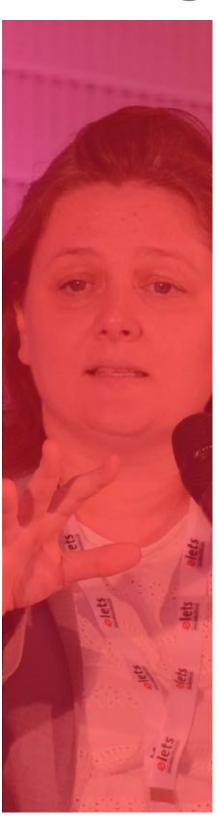
Philips Lighting

- We are number one company in LED and connected lighting
- Monuments lighting, illumination of bridges, open spaces lighting can be done in smart cities
- Through cloud based technology we can monitor the lighting, maintain them and manage it worldwide

INTER







TATO SPEAKERS







GAUTIER KOHLER

Project Chief at Agence Francaise De Development

A Brief Sketch

Gautier Kohler is the Project Chief at Agence Francaise De Development (AFD). Originally from Paris, Kohler has a Master's degree in International relationships and sustainable development from Institut d'Etudes politiques de Paris.

He was actively involved in signing a deal with Kochi Metro Rail Project (KMRL). Under the deal, AFD has provided a long term loan of Euro 180 million for the Kochi Metro Phase-1 Project. The Credit Facility Agreement between AFD and the Department of Economic Affairs (DEA), Ministry of Finance, Government of India, for the Kochi Metro project was signed on 7th February this year.

AFD has provided a credit of 130 million euros to Nagpur Metro Rail Corporation (NMRL) as well. The 20 year period credit with a moratorium of five years, will be used for funding signalling, telecom, automatic fare collection systems, lifts and escalators.



EXCERPTS OF GAUTIER KOHLER'S SPEECH

- In Kochi, we have financed Metro.
- In Kerala, we are trying to finance a plan for mobility.
- We have brought the expertise from France for urban planning in India.
- We are going to sign a rent agreement with the Minister of Urban Development (M. Venkaiah Naidu) to implement the mobilised city initiatives.

ULRIKA SUNDBERG

Consul General, Consulate General of Sweden

A Brief Sketch

Ambassador Ulrika Sundberg is the Consul General of Sweden in Mumbai, India since September 2016.

Before taking up this post, she served as Sweden's Special representative to the French Initiative on the Middle East Peace Process, as Ambassador to Ireland, to Belgium and to Pakistan between 2009-2016. She was Ambassador and senior political adviser to the Commissioner for Human Rights of the Council of Europe 2008-2009 as well as Head of the Swedish diplomatic mission in Khartoum. South Sudan 2006 -2008. Previous postings include Deputy Head of Mission at the Swedish Delegation to the United Nations and International Organisations in Geneva, working with UN-issues and reforms at the Ministry for Foreign Affairs 1996-1999 and at the Permanent Mission to the UN and UNDP in New York 1992-93. She worked as Consul and Legal Advisor at the Swedish Consulate General in New York 1993-1996, and in the Swedish Embassy in Lima/La Paz, Peru/ Bolivia 1990-92. She holds a Masters in Law (LL.M) from University of Stockholm. She has specialised in international law. human rights and conflict of laws and is Vice President of the Siracuse Institute for Criminal Justice and Human Rights since 2015.



EXCERPTS OF ULRIKA SUNDBERG SPEECH

- Administration should think about the environment protection while transforming the cities.
- I come from a country where the young population is extremely sensitive to environmental issues.
- For the betterment of the society, policies should be made citizen-centric.
- It is not about having the data, someone needs to analyse it and build products which can be delivered to the citizens.



JEAN-MARC MIGNON

Economic Counsellor, Consulate General of France

A Brief Sketch

Jean-Marc Mignon is Economic Counsellor at the Consulate General of France in Mumbai. He is in charge of Mumbai and Maharashtra-based bilateral economic and financial issues.

Prior to coming to Mumbai last year, he was International Economic Counselor with the regional Prefecture in Auvergne.

Mignon is an official from the French Directorate-General of the Treasury. He has mostly developed a career as a multilateral trade diplomat. His last assignment in this area was being the Deputy Permanent Representative of France to the World Trade Organization until 2013.



EXCERPTS OF JEAN-MARC MIGNON'S SPEECH

- Huge infrastructure needs to be built for waste management, water treatment, transportation.
- Infrastructure needs to be made smart with the help of latest
- We have brought the expertise from France for urban planning in
- Internet of Things should be promoted.

ANTONY VIVES THOMAS

Former Deputy Mayor, Barcelona, Spain

A Brief Sketch

Antony Vives Thomas is currently the Chief Executive Officer of Spain's City Transformation Agency. He is also the consultant, political advisor and policy analyst in City Transformation Agency of Barcelona Area, Spain.

From 2011 to 2015, he has served as the deputy mayor, vice president of the Metropolitan Area in Barcelona. He was also the vice president of the Port of Barcelona at Barcelona City Council. He has been responsible for the Smart City and urban innovation strategies in Barcelona, leading over 10 municipal and metropolitan bodies. During this period, he was also in charge of the internationalisation of Barcelona, leading the city branding abroad, attracting investment and connecting catalan companies to the world.

During his leadership, Barcelona received numerous awards, including the 2014 European Innovation Capital (European Union), the 2014 Challenge Award Mayor Bloomberg Philanthropies (Vincles Project) and 2015 Juniper Research Ranking 1 Global Smart City.

Thomas is also the founder of the Institute of Advanced Architecture of Catalonia. He graduated in Business Administration from the Barcelona University and undertook the Leadership Public Management Programme, IESE, Madrid.



EXCERPTS OF ANTONY VIVES THOMAS 'S SPEECH

- Smart Cities face double challenge. There is a need to have strong vision for the coming years without which Smart Cities cannot move forward.
- We need to develop short and quick ways to develop smart cities. Smart City solutions need to deliver the results in every six month
- I don't believe in dashboards because nobody keeps a track of things on the dashboard.



CÉCILE LEEMANS

Programme Manager, Partnership Instrument, European Union

A Brief Sketch

Cécile Leemans is in charge of the **Foreign Policy Instruments projects in** the European Union (EU) Delegation to India, based in New Delhi. Since 2016, she has been responsible for the successful implementation of technical cooperation projects between the EU and India in the sectors of water, clean energies, climate change, resource efficiency and urbanisation.

Leemans joined the European Commission in 2009, working in the EU Delegation in Malawi as programme manager of development cooperation in infrastructures of Transport, Water and Energy.

She started her professional career as construction engineer for water and waste water treatment plants in France. Following which she started working with Action against Hunger in Bangladesh and South Soudan, leading emergency and recovery response projects in water, rural development and infrastructure.

Leemans holds a Masters of Science in Environmental Engineering acquired in France and Canada, as well as a Post Graduate Diploma in Public Heath from the London School of Tropical Medicine and Health.



EXCERPTS OF CÉCILE LEEMANS SPEECH

- Smart governance is a two-way flow of information and services between the government and the city stakeholders.
- Smart governance should be open and data oriented.
- Smart economy should be a mix of e-business and e-commerce.

PROFESSOR IONNIS MINNIS

Partner, M Prime Advisory Services

Excerpts of Ionnis Minnis's Speech

- One aspect of mobility is to use the public transport and manage the chaos.
- Many agencies are doing great work in transportation individually but together they are not integrated.
- Reduce the number of trips, retime and rerouting can help India's transportation go forward.



ELETS TECHNOMEDIA PVT LTD THANKS OUR COUNTRY PARTNERS FOR PARTICIPATING IN SMART AND SUSTAINABLE SUMMIT - NAGPUR



