

# THE MAKING OF ELECTRONICS CITY INDUSTRIAL TOWNSHIP

How Karnataka's first
INDUSTRIAL TOWNSHIP AUTHORITY
made Electronics City
a futuristic model
for the rest of India.



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Electronics City today, is a modern, bustling township, gearing up to become a futuristic smart city. Situated on the Bengaluru-Hosur highway, it has all the ingredients for a modern-day industrial estate that can effortlessly oblige the needs of the future well-maintained public amenities, neatly asphalted roads lined with trees and safe, inclusive spaces. The township also stands out for its dynamic governance and community engagement which ensures that the needs of its expanding population are met. The growth of Electronics City was no magic; it took years of collective leadership, administrative realignments and forethought to make it a model township for the rest of the country.

#### **BACKGROUND**

Situated in the outskirts of Bengaluru, Electronics City is counted among India's largest electronics industrial parks and is home to a mix of small, medium and large companies. The member companies mainly belong to a combination of allied industries such as IT/ITES, electronics, hardware, design and manufacturing. Established in 1978 and spread across 903 acres, Electronics City is where many renowned Indian and global software majors like Infosys, Wipro, Tech Mahindra, Siemens, HP and Tata Consultancy Services have expanded their presence in Bengaluru.

The industrial area is carved out of villages in three local panchayats: Konappana Agrahara Gram Panchayat, Doddathogur Gram Panchayat and Veerasandra Gram Panchayat.

For over 20 years, the industries body Electronics City Industries Association (ELCIA) managed the industrial area and took the responsibility of road maintenance, water supply, street lighting, sewage and waste disposal, improvement of transport facilities, as well as safety and security. While the West Phase (also called Phase I) was handed over to ELCIA in 1997, the East Phase (known as Phase II) came under ELCIA management in 2008.

In 2003, the Government of Karnataka (GoK) amended the Karnataka Municipalities Act 1964, to include a chapter on the formation of Industrial Township Authority. ELCIA submitted a proposal to GoK to declare Electronics City as an Industrial Township Area.

## **Pioneering Industrial Township**

In 2013, the GoK, in a first in the state, declared Electronics City as an industrial township area to be governed by its members under the Karnataka Municipal Corporations Act and constituted the Electronic City Industrial Township Authority (ELCITA).





#### THE ELCITA COMMITTEE

The first administrative committee of ELCITA nominated by GoK included five members chosen from companies in Electronics City; two representatives from large enterprises having more than 10,000 employees and three members from small and medium companies were part of the team formed for three years. As per the Karnataka Municipalities Act, the government also nominated three members, one each from Town Planning, Urban Development and the Department of Industries and Commerce. The president of the Konappana Agrahara Panchayat was also nominated as a member. ELCIA's current and immediate past presidents were co-opted as invited members, to the committee.

At the end of three years, since election rules were still in the process of getting formulated, it was decided that the same committee would continue for another year or until the election rules are formulated, whichever comes first. In early 2017, GoK gazetted the rules for election and elections are to be conducted shortly.

During the first ELCITA committee meeting,
Rama N S was elected as the ELCITA CEO.

Committee members who represent the Government and Panchayat have been nominated by the GoK and have changed from time to time.

ELCITA inducted the current president and immediate past president of ELCIA for the committee as invited members.

# How the ELCITA Committee was Formed



Members from member companies



Member from Panchayat (nominated by Govt of Karnataka)



Members from State Government (nominated by Govt of Karnataka)



Members co-opted as invited members

# **ELCITA** Committee, Formed on 10th May, 2013



Kiron Shah Chairman



Ramdas Kamath Member



**Hari Hegde** *Member* 



Raj Narayan Member



**MV Nagaraj** *Member* 



## Transition of Municipal Functions from ELCIA to ELCITA

Prior to 2013	From 2013 Onwards
ELCIA maintained Electronics City	ELCITA manages Electronics City
Around 800 acres	Grown to 900 acres
Property tax paid to Panchayats	Property tax collected by ELCITA 30% of property tax goes to village panchayats
AMC paid to ELCIA	Khata and building approval by ELCITA
ELCIA security	Safety and Traffic
CISF for West phase	CISF in both East and West phases

During the first ELCITA meeting in May 2013, it was debated whether ELCIA should continue to maintain the estate. One suggestion was to allow ELCITA to outsource the maintenance activities to ELCIA, which would adopt a subcommittee approach to continue the operations. Considering that this would involve issues related to the income tax/service taxes and pose challenges for the exercising authority in collecting taxes and implementing enforcements etc., this idea was abandoned.

The transition was a process that involved many intricacies including transfer of assets, functions, finances, records from village panchayats and human resources.

Considering the extent of work involved, it was decided to complete the transition by November 1, 2013. The following were part of the transition process:

- All assets were listed and evaluated as on date and transferred to ELCITA. The formation of ELCITA implied taking over all the activities related to the management of the estate, from ELCIA, by the end of 2013. The written value of the assets transferred to ELCITA amounted to INR 1,65,92,425 which was approved by the members in the EGM held on November 6, 2013.
- All staff members working for ELCIA, including those assigned through agencies were transferred to ELCITA for the same remuneration.

- The above transfers required the combined forces of ELCIA and ELCITA personnel and the transition was completed by November 2013.
- Transfer of assets from KIADB and KEONICS was completed.
- During the transition year, before ELCITA came into existence, ELCIA had begun to collect AMC from members and among them were members who had paid property tax to village panchayats. After the ELCITA notification dated 10/7/2013, the township authority began to collect property taxes, giving credit to payments already made to ELCIA. The process for property tax collection was then regularized.



## **Challenges Faced During Transition**

The transfer of property records from the village panchayats was a herculean task. Records were incomplete, illegible, even inaccurate in some cases. Documents were handwritten, or in hard copies, causing delay. This required calling for help from experienced, retired municipality officers to extract the right records. ELCITA had to move the records from Form 9 to Form 24 of CMC. Even today, there are cases being transferred as and when they are found.

Collection of property tax, management of khata and building approvals were new areas for ELCITA team, where more focus and training were required. Retired government officials were hired to help ease the transition, understand the processes and meet the requirements.

Though relevant records were transferred, the revenue department's software was yet to be updated to serve the industrial township. One ELCITA member who could not register his property highlighted the issue and ELCITA had to work with Rural Development and Panchayat Raj Department (RDPR) department at the highest level to resolve the issue. The registration was possible when the properties of Industrial Township were listed under CMC in the App.

While tangible items were transitioned with little or no hiccups, the transition of mindsets, of the ELCITA teams and citizen companies was a larger task. While many understood and accepted the new concept of Industrial Township Authority, some of them continued to ask "What is ELCIA! ELCITA?"

ELCITA committee meetings are held every month to strategize and take decisions on major issues. The committee also reviews financial performance and gets an update on the progress made during the month. The execution team is responsible for planning and implementing.



#### **VISION**

To build and maintain a model industrial township that will focus on providing industrial infrastructure to facilitate innovation, enterprise, growth and high productivity. We will do this in a spirit of empathy and inclusiveness while maintaining transparency, mutual trust and respect in all our interactions.

## **ELCITA Principles**

ELCITA is founded on a set of principles that it upholds in its management and activities.

## Inclusion

We will be governed by inclusive processes that take into consideration the needs of all our stakeholders through consultative processes.

#### Collaboration

We will collaborate on projects for the benefit of all members in the estate.

#### **Excellence**

We will ensure excellence in all our interactions and projects.



#### **Chatham House Rules**

We will govern the confidentiality of individuals and information exchanged at meetings with a view to allow free expressions and discussion.

## Fair Play & Dignity

We will conduct ourselves with dignity and uphold ethical practices.



## **ELCITA Logo**

The ELCITA logo is a Morse code representation of the name and was designed by Abhay Cheema Design Studio, Bangalore. The logo was formally approved during the ELCITA meeting held on September 20, 2013.



#### **ELCITA'S FUNCTIONS**

The functions of ELCITA are laid down as follows, in section 364F of Karnataka Municipalities Act, 1964:

"It shall be incumbent on the Authority to make adequate provisions by any means or resources which it may lawfully use or take for each of the following matters within the Industrial Township, namely:

- 1. Regulation and construction of buildings;
- 2. Planning for economic and social development;

- 3. Roads and bridges;
- 4. Water supply for domestic, industrial and commercial purposes;

.....

- 5. Public, health, sanitation, conservancy, solid waste management and fire services;
- Urban forestry, protection of environment and promotion of ecological aspects;

- 7. Safeguarding the interests of weaker sections of society, including handicapped and mentally retarded and improvement of slums;
- 8. Provision for urban amenities and facilities such as parks, gardens and playgrounds;
- 9. Burial grounds and crematoriums;
- Public amenities including street lighting, parking lots, bus stops and public conveniences;

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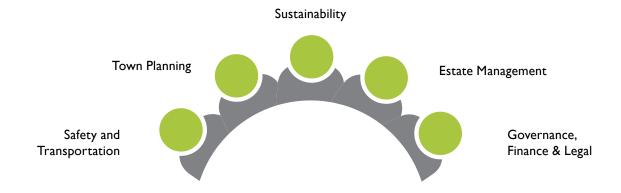
- 11. Regulation of slaughter houses and tanneries;
- Any other matter as may be prescribed."

## **Expert Groups**

ELCITA decided to use the expertise of member companies to perform its functions that required a multi-pronged approach. Overall, ELCITA adopted a focused, integrated and inclusive approach, involving specialists and creating expert groups.

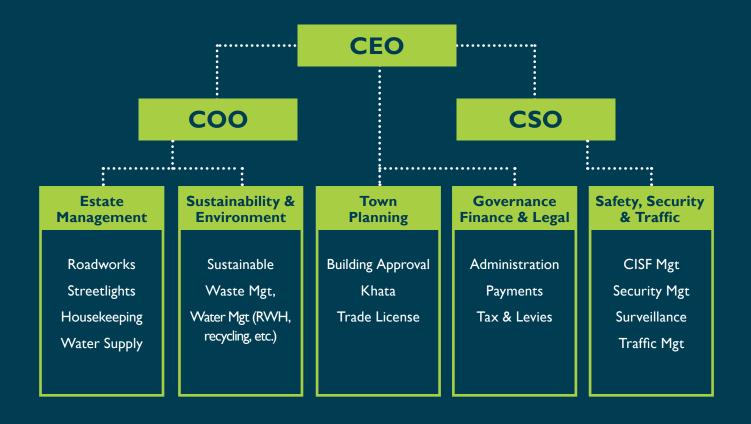
In May 2013, representatives of companies in Electronics City volunteered to form committees under ELCITA to create roadmaps and to lay the foundations for the management of key areas of development.

Five sub-committees were formed for effective functioning and members of these sub-committees were drawn from companies who had expertise in the relevant areas.



## THE EXECUTION TEAM

The execution team of ELCITA Committee, appointed by the ELCITA committee and headed by the ELCITA CEO is functionally organized as below:







# ELCITA OPERATIONS





## **GOVERNANCE, FINANCE AND LEGAL**

Governance at ELCITA is a crucial function that ensures that the authority has clear rules and mandates to follow while leading the township. Pre-defined governance mechanisms to define the taxes and other charges, as well as the regular updates of transactions on the website make the system transparent and straightforward. The website also has provisions to offer information on the authority's budget and expenses and for seeking RTI disclosures.

ELCITA's initiatives to build governance mechanisms and streamline the processes contributed significantly towards laying strong foundations for a modern township.

#### Key Steps

- ELCITA adopted the building bye-laws of BDA, with minor modifications as ELCITA bye-laws for building norms.
- The first document that the ELCITA team took up was the process document, an internal document laying down the guidelines for how the township would function and be managed. It gave function-specific directives for management, across Governance, Finance and Legal, Town Planning, Estate Management and, Security and Traffic. A process to deal with RTI was designed, with the CSO appointed as the Information Officer.
- Indus Law, a law firm was appointed to advise ELCITA on legal issues and to ensure that processes were legally right.

A Citizen Charter was formulated. As the name suggests, this was meant for the citizens of the estate - the member companies, residents and properties within ELCITA jurisdiction. The Citizen Charter documents the processes and delivery of ELCITA services and has clear guidelines on grievance redressal, tax payments, trade license application and receipt, khata registration, transfer, amalgamation and bifurcation as well as applications for building license and related processes.

While issuing of khata and building approvals would be part of town planning, the rate of property tax, license fee and Khata fee are decided by the Governance, Finance and Legal team.





## Finance and Budget

Finance management involves making adequate funds available for the township, along with checks and balances. The process document details the approval process. The internal auditor conducts monthly audits and, the audited monthly accounts are published on ELCITA website.

A decision on the tariff for taxes was based on the budget requirements of various developments of the township. During monthly meetings of ELCITA, major decisions on expenditure are discussed and approved.

All payments and receivables are made online. Housekeeping and security teams are also paid through bank transfer and due to this, demonetisation did not affect the ELCITA team.

#### **Budget Preparation**

ELCITA budgets are prepared based on the project proposals by different departments, the funds available and suggestions by the ELCITA committee. Once the committee approves a budget, it is sent to the Urban Development Department, GoK.

# Well-Defined Payment Procedures

Vendor bills at ELCITA are approved and payments disbursed promptly, most often in no more than 12 days' time.

## Fixing of Property Tax Tariff

Property tax considerations were taken to cover expenditure. The decision was to ensure that the increase did not burden the member companies while covering the financial requirements of the township. ELCITA trod cautiously on fixing the tax. The aim was to be judicious with the levy.

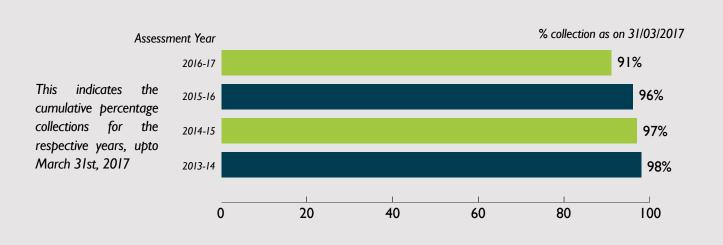
ELCITA introduced an interest on the tax to make citizens more responsible. Non-payment of taxes by the first quarter, affects the cash flow of ELCITA, which in turn negatively impacts development works. Hence it is made mandatory for member companies to pay taxes by June 30, beyond when interests would be charged. ELCITA wants to move towards 100% tax collection from the current 94-95%.

## **Collection of Property Tax**

One of the first decisions in ELCITA's governance team was to fix the property tax that would be required as per budget and acceptable to companies.

The authority initiated tax assessments based on self-declaration made by the owners. However, it later moved to a process-oriented taxation based on an "as-built," or actual, verified plan of the properties involved. GIS-based surveys are undertaken by ELCITA teams to avoid anomalies and make property taxation accurate and fair.





## ELCITA's efforts to bring all the members under the tax net continues. Pending tax payments for the earlier years are still being collected and is nearing 100%.

FY	% increase in revenue over previous year
2015-16	5%
2016-17	8%

## **Tariff for Taxes**

Property tax	2013-14	2014-15	2015-16
BUA (per sq. ft)	2.50	2.60	2.60
Vacant area (per sq. ft)	0.50	0.50	0.50
26% cess on total property tax	0.65	0.68	0.68
Safety & traffic management fee (per sq. ft of BUA)	0.85	1.25	1.25
Public utility charges/sq. ft of BUA	-	0.50	0.50
Total levies/sq. ft BUA	4.00	5.03	5.03



#### Before 2013 - 2014

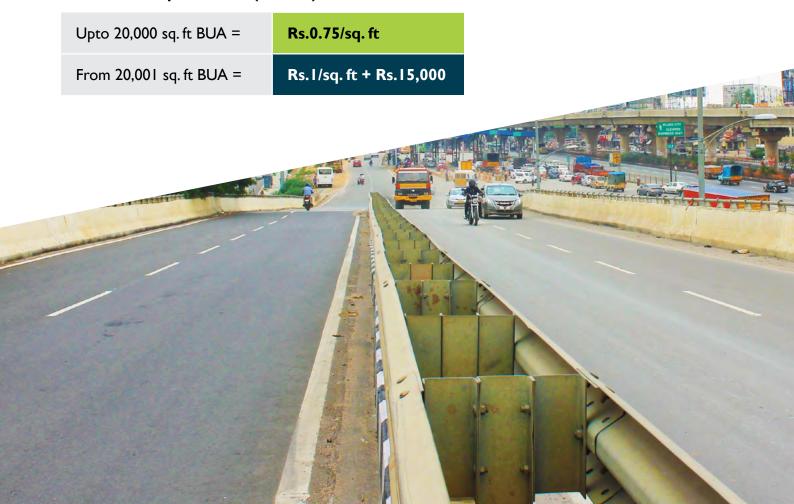
Prior to 2013-14, companies paid Rs 3.2/sq. ft, including Rs 2.00 per sq. ft as AMC to ELCIA and Rs 1.20 per sq. ft to the Panchayats.

ELCITA has sought financial assistance from the government through the Directorate of Municipal Administration. Currently, the township manages with balance monies after remitting 30% of property tax collected to the three Gram Panchayats of Konappana Agrahara, Doddathogur and Veerasandra.

## Infra Fee for Upgradation of Infrastructure

When Metro chugs in to Electronics City, thousands of people will come out of stations, which means we need an effective system to move them to companies. ELCITA plans to have an elevated walkway so that employees need not walk on the narrow roadside but directly reach their work places via walkalators. Towards this, during 2016-17, infra fee for new/additional construction and additional infra cess along with property tax was levied.

#### Infra Development Fee (Annual) from 2016-17





## **Notifications**

ELCITA communicates its policies and updates to members and residents in its jurisdiction through notifications.

#### **List of ELCITA Notifications**

#### 2016-17

l.	01/04/2016	Property tax & other levies
2.	01/04/2016	Solid waste management
3.	10/02/2017	Declaration of property details

#### 2015-16

1.	16/03/2015	Solid waste management
2.	23/03/2015	Property tax & other levies
3.	13/05/2015	Tariff for CISF deployment charges in Electronics City
4.	18/05/2015	Road naming charges in Electronics City

#### 2014-15

1.	26/03/2014	Property tax & other levies
2.	27/03/2014	Deployment of CISF in Electronics City & applicable tariff

#### 2013-14

I.	10/07/2013	Property tax & other levies
2.	01/12/2013	Interest on delayed payment of property tax & safety & traffic management charges for 2013-14
3.	24/12/2013	Advertisements & promotional activities
4.	02/01/2014	Submission/procurement of trade licence
5.	02/01/2014	Submission/procurement of occupancy certificate
6.	02/01/2014	Solid waste management

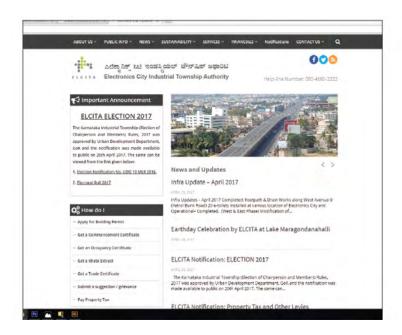


#### **Communication**

ELCITA communicates regularly about its activities and those of ELCIA through respective websites, newsletters and LED displays.

The authority is very active on social media, reaching out actively to the public through Twitter and Facebook. These media are also used to update the public about ELCIA and ELCITA initiatives, for grievance redressal and to garner public participation in some of its campaigns.

Member communications are mainly through e-mails and SMS.



Members of the township, their employees, or any concerned citizen can reach out to the township authority on grievances related to the upkeep of common infrastructure or the lack of it, even on the ELCITA portal. Such issues are promptly addressed.





#### e-Governance

The introduction of e-Governance took ELCITA one step closer to achieving its goals of being an efficient administrator and modernising the township management. In August 2014, ELCITA moved to paperless administration and has since deployed a customized software to manage the administrative requirements.



#### **Paperless Office**

ELCITA implemented paperless office for its administrative purposes in 2014-15. ELCITA has implemented this system for approvals, collection of taxes, trade license, water billing, etc. Automation has streamlined the processes and made grievance redressal easier. Tracking, retrieving and file management of documents such as trade licenses and other public documents, became more efficient and on-click, with the use of the software. While communication to all members is via emails, hard copies are printed only to communicate with Govt.

## **Transparency**

Data related to work orders, budgets, tenders, notifications and payments are all published on ELCITA's website and made accessible to all citizens.

#### e-Procurement Software

The Karnataka government's e-procurement portal is used for all procurements, to ensure transparency. Since many of ELCITA's works are outsourced, e-procurement provides for transparency in the procurement process.

Considering the risks involved in IT systems and data security, an audit of the processes was conducted and the findings are being incorporated by ELCITA.



## Ground Penetration Radar (GPR) Survey of Electronics City in 2016

ELCITA commissioned Secon Private Limited to conduct a study of the 903 acres in Electronics City to develop a property inventory database of ELCITA properties in its jurisdiction, along with a web-based Geographical Information System. Secon won the tender and works for the survey was launched in 2016. The study, nearly completed, includes a detailed property survey that touched upon:

- a. Property and topographic survey
- b. Plot inventory of each property and building in Electronics City
- c. Roads
- d. Storm water, drainage, power and water supply systems

The findings of the survey were integrated into a web-based GIS Management Information System that was customized to suit the needs of ELCITA in administering its municipality functions. The purpose of the system is to provide support for asset inventory, infrastructure management and e-Governance, with information on property size, ownership, size, physical address, topography, land use, etc.





## **TOWN PLANNING**

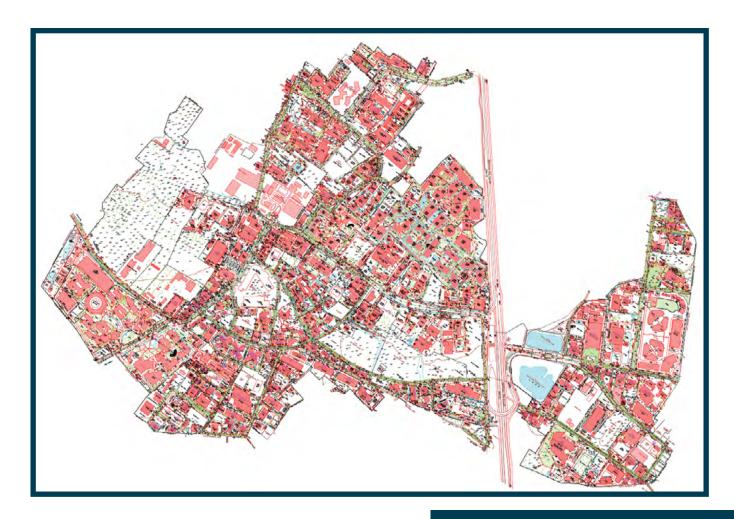
ELCITA's town planning role works towards achieving its vision of building a 'Model Township' in Electronics City with world-class facilities, in an inclusive and eco-friendly environment.

To educate the taxpayers on the process and to encourage adherence, there are initiatives to offer all the requisite guidance to citizens on the bye-laws and to guide them on making relevant payments. The aim is to ensure that statutory and mandatory actions are taken automatically and easily by taxpayers.

Town planning division ensures that all the statutory rules are followed and issues the rules to be followed during construction and approvals to be obtained both from ELCITA and external agencies.

It considers the guidelines from Fire Department, Airport Authority, National Building Code, the National Green Tribunal, Pollution Control Board and Bangalore Development Authority from time-to-time, to administer the bye-laws.

As the township has narrow roads, the challenge is to ensure quick and efficient commute that indirectly affects economic growth. For its part, ELCIA has made efforts to obtain Development Rights Certificate from Bangalore Development Authority for companies who surrender their land free of cost for road widening purpose. Electronics City has very little land available for development and redevelopment and vertical growth is the only way to add more built-up space.



Map of Electronics City, West and East Phases



## **Building Approvals**

The processes involved in issuing building approvals has been streamlined by the Town Planning Division, leading to quicker processing. A software for building approval is being tried out and needs some more improvements.

The function also involves updating property records and identifying tax deviations. Often, it also means ensuring that the licence holders do not stray away from the scope of the licence awarded to them.

Town planning stipulates the processes to be followed during construction, to get a building licence. There are specific stipulations for industrial buildings.

#### Some of the important prerequisites for building licenses are:

- a. A copy of Allotment Letter, Possession Certificate, Lease-Cum-Sale Deed/Sale Deed, Khata Certificate, latest Tax-paid Receipt and NIL Encumberance Certificate.
- b. Copies of plans for existing buildings as approved by KIADB/KEONICS
- c. Site plan for entire sital area showing the existing buildings, if any, & the proposed buildings with floor-wise area statement and calculations for floor area ratio (FAR), ground coverage and parking requirements.
- d. Floor plans & terrace floor plan
- e. Sectional view & elevation
- f. Clearances where applicable, from Fire Department, Airport Authority, Pollution Control Board, Bangalore Development Authority and in rare cases from Karnataka Power Transmission Company Limited (KPTCL)

## **Building License Fee**

Any person intending to construct/ reconstruct/ alter any building under sections 299, 304 & 312 of the KMC Act shall pay to the authority the building licence fee as prescribed by the authority.

## The licences are also granted based on certain parameters as mentioned:

Area of site, height of tallest building.

Width of public road as determined by KEONICS or KIADB Master Plans with ELCITA, FAR, ground coverage, among others.

The requirements also include clear stipulations about details such as height of the buildings, parking requirements, elevators, projection of balcony, provision of refugee area, the arrangement of internal staircase, provision of rainwater harvesting and fire protection among others.

ELCITA mandates that the provision of rainwater harvesting should be included for all plots that are more than 240 sq.mt in area.



## Tariff for plan sanction for buildings calculated on total built up area

Licence fee (commercial/industrial building)	Rs. 75/- per sq.mt
Ground rent (educational institutions, cultural and religious buildings are exempted subject to conditions)	Rs. 100/- per sq.mt
Scrutiny fee	2% of licence fee subject to a minimum of Rs. 25,000/-
Copies of sets of sanctioned plan  • Sets of I to 5  • Sets of 6 & above	Rs. 400/- each Rs. 600/- each
Security deposit (refundable if deviations are less than 5% of the sanctioned plan)	Rs. 100/- per sq.mt
Construction Labour Welfare Cess	1% x Rs. 13,000/- per sq.mt

## Details of new assessments in property tax and differential payments over the years

FY	New assessments	Differential payments & additional constructions
2016-17	H	18
2015-16	15	44





## **ESTATE MANAGEMENT**



Estate Management is one of the main pillars of ELCITA and takes care of the maintenance of township infrastructure and utilities management such as water supply and street lighting.

The team also collaborates for the management of sustainability initiatives. For instance, sewage from small & medium industries that do not have a Sewage Treatment Plant (STP) are treated at ELCITA's 300 KLD STP as per the KSPCB norms. Estate Management is also involved in upgrades of drains along with rainwater harvesting before every monsoon. The functions also include construction of new roads, footpaths, streetlights, RCC drains, culverts and service chambers.

## Housekeeping

Estate management looks after housekeeping for the Estate, regularly cleaning the roads and public facilities, to maintain them in the finest condition and improvise on an ongoing basis. This includes managing landscape, trees, upkeep of street lights, water lines, drains. The tasks are outsourced and closely monitored.

One of the key initiatives of the Estate Management team is to lead the efforts to make Electronics City a Smart City.





ELCITA's housekeeping staff are provided uniforms, protective gear, tools and equipment to ease their jobs. They also get free medical check-ups. Housekeeping is disciplined and follow pre-set schedules for cleaning.

The housekeeping team consists of trained workers, who also assist in waste disposal based on the Karnataka State Pollution Control Board norms. The scope of their work include the following:

Cleaning of roads and pavements daily. Two rounds of cleaning the main roads, starting 6.00 am and closing by 3.00pm every day.

Cleaning, de-silting of storm water drains.

Pest control using herbal products.

Landscape maintenance, watering plants and trees.

Clearing garbage on the roads.

Cleaning and maintenance of kerb stones and walkway pavers.

Cleaning electrical items, communication equipment, poles, railings, direction boards, waste bins and cross drains, regularly and whenever required.

Auditing trees in the estate for health and doing regular pruning, termite treatment, watering and other maintenance of trees and shrubs to ensure sufficient green cover at Electronics City Industrial Area.

Pruning of trees to avoid blocking street lighting/security cameras on advice of ELCITA.

Co-ordinating with BWSSB staff/concerned officer to release water as per the demand. Ensuring supply and demand are well within control.

## A team of 114 workers are involved in housekeeping within the Estate.





Free eye check-up camp for housekeeping staff



## **Maintenance of Roads**

The Estate Management team works on all the roads within the township and widens junctions to ensure smooth and easy vehicular movements.

## ELCITA aims at 100% pothole free roads within Electronics City.

- a. For this, ELCITA uses instant cold bitumen asphalt which can cover any pothole immediately and later, once in two years, the team asphalts the complete stretch of the road, if required.
- b. Shoulder drains are constructed at regular intervals, across the walkways connecting the road and the drains so that all the storm water on the roads flows into the drains. This prevents water stagnating on the roads and curtails potholes formation.
- c. ELCITA has built several speed breakers wherever required and based on the feedback from the citizens.

## **Junction Improvements**

Road geometries, especially at junctions, are monitored and continually improved, to enable easy vehicular movements. This is done through:

- Replacement of bulky RMUs to make space on the pavements.
- Increasing the turning radii on the roads where needed.
- · Widening the roads wherever possible.

During the last three years, Infosys avenue, Wipro junction, area near Toll plaza and Siemens junction, have been improved for better commute with the support of companies. Neeladri Road, covering Wipro Gate 16 has been improvised with drains. This involved moving of 7 RMUs and other equipment from the pavements.



## **Reclaiming Pavements**

The Estate Management team manages the upkeep of pavements on an ongoing basis. Damaged pavements are promptly repaired; pavers are laid on footpaths and concrete drains are built with cover slabs so that pedestrians can walk safely and freely.





#### Water Management

The team handles water management within Electronics City. The scope of the work spans:

- Water distribution BWSSB supplies I MLD of Cauvery water to ELCITA's centralized sump and from there it is distributed and billed monthly based on the consumption read in the water meters of the companies. Along with this, ELCITA also supplies borewell water to needy member industries.
- Fixing water meters to track water consumption within the township.
- Revamping the water storage facility for better distribution of water.
- Maintaining leakage of water within 5% by regular measurement and upkeep.



#### e-Toilets

This was an initiative that the township launched in 2015 to improve public sanitation. Electronic toilets or e-toilets are automated toilets fitted with bio-digesters and with options for controlling the entry, usage, cleanliness of the units. E-toilets are engineered to save water and for sustainable sanitation. So far, 20 e-toilets are operational within the township.

With the e-toilets, ELCITA has curbed open defecation in Electronics City. The user statistics indicate that the initiative is relevant and well received by public. For instance, in the second week of March 2017 alone, 3715 people used ELCITA's 16 e-toilets.



## **Upgrade of Infrastructure**

## Street Lights and Surveillance

All Sodium lamps in the township will be replaced with the more luminous LED lamps. This will involve replacing 350 streetlight lamps and modifying 220 light poles. Existing street light poles will also accommodate cameras which can be used for surveillance, traffic management and parking facilities in Electronics City. More surveillance cameras, 200 new ones for the West phase and 100 for the East phase will be installed in phases. LED displays are being planned in entry points like HP, Y Junction (East phase). 3M has worked on a display near Toll plaza.



- Roads built since May 2014
   10.24 kilometers
- Drainage works completed since May 2014 – 9.56 kilometers



### Support to Villages

As a goodwill initiative, the Estate Management has improvised the roads and drainages in the adjacent villages near Electronics City. The civil works undertaken by ELCIA Trust are also managed by ELCITA team.



#### **Toll Plaza Area Enhancement**

ELCITA improvised the facilities near toll plaza in West Phase by widening the roads. A bus bay was set up under the flyover near the toll plaza; and landscaping the median under the flyovers is under progress.



## Wipro-Neeladri Road Junction

ELCITA enhanced the Wipro-Neeladri Road Junction by expanding the pavement area with more space offered by Wipro, building the compound wall and asphalting the road at the junction.



### **Infosys Drive Junction Improvement**

The Infosys Drive Junction was enhanced by expanding the pavement area with additional space offered by Infosys. ELCITA also asphalted the road at the junction.

## Civic Amenities at KSSIDC Complex

ELCITA improvised the amenities near the Karnataka State Small Industries Development Corporation complex in West Phase, as it is a facility frequented by working professionals in Electronics City. The complex is a public facility that houses the traffic and civil police stations. ELCITA undertook the following works at the complex:

- a. Asphalting the busy roads adjacent to the complex
- b. Building underground drainage at the complex
- c. Constructing a 100 KLD septic tank
- Setting up two additional e-toilets near the complex in addition to the two existing ones to address the needs of the public



## **SUSTAINABILITY**

Sustainability is a culture that ELCITA fosters in every sphere of its work. The team works in tandem with the other departments to ensure that a commitment to conserve natural resources, is ubiquitous.

Green living is actively practised at ELCITA. For instance, visiting dignitaries are invited to plant saplings. Trees are not cut, but transplanted wherever possible. Green cover in Electronics City is methodically guarded and cared for.

Water conservation, solid waste management, alternate power, e-waste management and waste water management are functions of the sustainability group.

Sustainability as a focused effort of ELCITA began in 2014. In recent years, ELCITA has made impressive strides in gathering all its stakeholders to implement green initiatives. The scope of the department mainly involves supporting waste management for all companies, common areas, green facilities, water conservation and promotion of eco-friendly and sustainable initiatives within the estate and its neighboring villages.





## **Solid Waste Management**

#### **Facility**

ELCITA built a solid waste management facility towards responsible waste management for the companies in the Estate in the year 2011. Wastewise Management and Consulting Services (WWM & CS), a private waste management firm along with Mindtree's social technology platform iGot Garbage, work with ELCITA towards its mission of 'Zero Waste to Landfill.' Most recently, the facility was enhanced with smarter features, such as fitting customized conveyor belts, designing and implementing new processes to manage the work with the help of the SweepSmart team.

## SweepSmart Collaboration

The social enterprise from Netherlands collaborated with ELCITA in the recent months to improvise the systems and processes at the solid waste management facility and also for a better work environment for sorters. A new conveyor system was introduced. The partnership is a validation that ELCITA's waste management initiatives are among the best and most efficient among such organizations in India.



#### **Waste Characterization Study**

A waste characterization study was held regarding the Estate's municipal solid waste. The aim was to understand the waste composition to design an adequate collection, transfer and waste treatment system. The characterization study was done by the Institute of Sanitary Engineering and Waste Management – University of Hannover, Germany (ISAH), the Forward Foundation and a team from Velankani.





## e-Waste Management

#### e-Waste Management Survey

ELCITA has initiatives in place to support member companies towards responsible e-waste management. The focus is on low and negative value e-waste in medium and small companies. The authority created an e-waste committee comprising ELCITA, HP and Wipro after which ELCITA assigned Australian company Infoactiv to conduct an online survey and workshop to understand the practices and key challenges in e-waste management for member companies. During the survey, Infoactiv assessed the practices and processes in e-waste management for a set of 15 companies. A report including the policy, guidelines, types of e-waste and handling, process kit, FAQs and environmental benefits of e-waste recycling was submitted to ELCITA.



# e-Waste Collection Centre

The report is available on the website.

Based on the study, ELCITA set up an e-waste collection centre after getting KSPCB clearance. e-Waste is collected using the ELCITA waste vehicle and is then disposed to the audited recycler.

## **Organic Waste Treatment Plant**

The ELCITA organic waste treatment plant is used to compost the leaf litter from the segregated waste collected from the roads of Electronics City. The road waste is segregated as wet, dry and reject waste on the road by the housekeeping team under ELCITA. The segregated waste is then brought to the KIADB land from where all dry waste is sent to ELCITA SWM vendor for recycling. The garden litter is shredded and composted, using treated water from ELCITA CSTP. The compost is sold back to the industries.





The twin aims of the sustainability initiatives are to achieve zero usage of disposables, and 100% segregation of waste.

Waste segregation at source	Non-usage of single-use disposables
Waste collection is driven with the aim of segregating waste at source as dry waste, wet waste and organic waste. Source segregation has been mandated to all companies.  Each stream of waste is then treated in the most responsible manner.	On April 1, 2016, ELCITA issued a notification to citizens, especially eateries and shop owners making it mandatory to segregate waste at source and prohibiting the use of single use disposables.  The mandate has received encouraging response with companies, shop owners and residential facilities adhering to it.

## **Key Activities Under Sustainability**

- Workshops among member companies: Workshops are held to urge them to follow best practices
  in waste management. Frequent workshops in campuses, help to sensitize users about the acceptable practices,
  educate the public and to promote best practices. Some of these programs, such as in government schools are
  held in collaboration with ELCIA Trust.
- Audits during trade license issuance: Trade licenses are issued to commercial establishments only
  based on their compliance with the policies and directives of the sustainability initiatives. The ELCITA team
  conducts audits at the site to check on waste disposal and segregation methods, usage of single-use disposables
  in the premises, sewage disposal, etc. prior to clearing trade licenses.
- **Events and public stalls:** Through events, cleanliness drives, conferences and awareness programs, ELCITA popularizes green initiatives among the public. E-mails to member companies and stalls in public places help ELCITA lead the estate to greener, sustainable living.

## The Journey So Far

The sustainability initiative started with 14 companies agreeing to collaborate with ELCITA towards solid waste management guidelines. Today, 85 companies are on board for these initiatives. About 6 tons of compost has been sold back to the industries and 4 tons of E-waste channeled to proper recyclers.



## Wastewater Management

ELCITA took up a study on sustainable water management in and around Electronics City. The recommendation of Ecofirst, which conducted the study are being implemented.

#### **Sewage Treatment Plants**

Ecofirst recommended the construction of 5 STPs, of which one has been constructed and is operational. The 300 KLD CSTP is used for small and medium establishments to help them manage their sewage responsibly and sustainably.

The treated water is used for non-potable uses, such as construction activities, gardening, composting within the Estate. Two more STPs, which need land from KSSIDC and KIADB, of capacities 400 KLD and 500 KLD are awaiting approval from the Executive Committee.

ELCITA has an 8 KLD STP at the Fire Station which uses soil biotechnology. ELCITA is also implementing two smaller STPs with ESBR and DEWATS technologies, thus experimenting different wastewater treatment technologies for water management.

#### **Rainwater Harvesting Pits**

**50 RWH pits** have been constructed along the drains to replenish ground water in the estate.





## SAFETY AND TRAFFIC MANAGEMENT

Being the Silicon Valley of India makes Electronics City vulnerable; and it is listed among Intelligence Bureau's high alert locations. ELCITA focuses heavily on security and safety in the Estate.

ELCITA has a dedicated team for managing both the traffic and law and order situation in the Estate. The team also ensures enforcements of rules. For example, ELCITA has a 'No-Hoarding' policy which is monitored by the security team. When anyone digs the roads in Electronics City without authorization or violates traffic rules, it is the security department that ensures that the violators are stopped.

Electronics City has a Law and Order Police Station and a Traffic Police Station situated within the KSSIDC complex in West Phase.

#### Four Layers of Security at Electronics City

Electronics City has four layered mechanisms in place, synchronizing to safeguard and maintain law and order situation in the Estate.

- Each member company oversees the security in and around its own campuses.
- ELCITA manages security and traffic in common areas.
- The CISF is the first responder in case of terrorist attacks or safety issues of serious nature, as well as natural calamities in the township.
- Government enforcers such as the police and traffic police take care of violations and crimes within the jurisdiction.

## **ELCITA Security**

The team of 113 trained security staff supplements the law and order protection provided by the police teams. Some of their responsibilities involve:

- a. Removal of petty shops, unauthorized pavement vendors, etc. from the township.
- b. Setting up "You are under surveillance" at prominent locations.
- c. Audit of all the activities within the township to ensure that no unauthorized work, such as unpermitted digging or cabling happens in its purview.
- d. Coordinating with other teams to work towards infrastructure upgrade for CCTV surveillance and smart traffic management.
- e. Prevention of petty crimes in the area through seamless surveillance.





## **Emergency Numbers**

	E City PS	080-22943469/28522125
	P Aggrahara PS	080-22943468
ĺ	E city Traffic PS	080-28522126
	Fire Station	080-22971576/77
	CISF Control Room	080-28521957/0669/2999
	ELCITA Control Room	080-28522888/46602222
	BETL Office	080-28520758 ext 20
	Bangalore One	080-7836666
	Rail Reservation	080-28520012
	KSRTC Reservation	080-28523344
	KSRTC Travel House	9900521547
	E city PO	080-25820119
	LPG Emergency	080-26595138
	BPCL Petrol Pump	080-28521096
	Pollution Control	9845390440



Electronics City has a fire station in the West Phase.



ELCITA launched the TrackMe.mobi app to ensure the personal safety of travelers, especially women who travel at night.



## **CISF Deployment**

The paramilitary forces or the central industrial security force (CISF in Electronic City) was the result of ELCIA's requests for special security in the township. Till 2016, only West Phase was covered using 68 personnel lead by a DC/AC. Now, the team secures over 900 acres covering both East and West phases. ELCITA ensures that all facilities are provided for the CISF team and the quick response teams to protect the township.

Funds for CISF deployment were collected from members by ELCIA and the practice is continued after ELCITA's formation. While all companies are expected to pay the CISF charges, small establishments are charged at much lower rates.



#### **Training Programs and Mock Drills**

Apart from managing the safety and transportation needs of the Estate, the security team also facilitates training and awareness drills among the members. Some of them are listed here:

- a. Training for security teams of member companies.
- Mock drills conducted in campuses to equip the companies to deal with contingencies such as bomb threats.
- c. Training for security officers on road safety.
- d. Fire prevention and firefighting training by fire and emergency services.
- e. Interactive sessions on topics such as anti-terrorism measures and cyber security.
- f. Workshop on cybercrimes, cyber security and data protection.



During peak hours alone, i.e., between 8.00am to 11am, ELCITA manages a cumulative movement of around 50,000 to 60,000 vehicles within the township. In the evenings, an equal number of vehicles move out of Electronics City. A 30 member team manages the vehicular movement to ensure smooth flow of traffic.



## Working with Civil and Traffic Police

ELCITA works with the state police, both traffic and law and order, to protect the township. Some of the responsibilities jointly managed by ELCITA and police teams are the following:

Penalizing parking violations

Towing of vehicles

Penalizing autos with more than three passengers

Filing civil complaints and catching the culprits

Extending support during road works

Extending support during any riots/issues in the city

Managing VIP visits and events

Penalizing traffic violations

Avoiding heavy-duty vehicles during peak hours

Avoiding unauthorized bus stops on the elevated road

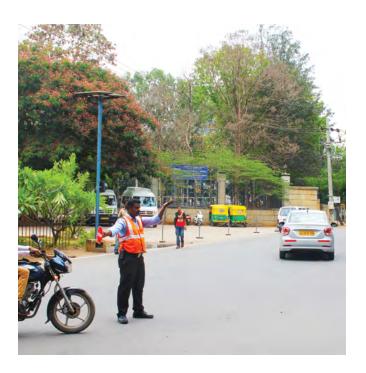


## **Traffic Management**

The traffic management function of ELCITA team supports the work done by the traffic police within Electronics City. Though Electronics City is a No Parking zone, ELCITA has made provisions for paid parking slots in the township on relatively wider roads in times of less traffic.

Apart from managing, re-routing and regulating traffic, the team also takes measures such as:

- Setting up traffic umbrellas to regulate traffic
- Identifying No Parking Zones on pavements and ELCIA roads and offering alternative parking spaces, such as:
  - I. Parking in vacant plots
  - 2. Parking on ELCIA land
  - 3. Parking at KSSIDC complex



ELCIA initiated CISF deployment in 2010 and ELCITA extended the operations to East Phase during 2016. From its starting strength of 68 personnel, the CISF today has 83 people to take care of township.



CISF Charges	2013-14	2014-15	2015-16
Fixed rate	Rs.65/employee		

#### Slab rate from 2014-15 onwards

upto 200 employees	Rs.6/employee	Rs.6/employee
from 201 to 1000 employees	Rs.40/employee	Rs.40/employee
from 1001 onwards	Rs.80/employee	Rs.80/employee

#### **Transport**

ELCITA initiated talks with the Bangalore Metropolitan Transport Corporation to ensure that more BMTC buses connect Electronics City to the rest of Bangalore. Trunk services by BMTC were initiated during 2013. In the same year, the authority also worked to ensure the introduction of 'U' turn on Hosur Road to integrate traffic from NICE road to the entry of Electronics City. ELCITA was successful in getting BMTC buses on NICE road. Ongoing efforts to improve the travel experience of people meant working with private operators, auto drivers, BMTC, commuters to bring in discipline and avoid road rage.

## Approximately 350 BMTC buses ply to Electronics City, making 3500 daily trips

#### The Hosur Road Commute

The elevated road on Hosur road, launched in 2010, was a dream come true for ELCIA. The road has reduced commute time on Hosur road. However, there are still some issues that are being addressed by the township authority and ELCIA. For instance, any vehicle off-road causes traffic jam on the elevated road and a sudden rush near Toll plaza leads to long queues. ELCITA has taken up such issues and works towards improvisations using technology. ELCITA is promoting the use of RFID tags for the elevated road. A sky walk is planned to help commuters crossing National highway.



# SMART CITY@ ELECTRONICS CITY





## **SMART CITY@ELECTRONICS CITY**



To improve quality of life of citizens, ELCITA aims at developing the entire eco-system, represented by the four pillars of comprehensive development- institutional, physical, social and economic infrastructure. ELCITA can work towards developing such comprehensive infrastructure, adding layers of 'smartness' ONLY when each one of the citizens aspire for it and partner the cause.



## **Smart City Pilot**

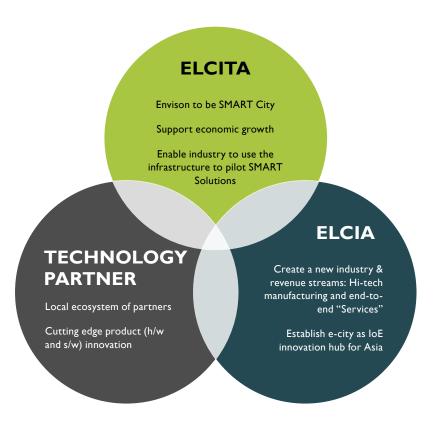
Electronics City is uniquely positioned with self-governance, participative citizens and exposure to latest technology that augurs well with the definition of SMART City. ELCITA envisions building a model SMART City in Electronics City and allows its member companies to use the Smart City infrastructure to test their SMART City products and services. The project will promote an innovation hub and offer alternate revenue streams in the SMART city products and services for its members.

## **ELCITA** believes that Electronics City qualifies to be the model cited in the **SMART** cities' mission statement:

"In the approach to the Smart Cities Mission, the objective is to promote cities that provide core infrastructure and give a decent quality of life to its citizens, a clean and sustainable environment and application of 'Smart' Solutions. The focus is on sustainable and inclusive development and the idea is to look at compact areas, create a replicable model which will act like a lighthouse to other aspiring cities".

The first pilot involved Cisco where smart lighting, water management, surveillance cameras and smart parking were tried out successfully for a few locations. This gave ELCITA the confidence to plan for a SMART City test bed and try out different technology solutions for better management and citizen participation.

### **Electronics City Smart City Pilot**





### **SMART CITY INITIATIVES**

ELCITA has partnered with IISc, Wipro, Bosch, Tejas Networks, Bydesign, VXL, TCL and other companies and institutions to implement locally developed SMART City solutions in ELCITA test bed in the following areas:

e-Governance



- Online procurement
- Tax collection
- Payments
- Khata and licence
- · Complaints management
- Communications
- Monthly accounts publishing

**Smart Lighting** 



- Sodium lamp replacements with LEDs
- Ability to monitor the status of individual lights
- Ability to switch on or off at stipulated timings
- Desired luminance at stipulated timings
- Increase/decrease luminance based on prevailing natural luminance
- Increase/decrease luminance based on traffic conditions
- Ability to get report on power consumption
- Weekly/monthly report on the status of lights

Smart Water Management



- Wireless meters for entry points including bore wells
- · Generation of water bills
- Payment and reconciliation
- Wastewater discharge meters
- Monitoring health of STPs
- Quality check of water
- Analysis of water flow and check for leaks on daily basis
- Ability to assess water usage and target to reduce per capita usage
- Aquifer check of water level in the area



## **Smart City Initiatives**

### **Smart Parking**



- Unauthorised parking identification and reporting
- App shows parking slots to people coming to e-city
- Parking fee payment online
- Live report on parking

## Smart Surveillance



- Optical fibre network is ready across the township to enable smart surveillance
- Cameras with analytics to be used for:
  - A. Traffic management
  - B. Information on traffic in and around e-city
  - C. Information on traffic violations
  - D. Works management
  - E. Security and vehicle movement management

## Waste Management



- Collection management
- Vehicle tracking
- Monitoring facilities management
- Smart segregation using conveyor line
- Track journey towards '0' waste to landfill
- Financial management of SWM facility
- Individual company data on waste



## **Smart City Initiatives**

## Estate Management



- e-procurement for all work orders
- Monitoring works
- Monitoring unauthorised digging
- Monitoring littering
- Monitoring e-toilets
- Monitoring house-keeping activities
- Identifying improvements required in the city

## Infrastructure Improvements



- Clearing pavements of BESCOM, telecom equipment
- Replicating the smart initiatives across the township
- Augmenting any additional power/optical cabling
- Planning UPS/solar for uninterrupted power supply for cameras and streetlights

## **Miscellaneous**

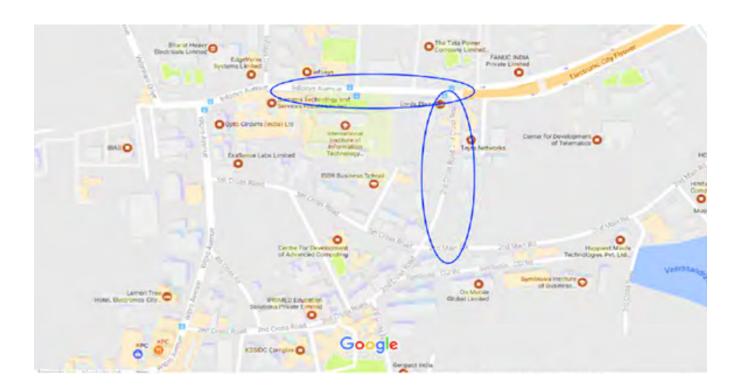


- Complaints management
- Digital displays
- Personal air quality systems
- Traffic management



### **ELCITA Smart City Test Bed**

The **Infosys Avenue and Pump House** road have been identified for Smart City test bed and the physical infrastructure is upgraded to have poles reinstalled, power cables and optical fibre is augmented, based on the design by **Tejas Networks**.



## Software System Integrations for Smart City

As part of SMART City initiatives at Electronics City, ELCITA has collaborated with various partners along with Wipro, IISC, MapUnity, Velankani, Tejas Networks among others.

The project proposal, titled Proposal for Smart City Test Bed Project in Electronics City enumerates the role that each partner will play in the project.

Wipro has taken the initiative to be the system integrator and uses the hardware/software provided by vendors/partners approved by ELCITA to provide SMART city solutions in the test bed.





For this test bed, i-Connect, a system integration platform developed by Wipro with the following attributes will be used:

#### **Dashboard**

Dashboard is part of i-Connect, where real time information is harnessed and shared across departments and throughout all the registered users at ELCITA, enabling new levels of collaboration. It uses data visualization and deep analytics that can help ELCITA prepare for problems, coordinate and manage response efforts and enhance the ongoing efficiency of city operations to improve the services offered to citizens. It can also be used to spot patterns or trends and explore scenarios to predict the impact of future events.

#### The scope of the dashboard will extend to different levels:

- CEO ELCITA
- Administrator
- Operator
- The dashboard will also exhibit a dynamic city map view and a list of modules.

## **Test Bed Hardware Integration**

#### **Smart LED lighting**

Currently, three 30 watts LED panels are being assembled using a three-way splitter and the central 30W LED will turn off from II:00PM to 6:00AM, while the other two will be on from 6:00PM to 6:00AM. LORA, a technology that supports Internet of Things, is being tried for communicating with and controlling the lights. Currently, about 50 LEDS are installed and multiple vendors can be used to evaluate the smartness offered.

Other smart LED modules will be tried for managing and maintaining the streetlights.

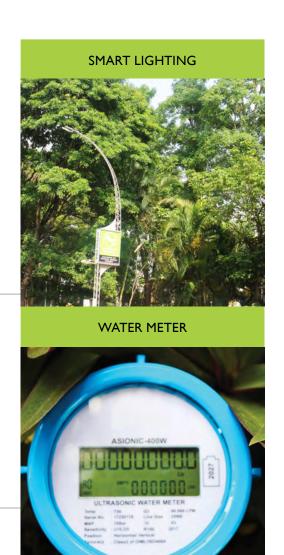
#### Water meter

Current water meters send meter reading using SIM cards via SMS. The readings need to be sent in a format that can be used by system integrators. Water meters with communication device using LORA are being tried out in the system. The first batch of water meters did not work, as the quality of meters were substandard.

Both digital and mechanical meters and available communication options will be explored in the test bed. Currently, input water meter reading is not accessible to ELCITA and needs to be obtained from BWSSB.

#### Cameras and optical network

Cameras are being upgraded from 2MP (Mega Pixel) to 5MP and this requires re-design of the fibre network and the associated switching networks. The plan is to get the network re-designed by Tejas





Networks and use managed PoE switches/GPON for deployment of cameras. Currently, Infosys avenue has a ring structure with 12 cameras operational. Analytics are set to be piloted on this stretch.

The entire township has been divided into clusters for better management of traffic. The CISF and the command centre at ELCITA office will be mirror images and a direct connect between them will be enabled. Cameras will be used for traffic management, surveillance, parking management, works management and to monitor all types of violations. This will be achieved using smart solutions by different vendors.

The cameras will be deployed on alternate poles and in junctions. Cameras fixed back-to-back will cover roads on both sides. Junction cameras will be designed based on the requirements.

#### **POE SWITCH**



#### Waste management

Waste data is entered to I Got Garbage (IGG) manually and managed. QR codes and conveyor systems help improve operations. Bins with RFID will be procured for trial.

Plans are on for the integration of IGG and other improvements in East Phase.

Waste water management meters are available in the STP and the collection tankers do not have such facility to measure the quantity and send it. Such hardware needs are to be explored and implemented.

#### Fleet management

Fleet management through an app will allow GPS tracking on all vehicles. Currently, this tracking is available only for a few vehicles. This app can also be integrated into the platform.

#### Air quality measurement

Both fixed and mobile air quality measurement devices are to be installed for monitoring the air quality, by checking parameters such as air quality, temperature, sound, humidity, carbon-dioxide and nitrogen dioxide in the air.

#### **Power supply**

There is a need to ensure uninterrupted power supply to street lights, cameras and other network elements. Hence, each limb of the network will have a UPS to ensure two hours of power back-up when BESCOM power goes down.

#### e-Toilets

The status of e-toilets and usage will be monitored and will be available on the common platform.





AIR QUALITY SENSOR



#### **Carpooling**

Carpooling applications will help ELCITA to monitor and promote the practice among the population in the township.

#### Car parking solutions

Two startups are working on parking solutions. Car parking sensors will be deployed as pilot and it will enable ELCITA to understand the usage pattern. Users can also get information on available parking slots nearby.



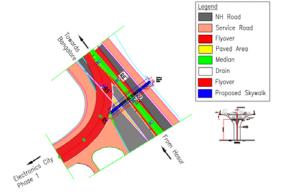
#### Citizen Participation

"The more the citizens' participation, the better can be ELCITA's services. We are blessed with companies that are actively participating in construction of common amenities such as pavements and widening of roads. This is very important for the smooth governance of any place. The committee members take pride in all developmental activities and their support and guidance has helped continuous improvement of the Township," says ELCITA CEO Rama N S.

## **PROJECTS UNDERWAY**

Electronics City is on a fast track to development; and ELCITA is working on several parallel projects to help the township accommodate the growth. For instance, works are ongoing to get Metro Rail connectivity to Electronics City. An immediate solution is being sought to help commuters cross over the under the elevated road on Bangalore-Hosur Highway to reach the first entrance of Electronics City.

ELCITA has plans to set up a movable median on elevated road to ease traffic jam.





### **Testimonials**

#### Prof S Sadagopan, Director, IIIT- Bangalore

Being part of a new generation township, that is responsive, agile and tech savvy, ELCITA residents feel the difference. IIIT-B feels the difference even more — being treated on par with other biggie residents, though we are one of the smallest — yet another feature of ELCITA.

#### Prashant Kempanna, Project Manager - Physical Infrastructure, Tech Mahindra Ltd

It has been a very pleasant experience with ELCITA for our Sanction plan approvals of Tower 6 & 7. I was really amazed on the speedy approval accorded to us in couple of days for the Sanction Plan, Commencement Certificate and Occupancy Certificate. I have not seen any Authority which is so transparent, professional and clean. The maintenance and security compliance too is impeccable.

Keep up the good works and really hats off to the entire team led by Mrs. Rama, CEO.

#### Pushpa Nair, Senior Manager, Narayana Hrudayalaya

We do not face the usual urban bottlenecks such as prolonged traffic jams or road congestions in Electronics City. The entire team is brilliant — we rarely need to visit the main office to get things done, their team on the road are equally committed and helpful. When our ambulances are on ELCITA roads, the security personnel take special care to clear the way for them. ELCITA has also made the entire neighbourhood safe – even when there are bandhs or incidents elsewhere, Electronics City and the neighbourhood is untouched. We have ELCITA to thank for all these.

#### **Building owner in Electronics City**

In comparison to other semi-government offices, ELCITA is by far the best. The experience that you will have with the team is incomparable to what you find within city limits. The office is run by excellent people who are very quick in their response and straight forward- there is no harassment and you do not need to speculate when you deal with them. The infrastructure upkeep is excellent.



Designed and Developed by



#### **CONTACT US**

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