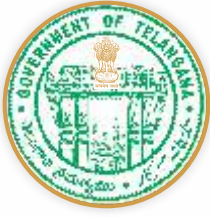# ICT POLICY FRAMEWORK 2016

Information Technology, Electronics
& Communications Department
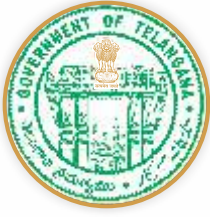Government of Telangana

Sri K. Chandrasekhar Rao
Hon'ble Chief Minister
Government of Telangana

MESSAGE

Telangana, the newest State of India, is an outcome of decades of struggle against discrimination, suppression of opportunities and rights. Now that we have become masters of our own fate, we must ensure that every sphere of economic activity that can propel the state towards the vision of "Bangaru" (Golden) Telangana is realized at the earliest. Information Technology has the potential of ushering our state towards the rapid path to progress. It is well-known that many regions of the world today are thriving because of the Information Technology revolution. Hyderabad, our crown jewel, is already a magnet which attracts the best in the world, and our government intends to embellish it even further to make it standout as the most preferred destination for the IT companies.

The new Industrial Policy released by our government is widely considered to be path-breaking and revolutionary. Coming close on its heels, I am confident that the new IT policy will also be similar in its impact, and will become a role model for the rest of the Country.

I congratulate my IT Minister, Mr. KT Rama Rao, the IT Secretary, and his team for bringing out this progressive and comprehensive IT Policy.

Sri K. Taraka Rama Rao
Hon'ble Minister for IT, Panchayat Raj, MA&UD
Government of Telangana

MESSAGE

One key reason for India's emergence as an economic powerhouse in the last two decades has been the phenomenal growth in the Information Technology (IT) sector. Revenues earned through the IT/ITES sector contribute close to 9.5% of India's GDP of which over 65% is earned through foreign exchange. The sector also provides employment to more than 35 Lakhs professionals directly and 1 Crore people indirectly, making it the Country's largest private sector employer. It is heartening to note that close to 50% of these jobs have gone to young men and women from the smaller towns and mofussil areas of the Country. India's natural advantages reside in the availability of a large talent pool, the entrepreneurial spirit shown by our home-grown industry leaders and the congenial environment offered to the industry in and around a few city clusters.

Hyderabad has justifiably earned a reputation for being a welcoming and cosmopolitan city over the last few centuries. Strategically situated at a place where north meets south, and propelled by the progressive, outward looking attitude of its erstwhile rulers, Hyderabad embraced all cultures, people of all backgrounds and provided equal opportunities for all new comers to flourish and thrive. When the IT sector was opening up in the Country in the mid-90s, Hyderabad became a natural choice for the IT majors. Even though Hyderabad entered the race a little late, it has become a critical national and international IT hub, with a reputation for encouraging the talent and creativity of the IT industry. The presence of leading national research and academic institutions has served to further promote the growth of IT in Hyderabad.

Of late however, the growth of the industry in Hyderabad has hit some minor road bumps. Lack of agility from key decision-makers has led to Hyderabad missing out on many opportunities that should have otherwise come its way automatically. The Government of the day also failed to accord the kind of importance that the IT industry deserves in the State. The period leading to the formation of a separate state also sent out mixed signals to the industry about future prospects in Hyderabad.

I am happy to state that the moments of uncertainty and indecisiveness are all behind us now. The new state of Telangana has come into being in June 2014 and in this short span of time, we have witnessed some landmark decisions, the likes of which have never been seen before. We now have a very decisive and focused leadership that is extremely serious about making amends for the lost years and ensuring that no opportunity that can come Telangana's way is left unexplored. With a keen appreciation of the importance that the IT sector has in the life of every individual in Telangana, the Government accords highest priority to the further growth of Information Technology in the State, not just in Hyderabad city but also in Tier II, Tier III and other smaller towns and villages.

IT Policy is the most important instrument through which the Government elaborates upon its vision for the IT sector. Our policy focuses not only on consolidating our strengths but also on making pioneering efforts into new and emerging areas. We might have got on the IT bus later than others in the past, but I am confident that we will not only be on the bus in time but also drive it.

INDEX

PREAMBLE: IT IN TELANGANA

Hyderabad, the capital of Telangana, is now recognized as one of the leading Information Technology hubs globally. It houses over 1200 IT companies, both large and small which together employ close to 4 Lakhs professionals, besides supporting an indirect employment to over 6.5 Lakhs people. In 2014-15 the total value of software and IT products exports accounted for INR 68,232 Crores and this amounts to about 11% of National IT exports. The sector is growing at a rapid pace. The YoY growth in 2014-15 was 16%, which is 3% higher than the national average growth.

Origins of IT industry in Hyderabad started in 1990, when Maitrivanam, India's first IT incubator was established with highest standards of IT and communication infrastructure thereby propelling the growth of local IT entrepreneurs. In 1992, the IT Hub was moved to a more suitable location in Madhapur and this coupled with the access to skilled workforce ensured Hyderabad became a favorable destination for NRIs, who were setting up companies in India. With this fast growing IT ecosystem, Hyderabad attracted multiple multi-national corporations in the likes of Citi Group, Intergraph and Indian leaders such as Wipro, Cyient etc. Over the last two decades, Hyderabad has placed itself on the global IT map by not only attracting leading IT companies but also taking IT to the deeper roots of the society.

Hyderabad is now home to some of the leading software companies in the world, such as Microsoft, Google, Deloitte, Facebook, Cognizant, Oracle etc. Many of these companies have made Hyderabad the base for some of their most critical global operations. For example, the only R&D center of Microsoft outside the USA is in Hyderabad. Google has its largest campus outside the US in Hyderabad, and TCS has its largest development center, globally, in Hyderabad. Recently, Amazon joined the ranks of these companies, and has broken ground on a INR 1800 Crores, 25 Lakhs sft. area facility, which will be its biggest campus outside the USA.

Hyderabad is also well represented among the rarified circles that make up leading global IT executives. Some prominent names with ties to Hyderabad include Mr. Satya Nadella (Microsoft), Mr. Shantanu Narayan (Adobe), Mr. Ajay Banga (MasterCard), and Mr. Prem Watsa (Fairfax Holdings).

Over time, a physical ecosystem has also evolved around these technology bellwethers. The IT parks located in Gachibowli, Madhapur and Nanakramguda in Hyderabad are often showcased as aspirational exemplars of their peer group. These have become thriving local communities, providing an ambience on par with many leading global cities, facilitating a creative work environment and promoting work-life balance. A number of technology and engineering colleges across Telangana offer professional courses and contributes to the development of deep, broad-based talent pool to meet the requirements of the IT industry.

VISION FOR THE IT SECTOR

In order to identify the strengths and weaknesses of the IT Industry in Telangana, the State Government has conducted a detailed benchmarking analysis of Telangana's IT Industry with other countries, as well as with other states across India. Post these benchmarking efforts, and after consultations with industry experts, the government has identified key competitive advantages that the state has, given its geographical location, infrastructure facilities, available talent pool and regulatory framework. This analysis has helped in developing state government's vision for the IT sector. Subsequently, the State Government has identified 10 focus areas related to IT Investments in these areas will be accorded the highest priority by the government.

The table below summarizes the vision statement, following which the ten priority areas are explained in detail.

- Telangana should become the most preferred destination for any IT company which is planning to commence new activities anywhere in the world

- Telangana should be recognized as leader in key emerging technologies

- Telangana government aims to intensively use IT tools to improve processes and deliver citizen services better and stand out as a role model for smart governance

- Citizens of Telangana will be empowered to make the best use of the opportunities emerging in an increasingly digital world

- Telangana should become a leading global hub for technology entrepreneurship and innovation in the country
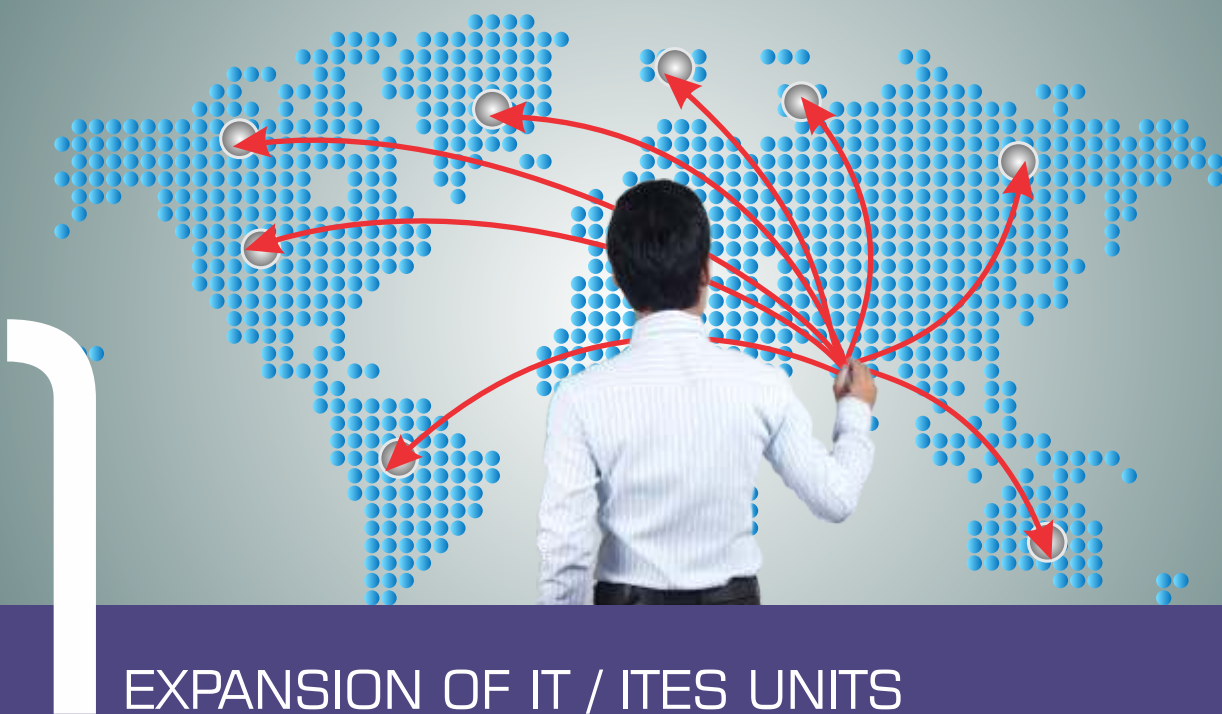
EXPANSION OF IT / ITES UNITS

To make Hyderabad the national leader in terms of IT exports and to leverage on the strong infrastructure that exists to attract more investments

- To double the value of current INR 68,232 Crores IT exports in Telangana in 5 years

- To double the current employment of 4 Lakhs in 5 years

- To establish 3 tier-II cities as IT Hubs in 5 years

Telangana will continue to encourage all existing IT/ITES companies already located in the state to expand and grow within the state, and also motivate and incentivize new companies to come and establish their units in the State. While Hyderabad will remain the center of product development and R&D activities, companies, particularly ITES companies will also be encouraged to locate themselves in Tier 2 cities like Warangal, Karimnagar, Nizamabad etc. The following instruments will be utilized to facilitate expansion of IT and ITES industry.

CLASSIFICATION OF PROJECTS

- **Mega Investments**: Companies/entities that invest more than INR 200 Crores or provide employment to over 1000 people or belong to areas of strategic importance.

- **Start-ups**: Individuals/companies/entrepreneurs working on their idea/concept, having 0-5 years in Business and employee strength of 0 - 50.

- **Small and Micro Enterprises (SMEs)**: Small & Micro IT/ITES Companies/units/Enterprises with a turnover of more than INR 50 Lakhs and less than INR 10 Crores per annum. According to Government of India, Ministry of Micro, Small & Medium Enterprises, a Small & Micro company has an investment of less than INR 5 Crores in the manufacturing sector and less than INR 2 Crores in the services sector. The nature of an IT/ITES company is such that there is a relatively lower investment compared to other sectors. Hence the definition is changed such that the scale of the company is determined by its revenues.

- **Mid-Scale companies**: IT/ITES Companies/units with turnover more than INR 10 Crores and less than INR 200 Crores According to Government of India, Ministry of Micro, Small & Medium Enterprises, a Medium scale company has an investment of between INR 5 Crores and INR 10 Crores in the manufacturing sector and between INR 2 Crores and INR 5 Crores in the services sector. The nature of an IT/ITES company is such that there is a relatively lower investment compared to other sectors. Hence the definition is changed such that the scale of the company is determined by its revenues.
- **Tier II locations:** Any city/town outside HMDA city limits in Telangana is classified as a Tier II city.

DEVELOPMENT OF IT PARKS

IT activities are largely concentrated in Gachibowli, Madhapur and Nanakramguda to a large extent in Hyderabad. Two more clusters at Adibatla and Pocharam are at a nascent stage. As a part of the ITIR (Information Technology Investment Region) scheme, Government will identify suitable land parcels under which new IT clusters can be located. The Government will leverage the growth corridor along the Outer Ring Road (ORR) by earmarking certain zones to be used exclusively for development of Information Technology.

NEW IT PARKS IN PPP MODE

While government agencies like Telangana State Industrial Infrastructure Corporation (TSIIC) will be encouraged to setup IT parks on their own, reputed private developers with proven track record will be also welcomed to develop IT parks in government lands in an appropriate PPP mode. The exact structuring of each of the PPP projects will be decided by the government on a case to case basis. In addition, IT parks developed by private parties on completely private owned lands will also be eligible to receive benefits from the government on par with those developed on government lands either by government agencies or through PPP.

CREATION OF INFRASTRUCTURE

All the new IT parks and IT clusters will be provided with the required infrastructure of highest standards. Telangana State Industrial Infrastructure Corporation (TSIIC) will become the nodal agency to create this infrastructure and manage the land bank. ITE&C department will play a key role in existing IT parks as well, in ensuring that the existing infrastructure is well maintained at all times. A separate Critical Infrastructure Fund (CIF) will be kept at the disposal of ITE&C department to meet urgent maintenance works in existing IT Parks.

COVERAGE UNDER TS-IPASS

The Industries department of the government has recently brought out a new scheme, the Telangana State Industrial Project Approval and Self Certification System (TS-iPASS), which provides for automatic approvals based on self-certification. All approvals required by mega industrial projects will be given in 15 days, and for all other types of industrial projects, the approvals will be given in 30 days. Further, a right has been bestowed to the investor in that, if the agencies fail to provide the approvals within 15/30 days, the approval would be deemed to have been accorded, and the agency which caused the delay will be penalized. All approvals pertaining to IT companies will also be covered by the TS-iPASS.

ALLOTMENT OF GOVERNMENT LAND AND PROVISION OF INCENTIVES

Given the fact that the Information Technology sector creates massive employment and also contributes to the state's economy in a very significant way, the Government also needs to encourage IT companies coming to the state by providing suitable incentives. Incentives will be offered in the following ways
1. Land cost rebate linked to employment
2. Power cost reimbursement
3. Reimbursement of stamp duty, transfer duty and Registration Fees
4. Reimbursement of patent filing/copyright costs and Quality Certifications costs
5. Recruitment Assistance incentives

The scheme for incentives will be notified separately. The land allotment process that is followed by Telangana State Industrial Infrastructure Corporation (TSIIC) for industrial units is also followed for land allotment to IT companies. The IT companies requesting for land and applying for incentives will be scrutinized by the Consultative Committee on Information Technology Industry (CCITI) and the recommendations will be passed to TSIIC. For Mega IT projects and marquee IT companies, a decision which will be taken in the CCITI for provision of a tailor-made package of incentives.

SPECIAL FOCUS ON IT SMES

While large companies typically have globally recognized products/services and provide employment to thousands, the contribution of hundreds of SMEs working in the IT sector is no less significant. It is estimated that there are over 500 IT companies in the SME category who collectively employ over 70% of the working IT population. A major part of the state's IT revenues comes from SMEs and the government aims to give a further boost to this sector by crafting two initiatives specifically for them.

i.   Construction of SME Towers

Given their scale the SMEs do not have the wherewithal to develop their own campuses or buy a built-up space for their use. Most of them presently lease existing buildings to run their operations. A major support that will be given to such IT SMEs by the Government will be to offer lease rental subsidy. The Government also intends to construct IT towers in Gachibowli/Madhapur/Nanakramguda exclusively for SMEs having small office spaces which the SMEs can use as their front office for client interactions and brand building purposes. The IT towers will also have facilities like common conference centers, availability of WiFi, cafeteria and other basic facilities on par with leading commercial IT office hubs.

ii.   Creation of Specialized Financial Instruments

One of the key factors that stops SMEs to grow bigger is the ready access to capital. Realizing this, the government is trying to ease this bottleneck and give SMEs the financial assistance that will help them grow sustainably. The Government shall first engage with national and international investment banks, financial institutions and Private Equity funds to understand the synergies between existing SME scenario and the finance providers. Later, in collaboration with these bodies, the government shall carve out a specialized financial instrument that will adopt best practices from various countries to eventually help this sector thrive. The instrument shall directly promote SMEs by providing them easy access to affordable financing structures.

IT & ITES IN TIER II LOCATIONS

The Government wishes to encourage IT/ITES companies to also consider Tier II locations like Warangal, Karimnagar, Nizamabad etc. Due to the availability of cheaper land (as compared to Hyderabad) and infrastructure, and the presence of a number of professional colleges including engineering colleges at these centers, these centers could potentially emerge as attractive destinations for IT/ITES company planning to setup a new center. The Government will further incentivize these companies by providing benefits. The first few pioneering anchor clients for each of the Tier II location will get additional benefit. Details of these benefits will be spelt out separately.

To further provide encouragement to rural employment in the IT sector, the Government shall promote the development of Rural Technology Centers. These centers will perform BPO, KPO and other IT tasks, thereby, not only creating employment but also reducing operational costs for companies by significant amounts. These centers shall be opened in Mandals and villages.

COORDINATION MECHANISM

The Government wants to develop a responsive mechanism which will be tuned into the critical needs and emerging requirements of IT companies. While the ITE&C department itself can resolve most such issues and grievances, certain issues will require to be coordinated with other line departments like Telangana State Industrial Infrastructure Corporation (TSIIC), Greater Hyderabad Municipal Corporation (GHMC), Hyderabad Metropolitan Water Supply and Sewerage Board (HMWSSB), Hyderabad Metropolitan Development Authority (HMDA), Transmission Corporation of Telangana (TRANSCO) etc. Government will create an empowered committee comprising senior officers from these departments which will meet periodically and interact with industry bodies such as National Association of Software and Services Companies (NASSCOM), Hyderabad Software Enterprises Association (HYSEA), Telangana Information Technology Association (TITA) and other industry associations, in order to create multiple channels for soliciting feedback from the IT industry.

PROMOTING THE CREATION OF INTELLECTUAL PROPERTY

In order to thrive and expand, an ecosystem also needs strong Intellectual Property laws and frameworks apart from physical infrastructure. The Government wants to enforce intellectual property laws by creating an IP cell with dedicated resources to investigate and prosecute intellectual theft. The Government shall also strive to expand cooperation with various international agencies to gain expertise on IP laws across multiple countries, encourage and incentivize IPR registration in India, not only for small and mid-sized companies but also for start-ups and entrepreneurs.
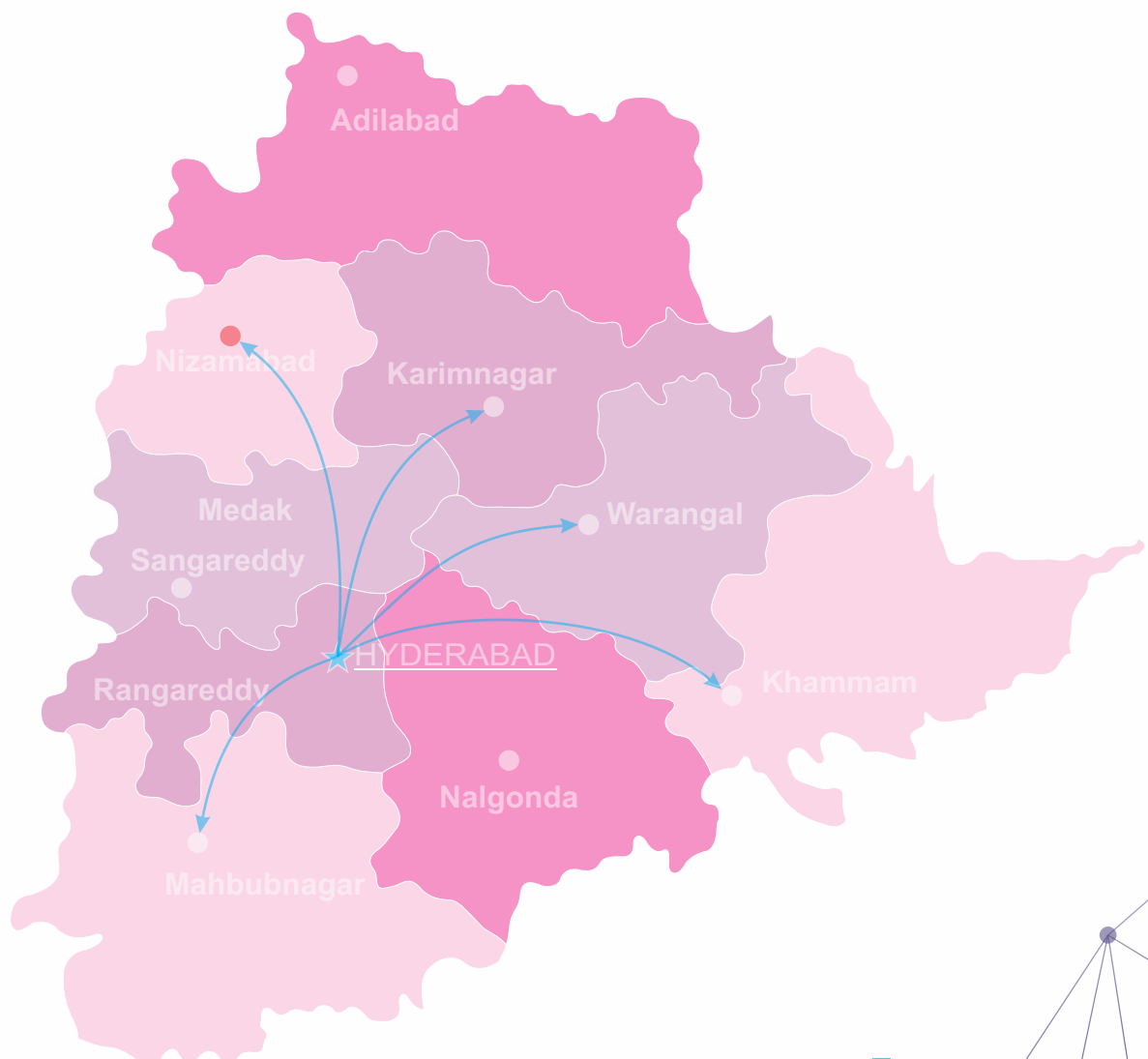
2

ELECTRONICS

- Attract investments to the tune of USD 3 Billion in Electronics sector

- Create an employment of 1.5 Lakhs through Electronics sector in the next 5 years

- Enhance the production from approximately USD 1 billion to USD 7.5 billion

The Telangana Government is planning to make Hyderabad a global hub for Electronics. The State Government attempts to provide strategic impetus to the electronic hardware and design industry and seeks to achieve this aim by providing infrastructure support, by creating a larger pool of skilled workforce, by offering a supportive policy environment, and by providing a pleasant tax and fiscal regime.

Infrastructure

Govt. of Telangana is setting up two **EMC**s (**Electronic Manufacturing Clusters**), spread over 600 acres and 310 acres at eCity and Maheshwaram Science Park respectively. These EMCs are coming up in the 200 sq.km/50,000 acre **ITIR (Information Technology Investment Region)** adjacent to the 8-lane, 158 Km Outer Ring Road near Hyderabad International Airport in areas other than zones prohibited for environmental reasons. The two EMCs will be dedicated clusters for Electronics Manufacturing having the full complement

of high quality infrastructure like uninterrupted power, water, waste treatment facility etc. Government can open up a few more IT parks for electronics manufacturing in tune with the demand.

Regulatory Framework

With the single window mechanism of giving approvals and clearances within 15 days i.e. **TS-iPASS**, the State hopes to create a highly favorable environment for companies to set up and expand operations.

Talent Pool

In tune with the National Program for Skill Development, the state's skilling initiative, **Telangana Academy of Skill and Knowledge (TASK)**, ensures companies get easy access to a rich skill-base in Telangana. With customized training programs developed through constant industry feedback complementing prestigious educational institutions that exist in the state, the state ensures that human resource needs of the companies are met. Also, to promote entrepreneurship and innovation in this sector, the State is setting up an "Electronics Incubation Center."

Incentives

The Govt. of Telangana has come up with a wide array of subsidies and tax breaks for companies willing to start/expand operations in the state. The state is providing tailor-made incentive packages that cater to a wide array of industries that come under the Electronics sector, such as Semiconductors, VLSI design, mobile manufacturing units, PCs and other gadget manufacturing units, LED manufacturers, EMS companies etc.

The detailed list of support initiatives, incentives and skilling programs shall be elaborated in a separate Electronics Policy that the Government of Telangana shall release.

3
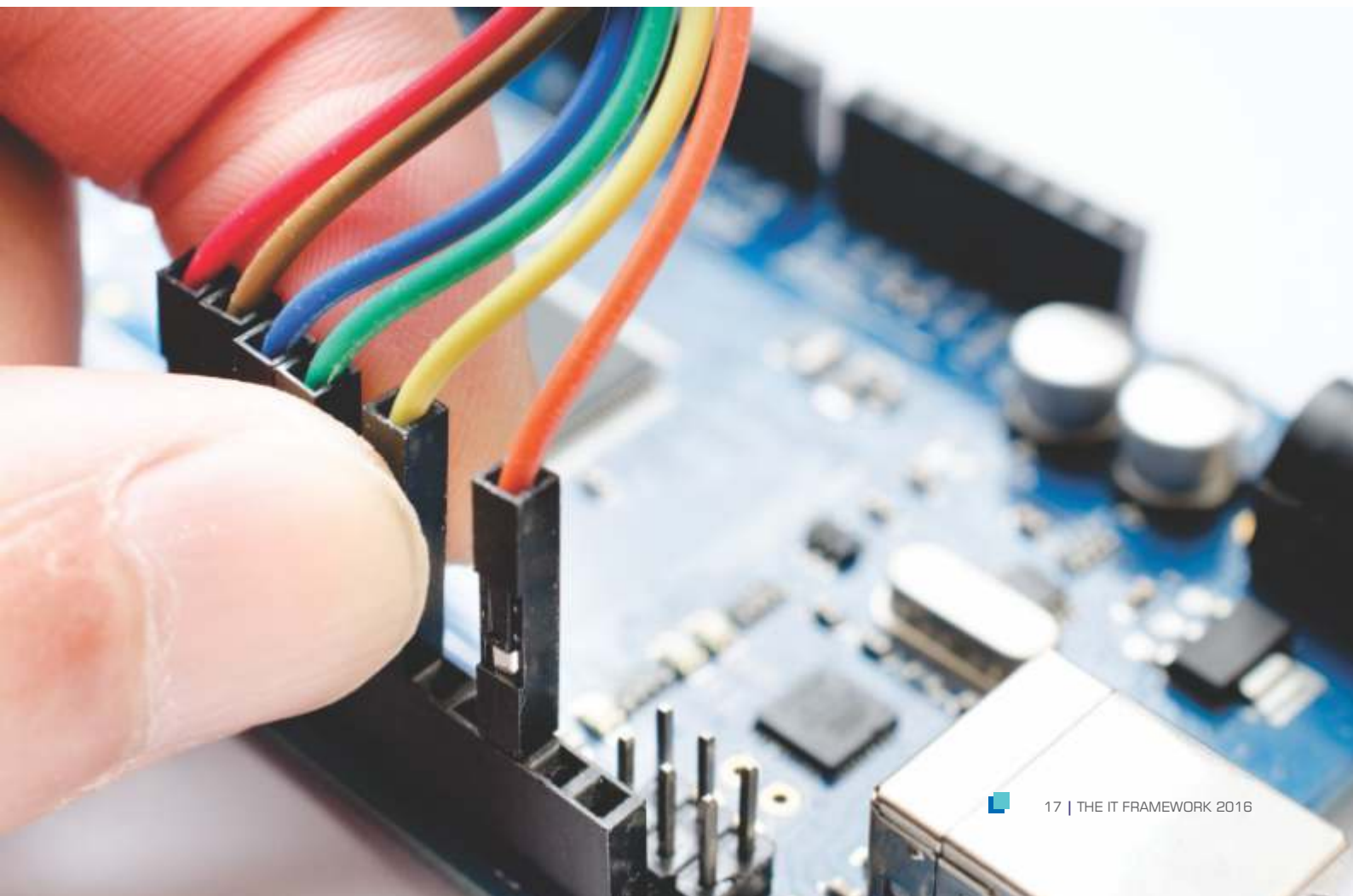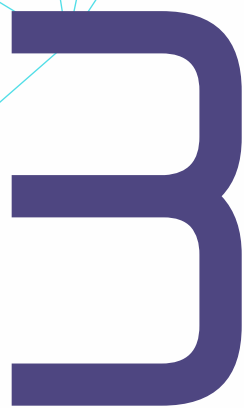
ENTREPRENEURSHIP

To give a boost to young entrepreneurs and to kick-start next-generation innovation by providing access to critical capital and state-of-the-art physical infrastructure

- Work with private sector to develop 10 Lakh sq. ft. of infrastructure space dedicated to start-ups and entrepreneurship related activities in 5 years

- Work with international financial institutions to raise and deploy INR 2000 Crores funds to aid entrepreneurship and accelerate innovation

- Provide incubation and mentorship support to 5000 startups in the next 5 years

The Government of Telangana aims to build a booming startup ecosystem that will unleash the entrepreneurial spirit amongst the youth and in turn aid in job and wealth creation. The Government aims to achieve this by bringing the entire start-up community in the state under one umbrella - the **T-Hub**.

T-HUB: CONCEPT AND VISION

The pivot for giving shape to government's vision will be T-Hub. T-Hub is designed for technology-related start-ups, and its mission is to catalyze the creation of one of the tightest and most vibrant entrepreneur communities in the world in order to encourage and fuel more start-up success stories coming out of India. T-Hub is a unique public/private partnership between the **Government of Telangana**, three of India's premier academic institutes - **IIIT-H, ISB & NALSAR** - and **key private sector leaders**. It stands at the intersection of the start-up, academic, corporate, research and government sectors.

T-Hub's main methodology will be:

- Strive to attract the best start-ups and entrepreneurs from across the world to Hyderabad

- Create a tightly knit ecosystem of entrepreneurs, investors, incubators, accelerators, mentors and academia, with the aim of making Hyderabad the most conducive environment for innovation and entrepreneurship in this part of the world

- Work with an extensive network of partners to help entrepreneurs launch and scale innovative businesses
- Equip innovators and organizations alike with the entrepreneurship skills required to succeed, using methodologies that transcend traditional learning

The entire ecosystem will be anchored to a world-class, state-of-the-art 70,000 sft. building called CatalysT, the largest building in India to be entirely dedicated to entrepreneurship. The infrastructure facilities at the building will be used for co-working spaces, conferences, mentoring and networking sessions. Over the next 3 years, an additional 3 Lakhs sft. of space has been earmarked for expanding T-Hub.

The Government of Telangana encourages both private and public institutions to set up Incubation centers, accelerators, seed funds and other similar concepts that can provide critical support to early-stage entrepreneurs. Entrepreneurs willing to innovate, start-up companies establishing a local base, and institutions such as incubators and accelerators promoting entrepreneurship in Telangana shall be incentivized on various fronts. The details will be brought out separately in the "Telangana Innovation Policy."

4

SKILLING

To enhance the skill level of students in Telangana, by imparting necessary technical and soft-skills and by tying up industry and academic institutions through a nodal agency

- To ensure 25,000 people are skilled and ready to be employed every year for the next 5 years

- To facilitate the nodal agency on skilling to partner with each and every educational institution in the State

- To ensure enhancing the employability quotient of 80% of the candidates skilled through Government's initiative

India is the world's second largest producer of engineering and technical graduates, but studies show that only 5% of these graduates are "employment-ready." To bring candidates to a "ready to deploy" status most IT companies spend around 3-4 months in training them at a cost of INR 2 Lakhs per employee on an average. Realizing this, the Government of Telangana is actively working towards becoming the frontrunner in the Country in providing "employment-ready" talent pool to IT companies.

TELANGANA ACADEMY FOR SKILL AND KNOWLEDGE (TASK)

The Government has set up the Telangana Academy of Skill and Knowledge (TASK), a society that will function as a nodal agency for all IT related skill development activities in the state. TASK will focus on the skill sets required for enhancing employability categorized as Personal Skills, Organizational Skills and Technical Skills and shall play a vital role for each of the following programs:

EMPLOYMENT-READY GRADUATES: TASK will collaborate with the ICT industry, academia, and the Government together to make graduating students industry-ready. TASK will also train the trainers; by facilitating faculty skill upgradation across educational institutions with the most updated "industry-synched" course curriculum. This would be facilitated through faculty development program in association with ICT Industry.

ONLINE EDUCATION PLATFORM: TASK shall aim to use the online media as an effective mechanism to transfer knowledge to students. TASK shall collaborate with premier academic institutions, develop curriculum, hire top-notch faculty and set up the necessary infrastructure for seamless delivery of this online content. It would implement multiple delivery methodologies such as synchronous learning, asynchronous learning, self-study with subject expert, webbed blog-wikis-forums etc. based on benchmarking the leading global models in this space, such as the , Coursera, Virtual labs, MPTEL and Edex to see what synergies exist.

FACILITATION OF HIRING: The Government will provide incentives for companies willing to hire from the colleges of Telangana through TASK. Apart from managing and disbursing recruitment assistance to companies, who can leverage services that include pre-assessment/pre-employment testing that can reduce cost of hiring, the government will also conduct events and job fairs to facilitate smooth recruitment.

FOREIGN LANGUAGE TRAINING: Since globalization and outsourcing have become part of life there is a need for learning new languages. Foreign languages help us to communicate with potential clients, sell our ideas and bond with their culture thereby enhancing employability. Acknowledging the fact that the youth today are interested in learning other cultures and languages, the Government will encourage its students to learn foreign languages. TASK will encourage employees of IT/ITES companies to learn foreign languages such as French, German, Spanish, Italian, Chinese, Japanese etc. by partially funding the certification fees of candidates who successfully qualify the relevant foreign language exams (level 2 or 3).

DOMAIN PROGRAMS: TASK will encourage development of specific domain-led programs for specific requirements of verticals such as finance, market research, supply chain planning, inventory management, big data and analytics, networking, e-governance, developers, user interface specialisation, QA testing, mobile computing, cybersecurity etc.

TECHNOLOGY ENTREPRENEURSHIP PROGRAM (TEP): TEP will provide an innovative approach to engineering education by providing the opportunity for students to take design and enterprise related modules. TEP is a structured program to promote entrepreneurship in students across Telangana has been launched by the Government of Telangana in collaboration with the Indian School of Business (ISB). TEP will be offered as an elective to the 3rd and 4th year engineering students and will deliver business education through technology platform and guide students through design, prototyping and mentoring. TASK will subsidize the program for the students.

DETAILS OF INCENTIVES FOR THE SKILLING INITIATIVES WILL BE FURNISHED SEPARATELY

5

PROCUREMENT OF IT PRODUCTS AND SERVICES BY THE GOVERNMENT

To improve technology adoption and plug technology gaps by all government; to improve internal efficiencies; to achieve improved delivery of services and to become technology-savvy government

The reach of the Government encompasses a big range of activities and the total citizen population in some way or the other. Despite considerable progress in the last few decades government departments are yet to embrace modern technology to the fullest. Experience the world over has shown the potential of technology in radically transforming work processes and outcomes.

The IT Department will plan to assist all the Government departments in finding technology-driven solutions related to their work. The technology solutions can improve the internal efficiency of the department, or can contribute to better delivery of citizen services. For this purpose, the government intends to liaise with large IT companies, SMEs, start-ups and entrepreneurs, by leveraging the inherent potential to become one of their largest customers.

A team constituted by the IT Department will be attached to every Government department. The team will interact closely with all levels in that department to understand and map out existing work processes. The team will also undertake extensive field visits to study the processes involved in delivery of citizen services, receiving feedback from citizens etc. A comprehensive understanding of key processes/work streams in each department where technology can help will be identified.

The IT Department team will then interact with technology developers including large companies, SMEs and start-ups, and entrepreneurs to identify technology solutions that have been developed in that sector and are already in use in locations within India and abroad. The IT Department team will evaluate each such technology solution in terms of cost-benefit analyses, ease of managing the technology, potential of applicability in Telangana, risk of vendor lock-in etc. The cost at which the technology developer is prepared to make the technology available will also be evaluated and negotiated. The IT Department will work with various government departments to identify and recommend the most appropriate technology for them.

Each of the Government departments will create an internal IT cell that will interact with the IT department, and subsequently, with the identified vendors.

6

NEW INITIATIVES

To take leadership position in all emerging technologies by creating a conducive environment that encourages product development companies, R&D institutions, SMEs, startups to choose Telangana for their units

High levels of creativity and innovation are the hallmark of the global IT landscape today. Leading universities of the world are conducting cutting edge research to bring out newer and newer products and applications. The State of Telangana aspires to be a front runner in embracing all these new and emerging technologies. At this point in time, the following new initiatives have been identified by the Government. However, the government is always willing and ready to explore any other new frontier as and when it reaches a threshold level of acceptability.

The Government support to new initiatives will be extended in multiple ways. These include:

- Creation of a cluster for that initiative (Ex: GAME park, Data Analytics park, Data Center campus etc.)
- Creation of specialized wings within the ITE&C Department to focus exclusively on specific areas (Ex: Photonics Valley Corporation).
- Development of thematic training and innovation centers and Centers of Excellence (Ex: IoT Innovation Center)
- The government will also notify additional incentives for companies that take up R&D and product development in these emerging areas. Attractive benefits and incentives will be provided to the first few anchor clients for each of these areas.

Detailed list of support initiatives and incentives for various new initiatives will be elaborated in separate policies/Government Orders that the Government of Telangana will release.

Photonics

Photonics science includes the generation, emission, transmission, modulation, signal processing, switching, amplification, and detection/sensing of light.

Government of Telangana has decided to lead the next computing revolution in terms of facilitating the exploration of 'Photonics' technology as the alternative computing paradigm. As the globe is probing for the new direction in view of exigency of transformation of existing chip technology, Government of Telangana believes in the dominant opinion that 'Photonics' offers the way forward. In this pursuit Government of Telangana has instituted 'Photonics Valley Corporation' as a non-profit company and extended the mandate for facilitating the evolution of the technology through a comprehensive ecosystem, 'Photonics Valley', which will constitute relevant manufacturing, supply chain and research institutes. Strategic partnerships will be forged with leading technology partners and huge investment is expected to flow in. Since it is a massive effort, Government of India will be requested for support. The aim is to facilitate state of the art and futuristic technologies to create an environment of innovation and entrepreneurship in order to generate capital formation, employment opportunities and foment manufacturing discourse in the state. In addition to the IT policy extension, an appropriate and special framework will be worked out for promoting the initiative.

GAME – Gaming, Animation, Media and Entertainment

The global gaming and animation market is expected to grow to USD 240 billion in the coming 2-3 years and a significant portion of this work is outsourced to India. Hyderabad is already the home to a significant number of Gaming & Animation companies, many of whom have already made a mark in international and domestic levels. Given the strong infrastructure and talent pool, the government of Telangana aims to give a further push to this already fast growing sector. The state will create dedicated infrastructure for the sector in the form of "GAME city" – a 6 Lakhs sq. ft. space that will provide facilities for Animation and Gaming companies, Digital Film Production houses, Music and TV studios, training academies, Entertainment complexes etc. Government will also encourage startups in the area of Entertainment Technologies.

A separate policy on Gaming & Animation will be brought out to detail various other state support measures including incentives.

Smart Technologies

Cities like Barcelona, Singapore, Amsterdam, Vienna and Rio de Janeiro are today recognized the world over as leaders in adoption of smart technologies. They have rightfully earned the title of "smart cities". The Government of India has also launched Smart Cities and AMRUT (Atal Mission for Rejuvenation and Urban Transformation) schemes covering 100 smart cities and 500 towns respectively. Although smart cities have various components like smart planning, smart governance, smart citizens, etc., smart technologies form its backbone. These technologies aid the city management in developing intelligent traffic systems, waste management, relief and rescue operations, energy conservation, and improving citizen involvement. While many technologies are already in usage the world over, most of these technologies have the potential to be utilized in Indian cities following suitable modifications. Further, there is always scope for developing tailor made smart technologies for India. ITE&C department wishes to identify all such smart technologies that can aid Indian cities and eventually aims to become a national repository for these technologies. Government of Telangana will also encourage technology developers to identify new solutions for hitherto un-explored and under-explored areas.

Data Analytics

The Government of Telangana will take initiatives to promote and invest in Data Analytics. Data Analytics or Big Data is a broad term for data sets so large or complex that traditional data processing applications are inadequate. Apart from search, storage, transfer, visualization and privacy of data, challenges also include capturing and processing of data using predictive analysis methods to extract value.To facilitate research and product development in this area, the Government of Telangana will developa Data Analytics cluster. Anchor companies, world-class universities, SMEs, startupswill be incentivized to participate in the cluster. Companies operating from Telangana will also be encouraged to take up Data Analytics assignments for various government departments. Government will come out with a separate policy on Data Analytics.

Data Centers

The Government aims to transform the city of Hyderabad into a global data center hub. Hyderabad offers a multitude of advantages which favor data center development. In addition to having the largest industrial land bank, the State of Telangana has a concrete policy and regulatory system with TS-iPASS and Single Window Clearance standing out. Hyderabad also offers attractive provisions such as 24 hour power supply and high speed internet lines. Hyderabad already has a thriving datacenter ecosystem, including one of India's few Tier 4 data centers. A number of global players have data centers hosted here due to proximity to 1 GBPS data line. On the geographic location front, Hyderabad is located in one of the least seismic activity zones and is away from the coast thereby having low susceptibility to other natural hazards.

Open Data

Various arms of the Government are involved in collection, generation and updating of data on multiple issues collected using public funds. Such data should be readily available for citizens' consumption. Although individual departments share data for usage by civil society and private sector, there is a need for an open data policy that enables proactive data sharing by every department. This will not only result in greater transparency, but also helps the government in better decisionmaking.

Telangana Open Data Sharing & Accessibility Policy would be that enabling provision that provides for the relevant guidelines in sharing open data and its access by various groups. The ITE&C department will formulate the open data policy learning from the best practices of the National open data policy. The ITE&C department will also identify other departments for the first phase of the open data roll out. The necessary infrastructure and resources will be put in place on the lines of "Open Government Data (OGD) platform (data.gov.in)" of Government of India with the active support of Department of Electronics & Information Technology. Data controllers will be designated in each department to act as the single point of contact for open data sharing. The ITE&C department will act as the nodal agency for acquisition, sharing, maintenance and security of open data in the State. The ITE&C department will also organize brainstorming sessions with civil society and relevant subject matter experts to decide on the type of data to be generated and released. In addition to encouraging the private sector to build applications, the government shall organize regular Data Summits and Hackathons to enable application development. The government will provide the anchor clients with specific incentives and will also encourage other government departments to proactively use this data for decision making and policy formulation.

Internet of Things (IoT)

IoT is a seamless connected network system of embedded objects / devices, with identifiers, in which communication without any human intervention is possible using standard and interoperable communication protocols. IoT can also be defined as interplay for software, telecom and electronic hardware industry and promises to offer tremendous opportunities for many industries.

The Government of Telangana will invest in IoT to develop connected, secure and smart systems for the state's economy, society, environment and global needs. With the advent of IoT, involving trillions of sensors, billions of intelligent systems, and millions of applications, new consumer and business behavior will be driven, leading to an increase in demand of intelligent industry solutions. Further, this shall drive trillions of dollars in opportunity for the IT industry and even more for the companies that take advantage of IoT.

> **Conquering adverse consequences of IT: While the boons of IT including the emerging areas are clearly visible, it is an unfortunate reality that misuse of IT also takes place at a large scale. The Government is conscious of its responsibilities to ensure that no institution or even a citizen of the state is adversely affected by the wrong use of Information technology.**

The Government will accordingly encourage effective action in the following areas also:-

Cyber Security

Cyberspace is vulnerable to wide variety of incidents, whether intentional or accidental, manmade or natural, and the data exchanged in the cyberspace can be exploited for nefarious purposes by both nation-states and non-state actors. With increasing amount of classified data that is used for various purposes, large corporations and companies face huge threats from activities such as hacking and phishing. In this regard, the government is no exception and is highly prone to such activities, which threaten lives, the economy and national security.

There are various ongoing activities and programs of the Government to address the cyber security challenges. The Government will encourage the sector and provide incentives for investment with a vision to build a secure and resilient cyberspace for citizens, business and Government. The Government will also promote training in Cyber Security in a big way to ensure that a large pool of trained and skilled manpower is available not only for the Government's own cyber security needs but also for the private companies. The Government will also develop a robust legal framework which assists information exchange and data privacy for institutions collaborating in this area. In this direction, the government will draft a comprehensive Cyber Security Policy.

Addressing Inappropriate Content on Internet

The safety of its citizens if of prime importance for the Government of Telangana. Incidents of crimes against women have been growing all over the country. A detailed analysis done by a high level committee of the Government has identified easy access to pornographic material on the internet as one of the main reasons behind such incidents. In this context, the Government intends to take actionagainst online pornography. Government will create an institutional mechanism that will partner with domain experts to identify sources of pornographic content and block access to them. Telangana aspires to become the first state to make efforts to ban all pornographic sites and create a society that is safe for our women. Also, the government shall relentlessly work towards educating its public by conducting citizen awareness programs such as "Acceptable online behavior", "Living in a digital world – Dos and Don'ts for citizens". These educational initiatives shall be delivered to the masses through the government's education broadcasting medium "Society for Telangana Networks (SoFTNET)".

7 E-GOVERNANCE & M-GOVERNANCE

To continue as a leader in the country for e-governance and citizen delivery services and to become a pioneer in m-governance and stand as an example to other states and countries

- To increase the electronically delivered services from 500 to 700 in the next 3 years
- To ensure 50% of these services are available also on mobile and online platforms in the ext 3 years
- To achieve a total of 10 Crores transactions through the Electronic Service Delivery (ESD) platform in the next 3 years
- To re-architect the existing ESD platform to provide citizen services through electronic means anytime, anywhere and in any mode with emphasis on online and mobility

Electronic Delivery of Services

Mee-Seva, which literally means, 'At your service,' has redefined Electronic Delivery of Services to the citizen through a single-entry portal for the entire range of Government services. The core objective of ESD is to provide smart, citizen centric, ethical, efficient and effective governance facilitated by technology with the objective to minimize the 'digital divide', and creating alternate delivery channel for services.

The state of Telangana currently has 4,168 citizen service centers spread far and wide that are locally called Mee-Seva centers. These centers provide various G2C services and utility payment services through an online platform. Presently about 325 services covering 34 departments are being delivered through these centers to the citizens and about 90,000 to 1 Lakh citizens are served daily through these centers, which are operated by entrepreneurs.

Mee-Seva acts as an integrated and collaborative window for many Government departments to service the citizens with strict timelines of delivery of services. It involves central pooling of all records, digitally signing, storing them in the database, rendering them using a web-service with efficient and real-time MIS reports (soft & hard copies) to the departments. This has resulted in improved efficiency in service delivery, higher citizen satisfaction, increased transparency and accountability to the Government.

Despite these seemingly large and impressive numbers there are still many gaps in Electronic Delivery of Services. There are many other services which can be brought under ESD and there is

under-utilization of many services due to various structural bottlenecks. Government intends to take a sectoral approach to ensure that each and every service that is being offered by various government departments to the citizens is done electronically over the next coming years. While most of it will be done in-house, government will also encourage private developers to come up with e-governance solutions.

E-Governance

Government of Telangana will identify end to end digital solutions in a number of key sectors where the Government plays a major role. Following list includes but is not limited to some of the key e-governance initiatives under different sectors:

Education – The programs under this sector are aimed at converting normal classrooms into digital classrooms. For achieving this goal, various technology providers will be evaluated and the focus will be on delivering content, evaluating students, maintaining student records and training teachers using electronic media.

Agriculture – Technology will play a key role in assessing crop conditions, transferring knowledge, giving solutions, crisis management etc. Additionally, the government will use technology to help the farmer take his produce to the market with initiatives similar to e-mandi, e-choupal etc.

Land Records – In line with the NLRMP (National Land Records Modernization Program), the government of Telangana will digitize land records for which the surveying and the changes in records will happen electronically

Welfare – Avenues such as welfare hostels, disbursement of pensions through e-panchayats shall be actively tapped to successfully implement welfare services. Additionally, the government will work towards enabling biometric and door step deployment of welfare schemes.

Ease of Doing Business – The entire chain of activities required from an investor while doing business in the state like accessing policy documents, scrutinizing availability of suitable land, applying for land and incentives, processing of his application, grant of approvals and clearances, sanction of incentives, post-implementation support will all be streamlined and made investor friendly by the application of technology.

Delivery of Services through Mobile Devices (M-Governance)

Electronic delivery of services are intended to make transactions with citizens a seamless and user-friendly affair. With the increasing availability of mobile handsets with the citizens there is an interesting opportunity to shift from delivery through electronic kiosks to delivery through mobile devices. It is estimated that there are 980 million mobile phones in India of which close to 320 million phones are smartphones. The pattern in Telangana is more or less the same. Mobile phone usage has reached even the remotest habitation and household. Given the advancement in technologies and the evolution of the hand-set market dynamics which is leading to a concomitant fall in device prices, the day is not far off when most of the mobile phones are also smart phones. Government of Telangana will endeavor to provide all the electronic citizen services on a mobile platform. The Government will position an in-house team and also take help from private developers and organizations to ensure a rapid roll-out of all the e-services into the mobile platform. The government intends to develop portfolio of mobile applications that are made easily available to the citizens. The government will facilitate this through telecom providers and existing application store proprietors.

8
DIGITAL TELANGANA

To transform the state into a truly digitized region by connecting every household through broadband, by providing Wi-Fi in major municipal corporations and by ensuring 100% digital literacy

- To ensure that atleast one person in every household in Telangana is digitally literate
- To provide internet accessibility for all by establishing connectivity through broadband to every household and Wi-Fi network in all major towns and cities
- Every government school in the state will provide digital literacy to students over 6th grade
- To create innovative mechanisms to encourage companies, established players as well as up and coming start-ups, to assist with the development of digital infrastructure and educational content for schools in the state, and to come up with innovative/disruptive models to create and deliver educational content

After Make in India and Clean India (Swachh Bharat), the Government of India has launched its 3rd major campaign, called **Digital India**. The ITE&C Department has simultaneously planned for a very ambitious **Digital Telangana** programme, some of whose goals far exceed Digital India's goals.

Digital Telangana stands on two pivots; each of them representing the supply and the demand side. On the supply side, the main aim is to ensure that digital facilities become available to each and every person in the State. This is being made possible through:

i. **Optical Fiber Connection** – The government shall lay Optical Fiber to each household in Telangana. An innovative approach of using the water grid trenches will be adopted for this initiative, thereby reducing the cost and time.

ii. **Providing 4G Services in the entire State** – The government shall collaborate with various telecom operators to roll out 4G services throughout the State. The government will issue enabling orders that will facilitate rapid implementation of these services by removing all the roadblocks connected with right of way, usage of public property, road cutting permissions, standardization of charges etc.

iii. **Wi-Fi in major Cities and Towns** – The government shall provide Wi-Fi service in all major towns. This initiative has already been started in Hyderabad on a pilot basis. The government will issue enabling orders that will facilitate rapid implementation of these services by removing all the roadblocks connected with right of way, usage of public property, road cutting permissions, standardization of charges etc.

iv. **Digital Telangana Centers** – The Government will create a digitally connected center at the Panchayat level in each of the 8,700 panchayats of the state. Each center will be managed by a trained Village Level Entrepreneur (VLE), who will be a woman. The centers will provide various digital services like G2C services (Mee-Seva), e-panchayat services (property tax, utility payments etc.), financial services (payment of pensions, wages etc.), banking services, insurance services and training services. Opportunities for taking up B2C services and e-commerce will also be provided at these centers.

Similarly, on the demand side, the intention is to make each and every person digitally literate, aware and empowered so that he/she can make best use of the digital facilities that are being made available right at his/her doorstep. The strategies for this include:

i. **Digital Literacy Programme** - Under this program, the Government shall ensure one member every household be made digitally literate in the next 5 years

ii. **School Computer Literacy Programme**: The government shall teach the basics of computers to every child from Class 6 onwards. The government shall proactively engage with IT companies in the State to improve and expand digital infrastructure in public and public aided schools by reusing obsolete computer systems.

For each of the above programmes, a detailed implementation plan will be worked out.

9 PROMOTIONS

To put Telangana on the global map by participating in global roadshows and events and aggressively promoting the initiatives, developments, and opportunities in the State

There is increasing interest in India as a destination for investment, in the backdrop of major national campaigns like "Make in India" and "Digital India'. Everyone in the world wants to do business in India and move here fast. Within the umbrella of national campaigns, the states today have total flexibility and autonomy in designing their own policy offerings and competing for global business with other states. Given the strong legacy of Hyderabad as a dynamic and vibrant Information Technology hub and given the new circumstances of the Telangana state, which has brought in decisive leadership, business-friendly policies and proactive governance, it is imperative that the strengths of the state are showcased appropriately across global and national platforms. The ITE&C department will design a sustained promotions campaign by taking assistance of professional agencies involved in branding &promotion. The focus of promotion activities will be four-fold.

1. **International and domestic roadshows** before invited audiences comprising of leading IT/ITES, Electronics, financial services and investment banking, asset management companies, property development firms and International governments, heads of missions in India, academic community, thought leaders, international and national media heads, opinion makers and influencers.

2. **Participation in international and domestic trade shows**, conferences and seminars in which opportunity is given to highlight the advantages the state offers for the IT/ITES, Electronics and related sectors.

3. State of Telangana will also offer to **host major international and domestic events** in Hyderabad so that the advantages of the state are showcased more vividly and more contextual interaction is possible. Some of these proposed events are World IT Congress, eIndia Conference, Electronics Summit and TIE Entrepreneur Summit.

4. ITE&C department will also be a part of the state's **bi-annual global investors meet**.

10

ENHANCED QUALITY OF LIVING

To put Telangana on the global map by participating in global roadshows and events and aggressively promoting the initiatives, developments, and opportunities in the State.

While the Government of Telangana is working hard towards building world-class infrastructure and creating an accommodating regulatory environment for companies investing in the state, the Government also realizes that people and local talent are equally important for propelling the growth of an economy. Hyderabad has been ranked 1st in the country for quality of life by Mercer Quality of Life rankings and 2nd globally by National Geographic among its 'Must-See destinations for 2015'. Also, the city is the best among all metros for air and water quality. The Government of Telangana is constantly working towards further improving the quality of life for its citizens.

Location Advantage

Hyderabad offers significant advantages over other cities in India, in terms of connectivity, climate, infrastructure, talent pool and predictable weather pattern. Situated centrally, the city is at the most 2.5 hours away from any location in India. The city is well connected internationally through its world-class Rajiv Gandhi International Airport. The Hyderabad Metro Rail, construction of which is proceeding rapidly, is the largest PPP Infrastructure project in the world and will play a key role in improving the traffic situation. Acting as a corridor between the north and south of India, the state is very well connected through excellent road and rail infrastructure.

Vibrant Cosmopolitan Culture

The State of Telangana has historically beena melting pot of different cultures and is truly cosmopolitan. There is no language barrier in the state as most people can speak English and Hindi in addition to the native language Telugu. To build on this, the Government wants to ensure that there is a vibrant city life. The IT Department along with other line departments such asTourism Department, Greater Hyderabad Municipal Corporation (GHMC), Hyderabad Metropolitan Development Authority (HMDA), and Sports Authority will promote the "Happening Hyderabad" initiative, a round-the-year effort intended to create a buzz around the city. As a part of the initiative, events such as Marathons, Sunburn, theater, art and literary festivals are being encouraged.

Environmental Sustainability

With an exponential rise in economic growth, industrialization and consumer spending there is also a steep rise in the impact that we have on the environment. Realizing this, the Government of Telangana will build upon the already existing multitude of initiatives and take up a few new ones to reduce our carbon footprint. The government shall develop IT corridors that facilitate the concept of "Walk/Cycle to work". The Government of Telangana shall focus on the following areas:

- **Solar Power:** The government shall aggressively promote the use of solar technologies by providing subsidies and capital support. In this direction, for major IT projects a minimum of 15% of the energy consumed should be mandated for green energy.

- **Water and Waste Management:** The Government shall encourage companies to take measures to segregate both domestic and e-waste properly. The companies shall be mandated to not use plastics in IT corridor and incentivized to set up sewage treatment plants. Sufficient support mechanisms shall be provided so that companies can recycle rain water.

- **Air Pollution:** The Government shall encourage companies to follow car-pooling mechanisms. Innovative systems to facilitate public transportation and cycling to work shall be encouraged and publicized.

- **Green Cover:** Government of Telangana has initiated a prestigious project, "Harithahaaram" that aims to increase the green cover in the state. ITE&C department shall work with GHMC and TSIIC to add tree cover in the IT corridors.

All benefitted companies will be mandated to participate in these initiatives through appropriate legislation and other policy measures. Those companies that take the lead and stand-out as role models in these initiatives will be duly recognized in an appropriate manner.

RESTRUCTURING OF ITE&C DEPARTMENT

The goals outlined in the above policy require a highly professional and efficient ITE&C department having domain experts who are nimble, agile and well versed with global trends. To meet the requirements in each of the above task areas, the ITE&C department will have separate wings for expanding IT and ITES, Electronics, Promotions, Digital Telangana, Government Services, New Initiatives etc. as indicated in the organization chart below.
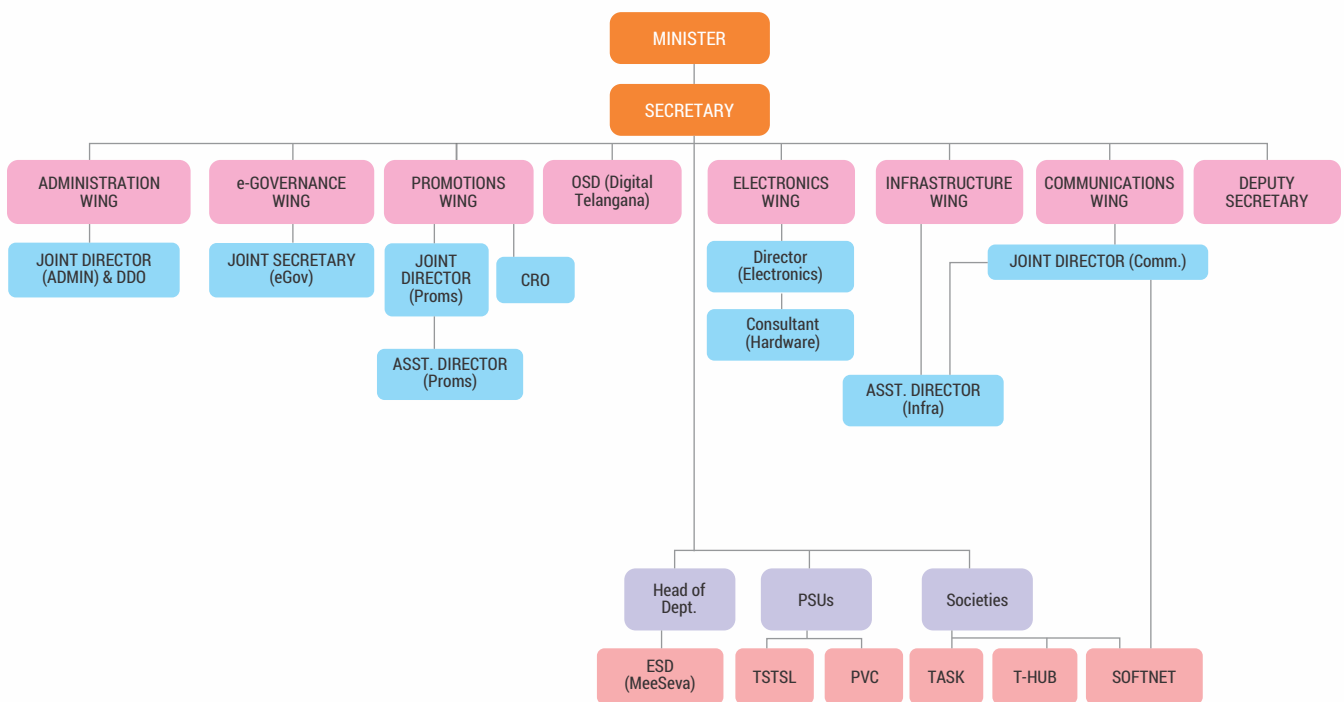
As shown in the above organogram, the revamped IT Department will constitute the following teams:

1. **Relations Wing** – Led by the Chief Relations officer, this wing shall be responsible for promotions and expansion of IT/ITES companies

2. **Electronics Wing** – Led by Director (Electronics & Semiconductors), Electronics wing shall take care of all Electronics related initiatives

3. **New Initiatives:** Photonics Valley Corporation – Led by CEO, PVC

4. **Electronic Service Delivery Wing** – Led by the Director, ESD. This institution will look after ESD and M-Governance activities

5. **TSTS** – Procurement of IT Services and Products for all government agencies

6. **Communications & Infrastructure Wing** – Headed by the Jt. Director, will look after supply side of Digital Telangana Initiatives

7. **TASK** – Led by CEO, TASK. This institution will be responsible for all skilling initiatives

8. **T-Hub** – Led by CEO, T-Hub. This institution will promote innovation and entrepreneurship

9. **SoFTNET** – Led by CEO, SoFTNET. Will enable outreach of TASK, E-Governance programs through television, online content etc.

10. **Administration and Finance Wing**

11. **Officer on Special Duty** for demand side of Digital Telangana Initiatives and focused E- Governance programs for health, education, agriculture, disaster relief etc.
    (Digital Literacy / School Literacy)

12. **SeMT** – State E-Governance Mission Teams – Led by the team leader. Will take the responsibility of adoption of IT solutions in different Government departments.

These positions will be staffed by recruiting talented professionals from open market or talented individuals under deputation from other institutions. ITE&C department will also engage professional consultant organizations in the areas of IT/ITES, Electronics, New Initiatives like Gaming & Animation, and Promotions to ensure maximum global outreach and increased investments in the state.

Interface of ITE&C Department with other Departments

The ITE&C department will also drive change across other Government departments and help them in every possible way to upgrade their IT systems to function efficiently and offer citizen services better. The following arrangement will be facilitated in all Government departments to enable this change:

i. A dedicated IT Cell will be created in each department which will liaise with ITE&C department for various IT specific initiatives

ii. A dedicated person will be appointed in each departments for maintaining and updating content on the department website

iii. An IT budget will be allocated by each of the departments for all IT related activities

Restructuring of ITE&C Department at District Level

The role of IT in improving lives of citizens is gaining prominence not only in urban but also in rural areas. There is a strong need for revamping the organizational structure at district level to derive maximum impact. The current set-up allows one person to oversee administrative tasks of IT needs of various districts. This is clearly inadequate and the Government of Telangana proposes a new framework to take IT to the roots of the society.

A District IT officer, supported by 2 program managers, will be appointed for each of the districts. One of the program manager will be responsible for ESD, E-Governance and M-Governance initiatives of the state, thereby ensuring efficient delivery of citizen services, while the other will take responsibility to help IT penetrate deeper into the state through Digital Telangana initiatives. This program manager will place equal importance to both supply side (Broadband connection, 4G,Wifi, Digital Telangana Centers) and demand side (School Computer Literacy, Digital Literacy) initiatives. These program managers will be well-accomplished professionals who shall either be sourced from the open market or from other line departments in the government. While it is important to pursue an aggressive strategy to take IT to all districts, the state also realizes the importance of efficient use of resources. The job description and objectives of the district IT officer and two program managers will complement the already existing National Informatics Center (NIC) and State Informatics Center (SIC) personnel. The tasks assigned to the district IT team will be non-overlapping with the existing IT resources.

ALIGNMENT WITH
GOVERNMENT OF INDIA SCHEMES

The State will ensure that it is well aligned with the overall policy framework prescribed by GoI and the national schemes that have flown from the policy. While adhering to the broad guidelines of national policies and programs, the state will also identify its unique requirements and accordingly create implementation plans. Some of the main policies and schemes are given below:

1. National IT Policy

2. Digital India

3. Information Technology Investment Region (ITIR)

4. Electronic Manufacturing Clusters (EMC)

5. National Skill Development Mission

6. BharatNet

7. National Program for Cyber Security

8. State Data Center (SDC) and State Wide Area Network (SWAN)

9. E-District, SSDG (State Service Delivery Gateway), MSDG (Mobile Service Delivery Gateway)

10. Common Service Center (CSC)

11. Knowledge and Collaboration Portal – Knowledge portal

12. NLRMP (National Land Records Modernization Program)

13. CCTNS – Crime and criminal Tracking Network and Systems

14. E-Panchayat etc.

PARTNERSHIPS

In achieving all tasks hitherto identified in the policy, the state will encourage all credible institutions like Universities, Private companies, Non-Profit Organizations and Industry bodies to join hands with it. The ITE&C department will strive to identify win-win situations with a range of partners and enter into bi-lateral agreements as appropriate with partners across the spectrum. All these partnerships will be forged in an objective and transparent manner after carrying out proper due diligence (institution, private sector etc.). Depending upon the circumstances, the Government will the play role of a catalyst, and the actual implementation will be done by partners.

International Partnerships

Government of Telangana shall proactively scout for opportunities to partner with International bodies in order to bring in their expertise to the state. The government will enter into MoUs with research institutions, international universities, regional ecosystems and various global IT clusters of the world. These agreements will be aimed at bringing additional benefits to the state and transforming its gaps into reliable strengths.

Conclusion

Telangana is India's newest state. It has been founded on a dream, and is being guided by a vision. Telangana has been founded on a revolutionary, transformational promise, of equal opportunity, of a paradigm shift away from exclusive elitism, towards inclusive excellence and overarching development. Technology is integral to this vision, and the concomitant roadmap, and Telangana plans to make IT and innovation the core of its efforts to transform the lives of citizens and put the State on the global map. Telangana has a committed leadership, and the State will put together a world-class operational model, drawing talent from, and forging partnerships with the best and the brightest from across the world. Within a short span of time, much has been achieved, but much more remains to be done. Telangana is open for business. Welcome to India's most promising startup State.

http://it.telangana.gov.in

Jayesh Ranjan IAS
Secretary to Government

Information Technology, Electronics
& Communications Department
Government of Telangana
D - Block 2nd Floor Room No. 315A
Telangana Secretariat Hyderabad-500 022
P: +91 40 2345 6401 F: +91 40 2345 0103
secy_itc@telangana.gov.in
jayesh_ranjan@hotmail.com