

Realising the Vision of Digital Telangana



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From the Minister's Desk

KT RAMA RAO

Hon'ble Minister for IT, Industries and MA&UD,
Government of Telangana

The growth of the IT sector in Telangana is a matter of considerable pride. Year after year, new records are set in areas of IT software development and export, and IT sector employment. The achievements for this year have taken the records to a new level of high. This makes us the best performing state amongst all by a wide margin.

When the 2nd ICT policy was launched in September last year, we had set very ambitious targets, with the belief that the momentum of the first five years aided by strategic push from the government will help us redefine new boundaries. This year's results clearly show that our optimism has been completely well placed.

Several new companies have found their home in Hyderabad. Most importantly, the existing companies have ramped up their operations quite significantly, which is the biggest testimonial to the fact that they find the going to be extremely good in our state and city. Many mid-scale and small companies in niche areas of cutting-edge technologies have started their operations here. Tech start-ups have also contributed in a big way to the rich landscape of Telangana. Our model of developing plug and play space in tier II cities and then inviting IT companies to set their operations in these places has borne rich dividends. The IT towers in Warangal, Karimnagar and Khammam are doing extremely well, and in forthcoming months, we will be starting new facilities in many other Tier II cities like Nizamabad, Mahbubnagar, Nalgonda and Siddipet. We are now emulating the same model as a part of the GRID policy also with a plug and play IT facility in Medchal and a proposed one in Malakpet.

All the wings of the IT, E&C Department have continued to perform exceedingly well. Both the T-Hub and WE Hub have provided high-quality incubation support to their start-ups, many of whom have been able to scale up their operations, receive funding support and also create a very positive social impact. We are looking forward to the opening of new buildings for T-Hub and T-Works. Rural innovation and innovation amongst the youth has been given a new fillip by the launch of Y-Hub, an innovation ecosystem targeted mostly at school and college students. We thus become the first state in the country to have a structured set up for this age group, about whom I

sincerely believe that catching them young will go a long way in sowing the seeds of innovation and entrepreneurship in their minds at the right age.

TASK has played an important role in supporting the growth of IT companies in Tier II destinations by ensuring the availability of good quality manpower in these centres. The hybrid model of skilling that was introduced the year before as a consequence of the pandemic has been continued with much success in this year also. T-SAT has also become a very useful institution in providing home-based education to school and college students during the pandemic times, and now preparing candidates aspiring for the huge number of government jobs.

The Electronics wing has succeeded in facilitating many new investments including repeat investments in our state. Not only has this contributed to the growth of our economy, but has also led to the creation of a large number of jobs. We are poised to build upon this momentum in the coming months and seek major new investments in the Electronics and Semiconductor areas.

The work that Telangana does in emerging technologies is the talk of the world. Even at the WEF event at Davos, our achievements in AI, Blockchain and Drones were spoken about with lots of admiration. Our assistance to other government departments and agencies to adopt more and more technology enabled solutions to improve their internal processes and outreach to their stakeholders has been delivering positive outcomes continuously.

I am very grateful to the Hon'ble Chief Minister for his encouragement and support to our endeavours. My team led by the Principal Secretary have also risen to my expectations of bringing laurels to the state through their hard work and untiring efforts. I would also like to convey my gratitude to all the industry partners and stakeholders for working together with the government in transforming Telangana as a truly technology-enabled state.



IT, E&C DEPARTMENT'S PROFILE



Information Technology, Electronics & Communications Department plays a crucial role in:

- Policy formulation for IT, ESDM sectors
- Conceptualizing and initiating various e-Governance initiatives
- Promoting investments in IT, ITes, ESDM, and other emerging technologies through proactive measures
- Creating a congenial environment for IT, ESDM companies to setup/ expand their operations
- Monitoring the benefits of IT percolates to the last mile of the State
- Providing strong communications backbone in the State



VISION

To leverage Information Technology not just for effective and efficient governance, but also for sustainable economic development and inclusive social development.

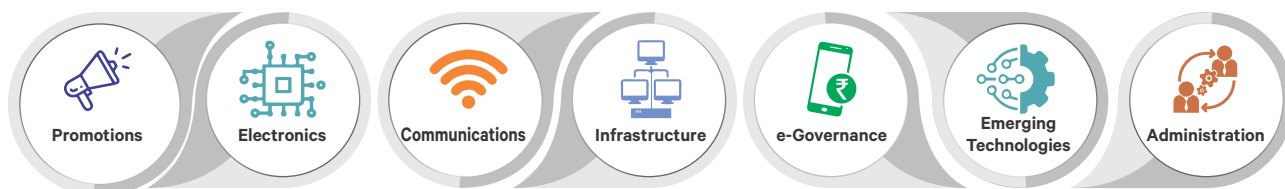


MISSION

To facilitate collaborative and innovative IT solutions and to plan for future growth while protecting and enhancing the quality of life.



THE DEPARTMENT



IT, E&C Department functions under one Principal Secretary assisted by senior and middle-level officers. The Department has:

One HOD

- Commissioner/Director. Electronic Services Delivery (ESD/MeeSeva)

One Public Sector Undertaking

- Telangana State Technology Services (TSTS) Ltd.

Three Societies

- Society for Telangana Network (SOFTNET)
- Telangana Academy for Skill and Knowledge (TASK)
- Society for Promotion of Industry and Innovation in Electronics in Telangana (T-Electronics)

Six Companies

- T-Hub Foundation (T-HUB)
- WE Hub Foundation (WE Hub)
- Telangana State Innovation Cell (TSIC)
- T-Works Foundation
- Telangana Fiber Grid Corporation (T-Fiber)
- Photonics Valley Corporation (PVC)



TELANGANA IT/ITeS EXPORTS WITNESSING AN EXTRAORDINARY GROWTH

- Telangana's IT/ ITeS Exports touched Rs 1,83,569 Cr for the financial year 2021-22, an increase of a whopping 26.14% over the previous financial year. The quantum of IT/ ITeS Exports saw a 220% growth since 2013-14. The rise of Rs. 38,046 Cr from 2020-21 is the highest in a single year since State formation.
- During financial year 2021-22, Telangana added 1,49,506 new jobs taking the total IT/ ITeS employment to 7,78,121, an YoY increase of a phenomenal 23.78% compared to the FY 2020-21. Telangana IT/ITeS employment witnessed an impressive 140% growth since 2013-14. The addition of 1,49,506 jobs from 2020-21 is the highest in a single year since State formation.
- Going by the progress in exports figures and employment generation, Telangana is well on its course to achieve Rs.3 lakh Cr exports and 10 lakh jobs – the target set in the 2nd ICT Policy 2021-26.

EXPORTS

IT/ITeS (INR Crores)

| | | |
|----------|---------|----------|
| 1,83,569 | 2021-22 | 7,78,121 |
| 1,45,522 | 2020-21 | 6,28,615 |
| 1,28,807 | 2019-20 | 5,82,126 |
| 1,09,219 | 2018-19 | 5,43,033 |
| 93,442 | 2017-18 | 4,75,308 |
| 85,470 | 2016-17 | 4,31,891 |
| 75,070 | 2015-16 | 4,07,385 |
| 66,276 | 2014-15 | 3,71,774 |
| 57,258 | 2013-14 | 3,23,396 |

EMPLOYMENT

IT PROFESSIONALS

Growth

in IT/ITeS Exports (2021-22)*

TELANGANA 26.14%

*The statistics were provided by Director of Software Technology Parks of India, Hyderabad (STPI) and Development Commissioner, VSEZ



IT INVESTMENTS

Goldman Sachs

Minister KTR has inaugurated Goldman Sachs' office in Salarpuria Sattva Knowledge City, HITEC city. The Investment Banking giant plans to have a headcount of 2,500 in three years. The Hyderabad unit will work on functions across engineering, finance, human capital management, and support for consumer banking.



One Plus

Consumer Electronics manufacturer OnePlus has made Hyderabad a hub for making smart TVs in India. About 500 employees are involved in the production, and it plans to roll out one million smart TVs.



Plug And Play

World's leading open innovation platform, Plug And Play, opened their office in HITEC City and will be catalyzing the growth of Automotive startups in Telangana.

MassMutual Inauguration

Minister KTR inaugurated the office of Insurance major MassMutual at BSR Tech Park, Nanakramguda in Hyderabad.

Stellantis Expansion

Netherlands-based mobility tech company Stellantis is expanding Hyderabad operations by adding 2,200 jobs by 2024.



BOSCH

German MNC and a world leader in Mobility, Industrial Engineering & Home Appliances, Bosch has chosen Hyderabad as a strategic location for its Global Software Technologies and R&D facility. They have started operations in HITEC City and will employ about 3000 people working on technologies such as Cloud, AIoT/ ML, Cyber, and embedded security.

Qualcomm Expansion

American multinational corporation Qualcomm announced its largest campus outside the US in Hyderabad. The 1.6 million sq ft facility will be operational by October 2022.



Google

Google is building its largest campus outside its HQ at Mountain View, USA. Minister KTR broke the ground for a 3.3 million sq ft energy-efficient campus in Hyderabad built with sustainable standards on 28 April, 2022.

GRID Dynamics

Grid Dynamics, an engineering IT services company into transformative cloud solutions, has announced plans to open its first presence in India with a headcount of 1,000 by the end of year 2022.



Mobility Cluster

With a vision to make Hyderabad a world-class destination for the mobility sector, ITE&C Dept. has started working on Mobility Valley which will be India's best and the most comprehensive Mobility Cluster. Designed the Mobility Valley Framework, with Boston Consulting Group as the strategic partner, taking the best practices from automotive parks around the globe. The Mobility Valley will have engineering and testing labs, pre-certification and certification facilities, AV and EV proving grounds, R&D and innovation campuses, an Automotive University, among other things.

GRID POLICY

The Telangana Government has come up with Growth in Dispersion (GRID) policy with a view to promote dispersed growth across Hyderabad. Special incentives are offered to companies that expand or set up their units beyond Western part of Hyderabad.



Gateway IT Park, Kandlakoya

Minister for IT KT Rama Rao and Labour & Employment Minister Ch. Malla Reddy laid the foundation stone for Gateway IT Park in Kandlakoya, Hyderabad on 17 February, 2022. More than 70 companies have applied for space in the Park.

Genpact

Ministers KTR and Ch. Malla Reddy laid the foundation stone for expanding Genpact Campus in Uppal in alignment with the GRID Policy.

SPREADING IT TO TIER-II CITIES

The Government of Telangana has unveiled Rural Technology Policy for the growth and development of Tier-II cities and rural areas. The IT, E&C Dept. is developing IT Towers/Incubation Centres across the Tier - II/ Tier III locations with a target to generate employment to 25,000 professionals by 2026.

- IT Companies Softpath and Quadrant have started their operations in Warangal IT Tower/Incubation Centre. Genpact and MindTree/ L&T have scheduled to start their operations in 2022.
- Construction of IT Towers in Nizamabad (50,000 sq ft), Mahbubnagar (60,000 sq ft) and Siddipet (1,21,600 sq ft) is nearing completion and scheduled to be inaugurated by October, 2022.
- Ministers Sri KTR, Sri G. Jagadish Reddy and Sri V. Prashanth Reddy laid foundation stone for the construction of IT Hub in Nalgonda on 31 December, 2021.





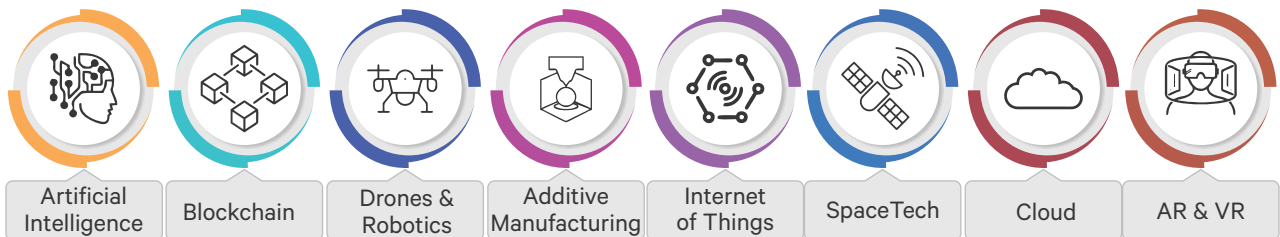
EMERGING TECHNOLOGIES

A first-of-its-kind dedicated vertical established in 2018 to nurture the ecosystem of emerging technologies in the State and enable their potential socio-economic impact.



Technologies in Focus

The ET Wing focuses on an expanding portfolio of emerging technologies that include:



Dedicated Institutions

Institutions operationalized to implement several technology-specific initiatives.



SpaceTech Framework

The technology-specific framework has been launched with a vision to “establish Telangana as a globally recognized one-stop destination in Space Technology”. The framework was officially launched in the presence of Minister for IT, KT Rama Rao, CEO, NITI Aayog Amitabh Kant, Chairman, ISRO S Somanath and Chairman, IN-SPACE Dr. Pawan Goenka. The launch event happened in metaverse in a first-of-its-kind adoption in the country.



TELANGANA AS THE NATIONAL HUB FOR 3D PRINTING

National Centre for Additive Manufacturing

The National Centre for Additive Manufacturing (NCAM) is being set up inside Osmania University as a dedicated Section-8 company in Hyderabad in partnership with the Ministry of Electronics and Information Technology (MeitY), Govt. of India. The centre would be responsible for boosting the domestic Additive Manufacturing (3D printing) ecosystem by offering access to infrastructure and synergizing the efforts of all stakeholders.



National Conference on 3D Printing in Medical Devices & Implants

India's first national conference on 3D Printing in medical devices and implants was organised by NCAM in Hyderabad on 13 May, 2022. This day-long National Conference exhibited the latest 3D printing technology and highlighted challenges of this technology in medicine. The conference was attended by more than 500 doctors wherein 40 speakers gave an expert talk on Additive Manufacturing (AM) technology in Healthcare Industry. As part of the conference, over 25 MoUs were signed to forge partnerships with leading organisations in AM technology from India and abroad such as EOS GmbH, SLM Solutions AG, Markforged, ASTM International, Wipro 3D, 3D Systems, Redington Group, Intech Additive, IISc Bangalore, ARCI, IIT Hyderabad, Print City - Manchester Metropolitan University, Deakin University, Australia.



DRONE INITIATIVES

Medicine from the Sky (MFTS)

MFTS is Telangana's flagship project for driving adoption of drones in healthcare logistics and is being undertaken in partnership with World Economic Forum and HealthNet Global (Apollo Hospitals). It was officially launched in September, 2021 in the presence of Union Minister for Civil Aviation Jyotiraditya Scindia and Minister for IT KT Rama Rao. The Phase 1 of the project constituted Asia's first and largest organised trials with more than 350 flights across 8 consortiums for drone-based medical deliveries.



Hara Bhara (Afforestation by Seed Bombing)

To support the Haritha Haram initiative of the Telangana Govt., Hara Bhara was launched as India's first aerial seeding project in partnership with Hyderabad-based startup Marut Drones. A total of about 12,000 hectares of forest area across 31 districts was successfully covered with 50 lakh seed balls during the Monsoon of 2021.

AGRITECH AS THE FOCUS

Saagu Baagu

Saagu Baagu is the flagship AgriTech project in partnership with the World Economic Forum to leverage technologies to enhance Production, Productivity and Profitability of farmers.

In a first-of-its-kind Public Private Cooperation (PPC) model, two AgriTech consortiums comprising a total of 8 Innovators/ Startups will create a positive impact for 50,000+ farmers over the next 2 years. Aimed at reducing input costs, Saagu Baagu focuses on Chilli and Groundnut crops. New age solutions such as AI-based pre-season crop planning advisories; timely pest management advisories and effective output market linkages, etc. are being utilised to yield desired results.



Saagu Baagu kick-off meeting at Khammam Collectorate



AI-based Pest Management for Cotton

The AI-based Pest Management for Cotton was deployed with 3,105 lead farmers and 653 AEOs from six major cotton growing districts viz. Adilabad, Karimnagar, Nalgonda, Mahbubnagar, Khammam, and Nagarkurnool. The solution by Wadhvani Institute of AI uses a smartphone-based app to advise farmers in advance of impending pest (pink bollworm) attacks. These timely advisories resulted in effective usage of pesticides e.g. the average spray cost for user farmers was Rs. 3,460 compared to Rs. 3,905 for other farmers.

Quality Assaying of Agri Commodities

A pilot project for AI-based objective produce grading and quality assaying for paddy/rice and red gram. The solution, developed by a Hyderabad based startup Nebulaa, captures and analyses images of the grains to determine quantitative procurement parameters, e.g. shrivelled grains in paddy. This ensures fair assessment of crops that is free of human error and bias. The technology helps in assessment of the quality thus aiding export of commodities.



Seed Traceability

A pilot project to securely trace the movement of truthfully labelled seeds from production till the final farmer on a blockchain network. The solution is developed by AgHub incubated startup TraceX to curb the spurious seeds menace and save the farmers from purchasing them from the market. Farmers can scan the QR codes on seed packets and validate its authenticity and source.

Smart Irrigation Management

A pilot on smart irrigation systems i.e. using IoT for automated water supply to fields. The irrigation solution is based on moisture in the soil and the weather conditions as captured by various sensors. The solution, from Hyderabad-based startup Aquastride, will maintain the optimum moisture in soil thereby increasing the yields and reducing water consumption.



Smart Nutrient Management

A pilot has been undertaken for rapid soil testing solution developed by Hyderabad-based startup Krishitantra. A soil health map for various nutrients in the Mandals of Maheshwaram, Kadthal, Kandukar and Amangal of Rangareddy District of Telangana was developed under this project. This would enable generating rapid soil health cards for farmers at their fields and the government interventions can be made based on geo-tagged soil health records.

ARTIFICIAL INTELLIGENCE INITIATIVES

Telangana AI Mission (T-AIM)

The Telangana AI Mission is an institution established by Govt. of Telangana and is powered by NASSCOM. It undertakes several initiatives to catalyse the AI innovation ecosystem in the State.

Revv Up - Acceleration Program for AI Startups

Revv Up, the free-of-equity, free-of-cost acceleration program by T-AIM, is exclusively designed for early-stage AI startups. It is a key step towards making Telangana and Hyderabad a global destination for Artificial Intelligence. A total of 80 startups have been receiving mentorship and knowledge sessions from industry experts, access to global pathways, and technology and IP resources to build scalable businesses.

Telangana Forest AI Grand Challenge

The Grand Challenge, in partnership with Capgemini, aims to seek novel AI solutions from startups to predict the movement of wildlife and other valuable insights thereof that help in preserving wildlife in Telangana's forests.

NextGenGov 'Data For Policy' Initiative

ITE&C Dept. has entered into a partnership with United Nations Development Programme (UNDP) that will promote local and global innovations as appropriate and foster a 'data for policy' ecosystem in the State of Telangana in diverse streams of work, including but not limited to sustainable food systems. The focus would be on strategies such as anticipatory and data-driven governance, policy experimentation, etc.



BLOCKCHAIN INITIATIVES

eVoting

A smartphone-based solution has been developed to enable eVoting especially for vulnerable demographics. AI is used for a three-factor authentication of valid voter viz. Name Matching with Aadhaar, Liveness Detection of Individual, and Image Matching with Electors Photo Identity Card (EPIC) Database. Blockchain (Distributed Ledger) is used to secure the de-identified and encrypted votes. A dry run was successfully conducted in Khammam District in October, 2021 and got positive feedback with 85% of the users terming it as user-friendly.

Gunny Bag Tracking

The State's Public Distribution System (PDS) has 2.83 million beneficiaries and uses 110 million bags annually for food grain distribution, but tracking the inventory of gunny bags and traceability of supplies has been difficult. Hence, a pilot has been initiated where blockchain is being deployed to track distribution at the gunny bag level. The goal is to have an end-to-end tracking system, eliminating discrepancies in both quantity and quality of food grains.

CYBERSECURITY CENTRE OF EXCELLENCE (CCoE)

The Cyber Security CoE is a joint initiative with Data Security Council of India (DSCI) to build best practices, catalyse innovation, entrepreneurship and capability building in cyber security and privacy.

The Great AppSec Hackathon

CCoE along with its partners FutureSkills Prime and TASK conducted a jeopardy-style Application Security Hackathon. The Hackathon had more than 5,000 registrants and the winners were given monetary rewards along with internships in global companies such as Synchrony. It even secured marquee sponsors like CSW, Ivanti, JP Morgan and Synchrony.

Indo-Dutch Cybersecurity Summer School 2021

The 4th edition of Indo-Dutch Cybersecurity Program - 2021 in collaboration with Hague Centre for Strategic Studies, the Municipality of Hague, and Embassy of Netherlands was held from 4 - 29 October, 2021. A total of 234 Students participated in the 3-week program.

CENTRE OF EXCELLENCE (CoE) ON E-WASTE MANAGEMENT

The CoE is established at Centre for Materials for Electronics Technology (C-MET), Hyderabad under the aegis of MeitY and Telangana Government. The CoE aims to build a sustainable e-waste management ecosystem with a vision to establish a self-sustainable technology hub capable of managing India's e-Waste.

Partnership with GreenKo Group

With the development of advanced PCB recycling by CoE, a technology transfer and collaboration agreement has been entered into with the Greenko group. Under the partnership, GreenKo will contribute more than Rs. 7 Cr to the CoE to further its activities.

Lithium-Ion Battery Recycling

The Lithium-ion battery recycling plant has been inaugurated where novel technologies are being developed for the recovery of valuable metal contents from discarded Lithium-ion batteries.

EVENTS AND ACTIVITIES

| | | |
|---|--|---|
|  <p>Blockchain Central India with Global Blockchain Business Council</p> |  <p>Webinar on Telangana AgriTech Ecosystem with World Bank</p> |  <p>AI Procurement Workshop with German FAIR Forward Initiative</p> |
|  <p>UnBlock 4.0: Blockchain Symposium with DLT Labs</p> |  <p>Telangana's AI Ecosystem webinar with AGNii Mission</p> |  <p>AI Pe Charcha on Telangana's Ecosystem with NeGD</p> |
|  <p>UK India Tech Exchange on Government Use-Cases</p> |  <p>Representation at MeitY's Azadi ka Digital Mahotsav</p> |  <p>Launch of Data Annotation Cluster and MoU with Tika Data</p> |



ELECTRONIC SERVICES DELIVERY (ESD)

Electronic Service Delivery (ESD) is the single point agency for delivery of government services to citizens and businesses with a key focus on improving efficiency, transparency, and accountability.

ESD currently delivers:

- 600+ services of over 100 participating agencies
- Offered through over 4,500 MeeSeva centers spread across the State, an Online MeeSeva portal, and a mobile app.
- Handles approximately Rs 4,500 Cr per annum serving about 2.6 Cr citizens per annum.

Telangana top State in e-Transactions

| S.No. | State Name | Population | No of e-Transactions | e-Transactions Per 1000 Population |
|-------|------------------------|-------------|----------------------|------------------------------------|
| 1. | Lakshadweep | 64,429 | 1,09,93,407 | 170628.20 |
| 2. | Telangana | 3,51,93,978 | 4,91,04,03,990 | 139524.00 |
| 3. | Andhra Pradesh | 4,94,71,555 | 6,85,19,87,298 | 138503.60 |
| 4. | Kerala | 3,33,87,677 | 4,44,98,60,428 | 133278.50 |
| 5. | Dadra and Nagar Haveli | 3,42,853 | 2,97,79,291 | 86857.30 |

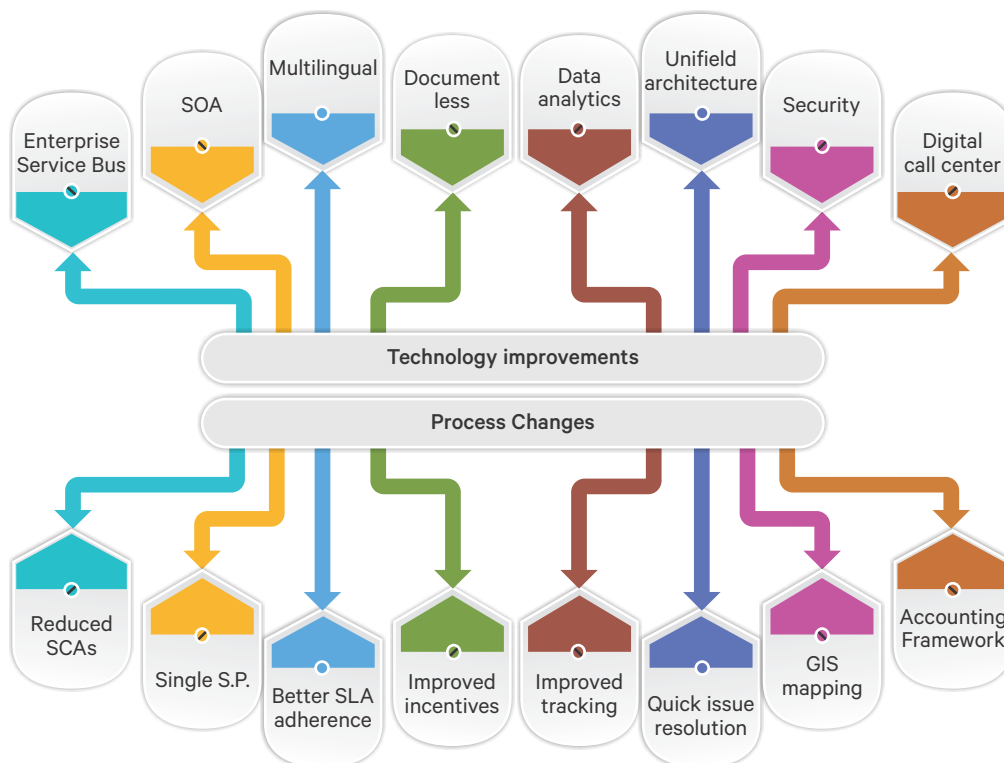
Telangana is one of the first States in India to adopt digital technologies for e-Governance. Telangana State has been ranked number one among the States in terms of e-Transactions per 1000 population as per the Electronic Transaction Aggregation and Analysis Layer (eTaal), MeitY, Govt. of India. Lakshadweep with a population of about 65,000 tops the list with 1,70,628 transactions per 1000 population.

(The rankings are based on the e-transactions recorded from June 2nd, 2014 to 26th May 2022)

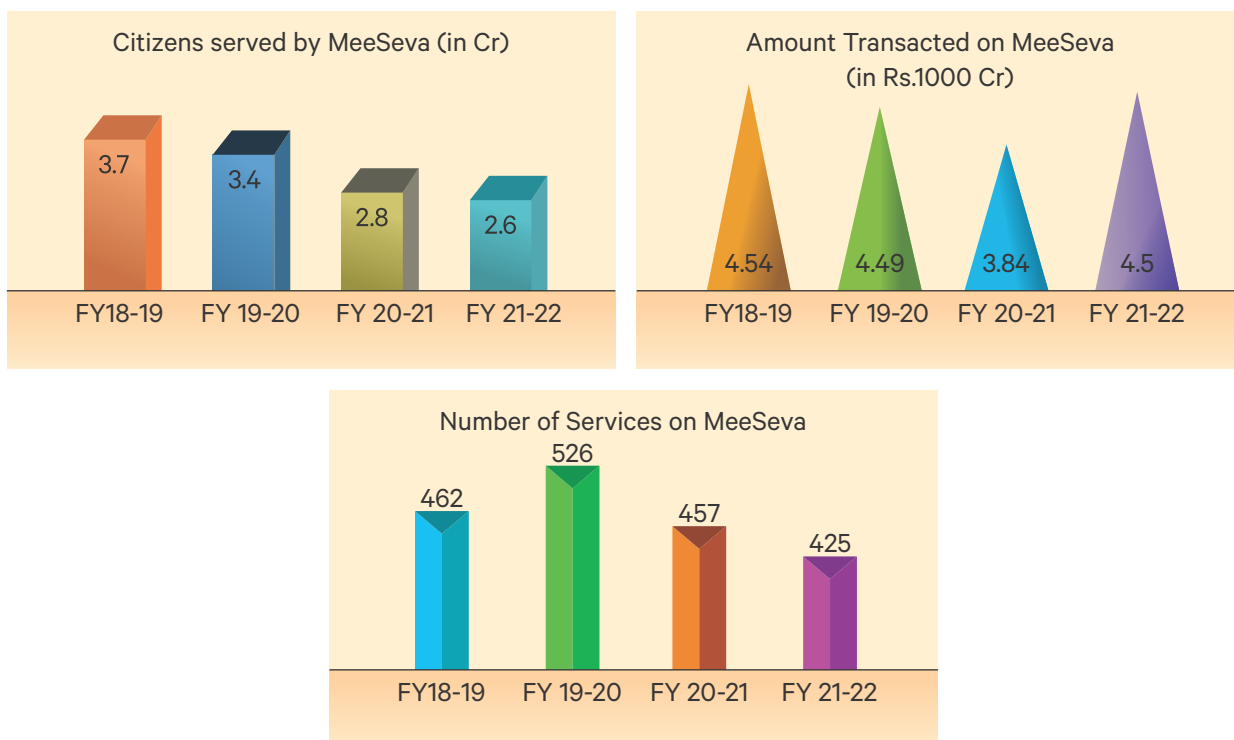
CITIZEN SERVICE DELIVERY PLATFORM(S)

MeeSeva 2.0 (MeeSeva in a new avatar!)

Rollled out in the year 2019, MeeSeva 2.0 has given significant benefits to all the stakeholders.



Key metrics of ESD (as on 5 May, 2022)



T App Folio

T App Folio, the flagship m-governance initiative of Govt. of Telangana, launched in February 2018, has recorded over 12 Lakh downloads. It is currently clocking close to 7,000 transactions a day. T App Folio currently hosts over 275 services from 33 participating departments.

T Wallet

T Wallet is the official digital wallet of Telangana State, launched on 1 June, 2017. Over 13 Lakh citizens have registered with T Wallet and it has facilitated close to 3.01 crore transactions amounting to about Rs.15,719 Cr in the last 5 years. T Wallet is now clocking about 5,00,000 transactions with a value of approximately Rs.300 Cr every month.

Smart Governance initiatives based on Emerging Technologies

Smart Governance is a key focus area for IT,E&C Department. In this regard, ESD has been adopting emerging technologies like Big Data, AI, ML, etc. for re-engineering processes involved in the delivery of all government services.

Real-time Digital Authentication of Identity (RTDAI)

RTDAI enables a document-less, presence-less governance mechanism using Big Data, AI, ML, etc. It facilitates key processes of government departments such as name verification, photograph verification, and ID verification for service delivery and ensures a proper audit trail for accountability and transparency. All the RTDAI citizen services are offered through T App Folio.

Pensioner's Life Certificate through Selfie (PLCS)

PLCS, the first use case of RTDAI, eliminates the need for pensioners to visit the authorized physical offices to submit proof of their liveness. During 2021-22 about 1,20,000 i.e. 40% of the pensioners have used PLCS. The PLCS has inspired the Government of India to launch a similar initiative in October, 2021.

RTA FEST

Except for services where a driving test or physical inspection of the vehicle is required, all the Transport Dept. services are offered in a contactless and presence-less manner through Friendly Electronic Services of Transport Department (FEST). About 90,000 citizens have availed of the services under FEST since its launch.

Renewing Driving License on a Sunday from the comfort of one's home using a smartphone is possible in Telangana thanks to the emerging technologies and FEST, an achievement very few countries in the world can claim.

DELEGATION VISITS TO ESD

A presentation was made to Members of Parliament on presence-less, contact-less, anytime-anywhere service delivery on 9th July, 2021. The virtual session was organised by Lok Sabha Secretariat for the MPs to understand unique programs in the country for possible replication in their constituencies.



Orientation program for IAS probationers of 2020 batch on MeeSeva and other IT,E&C Dept. initiatives on 7 May, 2022.



Orientation program for Group - I and IAS trainees of 2020 batch with AI mission on 1 January, 2022.



IT, E&C Dept., Govt. of Telangana in coordination with DARPG and MeitY, Govt. of India organized the 24th National Conference on e-Governance (NCeG) on 7 and 8 January, 2022 at HICC, Hyderabad.



MAJOR e-GOVERNANCE INITIATIVES

GOVERNMENT ORDER ISSUE REGISTER (GOIR)

| | |
|---|---|
| Secretariat Departments | 1,63,896 GOs |
| Commercial Taxes Department | 4,26,590 orders |
| Telangana Transco | 34,774 orders (as on 08.05.2022). |
| File Monitoring System (FMS) | 6,89,819 currents by all Secretariat Depts. |
| Secretariat Office Management System (SOMS) | 64,813 communications |

ICT PROJECT MONITORING SYSTEM

The e-Governance Wing of IT,E&C Dept., has launched a pilot web-based application 'ICT PMS' (egovpms.telangana.gov.in) in September, 2021. The application facilitates the client departments to monitor the project status, milestones and road map of the applications. The application generates MIS reports for submission to Govt. of India.

e-PROCUREMENT

A total of 2,89,079 tenders worth Rs.1,91,966 Cr were floated on the e-Procurement portal since the new version of the platform went live on 3 October, 2017. A total of 1,31,503 tenders worth Rs. 69,377 Cr were finalised. (As of 9 May, 05.2022)

eOFFICE

eOffice project is being implemented in:

- 30 Secretariat Departments, 113 HODs (Including all ULBs),
- 33 Districts (Collectorates & Police Offices), and all 16 TSSP Battalions
- 137 Government Degree colleges, 56 Polytechnic Colleges
- Being extended to 5 more Departments/ HoDs and to Mandal Level offices in Districts
- eOffice is live now in Osmania University and is under process in JNTU, BRAOU
- Separate eOffice instances are being created for the Singareni Collieries Company Limited (SCCL) and High Court of Telangana

Statistics

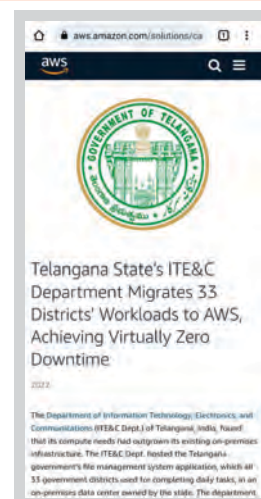
(as on 30.04.2022, including all instances)

| | |
|------------------------|-----------|
| Total No. of Users | 30,800 |
| Total Receipts Created | 26,16,244 |
| Total Receipts Moved | 61,96,240 |
| Total Files Created | 7,91,648 |
| Total Files Moved | 63,59,351 |

Deployment of eOffice application in AWS Cloud

The Government has mandated all government departments to deploy their existing or new applications on Cloud except confidential data or information that can cause serious damage to the security of the state/country or to the state/national interests.

As part of the Cloud Adoption Policy of the Government, the ITE&C Department is migrating all the eOffice instances in SDC to the Cloud environment. The Dept. has recently migrated Secretariat and all the 33 districts e-Office workloads to AWS Cloud. Consequently, the e-Office case study got published in AWS Global Portal under the India/ South Asia category (<https://aws.amazon.com/solutions/case-studies/itec/>).



REVENUE DEPARTMENT

- **The Chief Commissioner of Land Administration (CCLA):** Developed Web Application, Mobile App for Online Monitoring for PPBS (Pattadar Passbook Distribution) for CCLA. The application was made live. (ppbs.telangana.gov.in)
- **The Commissioner, Endowment Department** provided list of Temples for KIOSK, Online, Offline e-Ticketing application. The application was launched successfully and is being hosted at SDC.
- **Dhoopa Deepa Naivedyam (DDNS):** Application development has been completed for Phase I & II modules. (ddns.telangana.gov.in)
- **Temple Revenue Monitoring Application:** Application development is completed and pilot application was successfully launched at Balkampet temple. (endowments.telangana.gov.in)
- **Online Application for Temple Trust Board:** This application helps the officials of Commissionerate of Endowments to identify and recruit members for Endowments Temples Board. It is live now. URL: endowments.telangana.gov.in
- **Litigation Management System (LMS):** Application development is completed for LMS, where the details of the Temple properties are digitized, later integrated through Registration Applications such as Dharani, CARD etc. (lms.telangana.gov.in)
- **Anti-Corruption Bureau (ACB):** Development of online web portal has been completed. Extending support for the maintenance of portal. (acb.telangana.gov.in)

IGRS DEPARTMENT

- **T-Chits Project,** a Chit Fund automation project using Block Chain, was successfully implemented in two Assistant Registrar of Chits (ARC) offices as a Pilot.
- **Property Registration using Blockchain :** C-DAC has implemented the Blockchain-based Property registration in the Shamshabad Sub Registrar Office as a pilot and on successful execution will be extended across the State.
- **ChatBot Implementation:** Three use cases have been identified for Chatbot pilot implementation in the Registration Department. Chatbot was launched successfully.
- **Cashless SROs:** The services of the Sub Registrar Offices are integrated with the T-App Folio Application for collecting the amount from Rs.10 to Rs.1000.

COMMON APPLICATIONS FOR ALL GOVERNMENT DEPARTMENTS

- **Online Application for Court Cases Management System:** A common application has been identified for all the Departments, including HODs, of the Telangana Government to peruse the court cases pertaining to them.
- **Digital Asset Management System:** Application development completed.
- **Online Application for Right to Information Act:** Application development is completed and will extend it to include all the Departments, including HODs, of the Telangana Govt. On the request of Chief Information Commissioner (CIC), State Information Commission, a training session on the pilot Application has been conducted to the Police Department.
- **Automation of Central Library:** A web portal to the Central Library, Hyderabad has been developed digitizing rare books, newspapers, among others. (sclhyd.telangana.gov.in)
- **Application for the office of Advocate General, High Court:** Application development is completed. Integration of the application with the e-Courts/NyayPrakriya Application of NIC is underway.
- **Crowd Monitoring and Management Application using AI** was successfully executed for the monitoring of the crowd. It was extended to the Yadadri Sri Lakshmi Narasimha Swamy Temple. This app helps in preventing overcrowding in designated areas and helps in managing the traffic.
- **Constituency Level Development Monitoring System** Web Application (CLDMS) has been developed to monitor the Constituency Development Programme (CDP), State Development Fund (SDF), Crucial Balancing Fund (CBF) and Gajwel Area Development Authority (GADA) scheme works. The application covers flow right from the receipt of proposals from the MLAs and MLCs to completion of works by different executive agencies.

VETERINARY & ANIMAL HUSBANDRY DEPARTMENT

- **National e Governance Division (NeGD) LMS:** Learning Management System tool was developed for Capacity Building to all the Departmental Officers and Farmers. Application was made live.(ts-vahdlms.gov.in)
- **Integrated Dashboard:** Integration Dashboard for all the HoDs of Veterinary & Animal Husbandry Department (VAHD)
- **Facial Recognition Attendance System:** Developed for administrative staff of VAHD. Testing of the application is underway.

AGRICULTURE DEPARTMENT

- **Implementation of e-NAM system for Agriculture Markets:** Extended for fifty-four Agricultural Market Committees (AMCs) in Telangana. Nizamabad AMC has won the PM award for Implementation of eNAM in the country.
- **Implementation of ERP system for AMCs:** All the traders and commission agents need to register with ERP system and the commission amount will be paid through the ERP platform.
- **ERP system implemented for Markfed** through SAP B1 ERP system.
- **Implementation of Seed certification system:** To ensure the supply of only genuine seeds in the state, the suppliers/manufacturers were required to register in the Seed Certification System.
- **Implementation of ERP system for TS Agros**

EDUCATION DEPARTMENT

- **Implementation of Aadhaar Enabled Biometric Attendance System** for all schools/colleges in Telangana.
- **e-Learning module for SCERT** for the skill upgradation of faculty, NeGD LMS implementation.
- **Implementation of Integrated School Management System (ISMS)** for School Education Department

TRANSPORT DEPARTMENT

- **Accident Prevention system using AI & ML:** Solution successfully implemented in Transport Department and is being used for long distance bus services and for buses run at night.

HEALTH MEDICAL & FAMILY WELFARE

- **KCR KIT:** Since operationalization of KCR KIT, Rs.1,000 Cr have been disbursed to eligible mothers through direct benefit transfer (DBT). Additionally, integration with 102 Ambulance Services, KCR KIT-BDK system has been implemented. Pregnant Women Data is being shared with the Women and Child Welfare Department for the delivery of related services. (kcrkit.telangana.gov.in)
- **Non-Communicable Diseases (NCD):** For early detection, tracking, monitoring of the status/trend and treatment of NCDs in the State. (ncd.telangana.gov.in)
- **Telangana Diagnostics (T-Diagnostics):** Sixty-seven diagnostic tests are facilitated through an integrated web portal which connects diagnostic centers with hospitals and health centers. The quality services are being provided for free. Phase-I: Nearly 10,000 tests were completed; reports are made available the same day. Phase-II: Integration of District Hospitals, Government Health Centers in 33 districts is underway. (tdiagnostics.telangana.gov.in)
- **Electronic Intensive Care Unit (e-ICU)** initiative provides an online platform to manage ICUs in District and Area hospitals with regard to accessibility, better clinical outcomes, safety, reduction in costs, efficient use of scarce resources and effectiveness in improving the capacity of the hospitals.

BC WELFARE DEPARTMENT

- **Telangana Commission for Backward Classes Web Application:** A demonstration of the website had been given to the Commission members.

PANCHAYAT RAJ DEPARTMENT

- **Works Monitoring System for the PReD Department:** Web application/ Mobile Application for the work management system is in progress

PLANNING DEPARTMENT

- **Annual Survey of Industries (ASI), Directorate of Economics & Statistics:** The Annual Survey of Industries work flow is being automated. This helps in framing proper policies for industrial growth.

CCLA DEPARTMENT

- **Land Regularization Monitoring System Mobile application** was developed and is ready for launch. This Android Application is used to capture the geo-tagged photographs of the structures along with the beneficiary for recommended applications to regularize the unobjectionable Government land and surplus land under urban land ceiling.
- **Mobile App to assess the Performance of VROs:** Developed a Mobile App to capture the work done in subjects such as Land Records Inspection & Updation; Enquiry in respect of Mutation Requests received; Initiation of Succession Requests, Protection of Government Lands, Enquiry in respect of Certificates like Community, Income and Residence

HOUSING DEPARTMENT

- **Rajiv Swagruha Mobile Application:** This demand-driven and self-financed project provides an enabling environment for fulfilling the shortage of appropriate housing to the needy. Rajiv Swagruha Module is integrated into T App Folio and is ready to launch.

GeM

- **Government e Marketplace (GeM):** There are around 250 registered buyers from the state and operating their functions and fulfilling the procurement needs through the GeM portal.
- GeM has successfully facilitated high value bids like KCR Kits worth Rs.100 Cr and supply of Gunny Bags for Civil Supplies Corporation valued at Rs.250 Cr in the FY 2020-21.
- GeM generated orders valued Rs.726 Cr by May 2022 and an order volume of around 2500 has been met successfully. The GeM has achieved Rs.105 Cr Gross Merchandise Value (GMV) in the FY 2021-22 from the state.
- The GeM team has conducted around 500 training sessions to various departments in the state both in physical as well as in virtual modes.



PROMOTION OF DIGITAL PAYMENTS

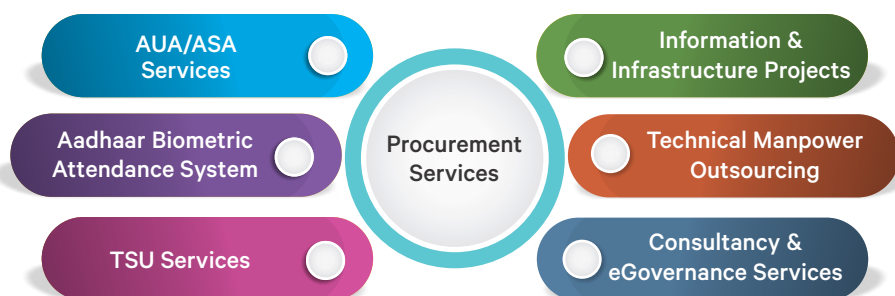
- The IT, E&C Dept is proactively driving digital initiatives that include UPI, Rupay Debit & Credit Card enablement, QR Code implementation. List of successful implementations during FY 2021-22:
 - ◆ Telangana State Road Transport Corporation
 - ◆ 26 Properties of Telangana Tourism Development Corp
 - ◆ Amrabad Tiger Reserve
 - ◆ Telangana State Police eChallan
 - ◆ KBR National Park
 - ◆ MeeSeva
 - ◆ Hyderabad Metro Water Supply & Sewerage Board (HMWSSB)



TELANGANA STATE TECHNOLOGY SERVICES

Telangana State Technology Services (TSTS) is the 'Nodal Agency' for e Governance initiatives including Hardware and Software procurement for all departments of Telangana. TSTS handles major Mission Mode Projects for the state like State Data Centre SDC, State Wide Area Network SWAN, Video Conferencing VC, Secretariat Campus Area Network SCAN. TSTS manages e Procurement portal and funds and acts as the fund manager for all IT,E&C department's budget funds.

Major Activity Matrix



MAJOR e-GOVERNANCE WORKS/ SOLUTIONS

DHARANI PORTAL

In co-ordination with CCLA, IGRS Department, TSTS is the nodal agency to provide complete technical support for Dharani, a Telangana government's initiative to implement new and completely IT driven Integrated Land Records System.

As on 31 March, 2022, Dharani Portal has completed about 14.62 lakhs registrations and collected an amount of Rs.2533 Cr.



AUA-ASA Project

TSTS has launched authentication services as Authentication User Agencies (AUAs) to all the Government departments by using Aadhaar from August, 2017. Type of Services being offered by TSTS:

- Authentication Services for identifying the correct beneficiary/user.
- KYC Services to fetch Demographic Details of Citizen
- AADHAAR Based Attendance System- A fool-proof Aadhaar based biometric Attendance system.



ABAS reached a new and big milestone of 10,00,000 authentications per day and the services are being used by 28 Departments of Telangana Government.

Pension Life Certificate through Selfie (PLCS) in coordination with ESD Mee Seva:

PLCS is the first use case of RTDAI and has been launched in April 2019. The solution eliminates the need for pensioners to visit the authorized physical offices to submit a proof of their liveness. This application uses AI, ML, Big data and Deep learning which may be perhaps first time in Government for providing better Citizen Convenience.

SCA Project and Operations & Maintenance of Govt. Owned Meeseva Centres in Urban Areas.

TSTS is designated as Service Centre Agency (SCA) to handle the operations of ESD SCA centres and Govt. Owned Meeseva centres to ensure better quality service delivery of Mee Seva services by proper managing of the Franchisees. There are about 3000 Franchisees and 108 Govt Centres and 75% of Mee Seva transactions happened through TSTS Franchisees.

Friendly Electronic Services in Transport Dept (FEST)

FEST is based on RTDAI to offer Presence Less and Contact Less Services using a 3-factor authentication by leveraging state-of-the-art technologies. Citizens of Telangana can avail 17 services of Transport department through a smartphone from their home, anytime, anywhere, without visiting the Transport department, except Driving test or physical inspection of the vehicle.



**FEST won the Digital Technology Sabha Award,
2021 in the Artificial Intelligence category.**

Other Major Projects

- Printing & Supply of Pattadar Passbooks to Pattadars in the State.
- Printing & Supply of Smart Cards for Dalit Bandhu Program.
- Printing & Supply of Smart Cards for Citizen Health Record creation in '2' Pilot Districts of the State.
- Installation of IP CCTV camera surveillance system (10,000+ nos) in all the Police Stations across the State under guidelines of Hon'ble Supreme Court of India
- Selection of Operations & Maintenance Operator for State Data Centre (SDC)
- Identification of Consulting Agency to study & prepare DPR for establishment of Mobility Cluster in Telangana.
- Cyber Crime Investigation Tools, Clues & Lab equipment for Hyderabad Safecity project.
- Aadhaar based PoS Devices to Civil Supplies Dept.
- Supply of 27,586 nos of Smart Phones to Health Medical & Family Welfare Dept
- Service Provider for Operations & Maintenance of existing ERP solution in GHMC
- Digitization of Records & DMS implementation in ISWR-I&CAD Dept
- Facial Recognition solution for Election for State Election Commission in coordination with ESD Mee Seva.
- Undertaking AMC of Security Equipment, Procurement of Baggage Scanners to Hon'ble High Court of Telangana.
- Selection of DIPP registered Startups for Design, Development, Implementation and Operations & Maintenance of Emerging Technology Based and Agriculture-Related Solutions for Agriculture Dept under NeGPA.
- Establishment of Command Control Centre in newly formed Police Districts.
- Acting as Consultant & Tendering Agency for Hyderabad Safe City Project.
- Acting Technical Consultant for Karimnagar Smart City projects.
- Providing expert & Consultancy services to T-Works for procurement various machinery/equipment.
- Traffic Signals, ANPR Cameras & CCTV Surveillance systems for Cyberabad Police
- IT Hardware and Cyber Crime Investigation tools for Anti-Corruption Bureau.

IT Hardware & Office Automation Projects (HWP & OAP) for High Court, Universities, Commercial Tax Dept, ITE&C Dept, Surveillance for School Education Department & Establishment of Digital Class Rooms at Gurukulam Schools, Government Schools etc.

Infrastructure & Networking Projects (IIP)

- Maintenance of State Wide Area Network (SWAN)
- Operations & Maintenance of State Data Centre (SDC)
- Maintenance of Secretariat Campus Area Network SCAN
- Maintenance of Video Conferencing Facility at various Government Offices.



TSIC
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TELANGANA STATE INNOVATION CELL (TSIC)

Telangana State Innovation Cell (TSIC) was set up in 2017 under the State Innovation Policy with a vision to build and nurture the culture of Innovation in the State of Telangana. TSIC acts as the first response of the State Government for identified innovators, start-ups, entrepreneurs, and innovation catalysts to foster an inclusive innovation ecosystem with State-as-a-whole-approach. TSIC is driven by three mandates:

01

To build a culture of innovation from the school age

02

To foster innovation within the Government and Administration

03

To promote the culture of innovation in the State

INTINTA INNOVATOR EXHIBITION 2021

- The 3rd edition of Intinta Innovator exhibition saw the participation of 500+ innovative ideas across 33 districts and 108 innovative solutions were exhibited in various districts across the State.



► 500+ innovative ideas across 33 districts and 108 innovative solutions were exhibited



► Intinta Innovator Grameena Awards launched to enable Local Recognition for the innovators.

INTINTA INNOVATOR GRAMEENA AWARDS

- First-of-its-kind Intinta Innovator Grameena Awards was initiated as a part of Republic Day celebrations at 4 Gram Panchayats under the State-wide campaign Intinta innovator, to enable recognition for the local innovators. The recognition of the four innovators was done by the Sarpanch and Village Secretaries of the Gram Panchayat.
- As part of Telangana State Innovations with Rural Impact (TSIRI) Incentives executed, six startups and twelve innovators have received incentives under the grants: Prototype, Seed, and Pilot. The incentives are a first-of-its-kind support mechanism by the Government of Telangana for grassroots innovations.



► 6 startups and 12 innovators have received incentives under the Telangana State Innovations with Rural Impact (TSIRI) Incentives



► HYSEA Awards

- The Framework of India's first innovation hub for youth & adolescence "Y Hub" by TSIC, in collaboration with UNICEF India & YuWaah India, was launched by Minister of IT Sri K T Rama Rao and Minister for Education Smt. Sabitha Indra Reddy.
- 12 Social Startups have been facilitated by TSIC to present their innovation at Dubai Expo 2021-22, and pitch at the Elevate event to a group of impact investors.
- TSIC facilitated 11 top Telangana Startups in the Sustainability space to showcase their products, services, journey to an international audience, and social entrepreneurs in the TiE Sustainability Summit 2021
- Close to 30 rural innovators are currently being supported along the lines of Intellectual Patent Rights, Mentorship, Prototype/Product Development, and Market Access



► *Telangana edition of Azadi Ka Amrit Mahotsav was celebrated with a focus on Innovation & Social Impact*

AZADI KA AMRIT MAHOTSAV

- The 75 years of India's independence, the Aazadi Ka Amrit Mahotsav – Telangana edition, is celebrated with a focus on Innovation & Social Impact in the presence of 100+ State ecosystem stakeholders.
- Impact Labs, a convergence of 9 NGOs and Social startups to co-develop solutions for identified problems was launched in November, 2021. The selected cohort startups were provided with an opportunity to work on a proof-of-concept and an eventual pilot enabling them to work hand-in-hand with the NGO partners.
- Data for Social Good Hackathon, a collaboration between the Government of Telangana and the University of Massachusetts, saw over 2000 participants. The winning teams get an opportunity to present their findings at the Annual UMass Homecoming Research Symposium and also get featured on the DACSS research website.
- Telangana Social Startups Network (TSSN), a network of Social Impact startups and other ecosystem players, currently has 297 social startups, 35 Incubators, 30 NGOs, 77 Mentors, and 23 Investors.

ASSISTIVE TECHNOLOGY EXHIBITION 2.0

On World Braille Day, Telangana Assistive Technology Exhibition 2.0 was organized in collaboration with the Department of Disabled Welfare and Senior Citizens, where 10 Startups, 4 College Teams, National Institutes, and Grassroots Innovators showcased their solutions devised for Persons with Disabilities (PwDs).



► *10 Startups, 4 College Teams, National Institutes, and Grassroots Innovators showcased their solutions devised for PwDs at ATS 2.0*



► *Top 20 innovative ideas out of 11,037 teams were exhibited as a part of School Innovation Challenge 2021-22*

SCHOOL INNOVATION CHALLENGE 2021-22

The second edition of School Innovation Challenge 2021-22 organized in collaboration with the State Education Department, UNICEF India, Inqui-Lab Foundation, and YuWaah witnessed more than 25,000 school students from ZPHS, Welfare, and budget private schools undergo Design Thinking and Problem-Solving training. Twenty ideas were shortlisted from 11, 037 teams from across 33 districts of the State for the Grand Finale. The top 5 winning teams were felicitated with cash prizes, which will be useful to scale the ideas.

I2E LAB: INNOVATION TO ENTREPRENEURSHIP LAB

TSIC in collaboration with Make Room India, with about 12 partners, has enabled 14 teams to work on solving air pollution, traffic, agriculture, farm mechanization, and mental health. While TSIC enabled government access for these startups, Make Room India connected them with capacity building, funding, and market access. Together 5 teams of i2E Lab have raised over Rs.1 Cr in funds and market access to build in Telangana and for India.

SOCIAL ENTREPRENEURSHIP SUMMIT IMPULSE 2022

Over 800 social entrepreneurship enthusiasts including impact investors, incubators, and mentors participated in a day-long event, Impulse 2022 on April 8th, at Bala Vikasa International Center (BVIC) Campus. The first-of-its-kind event focused on various panels, knowledge sessions, and interactive workshops on nurturing social entrepreneurship. Eighty Seven social startups including that of rural innovators showcased their products and services.

T-INNOVATION MAHOTSAVAM

Aimed at celebrating the state's inclusive innovation ecosystem, Telangana Government organized T-Innovation Mahotsavam on April 21st, 2022. The event brought together Telangana innovation enablers and featured inspiring keynotes, entrepreneur talks by startups, grassroots innovators, and women entrepreneurs. It was also organised in Engineering colleges and incubators/accelerators across Telangana. Alongside, 120 Degree and 60 Polytechnic colleges held "Hour for Innovation" sessions.



► T-Innovation Mahotsavam marked World Creativity & Innovation Day and brought together the Telangana innovation ecosystem



► Portal to nurture & celebrate innovations by educators in teaching/non-teaching methodologies launched. (www.ts-tir.telangana.gov.in)

TEACHER INNOVATIONS REPOSITORY

TSIC spearheaded Teacher Innovations Repository (TIR), in collaboration with Telangana Education Dept and Grassroot Innovations Augmented Network (GIAN). The Repository was launched by Minister for IT Sri K T Rama Rao and Minister for Education Smt. Sabitha Indra Reddy. The TIR portal envisions nurturing and celebrating innovations by educators in teaching/non-teaching methodologies that would translate into effective & innovative pedagogical skills.

VILLAGE INNOVATION CHALLENGE

The second pilot of Village Innovation Challenge, an attempt to enable rural youth and the villagers to innovate to solve their problems, was launched in Marikal Mandal of Narayanpet District. Currently, the first phase of the program is concluded that sensitised 17 villages on the concept of innovation.



► 17 villages in Marikal Mandal of Narayanpet District on the concept of innovation



► **Minister KTR launched the framework of India's first innovation hub for youth & adolescence**

YOUTH FOR SOCIAL IMPACT

Youth for Social Impact (YFSI) program in collaboration with UNICEF India and YuWaah, for college students of Telangana, was launched to up-skill the youth to become problem solvers; validate their ideas & innovation, and challenge their perspectives through grassroots immersion.

WORKSHOP CONDUCTED WITH IERPS

TSIC, in collaboration with the Social Welfare Department and Sarva Shiksha Abhiyan Telangana and Giftolexia, a Start-up in the space of learning difficulties, organized a workshop on “Innovative & Inclusive Classroom Strategies for Children with Specific Learning Difficulties”. The workshop has been attended by close to 430 Educators and Inclusive Education Resource Persons (IERPs) working in the space of Learning Difficulties across the State of Telangana.

HEALTH TECH

The second edition of Government Startup Connect was conducted for Health Tech startups. Eleven startups were given an opportunity to pitch their unique propositions to the Chief Secretary, Principal Secretaries of ITE&C and Health Departments, along with other Government officials. TSIC is supporting the startups to procure piloting opportunities with the Government of Telangana.



► **11 startups were given an opportunity to pitch their unique propositions to the Chief Secretary, Principal Secretaries of ITE&C, and Health Departments**



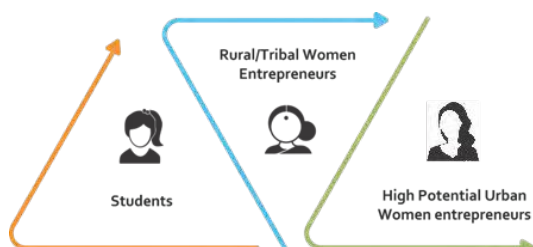
COLLABORATIONS

- Agri Innovation Hub (AgHub) of Professor Jayashankar Telangana State Agricultural University (PJTSAU) has entered into an MoU with TSIC to provide technical backstopping to grassroots entrepreneurs and students in the State of Telangana
- TSIC has entered into an MoU with Bala Vikasa International Center (BVIC) where the latter would provide incubation support for Startups, as a part of the Impact Labs program. TSIC has collaborated with BVIC as a Knowledge Partner in conducting the Telangana's first Social Entrepreneurship Summit “Impulse 2022”
- TSIC has collaborated with WaterAid to conduct the “Innovate 4 Menstrual Waste Hackathon” for students, working professionals, SHGs, and innovators across India



WOMEN ENTREPRENEURSHIP HUB

WE Hub is a first of its kind State-led platform, with the primary goal to promote and foster women entrepreneurship by way of Incubation, Access to Government and Building a collaborative ecosystem. Since its inception, WE Hub has conducted various programs, primarily focused on three segments/target groups of beneficiaries.



Impact Over the years

STARTUP VERTICAL

The Startup Incubation vertical at WE Hub enables women entrepreneurs from the Metro and Tier-1 regions across the country to validate, scale-up, and be investors ready.



Pre-incubation: An initiative to create awareness and coach the aspiring women about entrepreneurship and ensure that the ideas with potential graduate with prototypes. Currently WE Hub is supporting 67 entrepreneurs through 2 of the following programs.

| Program Name | UPSURGE |
|----------------------|----------------------------|
| Partners Involved | Australian High Commission |
| Participants Engaged | 23 |

UPsurge: A program launched by WE Hub in collaboration with the Australian Consulate, Chennai. The objective of this program is to support 120 aspiring women entrepreneurs spread across 4 cohorts, each for 12 weeks, to validate their ideas and develop them into Minimum Viable Products (MVP). WE Hub onboarded 23 entrepreneurs from 3 States across India and the US in the second cohort.



Greater 50 - WE Spark: Greater 50 - WE Spark is an initiative in partnership with FICCI Flo that provides access to technical, financial, government and policy support required to enterprise, scale up and accelerate with global market access, to all women entrepreneurs in the country.

Incubation

An initiative to ensure that women entrepreneurs across the country have an avenue to scale their start-ups and become investor ready.

| Program Name | WE Hub Flagship Incubation | Flo Incubation | WEnture |
|----------------------|----------------------------|----------------|---------|
| Partners Involved | WE Hub | FICCI Flo | i-HUB |
| Participants Engaged | 25 | 5 | 6 |

Incubation Cohort 3: Under the WE Hub's flagship incubation program, 25 startups were selected from six cities in India. The 3rd cohort of the incubation program was launched in November, 2021 with 26 entrepreneurs from EdTech, FinTech, FMCG, HealthTech, AgriTech, DeepTech, OceanTech, E-Commerce, Retail and Live Commerce.

FLO Incubation: In partnership with FICCI Flo, WE Hub has kickstarted a 6-month incubation programme with 5 startups in the cohort.

WEnture: Curated in collaboration with i-Hub, Gujarat and targeted at supporting 11 entrepreneurs across India. The cohort has 5 entrepreneurs from WE Hub and 6 entrepreneurs from i-Hub.

SMALL AND MEDIUM ENTERPRISES (SME) VERTICAL

The SME vertical works towards enabling aspiring and existing women entrepreneurs and women in business across the Tier 2 and Tier 3 regions of Telangana. A total of 354 entrepreneurs have been supported through various programs. They have been classified under two categories:



| Livelihoods/ Women in Business | Small and Micro Enterprises |
|--------------------------------|-----------------------------|
| 244 | 110 |

Programs initiated

| Program Name | Rural Incubation | Tribal Entrepreneurship Cohort 2 | Dalit Bandhu | Model Municipality Project |
|----------------------|------------------|----------------------------------|------------------------------------|----------------------------------|
| Partners Involved | WE Hub | TRICOR | Karimnagar District Administration | Ramagundam Municipal Corporation |
| Participants Engaged | 17 | 93 | 174 | 70 |

Rural Incubation: WE Hub has launched its flagship rural incubation program with a two-fold vision of accelerating existing enterprises as SMEs and strengthening local supply chains. Currently supporting 17 rural women entrepreneurs from across Telangana.

Model Municipality Project: To unlock the potential and power of women in business, WE Hub in collaboration with the Municipal Corporation of Ramagundam, launched a 6-month Sustainable Livelihoods project in June, 2021 to digitally and financially enable existing and aspiring women in Livelihood businesses. The project is curated to inculcate the knowledge of entrepreneurship and equip women in businesses with digital literacy and financial inclusion and to ensure sustainability of the businesses through tailored Enterprise Development Programs (EDP). A total of 166 enterprises were sanctioned loans to the tune of Rs. 7,39,20,882 so far.

WE Hub - TRICOR Incubation Program: The second cohort of the WE Hub TRICOR Incubation program was launched in 2021, with a total of 93 entrepreneurs. The program is supporting the women entrepreneurs through forward and backward linkages particularly in setting and grounding sustainable enterprises through bank linkages to the tune of INR 5,09,61,264. It is also the first initiative under the Tribal Welfare Department that marks the shift from beneficiary model to entrepreneurship model.



Dalit Bandhu: WE Hub facilitated the implementation of Dalit Bandhu in Karimnagar District with the primary objective of inculcating entrepreneurial mindset amongst women. A total of 790 women were given EDP training and 174 women are being supported in grounding their businesses.

STUDENT ENTREPRENEURSHIP VERTICAL

To encourage more girls to enter Science, Technology, Engineering and Mathematics (STEM) fields, WE Hub has designed programs for age groups of 13-18 and 18-24 years.

Girls in STEM - Schools: For the 13-18 years age group, the program was launched with focus on Data Science skills. About 75 students from 6 international schools were selected for this program. Of these 6 schools, four are from Hyderabad, one is from J&K and the other is from Assam. WIDS, an initiative of Stanford University for encouraging women in Data Science, taught theory to the students and Mathworks had given Matlab, a platform for putting these concepts into practice. Students were divided into eight different teams and their projects developed through Matlab were pitched to a jury composed of corporates.



WE Alpha: For the 18-24 years age group, ideas of 12 students were selected from across six women colleges in Telangana and the program is underway to pilot these ideas at their respective colleges.

To enable the above, faculty from each of these colleges were guided on creating outcome driven Student Entrepreneurship Programs by leaders of the Telangana Innovation Ecosystem.

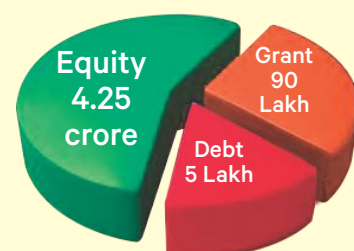


NEED BASED INTERVENTIONS

Access to Finance

Start-up India Seed Fund: WE Hub has been selected as an incubator under the Startup India Seed Fund scheme. A sum of Rs. 5 crore was sanctioned to WE Hub out of which WE Hub has already sanctioned Rs 4.5 crores to 13 startups. It was for the first time that WE Hub itself invested in start-ups.

Enabling Start-ups to raise funds: WE Hub prepared start-ups to pitch and raise funds through various channels. The amount of funding raised through the different channels include:



Access to Markets

Business to Government (B2G) - Pilot with Government of Telangana:

Renovation of Palliative Care Center in Rajanna Sircilla District at a cost of **Rs. 11,96,839**.

Renovation of Anganwadi Center at Gudem Village, Rajanna Sircilla District with an amount of **Rs. 26,76,791**.

Designing and manufacturing of uniforms for frontline health workers to the tune of **Rs. 2.45 Cr**



Business to Business (B2B) - Launchpad: A six-week market readiness program to ensure improved market access for women entrepreneurs with a two-fold objective of:

- Offering a platform for women entrepreneurs to be equipped with the needed tools to become market-ready.
- Providing an opportunity for retail and wholesale brands in Telangana to create an access to required forward linkage support channels for women entrepreneurs in the FMCG sector.

WE Hub in partnership with QMART has created a “WE Corner”, the first retail forward linkage support channel for women entrepreneurs in the FMCG Sector in August, 2021. Till date, the shelf has over 20 brands and 170 Stock Keeping Units (SKU), generating an average monthly revenue between Rs. 1,00,000 and Rs.1,50,000.



B2B - WE TRADE: To enable Women-led SMEs gain access to markets, CII Indian Women Network (CII IWN) and WE Hub together launched "WE TRADE", a platform for B to B Connects.

Access to Information & Networks

LaunchHer: A first-of-its-kind Entrepreneur Awareness Initiative for aspiring women entrepreneurs across the state of Telangana. The 20-part video series will not only offer an insight into starting a business, but also enable women to establish their enterprises.

Dubai Expo 2020: Five of WE Hub Incubatees showcased and pitched (Elevate 2.0) at the Innovation Bus from 8-11 November, 2021 to the potential investors and consumers.



PARTNERSHIPS



WE Hub entered into an MoU with Mathworks to develop customized curriculum and deliver programs to inculcate, promote, and foster entrepreneurship among women. The focus areas include encouraging girls in STEM fields and providing start-up support in the Deep Learning Sector and through subsidized access to Matlab platform for WE Hub incubated start-ups.

WE Hub and Meesho: Under the partnership launched in 2021, 183 Women from 5 districts of Telangana were onboarded for the joint program with Meesho. Ten thousand Homepreneurs across Telangana will be supported with access to social commerce by bridging the digital divide.



HIGHLIGHTS OF WE HUB STARTUPS

WE Hub incubated startup Sortizy won Google Play's Best of 2021 Award in the daily essentials category.



Nishtha Yogesh, Founder and CEO, Hunar Online Courses got recognized by 'Businessworld 30 under 30' list of young achievers.



Lauriko, an FMCG brand, won the Best Emerging Women Entrepreneur 2022 in Nutraceuticals Category of Business Mint Nationwide Women Excellence Awards.



Heal HealthTech is one of the 75 winners of NITI Aayog's Women Transforming India (WTI) awards.



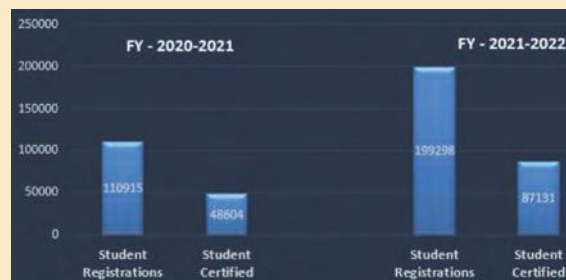
Aashraya Rau has been selected to be a part of the Launch House, a 4-week residency program-based Web 3.0 in Manhattan. She is one of the 20 engineers selected from across the world.



PMGDISHA

- The Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA), part of the Digital India programme, benefits about six crore households, making them digitally literate. With PMGDISHA, most rural households would benefit and enhance their livelihood.. This initiative aims to transform India into a digitally empowered society and knowledge economy

Compared to previous FY 2020-21,
Student Certifications &
Registrations in Telangana have increased
to 179% in FY 2021-22



T-Hub, India's largest incubation centre, synergises startups, corporations, governments, academia and investors to drive transformative change.



Visit of the Parliamentary Standing Committee on Information Technology to T-Hub on 7 September, 2021

In 2021, T-Hub completed six successful years of empowering India's innovation ecosystem. In these years, T-Hub has worked towards building one ecosystem that nurtures entrepreneurship and innovation. It has delivered 100+ innovation programs so far, enabling startups to scale nationally and globally, and connecting them with potential investors, corporate communities, and national and foreign government bodies. It has also enabled academia to introduce innovation and an entrepreneurial approach in curriculum and empower corporations to build a culture of innovation. Under its new leadership, T-Hub will continue to develop strategic programs to elevate innovation for outcome-driven results and support other ecosystem enablers — TSIC, T-Works, WE Hub, RICH, TASK — by sharing its knowledge and resources.

During 2021-22, T-Hub has welcomed 533 startups to its innovation ecosystem, and introduced unique programs and events with a special focus on 6Ms – Market Access, Money, Mentorship, Methodologies, Manpower, and Motivation.

STARTUP SCALING PROGRAMS

T-Hub has institutionalized innovation programs for startups and young entrepreneurs and is building a robust innovation ecosystem. We have seen a rise in the number of regional startups from 400 in 2016 to about 2,000 now, and T-Hub Phase 2 will further boost this growth. Startups from various programs like Zenoti, MyGate, WhistleDrive, Outplay, DrinkPrime and AdOnMo have secured more than Rs.2,269 Cr funding by mid of May, 2022.

Lab32

T-Hub's flagship program for 'seed-accelerator stage' startups is focused on enabling them to self-sustain and grow.

RubriX

In 2021, T-Hub launched its first-ever program on product development: RubriX. Aiming to support early-stage technology startups with ready prototypes in hardware and software, this program will enable them to reach the Minimum Viable Product (MVP) stage with reduced turnaround time and costs. 13 Startups selected for RubriX, a product development program



AIC T-Hub Foundation

AIC T-Hub Foundation is a partnership between Atal Innovation Mission (AIM) and T-Hub to foster a culture of innovation across India by supporting promising startups working on cutting-edge solutions in the healthcare, mobility and sustainability sectors.



Cinepreneur

T-Hub and MEE School (Media & Entertainment E-School) have announced a joint program – Cinepreneur - to train professionals in the Media and Entertainment space. The first-of-its-kind initiative in India devoted to the Media and Entertainment industry in the startup space, will provide internship and incubation facilities.

CORPORATE ENGAGEMENTS

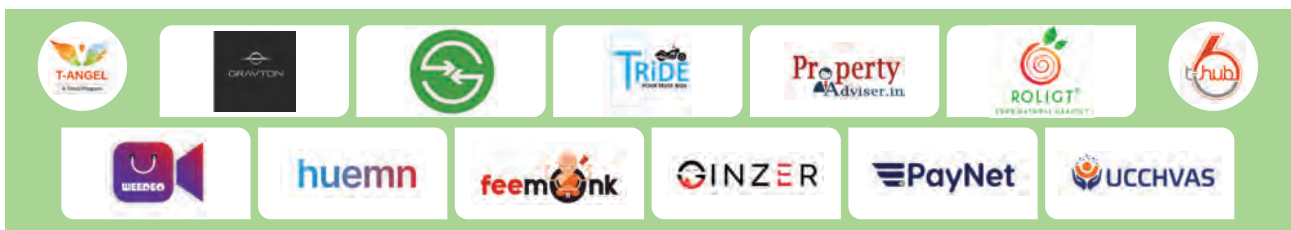
T-Hub has evolved from prototyping programs to crafting institutionalized programs to support the innovation journey of over 600 Corporates like Facebook, Uber, HCL, Boeing, Microsoft, and Qualcomm with more than 40 corporate innovation programs.

T-Hub has forged new partnerships with corporates like JK Tech, Maruti Suzuki, Citibank, Renault, Nissan Technology, Business Centre India (RNTBCI) and HCL Technologies in the last one year.

FUNDING INITIATIVES

T-Angel

This 90-day accelerator program enables startups to get investment-ready through engaged mentoring, while enabling high-net-worth individuals (HNIs), angel investors and startup enthusiasts to explore angel investment. 11 startups selected for 90-day accelerator program, T-Angel, that enable startups become investment-ready



Digital India Scaleup Program

Ministry of Electronics and Information Technology (MeitY), along with T-Hub this year, disbursed a grant of Rs.7.5 lakhs each to 13 selected startups in the hardware and IoT sector. The mentorship and guidance from T-Hub and MeitY through this acceleration program helped the selected startups acquire more customers, receive incentive opportunities from the State Government, raise funds from investors, expand globally and launch new products successfully.



T-Fund

Telangana Government has set up T-Fund under its State Innovation Policy to support early-stage technology startups of Telangana with funding from the IT,E&C Department. The Telangana Government has designated T-Hub as the investment manager for this fund and allocated Rs.15 Cr in the 2021-22 budget to initiate the T-Fund operations. T-Hub has awarded Rs.1.5 Cr to three startups under the T-Fund initiative.

Startup Seed Fund India

T-Hub was selected under the 'Startup India Seed Fund Scheme' by Department for Promotion of Industry and Internal Trade (DPIIT), GoI, to disburse Rs.5 Cr among eligible startups to support and fuel early-stage funding. The fund will be used to provide financial assistance to startups for proof of concept, prototype development, product trials, market-entry, and commercialisation. T-Hub will be disbursing this fund to 15 startups in three years.



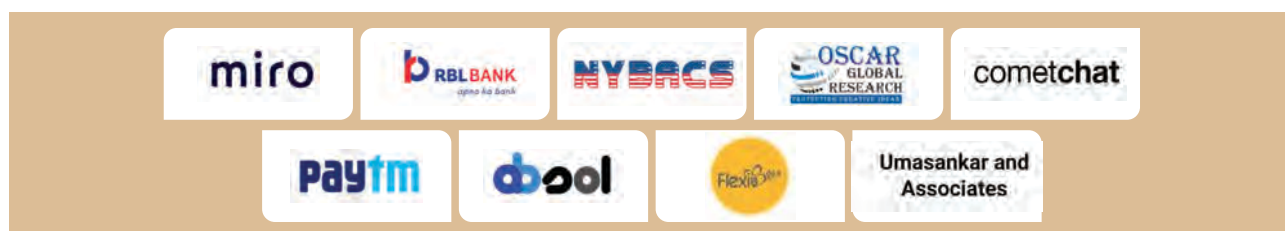
INTERNATIONAL ENGAGEMENTS



T-Hub has partnered with international ecosystem enablers and governments like Redberri Earth Foundation, Digital Catapult, UK Government's Department for Business, Energy & Industrial Strategy and Foreign, Commonwealth and Development Office (FCDO) and La Trobe University. The partnership helped in knowledge transfer between various innovation ecosystems and provided business opportunities and market understanding to the international startups as well as Indian startups.

SERVICE PROVIDERS

T-Hub has built a robust, constantly evolving network of service providers that startups benefit from in various ways: cost optimization, technical support, subject matter expertise, etc. T-Hub has onboarded nine (9) new service providers to help Startups scale faster.



EVENTS

Innovation Ecosystem Summit: Felicitation of stakeholders in the Innovation Ecosystem Summit



Community Connect



The Womenpreneurs



T-Innovation Mahotsavam



Mentors Meet



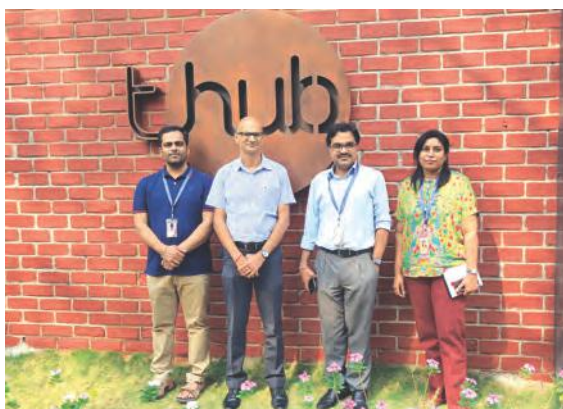
VISITS



Joseph (Joey) Abraham, Consul,
Consulate General of Israel,



Paulina Chromik
Diplomat at Netherlands Embassy in New Delhi



Dr Mahesh Bhalgat, COO,
Syngene International Limited



Indian Foreign Service officers



The leadership team of Advance Auto.



Lindsey W. Ford,
U.S. Deputy Assistant Secretary of Defense for
South and Southeast Asia



TELANGANA SOCIAL IMPACT GROUP

T-Social Impact Group (T-SIG) is an initiative to attract, mobilize and incentivize financial investments into inclusive and sustainable development projects from local, national and international organizations.

OBJECTIVES OF T-SOCIAL IMPACT GROUP



T-SIG NETWORK & IMPACT

| Partnerships established | Total | Impact created | 2021-22 |
|---|-------|--|---------|
| Corporate Connections | 238 | CSR Projects Facilitated | 30 |
| Govt. Depts. & District Administration in Telangana | 39 | Districts covered in Telangana | 05 |
| NGOs / Social Enterprise Partners | 295 | CSR Events/Programs hosted & Co-hosted | 15 |
| Industry Associations/ Aggregators | 13 | | |

COVID-19 WARRIORS RECOGNITION

On 8th November 2021, Telangana Social Impact Group (TSIG) organized the 'T-SIG COVID-19 Warriors Recognition Event' at HICC, Hyderabad. The event felicitated people who have extended relief to those affected with COVID-19 in 2020 and 2021.

Minister for IT KT Rama Rao, Principal Secretary Jayesh Ranjan, noted philanthropist and film actor Sonu Sood attended the event and commended the efforts of 12 Corporates, 26 NGOs, 29 Exceptional Individuals, and 6 Enablers. Additionally, efforts of more than 1000 entities and individuals have been acknowledged through e-certificates.



COVID-19 SECOND WAVE RELIEF ACTIVITIES

- Established Covid-19 Isolation Centres in Golconda and Malakpet of 50-bed and 25-bed capacity respectively.
- 24*7 Covid-19 Helpline: Operated for 45 days with 546 Volunteers. 4,415 requests for Hospital Beds, Oxygen, Medication, Plasma etc. in 19 States and 115 Districts supported.
- Operated Oxygen Centre with 600 Oxygen Cylinders and 200 Oxygen Concentrators for one year in Jeedimetla.



SUPPORT TO ASPIRATIONAL DISTRICTS

- Oxygen Plant Set Up in a Hospital that served 100 beds for adults, 10 pediatric beds, 10 ICU beds in Jayashankar Bhupalpally Dist.
- Pulse Oximeters, PPE Kits, Thermal Scanners, N95 Masks, essential Pediatric Syrups provided to Bhadradi Kothagudem Dist. Collectorate.



IMPACTFUL CSR COLLABORATIONS

Collaboration with Miss India, 2020 Manasa Varanasi

Ms. Manasa Varanasi, Miss India 2020, adopted the cause Project Ten-Nine-Eight (1098) in collaboration with T-SIG. 1098 is the Child Helpline number to save children from distress and sexual abuse. On the Children's Day (14th November) 11 companies and philanthropist organizations, under CSR formally handed over 33 Bala Rakshak Child Response Vehicles to the Women Development & Child Welfare Department, in the presence of Smt. Satyavathi Rathod, Minister for ST Welfare and Women Development & Child Welfare Depts. These vehicles are pivotal in the rescue & rehabilitation of children in the age group of 0-18 years who have been victims of child marriage and child labour.

CSR Collaborations for Telangana Social Welfare Residential Educational Institutions Society (TSWREIS)

In FY 2021-22, State Street Corporate Services approved 3 grants to Surge Impact Foundation (SIF) to support the holistic development of about 20,000 students from marginalized communities studying in 38 Telangana Social Welfare Residential Educational Institutions Society (TSWREIS) schools to acquire technical, logical and problem-solving skills.

253 laptops were distributed to support about 20,000 students in the FY 2021-22 to:

- Address the issue of the digital divide among the rural students
- Support access to education for children from the most deprived sections of scheduled caste (SC) and scheduled tribe (ST) communities during the Covid-19 pandemic through remote access.
- Impart computing skills aiding them in the preparation for national level entrance tests.
- Facilitate remote learning during the Covid-19 pandemic

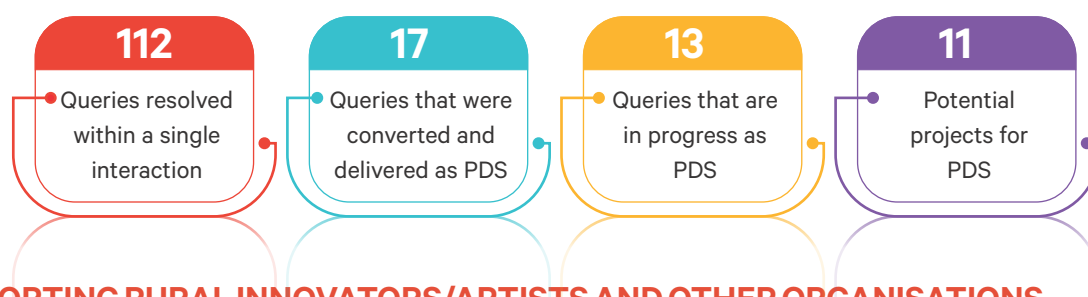


T-WORKS

T Works is India's largest upcoming prototyping center with a vision to create and celebrate a culture of hobbyists, makers, and innovators in India. T Works provides services such as IP facilitation, Product Design, Rapid Prototyping and Component Sourcing.

SOLUTION SEEKER PLATFORM

- T-Works introduced the Solution Seekers platform, an integrated programme for managing queries coming from makers, innovators, startups and businesses and assisting them with valid solutions in different capacities.
- T-Works has received and resolved queries from 162 Solution Seekers between 1 March, 2021 to 9 May, 2022 by offering solutions such as Product Design & Development Services (PDS), component sourcing, vendor connects and mentoring.



SUPPORTING RURAL INNOVATORS/ARTISTS AND OTHER ORGANISATIONS

T-Works has taken multiple initiatives such as Rural Innovators Development Programme (RIDP), collaborations and partnerships platform, solutions seekers platform to support various grassroot innovators, artists and organisations with their innovations and developments in various capacities and translate them into functional products ready for market.

PCB Fabrication

T-Works is working closely with a rural innovator named Raju Mupparapu, who is designing a mobile-charging solution at no cost. T-Works team designed and delivered a custom PCB required for the project. T-Works is also mentoring the rural innovator for further development in the project.



Mentorship by T-Works

Followed by the Minister for IT KT Rama Rao's tweet acknowledging the high efficiency pesticide sprayer built by Ashok Gorre, a rural innovator from Anjalipuram, Suryapet District, the T-Works team invited Ashok to the facility. T-Works has offered him the position of a Junior Fellow under the Fellowship Program 2022 and is training him in the areas of Design & Engineering and mentoring him for the development of innovative products.

Upskilling support

T-Works onboarded Rajendra Prasad, a rural innovator who developed a functional prototype of a solar electric car, as a Junior Fellow and is helping him learn industry-relevant skills required to launch his EV into the market. T-Works team is helping Rajendra Prasad to upgrade his skillset by sharing access to the right knowledge and resources.

Development of an automated Quilling Tool

T-Works is working closely with SIFKA (Silver Filigree of Karimnagar Association), a community of craftsmen from Karimnagar working on the art of Silver Filigree, an art native to Karimnagar, to make an automated quilling tool that has the potential to increase the throughput by 10 times their current rate, at a highly subsidised price.

Cost optimisation support

T-Works is working with Aparna Viswanatham (Library Solutions) in optimising the cost of their product and component sourcing.

Idea Validation and networking support

The T-Works team supported Ravikanth Rangannagari, a goldsmith who discovered a unique process critical to jewellery making. T-Works team met the innovator, invited him to the facility and assisted him in the process of idea validation.

PARTNERSHIPS

ICFAI

T-Works onboarded ICFAI Business School as an academic partner with the objective of delivering a collective impact on the society and students. As part of the collaboration, a group of students are currently interning to create a Go-To-Market Strategy for certain products made by T-Works.

Collaboration with Institutes and organisations

T-Works also visited prestigious institutes to expand collaboration opportunities, including MSME, NSIC, NSTI, CITD, CCMB, LV Prasad Eye Institute, NIFT and ICRISAT.



► Visit to National Institute of Fashion Technology (NIFT), Hyderabad

Collaboration with International Organisations

T-Works hosted international organisations such as JETRO, JICA and the United States Department of Defence, and explored the areas for mutual collaboration that can make a difference to society.

► Meeting with Lindsey Ford, the US Deputy Assistant Secretary, Defence.



Mouser Electronics

T-Works has successfully onboarded Mouser Electronics as an Electronics and Semiconductor components technology partner and it will be providing support for the procurement of high end prototyping equipment in the Electronics Test and Measurement fields.

CARE India

T-Works and CARE India have partnered to design technical interventions for the beneficiaries of CARE India. Teams from both organisations visited Bengaluru in March 2022 for a community immersion program. The objective of the immersion was to understand the problems faced by Improved Cookstove Users and design a more sustainable and efficient alternative.

OTHER INITIATIVES

T-Works has launched multiple initiatives and services with the aim of reducing the barrier to prototyping. Major initiatives include:

Prototyping Services (Proto.tworks)

T-Works rapid prototyping services aim to give innovators access to precision prototyping equipment. The prototyping services aim to aid startups, makers and innovators transit from prototype stage to the product stage faster, on demand and at a subsidised rate. 97 rapid prototyping orders have been received and delivered between Apr 1 2021 to May 9 2022.

PROTO PROJECT HIGHLIGHTS

- (Proto.tworks Project) 3D Printed Surgical Guides for LV Prasad Eye Institute Centre
- T-Works' Proto team 3D printed the implant surgical guides for LV Prasad Eye Institute Centre for Innovation with biocompatible resin, which is not widely available in the market. These surgical guides are used for patients' post-enucleation caused due to mucormycosis (Black Fungus) following Covid recovery. These surgical guides are unique to the patient as the design of the parts are derived from the CT scan of the patient's skull, enabling the surgeons to operate precisely at identified locations.
- T-Works facility is equipped with 3D printers, tools and multiple FDA approved biocompatible resins which can be used for long term skin, Mucosol membrane or bone contact thereby enabling it to support prototyping of medical devices, implants etc.



T-Works Fellowship Program 2022

- T-Works launched its 3rd Fellowship Program for 2022, a 12-month program for creative and passionate individuals, to join T-Works, learn and engage with stakeholders from government, corporate, educational institutions, startups, artists and makers. Fellows are categorised based on work experience, skills and capabilities.
- Total of 2000 applications across skills were received, and T-Works has onboarded nine candidates across mechanical, design and electronics fields.

T-WORKS PROJECTS HIGHLIGHTS 2021 - 2022

Biopress 4T



- T-Works continued to work with Srija, a young innovator from Gadwal District in Telangana, to develop her idea of biodegradable seedling planters. T-Works has developed an affordable, scalable and portable setup to mass-produce the planters to meet the growing needs of nurseries for mass plantation drives such as Telangana Government's Hariitha Haram. This setup can be used by self help groups in villages, creating sustainable livelihood opportunities. T-Works and GE Appliances collaborated to set up a small scale domestic industry for biopot production in Gadwal District, Telangana. A live demo of making the biodegradable pots has been conducted by the TSIC and Srija.

Oxygen concentrator

- T-Works designed and developed an affordable Oxygen Concentrator which can filter out oxygen from the ambient air and deliver more than 90% pure oxygen to patients in need. GE appliances assembled five concentrators with training from T-Works. These Oxygen concentrators are donated to the ones in need.



Samskara toy

- T-Works worked with a rural innovator named Ganesh Yakara, to prototype and develop his idea of a smart educational toy/mascot named Samskara toy for children. The toy brings them the awareness on sexual harassment and responding to it while making them understand about safe and unsafe touches. The T-Works team helped develop the first prototype and the electronics system used in the product.

T-WORKS EVENTS

Orientation on 'Technology Development fund'

T-Works, in collaboration with T Hub, hosted an interactive session on the "Technology Development Fund (TDF)" scheme powered by Defence Research and Development Organisation (DRDO), Ministry of Defence, Government of India on 2nd September 2021. Smt. Nidhi Bansal, Director, TDF, DRDO has explained about the new initiative that engages startups at nascent and growth stages.

The session was attended both offline and online by 70+ members of startups across India. The DRDO team detailed the TDF scheme, eligibility criteria for startups, project requirements, selection process, support to startups, among others.

T-Works at ICORT 2021

T-Works exhibited its projects at the International Conference on Range Technology (ICORT) 2021, organised by DRDO on 5th and 6th of August 2021. The Conference was dedicated to professionals of Test Ranges across the globe, associated partners, and researchers.

OTHER INITIATIVES

Launch of IP facilitation Cell

To aid startups, MSME's, entrepreneurs, makers, rural innovators by providing easy access to IPR services at a subsidised fee, T Works launched an IP facilitation Cell. Launched as a pilot project in December 2019, the Cell has facilitated 11 applications and 34 are under process.

Component Sourcing

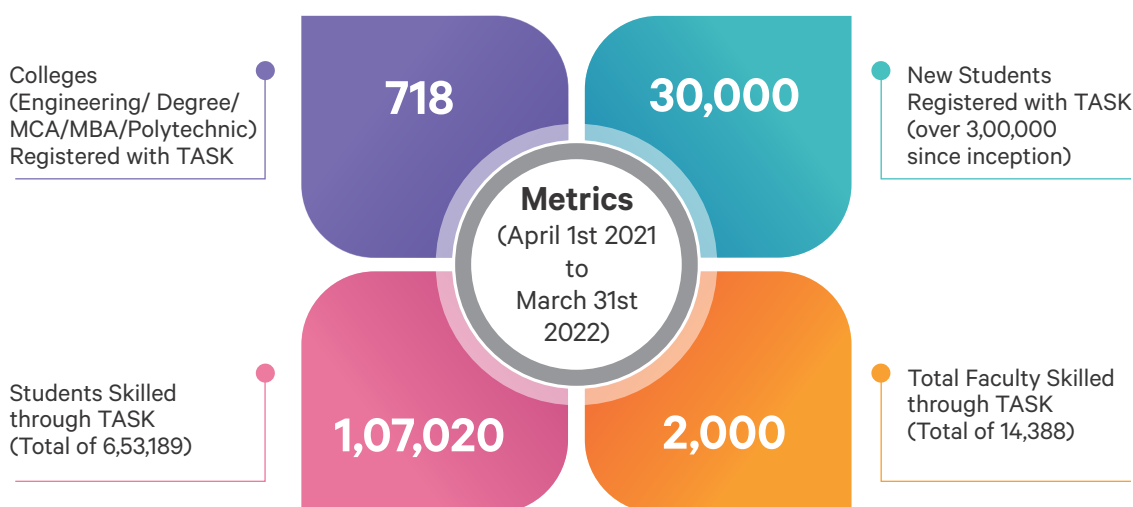
An online platform for component sourcing that helps startups, SMEs and makers source components with ease reducing the existing barrier in terms of cost, time and complexity.

TELANGANA ACADEMY FOR SKILL AND KNOWLEDGE

Telangana Academy for Skill and Knowledge (TASK) is a not-for-profit organization established by the Government of Telangana that works with the primary objective of skilling youth and making them more employable and hence, curbing the unemployment rate in the State.

TASK caters to students from diverse academic courses and socio-cultural backgrounds working on its objective through a three-pronged approach.

- Skilling youth in technologies that are in demand as per industry standards
- Building essential 21st Century workplace (transferrable) skills to make youth more adaptable and employable
- Developing an entrepreneurial mindset in the youth of Telangana



INITIATIVES

- Commenced TASK Regional Centre at Sircilla
- Conducted programs in the areas of AI, ML, Data Science, Blockchain, etc. These programs were conducted through TASK with industry and corporate partnerships including IBM, ExcelR, Microsoft, Smartbridge, NASSCOM Future Skills, and others
- Webinars conducted on diverse industry segments like IT/ITeS, Hospitality, Logistics, Manufacturing, Pharma & Med Tech to help students understand the Industrial Revolution 4.0 (IR) skills
- Partnered with JNTU Hyderabad, Dr. BR Ambedkar Open University, Osmania, Kakatiya, Mahatma Gandhi and Satavahana Universities for enhancing the skills of the students and making them employable
- Hindustan Coca-Cola Beverages (HCCB) to skill 10,000 unemployed youth in partnership with TASK
- Partnered with Cotelligent for providing training and placement for 500 youth across Telangana in the area of Cyber Security
- Initiated She Arise 2.0 program in collaboration with Centum Foundation for female students
- Formed New partnerships during the year with Mentor Together, C-MET, Taplingua, Access Health (Affordable Quality Health) - Upskilling and Re-skilling, Training to Support Staff and Nursing Staff, Unschool and AWS

Central Government Collaborations

- 5,370 students were trained and 2,360 students were placed in the Electronics and Telecom sector under the ESDM Scheme of Ministry of Electronics and Information Technology (MeitY) as of April, 2022.
- Reskilled 1,826 frontline health workers under the National Health Mission (NHM) in partnership with Telangana Vaidya Vidhan Parishad (TVVP).



Sircilla Regional Centre Inauguration



PwD valedictory Ceremony



Interaction with Vice Chancellor of Kakatiya University Prof. Thatikonda Ramesh



Interaction with Vice Chancellor of Dr.B.R. Ambedkar Open University Prof. K. Seetharama Rao



Interaction with Vice Chancellor of JNTU-H Prof. Katta Narisimha Reddy



Collaboration discussions with Director NIT Warangal Prof. Ramana Rao



Interaction with Vice Chancellor of Osmania University Prof. Dandeboina Ravinder



Interaction with Vice Chancellor of Satavahana University Prof. Mallesh Sankasala



HPC Practical Lab



Mentor Together MoU signing in the presence of Minister KTR



Aerospace Industry internship program discussion with TATA Advanced Systems Limited



Signing MoU with HYSEA in the presence of Hon'ble Minister KTR

PARTNERS

- **Google Cloud:** Google Cloud is self-paced learning where 32 faculty and 1,415 students were trained on Cloud Foundation in the year 2021-22
- **IBM Open PTech:** Offering Data Science, Artificial Intelligence, Cloud Computing, Cyber Security, Blockchain, Coding, Computational Thinking, Quantum Computing & Machine Learning
- **Salesforce:** Salesforce Trailblazer Connect brings job seekers and employers together. It connects students with their next opportunity in the Salesforce Ecosystem through Trailhead learning, expert-led webinars, career resources, a mentorship program, and classroom resources.
- **Kalyani Rafael Advanced Systems Pvt. Ltd.:** Offers training on the design & development of advanced optical engineering and signal processing technology for Engineering and Polytechnic students.
- **CISCO:** Offers training on IT Essentials, CCENT, CCNA, Introduction to IoT, Introduction to Cyber Security and IoT Fundamentals
- **Infosys:** Offers Campus Connect Certification through InfyTQ App, industrial visits to students and faculty, Faculty Enablement programs, Infosys BPM training, along with offering support for placements
- **Mahindra Pride Classroom:** Training for Employability Skills for final year students of all streams
- **Safran Electrical & Power India (P) Ltd:** Hiring and training programs for electrical test operators, manufacturing operators and for quality inspectors
- **ARM University:** Providing teaching materials and books for ECE, EEE, CSE, IT, EIE faculties
- **Google Kotlin:** Android Development with Kotlin courses for faculty members through the Train the Trainer program
- **ISRO NRSC:** National Remote Sensing Centre (NRSC) and Indian Space Research Organization (ISRO) offer industry visits to all the TASK registered Colleges.
- **Nagarro:** Trains the faculty of TASK registered engineering colleges on various concepts of Blockchain.
- **Clusters AI:** Trains students on data annotations through 6-day Online workshops
- **HERE Technologies:** Provides training Certification in Maps and Location Technology for Civil and Computer Science students to impart practical know-how, and industry association through exposure to content and tools
- **Oracle Academy:** Conducted 3 Faculty Development Programmes (FDPs) in the year 2021-22 through which 97 faculty members were trained and 1,152 students were certified in Java and Database courses.
- **Unschool:** Offers placements and technical management courses at discounted prices. Through 5 drives, Unschool has placed 75 students and provided internships to 84 students
- **Internshala:** Offers internships to students and FDPs. As part of FDP, 17 faculty members were trained in various courses and 1,832 students were provided internships in the year 2021-22.
- **Amazon Web Services:** Provides training on cloud technologies for faculty and students.
- **Smart Bridge:** Offers skill initiatives in emerging technologies to institutes. 2,051 students and 337 faculty were trained with Tableau Viz Challenge and 3,411 students were trained under HACK Challenge with IBM during the year 2021-22
- **CSS Corp:** Through this partnership, TASK provides internships and placement services for the students.
- **Yes Mentor:** Through this partnership, TASK offers Mentor Talks on career building and emerging technologies
- **VLSI:** More than 2,600 students attended the awareness sessions on VLSI in collaboration with PVC and Veda IIT

| Placement support provided | |
|---|--------------|
| Number of placement drives/job melas executed | 129 |
| Number of job openings generated | 16,912 |
| Number of students placed | 3,853 |
| ESDM Placements | 2,360 |
| Total Number of Students Placed | 6,213 |

- A total of 2,225 students got placed with Infosys. Engineering students got an average package of Rs.3.6 lakhs per annum while the non-Engineering students got an average package of Rs. 2.22 Lakhs per annum.
- UnSchool - 75 students got placed with an average package of Rs. 5 lakhs
- Virtusa- 214 students got placed with an average package of Rs. 4 lakhs

Other notable achievements

- Introduced courses on emerging technologies to meet the industry's current requirements
- Implementing IOCL CSR initiative – “General Duty Assistant” (GDA) – Sixty unemployed youth from the villages along IOCL's Paradip-Hyderabad Pipeline (PHPL) Right-of-Use (RoU) in Nalgonda and Yadadri-Bhongir Districts will be the beneficiaries of the project.
- Trained and placed 185 candidates from families affected by the Hyderabad Pharma City
- Pilot for skilling of Persons with Disabilities (PwD) initiated.
- C-MET has granted One Crore Rupees for providing awareness on e-waste management to all the TASK registered students

RECOGNITION & AWARDS

- ‘Outstanding Youth Transformation Initiatives’ by Indi Global Media Network at their India Global Education & Skills Summit 2021
- ‘Global Ignite 2021’ Excellence Award





INFRASTRUCTURE & COMMUNICATIONS

Infra & Communications Wing provides the state-of-the-art IT Infrastructure, Network and Security facilities to all the State Government Departments which are operating seamlessly 24/7 and 365 days.

FOUR MAJOR INITIATIVES

Telangana State Data Centre (TSDC): Ensures top-class services and world-class IT infrastructure for Telangana Govt. Depts. and entities

It enables various State Govt. Departments host their services/ applications on a common infrastructure leading to ease of integration and efficient management, ensuring that computing resources and the support connectivity infrastructure (SWAN/ NICNET) are adequately and optimally used.

The State Data Centre is powered with world-class Cloud and Hyper Converged Infrastructure, which enables it to host Computational, Network, Storage resources, and web & mobile Applications of all e-Governance initiatives.

SDC Infrastructure ensured delivery of services uninterrupted to Citizens and Govt. Depts. during the COVID-19 Pandemic.

SDC Infrastructure Statistics

| | |
|----------------------------|--------|
| Applications (G2C & G2G) | 134 |
| Departments | 27 |
| Virtual Machines / Servers | 1156 |
| Total Storage Capacity | 2.2 PB |

SDC Infrastructure hardening - Enhancements

Data Centre hardening is an approach to strengthen the G2C & G2G Critical Information Infrastructure (CII) by deploying different security controls to protect from potential cyber security threats. Security controls enabled as below.

| Security Controls | Benefits |
|---|---|
| Web Application Firewall (WAF) Solution | WAF protects web applications by filtering and monitoring HTTP traffic between a web application and the Internet. Protects web applications from attacks-cross-site forgery, cross-site-scripting (XSS), file inclusion, and SQL injection etc. |
| Advance IPS Solution | Preemptively detects and blocks targeted attacks. Defends the network with real-time, inline enforcement and automated remediation of vulnerable systems. Feature with AI & ML techniques to make real-time decisions to immediately and accurately block malicious traffic. |
| Anti DDoS Solution | Provides automated DDoS protection from fast-moving, high-volume, encrypted or very-short-duration threats. Defends against IoT-based, Burst, DNS and TLS/SSL attacks to secure SDC against emerging network multi vector attacks, ransom DDoS campaigns, IoT botnets, phantom floods, and other types of cyberattacks. |

STATE WIDE AREA NETWORK (T-SWAN): A high speed, reliable backbone network for Telangana State

State Wide Area Network (SWAN) is one of the core infrastructure components under the National e-Governance Plan.

- TSWAN is integrated with Telangana Secretariat Campus Area Network (TSCAN), SDC and National Knowledge Network (NKN) and facilitates secure network services.
- Dedicated centralized Service Desk and a 24X7 Network Operating Center (NOC) is set up.
- More than 46 departments, 101 sub-departments are connected to TSWAN and rendering services to citizens.
- Video Conference facilities are set up with SWAN as backbone across all District, Mandal headquarters and user departments. More than 600 video conference centers were set up. A total of 180 State Level and 3,690 District Level Video Conferences facilitated.

TSWAN (Point To Point Network Connectivity – Across Telangana State)

| TSWAN Points of Presence (PoPs) | Qty |
|---------------------------------------|------|
| State Headquarters (SHQ) | 1 |
| District Headquarters (DHQ) | 33 |
| Mandal Headquarters (MHQ) | 594 |
| Horizontal Offices | 1500 |
| Video Conferencing services locations | 536 |

Telangana e-Mail Services

- Provided 57,000 email accounts to various State Govt. Depts.
- Provided 37,000 email accounts for e-office implementation.
- Nodal agency for providing SMS and Bulk email services

Telangana Security Operations Center (TSOC): Ensuring a Safe & Resilient Cyber Space of Telangana State Infrastructure.

Set up in the year 2017-18 with the objective of deploying capabilities to shield Government assets from cyber threats and attacks at State Data Centre (SDC).

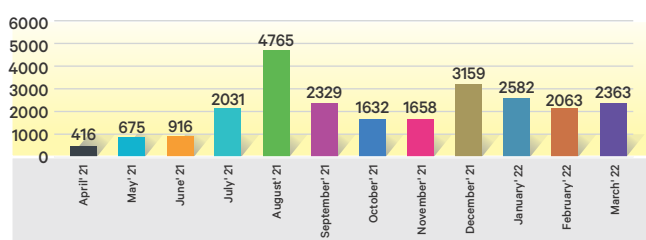
TSOC analyzes the events generated by the operating systems, network & security devices and databases in near real-time and provides notifications to single point of contact (SPOCs) if any intrusions are detected.

Vulnerability Assessment/ Threat Surface Management: Identifies, tracks and closes vulnerabilities.

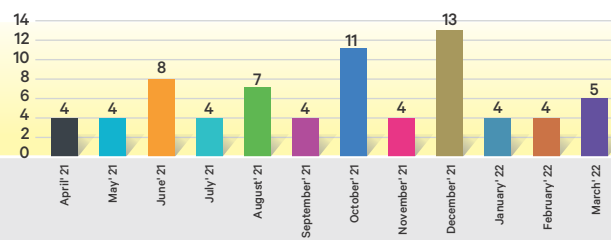
Threat Hunting: SOC team researches specific adversaries and supports by hunting through the environment using adversary tactics to improve detections and to develop new alerts based on the program results.

Security Operations Statistics

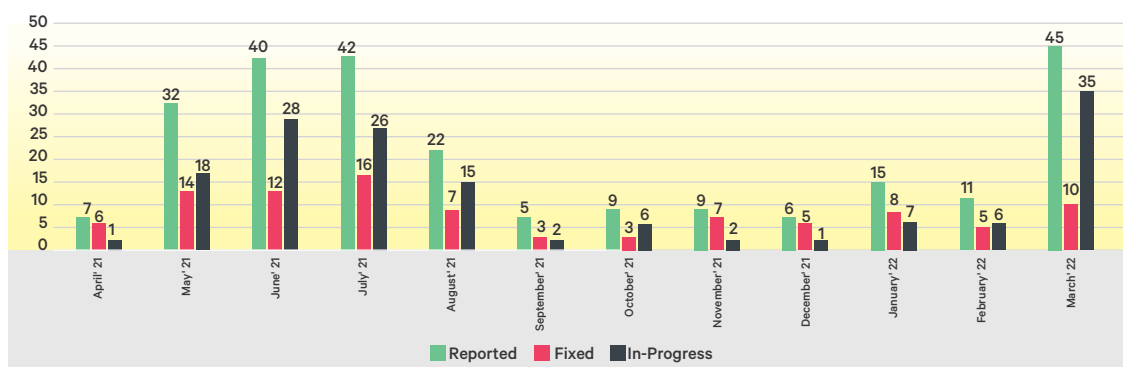
Threat Incident Summary



Threat Advisories



Vulnerability Summary



Activities

- Timely recommendation on infrastructure and application security best practices.
- Educating on the importance of Security Audit programs.
- Generating Threat Advisory Reports.
- Bringing out Cyber Security Newsletter.
- Preparation of Capacity Utilization Report.
- Preparation of SOC Procedures for handling Incidents.
- Remediation and Knowledge-based articles.
- Coordinating with the national agencies like Intelligence Bureau, NCIPC, CDAC, DSCI etc. on Cyber Security awareness programs.



ELECTRONICS, ELECTRIC VEHICLES & ENERGY STORAGE SYSTEMS

Telangana State Electronics Policy came into force in 2016 to evangelise the Electronics System Design Manufacturing (ESDM) ecosystem in the state and country.

MAJOR INVESTMENTS

Radiant Appliances & Electronics Pvt. Ltd. has set up a manufacturing unit for LED TVs with a capacity of 25 lakh televisions per year, employing 2,800 persons in Telangana, this is the **Single largest plant in the country for LED TVs**. The company inaugurated a new facility on May 3rd, 2022 in the E-City Electronics Manufacturing Cluster (EMC). The annual capacity now has increased to 45 lakh televisions per year with a combined workforce of 3,800 persons.

Premier Energies, which is among the leading Solar PV manufacturers in the country, has set up a world class facility in E-City EMC. The plant was inaugurated in July, 2021.

The Government has also approved the Company's new proposal to set up a facility to manufacture 750 MW Solar PV Cell & Modules with an investment of Rs.700 Cr. with employment generation potential for 500 persons.

Olectra Greentech, the country's largest electric bus manufacturer has chosen Telangana as its base. The government approved the Company's proposal for setting up an electric bus manufacturing plant on the outskirts of Hyderabad, with an initial outlay of Rs.600 Cr and a capacity of 10,000 units.

Government approved **Biliti Electric (Gayam Motors)** proposal for setting up the world's largest Electric 3-wheeler manufacturing facility in Telangana with a capacity to produce 2,40,000 electric vehicles (EVs) annually with a potential to create 3,000 jobs.



Delegation visit to the USA



A delegation headed by Minister for IT KT Rama Rao visited the USA in March, 2022. The delegation met representatives of leading electronics, semiconductor, and EV companies to discuss potential opportunities in Telangana. Discussions were held with the leadership teams of global majors including Sanmina Corporation, Applied Materials, Qualcomm, Fisker Inc., and Lucid Motors, to name a few.



The Hon'ble Minister took the opportunity to highlight the industry-friendly policies of Telangana and positioned the State for EV, Electronics and Component Manufacturing.

The visit was highly successful in securing marquee investments in the State by US-based companies. Qualcomm announced an investment of Rs.3,900 Cr to expand their Hyderabad operations over the next five years. The campus sprawling over 1.5 million square feet will be inaugurated in October 2022 and will lead to an employment generation of 8,700 software professionals.



American EV manufacturer Fisker Inc. established its Indian headquarters in Hyderabad. The company proposes to use this new operation center to work on software development and embedded electronics, virtual vehicle development support functions, and data analytics.

SemiconIndia 2022, Bengaluru

The inaugural event of SemiconIndia 2022 Conference was held in Bengaluru in May 2022 which saw participation from leading global companies across the semiconductor value chain. Principal Secretary, IT, E&C and Industries Depts. Jayesh Ranjan participated in a panel discussion to highlight Government of Telangana's initiatives and preparedness for semiconductor and display fabs.

CCESDM

The Consultative Committee on ESDM approved 60 proposals with an investment commitment of Rs. 2,700 Cr and an employment generation potential for 11,300 persons in 2021-22. This included multiple companies located in Telangana with proposals for expansion and diversification in the Electronics & EV sectors.

Launch of Pink Book

The Electronics Wing launched the 'Pink Book 2021' - an Investor's Guide to Telangana - in July 2021. The Pink Book is a compendium of the state's policies in all the domains and would help investors understand the various initiatives undertaken by the State.



Taipei Economic and Cultural Center in Chennai (TECC) Delegation Visit to Telangana

Delegation headed by Mr. Ben Wang, Director-General, TECC along with the Invest India team visited Telangana to witness the State's Industrial Infrastructure and Electric Vehicle and Energy Storage ecosystem and to understand the key initiatives undertaken by the State in these sectors. The delegation also held an interaction with the key industry representatives from the State, including Olectra, Mytrah, Gayam Motors (Biliti), Race Energy, among others to explore potential opportunities for investment in these sectors in Telangana.

New Land Parcels, Built up Space & Common Facilities Center:

The Government has already established 1,80,000 sq ft ready-to-occupy built-up space in E-City EMC. Additionally, the state targets to create 5 lakh sq ft of plug-and-play space in the first phase and an additional 10 lakh sq ft facilities shall be developed in a PPP model. The plug-and-play spaces will have access to all the necessary infrastructure for Electronics companies.

The State is also in the process of setting up a common facilities center in the EMCs with world class Prototyping, Testing & Calibration facilities.

The IT, E&C Department also identified new land parcels for future Electronics Manufacturing Clusters to cater to the growing demand for Electronics Manufacturing in the State.

Development and Promotion of Electric Vehicle (EV) and Advanced Chemistry Cell (ACC) Manufacturing Ecosystem

The State has identified EV and Energy Storage sectors as one of the priority sectors and towards this has launched an exclusive EV and Energy Storage Policy and established exclusive manufacturing clusters to cater to the industry.

As part of the State's efforts, the Electronics Wing hosted several companies including Arrival, Gujarat Fluorochemicals Limited (GFL) among others to showcase State's investment ecosystem and Industrial Infrastructure.

In pursuit of becoming an EV manufacturing hub, the Government of Telangana has signed an MOU with Automotive Research Association of India to set-up a Testing and Pre-Certification Lab in Hyderabad. The center will host testing and pre-certification facilities for various automobiles including Electric Vehicles. The facility is proposed to be set up in the E-City EMC.

Other Key Initiatives

The Electronics Wing, ITE&C Department worked with OLA group towards launching the O2 initiative in Hyderabad with Ola sponsoring 500 O₂ concentrators.



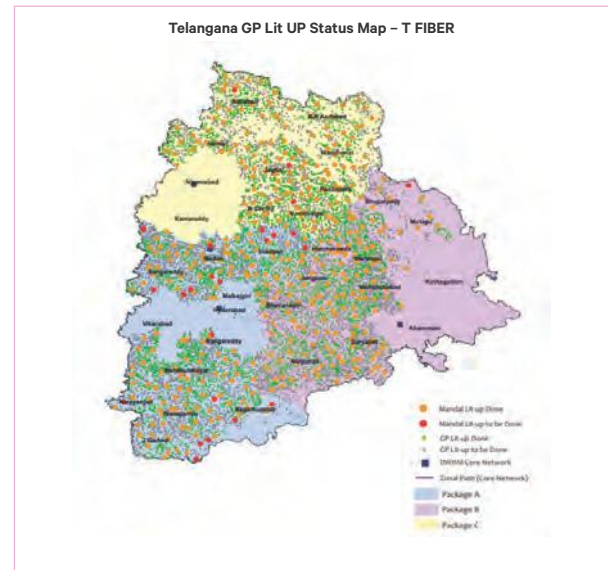
Under the T-Fiber Project, the Telangana Government is laying carrier-grade telecom optic fiber network from State Headquarters (SHQ) down to Grama Panchayats (GPs) and rural households along with all the Government institutions and private enterprises. The IT, E&C department has incorporated a Special Purpose Vehicle (SPV) i.e. Telangana Fiber Grid Corporation Ltd., (“T-Fiber”) as the State Implementing Agency.

PROJECT VISION

- Establish state-of-the-art digital network infrastructure that is long-lasting, resilient, secure, scalable, and carrier-grade.
- Provision bandwidth to licensed service providers in a non-discriminatory and non-monopolistic manner without entering into competition (except in delivery of G2G and G2C services)

PROJECT STATUS

| Activities | Progress | |
|-----------------------------|----------|-----------------|
| | Scope | Total Work Done |
| Trenching and Ducting (KMs) | 22,298 | 17,328 |
| Duct Rod Test (KMs) | 11,210 | 7,902 |
| OFC Blowing (KMs) | 34,848 | 20,544 |
| Lit-up completed GPs | 10,787 | 5,614 |
| Lit-up completed Mandals | 425 | 404 |



T-NOC

The state-of-the-art T-Fiber Network Operation Centre (T-NOC), located in Hyderabad, is hosting carrier-class network equipment, data, and application servers along with research and testing lab. T-NOC will be a focal point for fault, configuration, accounting, performance, and security management of the Telangana active and passive Telecommunication infrastructure. The functions and services performed by T-NOC are based on Telecommunication Management Network standards that ensure industry best practices and futuristic & scalable architecture.



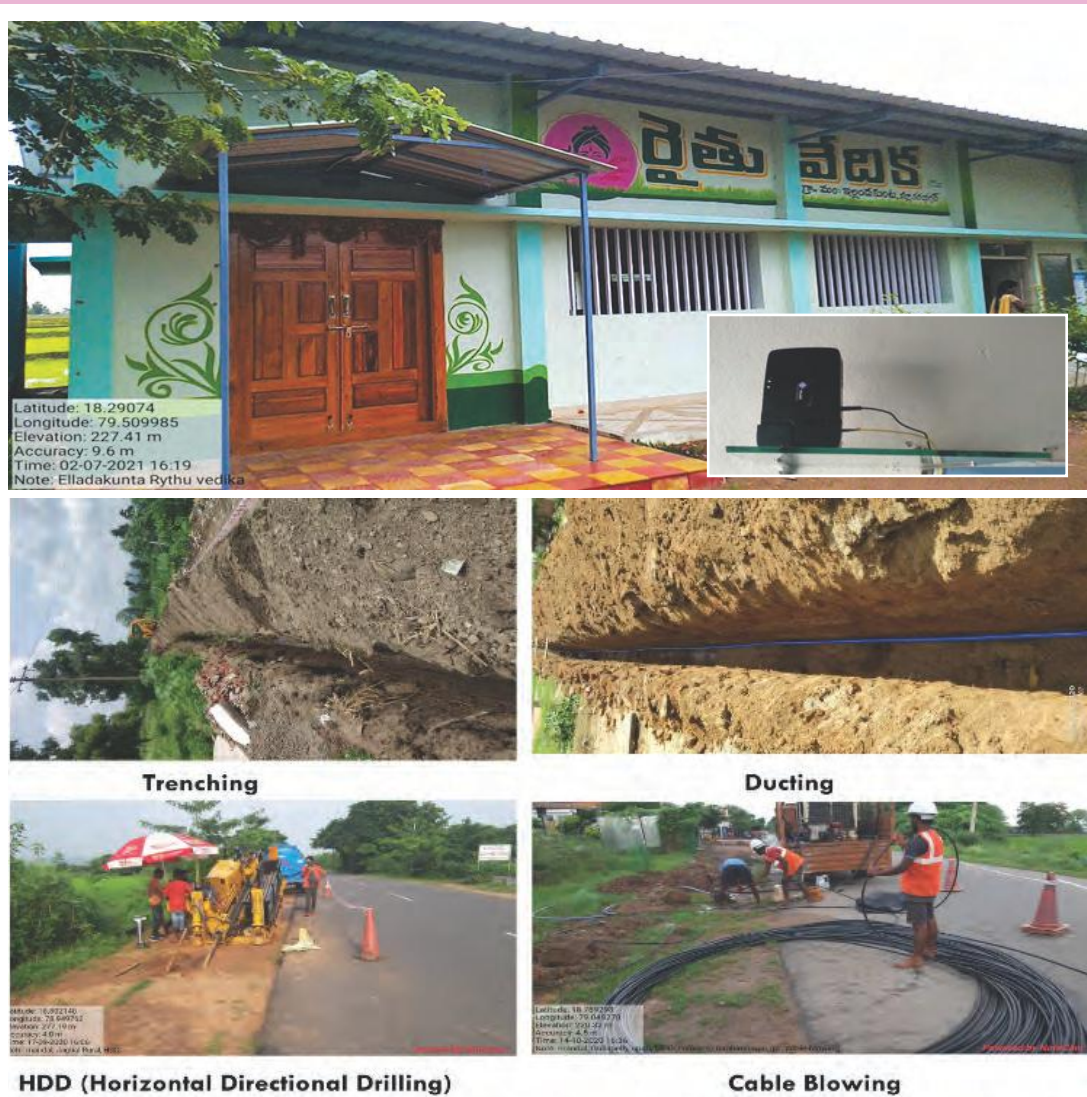
T-FIBER BUSINESS ACTIVITIES

Update of GI connectivity:

- T-Fiber has received the Letter of Intent from the Department of Telecom (DoT) granting Universal Licence (UL) for access services. This will allow T-Fiber to conduct its business of provisioning telecom services in Telangana.
- A list of 97,115 Government Institutions has been compiled for connectivity.
- First State Broadband Services Advisory Committee (SBSAC) meeting was conducted with Departments like Health & Medical, Education, Agriculture, Police, Panchayat Raj, Social Welfare, Revenue, and MAUD.
- Evolving digital classroom solutions for 'Mana Ooru-Mana Badi' program in partnership with the Commissioner of School Education.
- Working with the Police Dept. and Secretary, Telangana Social Welfare Residential Educational Institutions Society (TSWREIS) for broadband connectivity at various remote locations.

Update on residential and enterprise connectivity

- Various industry consultative workshops were held with potential business partners (B2B) i.e TSPs, MSOs, ISPs, and OTT players for delivering broadband services to residential and private enterprises.
- Ernst & Young (EY) has been engaged to develop sustainable business models and monetization of the network.





SoFTNET

T-SAT, the satellite TV network operated by the Society for Telangana State Network (SoFTNET) under the aegis of the Department of ITE&C telecasts programmes on education, employment, healthcare, and agriculture, among other subjects, through its two channels Vidya and Nipuna.

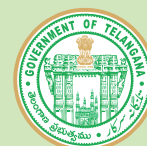


MAJOR INITIATIVES AND ACCOMPLISHMENTS



Department of School Education

- T-SAT Network channels telecast 8 hours of digital lessons for school students (Class III - Class VIII) in all subjects.
- 1710 hours of content available. All digital lessons are available on T-SAT App.



Women Development & Child Welfare

- T-SAT Network channels telecast daily 1 hour live session of learning for preschool children.
- 436 hours of content available.
- Anganwadi Teachers and Workers across Telangana are benefitted.



Board of Intermediate Education

- T-SAT Network channels telecast daily 11 episodes of digital lessons for Intermediate students.
- 2170 hours of content available on T-SAT App.
- Digital classes are telecast in both English and Telugu mediums



T-SAT Network in partnership with PVC & TASK

- Partnered with PVC & TASK, T-SAT Network and telecast programs on VLSI and Quantum Technology.



Guidance on TS TET and TS PSC Group 1

- T-SAT Network channels daily telecast special live programs for TET & Group-1 aspirants with reputed faculty to create awareness and give guidance on exam pattern
- 1220 hours of content available.



Staff Selection Commission CHSL/CGL

- T-SAT Network channels telecast coaching classes for unemployed youth preparing for competitive exams such as Staff Selection Commission.
- Mock tests on T-SAT App for SSC CHSL and CGL aspirants. Content available on T-SAT App.



Rytu Mitra (Vyavasayam & Pashuposhana)

- T-SAT Network channels telecast live interactive programmes with farmers in association with Professor Jayashankar Telangana State Agricultural University and Department of Animal Husbandry, Telangana.



Health-Aarogya Mitra

- Specialist doctors advise viewers every Friday through live interactive sessions.

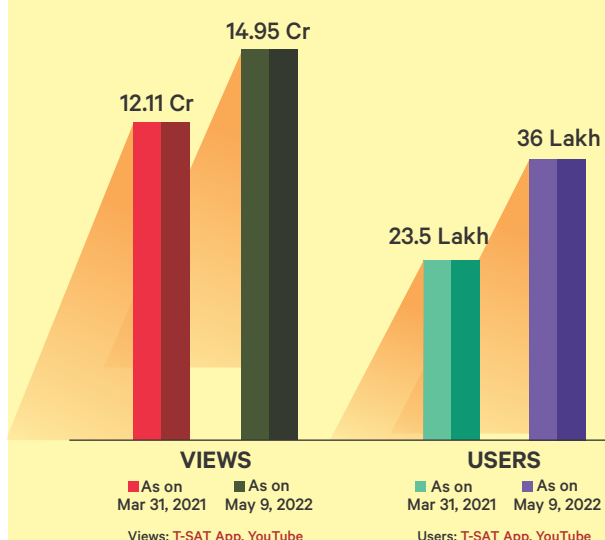


T-SAT e-Magazine

- e-Magazine from T-SAT on programmes broadcast by T-SAT network channels.
- Access to the e-library of T-SAT through e-Magazine.
- Hyperlinks of the programmes are broadcast every week.



T-SAT NETWORK VIEWERSHIP





DIGITAL MEDIA


Digital Media Wing is responsible for connecting and engaging with citizens to disseminate information on the digital media platforms. Core functions of the Wing include creation and maintenance of official Social Media accounts and Portals; implementation of Open Data Initiative, Localisation of Content and Combating Misinformation Campaigns.

HIGHLIGHTS


- The Twitter and Facebook accounts of Telangana CMO and Minister KTR have a combined reach of about 20 Cr. during 2021-22.
- Telangana CMO Twitter account is nearing 14 lakh followers and continues to stand at 1st position vis-a-vis other Indian States in terms of 'Followers per Thousand Population' whereas Telangana CMO Facebook page is at 3rd position on the same metric.
- Developed portals for:
 - ♦ Telangana State Commission for Women - www.tscw.telangana.gov.in/
 - ♦ Telangana Sports School, Hakimpet - www.sportschoolhpt.telangana.gov.in/
 - ♦ International Arbitration and Mediation Centre, Hyderabad (IAMCH) - www.iamch.org.in/
- Revamped the Open Data Portal - www.data.telangana.gov.in/
- Revamped Telangana Magazine Portal - www.magazine.telangana.gov.in/ and Bathukamma Portal - www.bathukamma.telangana.gov.in/
- Built self-assessment tool for ascertaining the compliance of websites to accessibility parameters of Guidelines for Indian Government Websites (GIGW)




STATISTICS (From 1st April, 2021 to 31st March, 2022)

|  | Telangana CMO | | Minister KTR | |
|---|---------------|-------------|--------------|-------------|
| | Followers | Reach | Followers | Reach |
| | 8,51,182 | 4,09,52,672 | 5,18,100 | 2,59,81,659 |

|  | Telangana CMO | | Minister KTR | | Digital Media | |
|---|---------------|------------|--------------|------------|---------------|-----------|
| | Followers | Reach | Followers | Reach | Followers | Reach |
| | 13,76,980 | 70,681,818 | 9,05,795 | 60,298,771 | 14,500 | 39,07,543 |

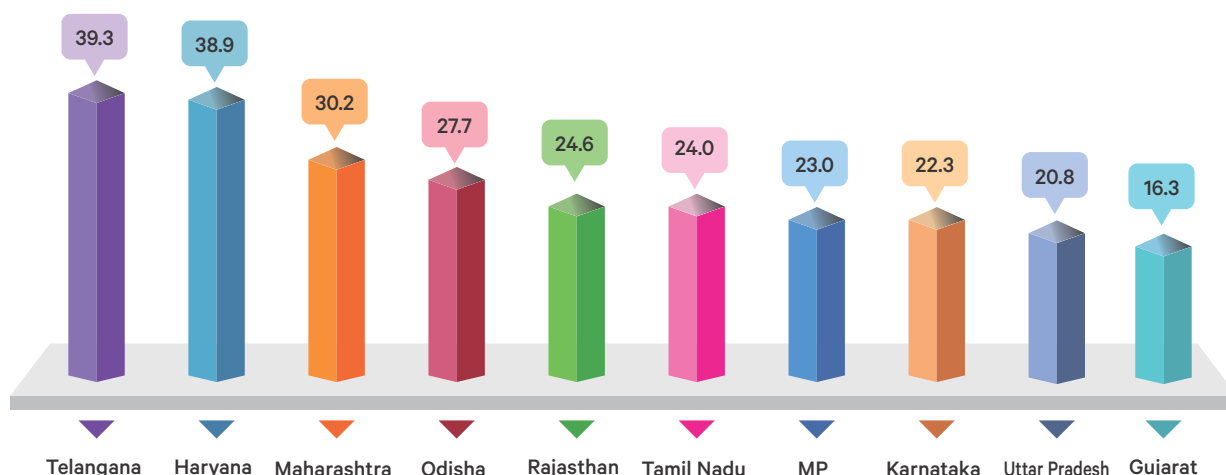
|  | Telangana CMO | | Minister KTR | |
|---|---------------|----------|--------------|-------------|
| | Subscribers | Reach | Subscribers | Reach |
| | 6,140 | 6,87,320 | 25,400 | 2,02,04,391 |

|  | Portals Views | | |
|---|---------------|----------------|------------|
| | State Portal | IT Dept Portal | CMO Portal |
| | 66,25,133 | 1,63,164 | 2,76,773 |

CMO Twitter Accounts - Top States (as on 20 May, 2022)

| S.No. | State | Followers | Population | Followers per 1000 population |
|-------|-------------|-----------|--------------|-------------------------------|
| 1 | Telangana | 13,76,980 | 3,50,03,674 | 39.3 |
| 2 | Haryana | 9,86,639 | 2,53,51,462 | 38.9 |
| 3 | Maharashtra | 33,92,363 | 11,23,74,333 | 30.2 |
| 4 | Odisha | 11,64,483 | 4,19,74,218 | 27.7 |
| 5 | Rajasthan | 16,88,102 | 6,85,48,437 | 24.6 |

CMO Twitter Followers per 1000 Population - Top 10 States



ACTIVITIES/ WORKSHOPS

- The Director, Digital Media spoke at the Wikimedia Technology Summit 2021 (www.indicwiki.iiit.ac.in/summit2021/) on the topic 'Role of Technology in Community Encyclopedias – Challenges and Vision' on 19 November, 2021
- Orientation Programme on 'Accessible India Campaign - STQC Certification' for the Web Information Managers and Nodal Officers of Secretariat Depts. and HoDs on 17 August, 2021.
- Orientation session for DPROs/ APROs on 'Digital Media for Governance' at MCRHRD Institute, Hyderabad on 23 March, 2022
- Set up Telugu Wikipedia Stall at 34th Hyderabad National Book Fair held between 18-28 December, 2021. Nearly 90,000 people visited the TeluguWiki stall. About 450 persons registered their names as volunteers for Telugu Wiki Project. About 50 of them were trained at IIIT Hyderabad from 3-8 January, 2022 on generating content for Telugu Wikipedia.



AWARDS

- Digital Media Wing has been selected for the Public Relations Council of India's (PRCI) Chanakya Award for the second year in a row. The Director, Digital Media Sri Dileep Konatham received the Award from Goa Chief Minister Sri Pramod Sawant on 17th September, 2021 at the 15th PRCI Global Communications Conclave held in Goa.



OPEN DATA

Open Data initiative's objective is to put Government data in open and machine-readable format to facilitate better planning of development programmes and to measure the effectiveness of Govt. schemes.

Highlights

- More than 1,423 datasets (resources) are available on the Open Data portal on varied areas and subjects. Many of these datasets are updated up to the most granular level every month.
- The Open Data unit obtains web services/API from multiple departments and publishes the data on the Portal after a process that involves cleaning and adding relevant metadata. More than 70% of the departments have made at least one dataset available on the portal.
- Many startups and not-for-profit organisations are actively using the data made available on the Open Data Portal.
- Agriculture-related Data is being used for a World Economic Forum (WEF) Project on AI. Open Data unit is providing data for various AI Projects carried out by Emerging Technologies Wing.
- Transit data of HMRL and MMTS in the GTFS format is made available. The GTFS data is being actively used by individuals and corporate entities including Google India.
- Data related to energy consumption by different categories of consumers such as Agriculture, Domestic, EV Charging Stations, Industries, and Streetlights are made available and updated every month.
- Anonymised data related to total vehicle sales, vehicle registrations etc. are made available at the granular level on a monthly basis.
- The Telangana open data portal has been revamped to add the following features:
 - APIs can be generated for all the datasets
 - Preview of datasets available
 - Faster and capable of handling large datasets

Geospatial Datasets

The following datasets were made available with latitude a longitude, contact, and address details.

- Fair Price Shops (Ration Shops)
- Fire Stations
- Haritha Resorts
- All public and private schools
- Sub-Registrar offices
- Agriculture Market yards

PROJECTS THAT USE DATA FROM THE OPEN DATA PORTAL

- World Economic Forum (WEF) - Saagu Baagu AI4AI project: High-value datasets such as Weather Data, Agriculture Market Yard Prices, Irrigation Datasets, Shape Files up to Mandal level, Soil Data and Crops Data are being accessed.
- UNDP - Food System Project: United Nations Development Programme (UNDP) has partnered with the Govt. of Telangana on the NextGenGov 'Data for Policy' initiative on Food Systems. Datasets such as Agriculture Electricity Consumption, Shape Files for Villages, Rainfall Data, Groundwater Level Data, Crop Data, and Agriculture Commodity Prices Data are being accessed
- The Agri Collaboratory - AgCx Project: Project AgCx i.e. Automated Farm Credit Assessment. Datasets such as Crop Grown and Crop Yield in Rabi and in Kharriif, Weather Data, Groundwater Level Data, and Agriculture Commodity Prices Data are being accessed



RESPONSES

- We have internally mapped the various RTOs to the relevant districts and use the registrations data as one of the data points to estimate the growth potential of the districts. With this, we have helped an NBFC client build their credit scoring model using around 24 indicators including mobility data etc.

Beneficiary : Adqvest Capital Advisors Private Limited

Dataset Used : Telangana Road Transport Dept.

- We have completed our project where we compared different machine learning models and developed a hybrid model to analyse the given Telangana Weather Data. We would like to thank Open Data for allowing us to use the dataset for our project.

Beneficiary : Students of Christ University Bangalore

Dataset : Telangana Weather Data

Project : A Comparative study of LGBM, SVR, and LGBM-SVR Hybrid Machine Learning Models

- I appreciate the Open Data Telangana for publishing updated shapefiles and I had used maps for department purposes.

Beneficiary : Praveen DE IT TRANSCO

Dataset : Telangana Shapefiles

Project : Updated maps for Energy Department Purpose

- ...thank you very much for providing Telangana State shapefiles without which plotting wouldn't have been possible.

Name : Machine Learning Engineer, Boston, USA

Dataset : Telangana District and Mandal Shape Files

Project : Developed Choropleth Map of Telangana using Python.

- I laud the Open data platform service initiated by the Telangana Government. Disaggregated data is extremely useful for understanding the on-ground information in a city for researchers.

Name : Transportation Systems Engineer at IBI Group

Dataset : Telangana Shapefiles and GTFS Data

Project : Transportation Analytics Models

Gramener office Inauguration





PHOTONICS VALLEY CORPORATION

The Photonics Project has been initiated by the Government of Telangana with an objective to create an ecosystem for nurturing alternative computing paradigms by mobilizing concerned stakeholders and related projects. The idea was to build an ecosystem with fabrication related units such as designing houses, manufacturing houses, R&D units and supply chain industries by leveraging one of the alternative computing technologies, Photonics.

THE ECOSYSTEM

VLSI Initiative

- Under the VLSI academy program, two batches of job seekers have been trained with the intervention of industry and were placed. An 'Exposure training' program has also been rolled out.
- Telangana – Fabless Accelerator through Cloud Enablement (T-FACE), an Incubation program designed to support the startups in Fabless/VLSI chip design activity was inaugurated on 16 September, 2021 by the Minister for IT KT Rama Rao during the launch of 2nd ICT Policy for 2021-26. Fifteen startups enrolled for the program.



Quantum Initiative:

Quantum Technology is emerging as a viable alternative computing paradigm which is capable of changing the computing fundamentals. Photonics is an inevitable part of Quantum approaches. Entire gamut of Quantum Communications is based on Photonics communications and Photonics based Quantum Computers emerged as serious contenders to provide stable Quantum computing at room temperature. We have initiated a program to promote the industry in the state.

- Under Quantum Computing, an 'Exposure Training' program has been rolled out with the help of industry and more than 60,000 students have been benefited. The program was conducted in collaboration with TASK and TSAT
- A virtual start up platform has been conceived as part of VLSI platform and a few startups have been enlisted.
- Four POCs have been identified and with the help of consultative committee DPRs have been developed. They have been communicated to Govt. of India and NITI Aayog for funding

MANUFACTURING ECOSYSTEM PROJECTS

• Horizontals

Packaging unit (OSAT): An OSAT or Packaging & Testing Unit has been allotted 10 acres of land at EMC, Maheshwaram. The unit is crucial to the Photonics ecosystem and it can cater to electronics packaging as well. The project also received sanction from Modified Special Incentive Package Scheme (M-SIPS) of Government of India. It's the first project in Hyderabad to get the 25% capital subsidy under M-SIPS.

Fab initiatives

The Govt. of India has issued an Expression of Interest (EOI) to establish Fabs in India. Three proposals - first from Mishran to establish a GaN/GaAs foundry with \$125M, the second from ASIP to establish Gallium Nitride (GaN) Fab with \$200M and the third from Blaize, an Indian/American Company to establish Silicon Photonics Fab - have been submitted.

EVENTS & MEETINGS



Minister KTR inaugurated the
2nd ICT Policy 2021-26



Minister KTR addressed the 'Parliamentary Standing Committee on Commerce' led by its Chairman Sri Vijayasai Reddy



Minister KTR addressed the 'Standing Committee on Information Technology'



Minister KTR spoke at 'Ambition India 2021' Business Forum at French Senate in Paris



The Govt of Telangana entered into an MoU with Google India in the presence of Minister KTR

EVENTS & MEETINGS



Minister KTR with Australia's Consul General for South India, Ms Sarah Kirlaw at the launch of 'An Update to an India Economic Strategy to 2035: Navigating from Potential to Delivery'



H.E. Mr. Emmanuel Lenain, Ambassador of France to India met Minister KTR on the sidelines of Indo-French Investment Conclave



Colombian Minister of Health & Social Protection Mr. Fernando Ruiz Gómez called on Minister KTR



Poland Ambassador to India H.E. Prof. Adam Burakowski called on Minister KTR



Announcement of Triton EV - a leading US-based Electric Vehicle company



Minister KTR met the leadership team of Sprinklr in New York, USA

EVENTS & MEETINGS



Minister KTR addressed the Indian diaspora at the Meet & Greet program organised by ITServe Alliance in New Jersey, USA.



Australia India Institute CEO Ms. Lisa Singh called on Minister KTR



Minister KTR Addressed the industry leaders at the German Investors' Summit in Hyderabad



Minister KTR laid foundation stone for expansion of Genpact Campus in Uppal



The Govt. of Telangana and Mobile Premier League entered into an MoU in the presence of Minister KTR



Minister KTR participated in the commemoration of reaching 3000+ public Wi-Fi hotspots

EVENTS & MEETINGS



A delegation of Taipei Economic and Cultural Center (TECC) Chennai, headed by Director General, Ben Wang met Minister KTR



High Commissioner of Republic of Singapore to India H.E Mr. Simon Wong met Minister KTR



Minister KTR inaugurated Ivanti, a Cybersecurity company



Ambassador of the Federal Republic of Germany to India H.E. Mr. Walter J Lindner and the Consul General in Chennai Mrs. Karin Stoll met Minister KTR



Ambassador Extraordinary & Plenipotentiary of the Republic of Uzbekistan to India H.E. Mr. Dilshod Akhatov and Dr. Nawab Mir Nasir Ali Khan called on Minister KTR



Deputy High Commissioner of Sri Lanka in Chennai, Dr. D Venkateshwaran called on Minister KTR

UK Trip May - 2022



Minister KTR met with the company leadership of Surface Measurement Systems in London



Minister KTR addressed the Indian Diaspora and India - UK based industrialists in London



Minister KTR met with Mr. Franck Riot, Global R&D Head GSK Consumer Health in London



The Govt of Telangana entered into MoU with Kings College in the presence of Minister KTR



Minister KTR met the leadership team of British commercial EV manufacturer Arrival in UK

Davos - 2022



Minister KTR with Swiss Re MD Veronica Scotti



Minister KTR with Meesho Founder & CEO Vinit Aatrey



Minister KTR with the Fujitsu Global CEO Takahito Tokita



Minister KTR with Sequoia Capital MDs Mohit Bhatnagar and Rajan Anandan



Minister KTR with Bharti Enterprises Chairman Sunil Bharti Mittal and Vice Chairman Rajan Bharti Mittal



Minister KTR shared his thoughts on 'AI on the Street Managing Trust in the Public Square' at a panel discussion at World Economic Forum in Davos.

Davos - 2022



Minister KTR with Deloitte Global CEO Punit Renjen



Leadership team of NEC Corporation led by its Senior EVP Norihiko Ishiguro met Minister KTR



A leadership team of Bharat Forge Ltd led by Deputy Managing Director Amit Kalyani met Minister KTR



Minister KTR with Schneider Electric EVP Luc Remont



India's leading EdTech firm BYJU's co-founders Raveendran and Divya Gokulnath met Minister KTR



Government of Telangana entered into an MoU with Mastercard in the presence of Minister KTR

USA - 2022



Minister KTR spoke at Investors Roundtable hosted by Consul General of India in San Francisco



Minister KTR addressed a group of over 250 members of the ITServe Alliance held at San Jose



Minister KTR chaired a high-level Industry Roundtable meeting in Bay Area



Minister KTR met with Mr. Agam Upadhyay, SVP, Chief Technology Officer of GlaxoSmithKline (GSK)



Minister KTR addressed the Indian diaspora at the ITServe Alliance organized Meet & Greet program in New Jersey



Jayesh Ranjan, IAS

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