22nd National Conference on e-Governance
8th & 9th August 2019

Proceedings

Theme
Digital India: Success to Excellence

Organised by
Department of Administrative Reforms & Public Grievances (DARPG), in association with Ministry of Electronics and Information Technology (MeitY), Government of India and Government of Meghalaya
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Introduction

The 22nd National Conference on e-Governance has been jointly organized by the Department of Administrative Reforms and Public Grievances (DARPG), in association with Ministry of Electronic and Information Technology (MeitY), Government of India and Meghalaya on the 8-9th August, 2019 at the State Convention Centre, Shillong. The theme of the conference- ‘Digital India: Success to Excellence’, focuses primarily on providing considerable momentum to e-Governance initiatives in the North-East Region and also to provide an opportunity to civil servants and others to showcase their successful interventions in providing end-to-end service delivery.

This forum brings together about 535 delegates and senior officials from as many as 28 States and 9 Union Territories along with regional experts, development partners, business organisations and other key stakeholders. Exhibitions are also being held on the sidelines to showcase India’s achievement in the field of e-Governance, along with Hall of Fame of the award winners. Besides, there are discussions on six sub-themes in plenary sessions and three Breakout sessions on the sub-themes during the Conference.
Day 1
8th AUGUST 2019
INAUGURAL SESSION

Address by Smt. R.V. Suchiang, Additional Chief Secretary, Government of Meghalaya

Smt. R.V. Suchiang in her address, welcomed the Chief Minister of Meghalaya, Shri Conrad K. Sangma, Union Minister of State, Dr. Jitendra Singh; Minister of Urban Affairs Department, IT&C Department, Government of Meghalaya, Shri Hamletson Dohling; Chief Secretary to the Government of Meghalaya, Shri P.S. Thangkhiew; Secretary MeitY, Government of India, Shri Ajay Prakash Sawhney; Secretary DARPG, Government of India, Shri K. V. Eapen; Additional Secretary, DARPG, Government of India, Shri V. Srinivas; delegates, invitees and other dignitaries. While delivering the welcome address, she stressed that the Conference will help to realize the dream of a digital India while helping us to keep up with the digital world. A documentary highlighting the achievements of e-Governance initiatives in various parts of India were screened which shed light on the relevance of the event of this calibre. The Video by DARPG recognized some important digital movements across the country which included IRCTC ticketing across the country, Online Land Management system in Uttar Pradesh, Real Estate Regulation in Maharashtra, Online health consultation service in Uttarakhand, Wind Power forecasting system for real time update in Chennai, GIS based model to calculate forest cover in Haryana etc.

Address by Shri K.V. Eapen, Secretary, DARPG, Government of India

Shri K.V. Eapen, in his address, expressed his happiness for having the e-Governance Conference in Meghalaya which is the first time in the North East India. While recalling his service in Meghalaya, he recollected how closely he worked with (L). Dr. Donkupar Roy, former Speaker of the Meghalaya Legislative Assembly and appreciated him for his accessibility and motivating spirit. He expressed his delight at the huge attendance on the first day of the 22nd National Conference on e-Governance in Shillong saying that the event was already a successful one. He also mentioned that the discussion and outcomes from this Conference will help to ensure digital inclusion and reduce the digital divide. He also stressed on the importance of digital transformation
in the Government sector saying that the advantages of the same are many. Shri K.V. Eapen stressed on the fact that India’s eco-system provides a perfect setting to utilize technology on a large scale for the benefit of all. However, he emphasized that the security aspect should be paid special attention while the focus is on technological advancement. He also said that the Government is committed to bring about a change in the working scenario that is to transform Secretariat into e-Secretariat and to synergise the role of Central and State Government. He also complemented Meghalaya for showcasing the Hall of Fame, an initiative that has been taken for the very first time.

Address by Shri Ajay Prakash Sawhney, Secretary, Ministry of Electronics and Information Technology (MeitY), Government of India

In his address, Shri Ajay Prakash Sawhney recalled that the first e-Governance Conference was held at Hyderabad in the year 1997 and since then the Government has come a long way, he said. He mentioned that Meghalaya, as a State, has great potential in the field of e-Governance which was clearly visible with the fact that the small hill State was able to hold a national event of this calibre. He also stated that the road to e-Governance initially began with a simple e-Governance plan and then in 2015, the digital India was conceptualised for the benefit of the common man. While stating that it is time to move forward with a different approach, he said that India is a global IT services hub but now it is time to convert it into a software product nation. He also mentioned that there is a spur in e-manufacturing growth and it is high time that the country starts exporting electronics to other countries. He stressed on the fact that e-Governance project should be universalised and made inclusive to all States in India including the municipalities. He also showcased India as a nation which is poised to become a digital economy while highlighting its strengths and aspiration to harness digital technology and foster innovations. He cited the examples of various public digital platforms such as Aadhaar, BHIM_UPI, GSTN, Passport Seva Kendra, e-Courts, etc. and said that they act as catalyst in unlocking the country’s exponential economic growth. He also stated that with these platforms in place, it is time that the country should move to the next generation of Digital India programme and that public digital platforms should act as key enablers of value creation.

Address by Shri P.S. Thangkhiew, Chief Secretary to the Government of Meghalaya

While delivering his address, Shri P.S. Thangkhiew said that the sole purpose of e-Governance should be to provide citizen satisfaction while improving their quality of life. He also mentioned that we should put our heads together and plan on taking this process forward. He also expressed that this event will help to achieve the said process through proper hand holding mechanisms. While speaking about enterprise architecture, he said that it will help to bind silos together. Shri P.S. Thangkhiew expressed his concern over the poor internet connectivity in rural areas of Meghalaya, thereby affecting banking services here. This will prove as a great hindrance towards e-Governance. He also hoped for another such conference in future to see how far the State goes in this regard.
Address by Shri Hamletson Dohling, Hon’ble
Minister of Urban Affairs Department, IT&C
Department, Government of Meghalaya

While delivering his address, Shri Hamletson Dohling said that IT is a powerful tool that can bring the people and Government together. He stated that this Conference is a platform for interaction of experts in this field to come up with concrete solutions to existing problems. He highlighted the initiatives taken by the IT Department of the Meghalaya Government. He also said that the Government is taking the initiative to make the delivery system people friendly. He also stated that there is a huge demand of man power in the e-sector. Shri Dohling informed that the Government is sponsoring youths to take up educational programmes in the e-sector. He also urged upon the need for funds for setting up of the technology park in Shillong thereby making it an IT hub and Silicon Valley of North East India. While concluding his speech, he hoped that the Conference will initiate inclusive participation from all sectors.

Address by Dr. Jitendra Singh, Hon’ble Minister of
State for (Independent Charge) of the Ministry of
Development of North Eastern Region, Minister of
State in the Prime Minister’s Office; Ministry of
Personnel, Public Grievances & Pensions; Department
of Atomic Energy & Department of Space,
Government of India

Dr. Jitendra Singh congratulated the Government of Meghalaya and the ARPG Department for being able to bring in such a huge attendance of 535 delegates from 28 States and all Union Territories in this Conference. He mentioned that since the induction of the Government, the ARPG has been able to expand its reach beyond the Vigyan Bhavan. He also said that the North East has not received the focus that it deserves and said that the Government has been trying to take e-Governance to the remotest part of North East India. He lauded the ARPG for developing a human friendly approach while citing the example of the pensioners Praman Patra. He said that citizen friendly Governance is the vision of the present Government. He appreciated Meghalaya for being the only State in India to have a Water policy in place. Dr. Jitendra Singh also mentioned that people should be brought closer to the North East as there is so much to learn from this region. He also expressed that the Central Government is constructing hostels for North East students studying outside the State and one such hostel was constructed at JNU. He advised that the Conference should formulate a ‘Shillong Declaration’ outlining the roadmap for e-Governance in India.
Address by Shri Conrad K. Sangma, Hon’ble Chief Minister of Meghalaya

While delivering the address, Shri Conrad K. Sangma said that e-Governance and inclusion of technology in Government process has been very close to his heart. He also stated that the programme is an example of how Dr. Jitendra Singh has been working hard not to leave North East India behind. He emphasized that connectivity is a real challenge to Meghalaya and requested the Hon’ble MoS to look into the matter. He also stated that most areas in Meghalaya lack mobile towers, especially the border areas where mobile towers cannot be placed with a certain vicinity of the International border. While speaking about the Conference, he said that the States must take advantage of such opportunities in terms of networking. Shri Conrad K. Sangma stressed on the importance of data driven Governance and its importance in the grass root level. The Chief Minister also narrated success stories from the State itself about how technology was used to provide efficient services while improving the quality of life of citizens. In this regard he cited the example of South West Garo Hills in Meghalaya which had high Maternal Mortality Rate. However, with the introduction of an innovative GPS based system to track pregnant mothers, Institutional delivery increased and within only six months, the mortality rate reduced to a drastic extent. He said that this was a perfect example of how technology can be used without additional funds for the benefit of the people. It is all a question of will power and motivation.

Similarly, the Chief Minister also highlighted other initiatives of the State, such as the 1917 i-Teams, that is helping to connect farmers to the buyer while also providing transport as well as consultancy services. The examples of Meg-Era Entrepreneur of the Month Award, launch of Megha-MART for State entrepreneurs and the use of integrated management system for the State Water Policy were some of the many examples put forward by the CM to emphasize the need to take e-Governance to the rural as well as the urban areas and whose benefits can be reaped by all. He also mentioned the need to think of innovative ways to make our village smart in terms of education, health, entrepreneurship. He also stressed on secretariat reforms while declaring the Conference open.

Vote of Thanks

The vote of thanks was given by Shri V. Srinivas, Additional Secretary DARPG.
PLENARY SESSION 1: INDIA ENTERPRISE
ARCHITECTURE (IndEA)

Introduction by Chairperson, Dr. Lovneesh Chanana, Vice
President of Digital Government – Asia Pacific and Japan, SAP,
India

Dr. Lovneesh Chanana opened the session by briefing the audience
regarding India Enterprise Architecture (IndEA). To kick start with the
session, he took the audience through few statements that would set the
context for the presentations that follow. He stated that the digital
citizen is a reality today, and the expectation of a digital citizen is more
towards not only getting the products and services of the Government
but also about creating experience. He also mentioned about digital
optimization, stating that in the earlier times, the main concern of
people was about digital optimization; however, the need of the hour is
not digital optimization but digital transformation. The world has moved on from being just a digital
world to a digitally intelligent world. He further added that there is a need to have architectures which
are agile, as the world is moving from processes that require data to data that define processes. The
automated tasks will soon be taken over by machines, and humans will then be required to decide on
what can be done better rather than how things can be done better. Humans will then be forced to add
high value task.

Dr. Lovneesh Chanana further added that all these changes in the way things are done will require a
change in processes. There will be a shift from capacity building to culture building, which is a big
step that IndEA will bring in. Processes will change from being processes consuming data to being
data consuming processes. Therefore, the challenges now lie in changing the processes and
procedures according to the need. This means that the architecture that will be designed will need to
be agile, flexible, and reusable. There will also be a need for multiple agencies to get into a single
unified interface. These are a few of the changes that are expected in the future.
Presentation on Digital Service Standards by Dr. Pallab Saha,
Chief Architect, The Open Group

Dr. Pallab Saha said that it is of prime importance to understand how the concept of IndEA can be integrated into the Government processes and other fields. In India, e-Governance has been in place for the past 30-40 years, but most of the functions are not clear as the systems are fragmented, with low or no interoperability, overdependence on vendors, limited internal expertise and capability within the Government ecosystem and so on. It is therefore important to set the standards right and follow the frameworks.

India ranks 96/193 on UN-Government Index 2018 even after implementing e-Governance from the past 30-40 years. Therefore, it is important to take the steps for improving the rankings. Currently, there is a lack of W-O-G approach in different Ministries, public administrations and public agencies to provide common solution to a particular problem. There is a need for architecture for common services. Further, he stated that standardization focuses on the renovation of ideas. He pointed out that architecture is the new ambition in building a stable e-Governance approach.

He also spoke about the 8 domains of IndEA: performance, business, data, application, infrastructure and others. He mentioned about the Performance Reference Model.

Architecture Domains

Performance Reference Model which helps in deciding what, to measure and monitor, when and how frequently to measure and monitor, what methods can be used to measure and monitor, and who will measure and monitor. In addition, it will help in analyzing, evaluating and validating the results.

In conclusion, he said that there should be a shift from physically fragmented to digitally integrated approach by taking an architecture approach to e-Governance and digital services. There are few initiatives which have been started including the blueprint preparation and implementation, where Meghalaya is the pilot State. He also mentioned about a few milestones achieved by IndEA, which include the administerial approval for the IndEA programme and the launch of the National Health blueprint.
Presentation IndEA: Sharing project and Experience of NIC by Shri D.C. Misra, DDG, NIC

Shri D.C. Misra started by speaking about the agenda of the presentation. He defined Enterprise Architecture (EA) as an enterprise which is a collection of organizations that have common goals. He spoke about how it is being implemented, and what the right approach to it is. Very briefly, the idea is to make EA flexible and resilient.

Shri Misra stated some of the key success factors of the IndEA vision which have included having national aspirations, and having a big-picture perspective, the need for political support and funding, and the creation of ownership in the line Ministries and Departments.

Shri Misra informed that IndEA has 8 reference models namely (1) application reference model; (2) data reference model; (3) technology reference model; (4) performance reference model; (5) integration reference model; (6) security reference model; (7) business reference model; and (8) architecture reference model. All these models have contributed as major reference models towards the formation of IndEA.

He stated the NIC’s EA Projects and initiatives and informed the audience that NIC is amongst the first Government organizations in the country to utilize the EA approach. He then spoke at length about the various projects over the last two years in which NIC has utilized IndEA. Some of these projects have adopted EA while some have adopted EAF as adopting foreign frameworks have not been ideal. He spoke about Public Service Commission including recruitment and training of manpower. NIC is preparing software that is operational and accessible. The idea is to treat it as an enterprise under the direction of the Ministry of Finance and the approach is to make it client heavy.

Shri Misra then spoke of NIC’s EA capacity building initiatives and how NIC has established an Enterprise Architecture Resource Division where various trainings have been conducted including workshops. NIC also has an operationalized EA resource website.

Some of the impediments that still remain in utilizing EA include a limited understanding and grasping, and capacity to develop and take advantage of architectural outputs and models. EA still remains a hard sell, and its quality is still subjective. There are however opportunities that exists for creation of greater value such as a continued emphasis on citizen centricity. ICT investment planning can improve through big-picture insights while another opportunity is to disseminate best practices via frameworks and architecture.

Shri Misra concluded by speaking about advancing the use of EA through various initiatives and efforts that include awareness and capacity buildings at various levels, disseminating knowledge on the best practices and guidelines for applying EA/IndEA in specific scenarios, building domain frameworks and reference architecture, and evolving towards a more agile and flexible approach.
Presentation by Dr. Charru Malhotra, Associate Professor, e-Gov and ICT, Indian Institute of Public Administration

Dr. Malhotra began by expressing thanks to the DARPG, MeitY and MATI, the organizers and hosts of the conference. Special thanks were given to Dr. J. Satyanarayana. She stated that the idea behind the conference is to make the audience and participants understand EA clearly. EA, as an enterprise, has a main goal which is to provide customers with goods and services while ensuring customer satisfaction. To achieve the goals, proper collaboration from all stakeholders is needed.

Dr. Malhotra informed the audience about the genesis of EA. It comprises 3 stages – pre EA, early EA and Modern EA – the later which deals with The Open Group Architecture Framework, or TOGAF. TOGAF incorporates the Architecture Capability Framework, the Architecture Content Framework, and the Enterprise Continuum and Tools, amongst others.

Dr. Malhotra then Stated EA’s cornerstones which are that enterprises must collaborate across many multifaceted layers. They are to store and collate data so as to be able to promote a practice that is ultimately aimed at establishing a robust IT Infrastructure. The approach here is to have at our disposal, a strategy that is comprehensive and which must be efficient, secure and durable. She does concede however, that there has been a fair amount of scrutiny about the approach and history of TOGAF. Some have found the Framework to be inapplicable, its prescriptions too vague, while it has been pointed that the changes in TOGAF v9.2 has failed to address, the fundamental problems in planning and approach. A main issue is that in India, State diversity has been found to be a main contributing factor. There is a lack of infrastructure and an existence of variation in human capital which has led to poor education and health services. To address, this, Dr. Malhotra advocated for the need to ensure integration of inter-State services, and Central and StateGovernment services. The process is to share best architectural practices, have a common entry point, and learn from one another. Hence, the need is to adopt IndEA and establish one governing enterprise built on inter relationships.

Dr. Malhotra then spoke about adopting the 3-pronged approach which comprises (1) Availability and Accessibility to ensure last mile connectivity; (2) Adaptability of tools; and (3) Affordability. This approach can be looked at as solutions to existing issues, or litmus tests, and the approach can ensure a “One Nation One Platform” end-result. Awareness and sensitization efforts are required. Stakeholders have to be multi collaborative, and should be on board as the approach can prove to be optimal if the right efforts are taken. The Centre can help with establishing best practices, with building architecture and with fostering eco-systems. On its part, the State must allocate co-creation, replicate best practices appropriately and engage in sensitization processes. The key takeaway is to find that harmony between the Centre and the State, and to beat working in silos. In the interim, both short and long term goals have to be developed in alignment with the IndEA vision while existing tools have to be standardized based on a country-wide dashboard that comprises index, schemes and portfolio.
PLENARY SESSION 2: DIGITAL INFRASTRUCTURE

Opening remark by Shri Ajay Prakash Sawhney, Secretary, Ministry of Electronics and Information Technology (MeitY), Government of India

Shri Ajay Prakash Sawhney opened the session by welcoming all participants. As he gave a recap of the previous sessions, he highlighted the many digital infrastructure initiatives undertaken by the Central and State Governments including VSAT terminals and direct to home fibre optic networks that aims to enhance access to digital services across the country. He highlighted that the country has taken significant strides in the setting up Common Service Centres (CSC), with 2.6 lakhs CSCs in Gram Panchayats. He added that there has also been significant and consistent progress in the expansion of telecommunications infrastructures which is reflected in the growing number of telecommunication service users including in rural India. To manage the country’s growing appetite for data, the country has established four national data centres at Bhubaneswar, Delhi, Hyderabad and Pune.

Going forward, he stated that the goal is to have common digital infrastructure for all. He added that the next plan of action is to understand the kind of digital infrastructure requirements of the country and stressed on the importance of building cloud enable infrastructures that are scalable and adaptable. Other steps include making GIS a common resource pool that is readily available and to enhance the country’s knowledge network to have every State of the country within its fold. These measures would help ensure the free flow of knowledge which would greatly benefit the country. As these infrastructure grows, he added that the country will also need to look at strengthening cyber security to protect the vast data in the cloud. Further, to universalise accessibility, the infrastructure will be developed to be compatible with local languages. This would ensure inclusiveness.

Presentation on MeghRaj Cloud initiative infrastructure by Shri Sanjay Goel, Joint Secretary, Ministry of Electronics and Information Technology (MeitY), Government of India

Shri Sanjay Goel gave a brief presentation on Cloud Computing beginning with how it is a model for enabling convenient, on-demand network access to a share pool of configurable computing resources that can be rapidly provisioned and released with minimal management effort or service provider interaction. He then stated that Cloud computing has optimum utilization of resources, faster procurement cycle, does not require capital investment on hardware and application, is flexible and has scalability and has little to no maintenance. He further spoke on the three main Cloud deployment models - Public, Virtual Private and Government Community Cloud.

He briefly spoke on Cloud service models namely Infrastructure as a service, platform as a service and software as a service.

Shri Sanjay Goel then gave a brief history on Cloud Computing stating that the first initiative was launched by USA in 2011; this was replaced by Cloud Smart in 2018 which focuses on service, security and cost while giving dept. multiple procurement options. In India, cloud first policy was announced in 2013; and the first national cloud was launched in 2014, Cloud Service Providers (CSPs) were then empanelled in 2016; 3 additional CSPs were added in 2017. So far, the Indian progress includes the setting up of Cloud Management Offices where onboarding of cloud packages will be accessed on GeM.
He also emphasized on empanelment of CSPs which should be made mandatory through GeM. He stressed on the need for growth of data centres since there is an explosion of data due to growing user base of online data.

### Need for growth of Data Centres

<table>
<thead>
<tr>
<th>Total Internet Users</th>
<th>Avg. person interaction with connected devices</th>
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<tbody>
<tr>
<td>~600 million users</td>
<td>From 300 times a day to 4800</td>
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*1 Zetta Byte = 10^21 Bytes = 10^9 Peta Bytes

He concluded with how all smart cities should be on cloud to save expenses and going forward - One Government, One cloud is the aim where all data centres should be cloud ready and ideally mini data centres of NIC should merge with NIC cloud.

### Presentation on Digital Infrastructure for Cyber Security by Dr. Ajay Data, CEO, Data Infosys and Council Member, ICANN

Dr. Ajay Data spoke on the importance of cyber security and stated how the internet is changing; and by 2020, the top level domain name can be registered in a language of one’s choice. Currently, universal acceptance is an issue across platforms and he stressed how the Govt. should add universal acceptance as a mandatory requirement in all procurements. Internet 4.0 is being worked on to break the language barriers of previous versions.

Dr. Ajay then added that the internet is not owned by any individual, however, it can be used by anyone but it is a hostile environment. As of now, people put trust only in passwords and OTP as a second level but there is a need for a more solid defence mechanisms since viruses and malware is an everyday issue faced by everyone. He emphasized on the need of a framework to be able to deal with this hostility and to know when one is being compromised. With platforms such as Skype and WhatsApp, the public is more vulnerable and there is a need to address, security measures on platforms such as these whereas telecom authority have their own security measures for call logs and chat data. He vehemently expressed the need to protect data SSL should be mandatory so as to guarantee security and Stated that GoI, by 2021, should mandate that India be Man in Middle Attack Free. He then concluded by stating that India needs a digital army to secure India as it has become a destination for spammers and every single IP should be accounted for and as a country we need to err on the side of caution.
Presentation on Creating the right Digital Infrastructure for advancing the way India lives and works, by Shri K. Vikram, Senior Director, Industry and Enterprise, HPE India

Shri K. Vikram stated that the digital user base in India is growing rapidly and users of online payment have doubled compared to last year. He stated how there should be simplification of digital processes. He stressed on the importance of being citizen centric as this is more secure and has an element of privacy. He highlighted successful examples of creating the right digital infrastructure - these included traffic management in Thane, waste management in Bhopal. Shri Vikram stated how Meghalaya is a good place to emulate what Rajasthan has done; which is providing free Wi-Fi to 5000 to 7000 villagers. Enabling this infrastructure can be seen as operational costs and can be delivered on a Cloud service. He concluded by citing e-health kiosks and how this can provide a digital health record, especially in rural areas and can also recommend specialists for far flung areas. SBI has the largest private cloud in the banking industry with some of the best e-Architecture. He added that they are currently conducting forward benchmark to assess future digital infrastructure requirements given the high rate of growth of its customer base.
PLENARY SESSION 3: INCLUSION AND CAPACITY BUILDING

Presentation on “Future Skills” by Shri S.V.R. Srinivas, Principal Secretary, IT, Govt. of Maharashtra

Shri S.V.R. Srinivas began by speaking about the importance of being future ready, citing examples of XEROX and KODAK going under. Future skills should be worked based on 3 contexts – Industry 4.0, globalization and demography. The future skilling efforts of the Government depend on these factors and should be oriented towards an embedded system. He also spoke about reinventing the current curriculum to suit the skills that may be required in the future, for example, courses regarding 3D modeling designing for 3D printing, cyber security in the banking, finance and insurance sectors, courses on blockchain, among others.

He then spoke about the need for online virtual classes in local languages and the creation of virtual classrooms, and why it is needed, and where people can be trained and their capacities can be built. He also stressed on the need of digital technology to be socially inclusive. It was observed that in the usage of internet, the percentage of women who use internet is 12% less than that of men. He concluded by stating that the direction is clear and only the pace has to be set.

Presentation on “NASSCOM Skilling” by Shri Gaurav Hazra, Senior Director & Head – India Market, NASSCOM

Shri Gaurav Hazra started by speaking on why reskilling of the labourforce is needed as automation and AI come into play. 9% of the people employed at current jobs will be deployed in new jobs that do not exist today. 37% of jobs will be the ones that need radically changed skill sets while 54% will fall under unchanged job category in the next few years. Reskilling will not only prevent job losses but will also prepare people for newer roles/shift in roles. India risks falling behind IT in the digital age, unless there is investment in reskilling/upskilling the labour force in digital technology. He then spoke about the FutureSkill PRIME which will enable the IT professionals to help them in building skill sets and retaining their relevance in the field. He also informed that FutureSkill PRIME has been on trial for 3 years and is still at a nascent stage.
Shri N.K. Mohapatra started by speaking about ESSCI in brief and the status of the non-profit organization and its current projects. He stated that he is concerned about rural India and especially the geography of NE India, as Rural India is where there are gaps in digital services.

There is a plethora of digital services available but the rural population is not tech savvy, and hence, there is a need for all the digital services to be packaged in a way wherein people are clear about where and how they can be used.

He concluded by highlighting the modus operandi of ESSCI which includes training of people to be digital technicians. Through this, these technicians will be trained on e-Government services utilization, behavioural skills, sales and marketing, etc. He also stated his project to work on a smart home digital services technician, and he is working closely with Reliance Digital to ensure that these services are delivered.
BREAKOUT SESSION 1: ONE NATION ONE PLATFORM (HOMOGENEITY IN VARIOUS SECTORS)

Presentation on Direct Benefit Transfer schemes by Shri. Saurabh Kumar Tiwari, Joint Secretary, Cabinet Secretariat, DBT Mission, Government of India

Shri Saurabh Kumar Tiwari started by introducing the premiere scheme of Government of India known as Direct benefit transfer and how it fits perfectly with e-Governance. Few years ago, with the coming of Welfare State in which the State protects and promotes the economic and social well being of the citizens, the State has moved on towards good Governance and it has been moving beyond text books and has become more technology–based, especially IT driven.

He highlighted the importance of Direct Benefit Transfer schemes in e-Governance to improve public service delivery by ensuring efficient, transparent and targeted delivery of Government subsidies, benefits and services. He also highlighted the journey of DBT in India right from Jan 2003 to August 2019. He presented the whole DBT ecosystem such as the use of IT, the use of identifications like Aadhaar, and the importance of banks, etc.

During his presentation, he mentioned:

- Key DBT enablers: Aadhaar, banking facilities and network infrastructure. It started with the growth of telecom connectivity then banking and then Aadhaar).
- Key activities involved in DBT implementation such as the importance of beneficiary digitization, de-duplication of beneficiaries, electronic transfer of fund, data security and data privacy standards, local Government Directory and monthly reporting.
- Privacy concerns regarding the collection of data which is susceptible to data being misused.
- Role of Aadhaar in DBT

Presentation on 1917 iTEAMs by Shri Pamu Sampath Kumar, IAS, Commissioner Secretary, Government of Meghalaya

Shri Pamu Sampath Kumar started his session by explaining that 1917 is a helpline number for farmers in Meghalaya. It provides Logistics services to farmers so that they can transport their produce to the market. It is a platform where buyers and sellers meet and interact with each other. He highlighted that 1917 iTEAMs was started in Meghalaya due to the key challenges faced by the farmers due to lack of connectivity with the market and the exploitation faced by the farmers in the hands of the middlemen.

He stated that while having a conversation with the farmers, it was learned that the farmers did not know whether there was a demand or not for their produce. The farmers usually are at the mercy of the buyers and do not have a voice. Therefore 1917 was conceptualize to remove the role of middlemen.
1917 iTEAMS has two call centres each in Tura and Shillong. 18000 farmers have been registered and data has been collected.

He highlighted the vision, objectives and the stages of implementation of 1917 TEAM. While mentioning the success factors of the program, he also stressed on the importance of data collected for a better service to the farmers.

He mentioned few of the key challenges faced by the program is the inability to collect data from farmers since they chose not to disclose information.

He Stated that farmers below the age of 30 are the main users of the service whereas farmers above the age of 30 are not responsive to the service. He also Stated that the iTEAMS is facing a major problem in aggravating produce and supply to buyers and it does not have access to the data of transactions between the farmers and buyers.

Address by Chairperson, Shri Sujit Baksi, President, Corporate Affairs, Tech Mahindra

Shri Sujit Baksi began by stating that the democratisation of data should be within boundaries otherwise data will be misused. He stated that data are available in multiple platform of social media and gave example of the Cambridge Data breach. He Stated that ‘One Nation and One Platform’ is important for any nation, however, it is a difficult task to achieve. Different conglomerate have been collecting data to use for cross selling. He Stated an example of a small country like Estonia which is an ultimate digital democracy.

He said that the main beneficiaries of data democratisation are Law and order, Healthcare, Agriculture, Judiciary, Revenue and education. He also said that social benefit is measurable if proper data is maintained.
Day 2
9th AUGUST 2019
PLENARY SESSION 4: EMERGING TECHNOLOGY FOR PRACTITIONERS

Opening remarks by Chairperson, Shri Ramendra Verma, Head of Government Advisory and Partner KPMG (India)

Shri Ramendra Verma opened the session by welcoming all the participants and briefed about the topics to follow. Talking about technologies, he stated that adopting to the current emerging technologies is a challenge as in every 18 months there is a leap in technology. In the session, he addressed few emerging technologies such as IODINE, Artificial Intelligence (AI) used by Government of India along with 5G technologies which is to be launched by late December 2019 or early 2020. He informed that Fractal Company is one of the key companies looking after analytics and proceeded with presenting his expertise on Block Chain.

Presentation on Blockchain by Shri Ramendra Verma, Partner and Head Infrastructure, Government & Healthcare, KPMG, India

Shri Ramendra Verma gave a brief presentation on blockchain stating that it was first conceived in 1991 and later improved by Santoshi Nakamoto in 2008 as part of an evolved version of a distributed database to be used by computer system. This technology can be adapted for various technological scenarios to serve the purpose of data exchanged. While, the central point of block chain is to record transactions like ledger as this data can be a record for movement of money, services, identity number etc. He clarified further that with this technology users can have complete controls of their own data, as block chain is controlled by one organization with no buyers and sellers.

Pointing out the characteristics of Distributed Ledger Technology (DLT), he mentioned few objectives of its functionalities like full transparency, anonymous identity of the participants, keep a secure record of individuals in an encrypted format and its trustworthiness. Further Shri Ramendra Verma shared few used cases by the Government for in record keeping to ensure provenance in land titles, vehicle registries,
medical records etc. and for sharing of physical or digital assets such as cloud storage.

He concluded his presentation by mentioning few myths related to blockchain like it can easily solve every problem, that it wastes a lot of electricity, it cannot be trusted and that all shared information through DLT will not remain private and secure.

**DLTs are mainly used for three sets of use cases**

- **Transparency and Openness**
  - A decentralized and immutable record keeping mechanism to ensure provenance
  - Eg: Land titles, Vehicle registries, Business Incorporation, Permits, Supply chain provenance, Medical records, Regulatory records

- **Trustless Public Infrastructure**
  - A trustless infrastructure for enabling friction free interaction, and information flow, resulting in innovative business models
  - Eg: Payments using cryptocurrencies, KYC systems, Paperless contracts, Smart cities, EV charging infrastructure

- **Decentralized and autonomous sharing economy**
  - Decentralized Platforms for sharing and tokenizing any physical/digital asset
  - Value sharing applications across ecosystems
  - Eg: Decentralized cloud storage: Storj.io, Collaborative transportation: LaZooZ

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**Presentation on Artificial Intelligence and Machine Learning by Shri Sandeep Dutta, Chief Practice Officer & Executive Team Member at Fractal Analytics, Gurgaon, India**

Shri Sandeep Dutta started his session with a rhetoric description of artificial intelligence (AI) and further questioned the house if AI is real, a myth or a hyperbole, as there is no escape to AI in today’s generation. He mentioned how AI is affecting our everyday activities like in beating cognitive task, usage of Alpha Go in Chess programmes, and usage of AL with Zero Chill programme in Twitter where after its inclusion it was able to pick up non relevant information creating chaos within the social media. He thereby stated that AI without a human involvement can be harmful.

Pointing out the importance of AI, he said that it can reconcile past and current data trends to make near accurate predictions in future. This method can further assist in various fields of Agriculture and its allied activities (as AI can provide assistance in mapping weather, soil etc.), in defence, Internal security departments and Public Health Sectors.

He further emphasized on the work and the unique approach by the AI in general but mentioned that AI alone cannot solve problems by itself and needs to be backed by Engineering and design in order to build and implement innovative products.

Besides that, he also stressed on the Swatch Bharat Mission, i.e. Addressing public defecation, AI-treat detection, Using AI led mobile dashboards - voice phase database.
Presentation on Artificial Augmented Reality (AR) and Virtual Reality (VR) by Shri Debasish Goswami, Partner & Head North-East Business, Wipro India

Shri Debasish Goswami stated that Digital Reality is a set of capabilities which includes Augmented Reality (AR), Virtual Reality (VR), and Mixed Reality that can easily present digital data to humans in natural ways. He mentioned that Digital Reality was earlier just a realm of science fiction which has quickly matured from experimentation to industrial applications to user-friendly Smartphone apps.

He added that Augmented reality (AR) / Virtual Reality (VR) allows users to experience their physical, real-world environment so that its elements are augmented by computer-generated sensory inputs such as sound, video, graphics or GPS data. Further he mentioned that VR can be used in education for making learning more fun and interactive as human minds accept VR more quickly.

He also mentioned certain key benefits of the AR-VR technology as it can help to achieve complicated concepts in the field of education by depicting complex imaginary in a simpler interactive way. Also, usage of this technology can prevent accidents and reduce services calls by showing the objects exactly where they are.

Further, Shri Debasish Goswami added that the Government Departments have started developing AR/VR based applications for the purpose of education (Smart Classroom/Tinerking Labs, etc.). The applications may also be developed for various sectors, viz. Training and Development (Anganwadi workers getting training on Hygiene, Medication, Child care etc.), tourism (Rajasthan Government has developed multiple AR-VR based application for engaging tourist/citizens to experience 3D models of Heritage monuments), and administration (Departmental Officials/Citizens/businesses entities can get access to various planned initiatives, smart city projects, infrastructure development projects etc.). He further elaborated that “see” through virtual/augmented reality for prototyping/visualization of the planned infrastructure development projects will actually look like—highways, water and energy facilities, public parks, new transit lines and stations, etc. – and even interact with the augmented project through simulation. He concluded his presentation by highlighting the importance of AI for Public Safety and Emergency Services.
Presentation on Drone Technology by Shri. Amit Kumar Sinha, IPS, Director (ITDA), Uttarakhand

Shri Amit Kumar Sinha shared his experiences of using Drone Technology during the Uttarakhand flood where people were identified from certain pockets of the flood-affected areas through drones. As no transportation or communication seemed possible at that time, UAVs helped rescuers spot people from forests, hills, and other isolated areas.

He informed the house that Drone Application and Research Centre (DARC) is a joint initiative of Information Technology Development Agency (ITDA) and National Technical Research Organisation (NTRO) which aims to promote and nurture R&D in the field of Drone Technology, train Government officials in the implementation of Drone Technology safely & effectively along with a Platform for knowledge & skill sharing on Design, Utilization and Applications. He further gave an insight on the India Drone Festival 2019- Dronathon-Dronanagir that was held from the 26th to 27th of February which saw the participation of 21 States with 1,192 participants. The programme also saw 16 drone companies exhibiting for their drones along with drone competitions and Knowledge Sharing Sessions.

Further, he mentioned the training programs that are being given to the employees on the usage of drone in various fields. He mentioned that there has been several capacity development or training programmes conducted by DARC on Drone training, training of trainers of RPAs, Foundation Course on Drone Technology, simulator training and drone training course given to various Government Departments such as Forest Department, State Disaster Response Force, Uttarakhand Police, Intelligence Dept. etc. Shri. Amit Kumar Sinha added the establishment of Drone Ecosystem by DARC which is inclusive of establishment of a Drone park, a key project to DARC and establishment of drone corridor, State Drone Policy along with R&D/Training.

ESTABLISHMENT OF DRONE ECOSYSTEM

01 DRONE PARK
02 DRONE CORRIDOR
03 STATE DRONE POLICY
04 RESEARCH & DEVELOPMENT / TRAINING

He concluded his session by highlighting the usage of drone/UAV image analysis for Military, search and rescue, surveillance, traffic monitoring, fire fighting, digital archaeology, environmental analysis, agricultural analysis, GIS mapping, coastal surveys, films or media, law enforcement, Telecommunication, mining and wildlife management.
PLENARY SESSION 5: SECRETARIAT REFORMS

Presentation on Secretariat Reforms by Chairperson, Shri S.N. Tripathi, Retd. Secretary to Govt. of India(Ministry of Parliamentary Affairs), Director, Indian Institute of Public Administration

Shri S. N. Tripathi opened the session by welcoming all the participants and briefed about the topics to follow. Citing a few examples from Mahabhararata and Gita, ShriTripathi connected the emergence of Drone, Digital world, live telecast, etc. with the ancient Indian technologies. He talked about the three simple strategies adopted for the implementation of OSWAS in Odisha, i.e. abolishing of all the delegations, personal claims not to be processed unlesssubmitted electronically; pay of the junior-most staff of office to be drawn only after submission of at least one file per month. He also said that for operating e-Office, a person is not required to possess the brain of Einstein but it is as simple as sending e-mail.

Presentation on e-Office by Ms. Rachna Srivastava, DDG & HOD, e-Office, NIC, MeitY, Gol

Ms. Rachna Srivastava thanked the organizers for providing her with the platform to speak about e-Office, its current scenario and what the way forward is. She stated that she will try and simplify the e-Office framework in a way that the audience will clearly understand without getting too technical on its finer aspects.

Secretariat Reforms aim to bring about changes in system, processes and structure of the Government. It is important because of the time it can save during intra and inter-departmental file movements. The security it affords eliminates chances of theft and missing files, and if implemented, there is no unnecessary delay in decision making. She cited an example when during a session in Kerala, an official was able to clear files while at a meeting. In this way, e-Office is an important step towards strengthening the decision making machinery.

Ms. Rachna Srivastava then highlighted the vision, mission and cited a few key highlights of instances when e-Office has proven to be very useful such as it is proving to be an efficient repository of structuring of documents. e-Office empowers users to take faster decisions due to information being available at the fingertips. Transactions are captured with audit trails which are non-tamperable, and it speeds up intra/inter-departmental file movements. Another feature is that data is properly preserved in cases of unforeseen events. She pointed out that there is seamless integration of e-Office with the CM’s dashboard in her State. Such features are small steps towards streamlining e-Governance but these will eventually lead to big reformations.
Ms. Rachna Srivastava does concede that there are implementation challenges. For example, e-Office can speed up the process of leaves applied for by an employee. Once this system of automation is introduced, it is much quicker to know whether such leaves have been approved or rejected, and thus one is saved a number of hassles. A big challenge remains where Government management is still reluctant to accept changes and do away with traditional ways. The way this can be addressed is to have a strategy in place where capacity building can be introduced on a regular basis together with guidance on how the application will help them in Work-life balance.

Other implementation challenges include inadequate infrastructure, and a lack of ownership of the project of e-Office. There are also a few technical challenges that exist such as meeting the needs of the organizations with the level of users, making the product device and platform independent and ensuring safety and security.

A sustainable e-Office implementation approach can eventually overcome most of these hurdles. She suggested that prior to procurement; a department is to ensure that the product e-Office meets all requirement. Employees are to be made aware of the product and the how it can stand to benefit its stakeholders. Successful implementation would also require e-Office to be mandated by the Government.

She concluded by stating the way forward for e-Office so as to ensure it becomes more user-friendly. This can be done through standardization of design, simplified processes, proper notifications and an API based collaboration within the same instances and across different departments. She is hopeful that the e-Office framework can be implemented and introduced effectively across all State Governments in the near future.
Presentation on “OSWAS” by Shri R.N. Palai, Special Secretary, Department of IT, Government of Odisha

Shri R.N. Palai started the session by stating that secretarial reform is the cornerstone of Governance reform. It is not a process but it is a wheel in itself. He said that the Governance reform should have a top-down approach. He informed that the Odisha Secretariat Workflow Automation System (OSWAS) has played a big role in bringing about reforms in the Government of Odisha. This system was initiated in 2008 and has been implemented on a large scale since September 2018. The stakeholders implementing this platform are the CM Office, the CS office and all departments at the Odisha Secretariat. Since OSWAS is used at the Secretariat, it runs on Intranet, but VPN access is also given to officers at higher levels, and by doing this, it is ensured that data is secured. Further, Shri Palai mentioned about the 5T objectives of the State of Odisha: Technology, Team Work, Transparency, Time, and Transformation. Through OSWAS, the State has been able to achieve all these objectives.

Shri R.N. Palai then explained about the two modules of OSWAS- one being the Core Module and the other being the Common Module. The core module deals with file processing, DAK/correspondence, the e-dispatch system among others. The common module deals with leave management, vehicle management, online telephone directory, RTI, and Assembly questions.

He informed that the implementation of OSWAS has brought about uniformity across all departments in the State, has helped in electronic processing of files, which has helped in saving 41+ lakhs of papers and reduced the file cycle time by 70-75 %. It has also brought about centralized file numbering system, leading to easy tracking of files. He especially mentioned about the use of an e-dispatch system, where official letters are sent to various departments electronically, and therefore, has played a huge role in saving time and paper.

To conclude, Shri R.N. Palai added that the way forward for OSWAS now is to extend the application of this system to State Directorate Offices and integrate it with other applications such as HRMS, eAbhiyog, eVidhan etc. He added that there is a plan to recommend the best practices and functionalities of OSWAS in other States as well.

Presentation on RAJKAJ by Shri Ravi Shankar Srivastava, Additional Chief Secretary, AR Department Govt. of Rajasthan

Shri Ravi Shankar Srivastava spoke about RajKaj, an e-office application for storing the important and crucial documents of the Government of Rajasthan. Shri Srivastava went a different route and presented a video documentary. The 2 minute animated video was on shortening the process of file transfer wherein it shows how RajKaj uses its e-platform. This can help an employee who applies for a leave
plan properly as the process is much shorter. It also shows that all data is recorded by the RajKaj software.

In his presentation, Shri Ravi Shankar Srivastava spoke of the concept of e-Governance, its concept and functions, and how its dimensions are focused on citizen centricity. He spoke of the ICT infrastructure projects which include Big Data, Raj Net, IP Telephony and Raj wi-fi. He also spoke of the ICT Infrastructure Project.

The vision of RajKaj was to establish an integrated office automation across the State of Rajasthan, to create a smart and intelligent system for enhanced productivity, to have a one stop-shop for all employees that can display their roles and functions, and to focus on simplicity and usability across all devices. He then spoke of the components of RajKaj which are namely, Personnel Information, File & Dak Management, Knowledge Management, Messaging & Collaboration, and Smart Office Assistant. RajKaj is unique in that it can define groups and create groups, it can manage workflow, there is provision to assign rights to the PA/PS for taking actions on behalf of officers, and there is a provision for bulk communication.

He concluded by informing the audience about the implementation status of RajKaj in Departments of the State of Rajasthan, where 40 + departments have implemented one or more modules of RajKaj based on their priority.

Presentation on e-Office in West Bengal by Shri Somnath Chatterjee, CEO, Webel Technologies Limited, Govt of West Bengal

Shri Somnath Chatterjee spoke on the e-Office Framework in West Bengal wherein the Government has decided to start e-Office in the Secretariat as a top priority project. It has been successfully implemented in all 50 Secretariat Departments since 1 January 2018 as a core implementation roll out in West Bengal. He Stated that presently West Bengal ranks 3rd in the country with 1,73,612 eFiles created, 6,62,134 e-Receipt created and with 10,853 active users.

He spoke about the infrastructure analysis of e-Office in West Bengal. Under e-Office Hosting, the e-Office is hosted at a highly equipped State Data Centre cloud server. Under Accessibility, since its introduction, the application since it has been migrated to the highly equipped new SDC environment; the Government of West Bengal decided that e-Office has been made available and accessible over open internet of any internet service provider. In this way, all e-Office users can now access on any internet browser over any network and even in smart phones and tablets.

Shri Somnath Chatterjee concluded his presentation by stating that for the successful implementation of e-Office, there are only 4 important aspects that are needed to be put into effect. These are to have a senior level mandate, to ensure that elaborate training and capacity building is conducted, to hire the right kind of people and to ensure its robust infrastructure.
Address by Chairperson Shri S.V.R. Srinivas, Principal Secretary (IT), Government of Maharashtra

Shri S.V.R. Srinivas started by sharing his experience in implementing the Direct Benefit Transfer (DBT) Scheme in Maharashtra. He stated that the objective of the initiative was to bring in accountability and transparency in disbursement of schemes money, e.g. Scholarship to students. However in the first year of implementation, the program was a failure. But the State re-worked on the program in 2018 and the outcomes were as such that 45 schemes adopted DBT and the Government was able to save Rupees Forty eight hundred crores.

He mentioned that it is difficult to implement any IT project with end to end solutions due to the lack of skills amongst the personnel in terms of IT knowledge and Domain knowledge. He also shared that the State started by studying the Government data and realised that DBT can be implemented first with the disbursement of scholarship to students. Therefore, students had to apply for scholarship online and the eligibility criteria were given online. Once the students apply for their scholarship, applications are routed to their institutes for mandatory checking and then it is forwarded to the concerned Department which again scrutinize the applications and then approve. A digital voucher is then generated in which a student has to redeem in order to get the scholarship. This process has eliminated a number of fake applications and in turn has saved the tax payers money.
A Presentation on MeeSeva by Shri G.T. Venkateshwar Rao, Commissioner (ESD), ITE&C Department, Government of Telengana

Shri G.T. Venkateshwar Rao started by stating that ‘MeeSeva’ means ‘at your service’. ‘MeeSeva’ is a digital platform which brought various Government services under one roof. He highlighted how the platform uses a franchise model to establish 4,000 physical MeeSeva terminals within 10 KM of each person, where citizens can avail digital services.

He stated that the only way to maintain democracy and ensure barrier free service delivery is to disconnect bureaucracy and the citizens and takes Government directly to the doorstep of the citizens. He explained that MeeSeva is a single Governance portal for the citizens who is a paperless and a cashless Government. To further understand the functions and benefits of MeeSeva, Shri Venkateshwar Rao showed an 8 minute video on MeeSeva to the audience.

After the video, Shri G.T. Venkateshwar Rao showed another video on Pensioners Life Certificate Selfie (PLCS) which was started this year. He said that PLCS is an online portal in which pensioners can submit their life certificate to the Treasury Department online. It uses AI based human check, ML based demographic comparison and deep learning based image comparison to authenticate user identity for enabling service delivery. He added that Telangana is the first State in the country to implement such a platform for the pensioners.

A presentation on LokSeva by Shri B. Chandrashekar, Secretary to the Chief Minister, Government of Madhya Pradesh; MD, SAMAGRA & ED, SAPS

Shri B. Chandrashekhkar started by stating that MP is the first State to come up with the e-Public Service Guarantee Act (MP-PSGA) 2010. The State started with a different Department called Service Management Department and State Agency Public Services for instrument arrangement. There is an ongoing project in the State which is funded by World Bank and works on e-Governance. He mentioned that as of date, there are 500 kiosks and 16,000 touch points in the State. He added that there is another platform in the State which delivers services to the public within a day called (Samadhanek din) or Same day Service delivery. A 181 single window toll freenumber has also been implemented so that the citizens can call for information, access to Government services or to express their grievances.
A presentation on Khanij Online by Shri Anurag Diwan, Joint Director, Chhattisgarh Infotech Promotion Society (CHiPS).

Shri Anurag Diwan started by showing a video on Khanij Online which is a web-based integrated mines and minerals Management system. It was launched on 21st June 2017 and its main objective is to administer the minerals of the State. Its functions include auto approval, single click online payment and real time assessment. He concluded that using online portal saves time.

A presentation on Integrated Financial Management System (IFMS) by Shri Deepankar Mohapatra, Joint Director, Odisha Treasury

He shared that his State started with Odisha Treasury Management system and upgraded to a new system which is Integrated Financial Management System which covers the whole function of the Treasury Department. He said that in their State two Banks are used for e-Payment, i.e. State Bank of India and Central Bank. 22 Administrative Departments are integrated with IFMS, 17 Public/Private Sector Banks with two payments gateway. He concluded that end to end financial transactions of the Government are done through IFMS.
BREAK OUT SESSION 3: END TO END DIGITAL SERVICES
(PRESENTATION ON I.T. INITIATIVES BY STATES)

Opening Address by Chairperson, Shri Sanjay Gaden, Principal Consultant and Head, SeMT, Gujarat

Shri Sanjay Gaden welcomed all the participants to the break out session and began by stating that e-Governance is constantly evolving and public services play a very important aspect and hilly areas and terrain face more issues in terms of communication.

Presentation on SKYLO by Shri B. Chandra Sekhar, Chief General Manager, NE-BSNL

Shri B. Chandra Sekhar opened by speaking on BSNL which is a PSU formed in October, 2000. As a PSU, it has more powers and were thought to be able to make decisions faster but this is not necessarily the case especially with growing competition. He stated that lack of connectivity and grand schemes fail due to various reasons and Skylo is the solution to this. Skylo is the world’s first purpose built network and is designed in such a way where a device can connect within a few seconds to the satellite. It is highly secure and works on narrow band and virtually works everywhere. He explained how it is an affordable, accessible and ubiquitous IoT which is fully self contained hub/ antenna. He gave an example of How Shatabdi is already using this technology and it can simultaneously alert the train driver and the control room of any logistical changes or if there are trains on the same track. The technology can create a digital fence and when the device is removed from the area, an alert is shown on the dashboard. Since it gives out locations, it can be used for tracking vehicles and also check the logistics of the vehicle. People can communicate from the most remote areas and location can be detected from anywhere.

He stated that in agriculture, it can be very useful as it can measure pH value, can detect pests and can be used for farm diagnostics. It is also useful for military convoys as alerts are given out. The technology supports 2 way messaging for emergency and response. It can be used for Search and Rescue operations and excellent for Disaster Management.

Presentation on Enterprise Architecture by Shri Sanjay Gaden, Principal Consultant and Head, SeMT, Gujarat

Shri Sanjay Gaden stated that Enterprise Architecture is a united approach and through EA, there is potential to curb unnecessary work on the Government’s side. He stated the difference between electronic services and digital services and the banking sector is doing the best job in the digital services. He stressed on the need for planning to be vertical and should happen at every level to optimize the system. Government has many obstacles with uniformity, delays in delivery, unnecessary burden of evidence, lack of equality, multiple touch points, legacy systems and inability to re-engineer processes, shortcomings in the institutional delivery framework,
centralization of decision making and lack of balance between Government as a sovereign Authority and Government as a Business partner. e-Governance is a challenge but Good Governance is everything and e-Governance is a tool to enable this. e-Governance apps lack EA because it is constantly evolving and there is incremental adoption, initiatives are driven by individuals and there is a lack of Systems Focus. Due to the lack of consequences of EA, ad-hoc implementations remain, non scalability is an issue, there are also challenging mitigations and it is a life time cost.

He concluded by giving examples of case studies from Gujarat who are now in their 8th year of running the e-Office. The next step is digitization of financial institutions in the State. Secure and Safe Gujarat(SASGUJ) has also been launched which is a State-wide CCTV surveillance project and the State has also launched the State Wide Area Network (GSWAN).

Presentation on MeghEA by Shri Timothy Dkhar, DDG and SIO, NIC, Meghalaya

Shri Timothy Dkhar started with the journey of e-Governance in State which started in 1987 by the setting up of the State NIC Centre and District sites and now there are fibre optic links of a GBPS connected with Delhi/Kolkata. The domain from 1987 still is the same and Form 20 is still the same till date which shows that there have been many changes in technology but little to no changes in Government.

He stated that the challenge with e-Governance is too many databases in the silos and these databases are not linked to each other. Integration of databases is too complicated as there are multiple IDs for applications. Aadhar or mobile number would help to seamlessly link databases. Meghalaya has a low rate of digital literacy and there is a need to educate the masses for successful implementation. Lack of connectivity in the State is also a factor and the State should voice these issues with the Government of India. He also stated that StateGovernment should look inward and take advantage of the transmission line of MeECL.

Shri Timothy Dkhar emphasized on data protection Security Act which is of utmost importance especially if all data is kept online; data should be protected to keep safe from breaches. He recalled how EA in Meghalaya began in 2018 at the North East Regional Workshop in Shillong. NIC is creating a service portfolio and have found that more than 1000 services are available out of which 80 per cent are in the offline mode, 12 per cent are online and 8 are hybrid. There is a lot of scope to make all these services online especially since there are only 133 online services out of which 64% are targeted towards citizens.

He stated that the vision is to integrate and to centralize data base management and also be citizen centric which will enhance transparency and ensure accountability. He concluded that by using One Portal One Single Sign On, users can access Government services.
Presentation on Assam experience of EA by Shri Mahendra Kumar Yadava, IFS, APCCF&MD, Assam Electronics Development Corporation Ltd.

Shri Mahendra Kumar Yadava stated that there is a problem with keeping digital data, and Open Standards can solve this problem. He stressed on how end to end services is a challenge and with data consumption constantly increasing, there is a need to look at how to store this data. He emphasized on how we are currently unable to handle the velocity, volume and variety of data. He stated that the Government should launch Proof of Concept and a Centre of Excellence to help address, this problem. He went on to State that with dependence in silos, there is a problem with databases not being linked to one another.

Address by Dr. Pallab Saha, Chief Architect at the Open Group, President of Association of Enterprise Architect

Dr. Pallab Saha stated that although there have been numerous sessions on e-services at the Conference, no State comes close to the top levels of EA. He Stated that the best approach should be Top-Down and the Government should have awareness and sensitization programmes. He mentioned that IIM Shillong is yet to launch a course on EA. He emphasized that before starting EA, higher officials in Government should understand the concept. There is no need to re-invent the wheel when all data on EA is readily available on Digital India website. He stated that States should understand the technological landscape and need to have the ability to manage vendors while also taking ownership. He further Stated that the key principles of EA isthe use of Open Standards. He concluded with the analogy that instead of aiming for hundreds of road side medals, we should aim for Olympic gold.
Opening remarks by the Chairman, Shri V. Srinivas, Additional Secretary, DARPG, Government of India

Shri V. Srinivas opened the session by stating that the National e-Services Delivery Assessment was first taken up in Aug 2018, by Department of Administrative Reforms & Public Grievances. He also informed that the India currently stands at 96th rank on e-Governance Index as compared to previous rank of 106 in 2016 and in 2014 it stood at 118th rank. He also said that the decision will throw light on how our rank can be improved further while taking up the issue of connectivity raised by Hon’ble Chief Minister of Meghalaya, Shri Conrad Sangma.

Paper Presentation on National e-Governance Services Delivery Assessment Framework by Ms. Kiran Puri, Joint Secretary (ARC, e-Gov) Dept. of Administrative Reforms and Public Grievances

While presenting her paper, Ms. Kiran Puri said that there was no means to measure overall efficiency of citizen centric service. In this regard, the UN e-Gov Development Assessment Index was formulated to measure the delivery of online Government services. She said that the UN EGDI (e-Governance Development Index) has correlation with economic development of the country, GDP, Cost optimization etc. She stated that MeitY has developed GIGW - Government India Guideline on Websites. The guidelines have been put in place to bring uniform service standards to all the websites/portal in order to ensure that citizens have access to the portal with better user experience in terms of Content availability, accessibility, ease of use, End service delivery, Privacy policy & security.
etc. She emphasised on the need to further increase our rank in e-Governance through effective indices put in place. She stated that there was a positive co-relation between UGDI and National Income. She emphasised on the need to adopt e-Governance system in daily function as well as innovation and capacity generation. She also said that there should be a single entry point for all service and urged on the need for a national website. She also gave a description of each assessment and their parameters of services.

**Paper Presentation on National e-Governance Services Delivery Assessment- approach & Methodology and Good Practices by Shri Prasad Unnikrishan, Partner IGH, KPMG**

While presenting the paper, Shri Prasad Unnikrishnan informed that the NeSDA assessment was carried out in Government to Business (G2B) and Government to Citizen (G2C) segment across the Sectors including Finance, Labour& Employment, Education, Local Government, Social Welfare, Environment. He mentioned that the service portals of the key sectors were accessed on the basis of 7 key parameters: Accessibility, Content Availability, Ease of use, Information security & Privacy, end service delivery, integrated service delivery and Status & request Tracking. He also said that the assessment was done through online NeSDA portal. He also threw light on the journey so far, future course of action, key findings of the NeSDA survey. He also informed that the coming year would have the NeSDA parameters aligned with India Enterprise Architecture (IndEA) and the United Nations Sustainable Development Goals.

**Paper Presentation on Comprehensive Telecom Development Plan for the North Eastern Region by Shri Tajinder Kumar, DDG Security, DOT**

While presenting the paper Shri Tajinder Kumar gave an overview of the statistic of connectivity in the villages of North East India and said that the vision of smart village cannot be achieved unless proper village connectivity is ensured. He also presented a comprehensive Telecom Development Plan for the North Eastern Region and also gave the details of various schemes under TDP NER and the States covered there in. In his statistical report, Shri Tajinder Kumar informed that there are 69255 BTS (Base Transceiver Station) which depicts around 41.92% growth in BTS in the last one year. He also mentioned that Meghalaya has been given special emphasis in terms of village coverage with respect to Telecom Service provider (TSP) and no of Base Transceiver Stations (BTS). He also mentioned that a Comprehensive Telecom development plan (CTDP) is being implemented for North Eastern Region with estimated cost of Rs.5,336Crs. However the cost has been revised at Rs.8000 Crs. approx with special emphasis in the State of Meghalaya at Rs.3911 Crs. His paper presentation showed a dismal connectivity scenario in the North Eastern Region in as far as rural connectivity is concerned.
VALEDICTORY SESSION

Valedictory Address by Shri V. Srinivas, Additional Secretary, DARPG, GOI

While delivering the valedictory address, Shri V. Srinivas stated that the two days 22nd National Conference on e-Governance held at State Convention Centre, Shillong Meghalaya on 8th-9th August, 2019 was the first of its kind to be conducted in North-East India. He recollected the comment made by the Hon’ble Chief Minister of Meghalaya, Shri Conrad Sangma, stating that this Conference will help the State to further strengthen the e-Governance system within the State of Meghalaya. He further added that through this Conference, India will be brought closer to the North-Eastern States. Shri V. Srinivas also gave the summary of the two day session stating that the conference seeks to provide a space for debating values and norms, standard setting, multi stakeholder initiative on specific issue on e-Governance such as NeSDA, e-Office, One Nation One Platform, Diversity and Secretariat Reforms, Cyber Security, Digital Security concerns, etc. He also highlighted that through the different sessions conducted, it was realized that the quantum of employment in the electronic sector is in high demand. He concluded by thanking all the members who have contributed towards the planning, organization and implementation of the Conference.

Speech by Shri K.V Eapen, Secretary, DARPG, Government of India

During his speech, Shri K.V. Eapen stated that the Conference is one of the best National Conference on e-Governance. He lauded efforts of the State Government for their hospitality and acknowledged Shri P.S Thangkhiew, Chief Secretary of Meghalaya and his team for being able to host the auspicious event. He also emphasized on the quality presentation stating that there is so much to be learnt and which can be implemented in their respective States.

Speech by Shri P. S Thangkhiew, Chief Secretary of Meghalaya

Shri P.S. Thangkhiew, Chief Secretary of Meghalaya expressed his gratitude to all the participants who have been able to shed light on various topics. He also thanked everyone for showing their enthusiasm to participate at the two-day event.

Announcement of the

SHILLONG DECLARATION

9th of August, 2019

The Shillong Declaration was read out by Shri V. Srinivas, Additional Secretary, DARPG, Government of India. The Conference unanimously agreed to the 10 points laid down in the Declaration.
22nd National e-Governance Conference, 2019

Jointly organised by

Department of Administrative Reforms & Public Grievances (DARPG), Ministry of Personnel, Public Grievances & Pensions, Government of India

Government of Meghalaya

Ministry of Electronics and Information Technology (MeitY), Government of India

22ND NATIONAL CONFERENCE ON E-GOVERNANCE
Digital India: Success to Excellence

8-9 August 2019
Shillong, Meghalaya

Shillong Declaration


The Conference has unanimously adopted the Shillong declaration outlined below after intensive deliberations during the sessions held over two days.

The Conference Resolved that Government of India and State Governments shall collaborate to:

1. Improve the citizens experience with Government services by promoting timely implementation of India Enterprise Architecture (IndEA) and implementing a single sign-on for interoperability and integration among e-Government applications throughout the country
2. Consolidate the plethora of successful State level e-Governance projects and domain-based projects with a focus to replicate them as a common application software with configurable features
3. Ensure improvement in ease of living and ease of doing business by making a big shift in the role of government from Service Provider to Service Enabler, thus moving from development of applications to making available public digital platforms where multiple competitive applications can be developed
4. Take steps to further improve connectivity in North Eastern States by addressing the issues and challenges of telecommunications connectivity at grass root level and formulate and implement a comprehensive telecom development plan
5. Take steps to enhance the activities of Electronics Sector Skill Council in North Eastern States and explore the possibility for opening an electronics skill center in Shillong
6. Promote use of e-Office and move towards less paper State Secretariats in the North-Eastern States and in the District level offices
7. Improve the quality of delivery of e-Services in the North East to fulfil the vision of improved citizen experience
8. Develop India as a global cloud hub and facilitate development of Government applications and databases on Cloud by default
9. Adopt emerging technologies for finding e-Governance solutions
10. Promote the Digital India Projects with focus on Smart Cities and Smart Villages with focus on Startups and Smart Entrepreneurship
***

Vote of Thanks

The vote of thanks was given by Smt. R.V. Suchiang, Additional Chief Secretary, Government of Meghalaya.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>AI</td>
<td>Artificial Intelligence</td>
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<tr>
<td>AMTRON</td>
<td>Assam Electronics Development Corporation</td>
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<tr>
<td>APCCF</td>
<td>Additional Principal Chief Conservator of Forest</td>
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<tr>
<td>AR/VR</td>
<td>Augmented Reality / Virtual Reality</td>
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<tr>
<td>BHIM</td>
<td>Bharat Interface for Money</td>
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<tr>
<td>BTS</td>
<td>Base Transceiver Stations</td>
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<tr>
<td>CEO</td>
<td>Chief Executive Officer</td>
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<tr>
<td>CHiPS</td>
<td>Chhattisgarh Infotech promotion Society</td>
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<tr>
<td>CSC</td>
<td>Common Service Centres</td>
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<tr>
<td>CSP</td>
<td>Cloud Service Provider</td>
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<tr>
<td>CTDP</td>
<td>Comprehensive Telecom Development Plan</td>
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<tr>
<td>DARC</td>
<td>Drone Application and Research Centre</td>
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<tr>
<td>DARPG</td>
<td>Department of Administrative Reforms &amp; Public Grievances</td>
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<tr>
<td>DBT</td>
<td>Direct Benefit Transfer</td>
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<tr>
<td>DDG</td>
<td>Deputy Director General</td>
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<td>DLT</td>
<td>Distributed Ledger Technology</td>
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<td>EA</td>
<td>Enterprise Architecture</td>
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<td>EGDi</td>
<td>e-Government Development Index</td>
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<tr>
<td>ESD</td>
<td>Enterprise Service Director</td>
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<td>ESSCI</td>
<td>Electronics Sector Skills Council of India</td>
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<td>G2B</td>
<td>Government to Business</td>
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<td>G2C</td>
<td>Government to Citizen</td>
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<tr>
<td>GBPS</td>
<td>Gigabits per second</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GIGW</td>
<td>Guidelines for Indian Government Websites</td>
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<tr>
<td>GIS</td>
<td>Geographic Information System</td>
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<tr>
<td>GOI</td>
<td>Government of India</td>
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<tr>
<td>GPS</td>
<td>Global Positioning System</td>
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<tr>
<td>HOD</td>
<td>Head of Department</td>
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<tr>
<td>HRMS</td>
<td>Human Resources Management System</td>
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<tr>
<td>IAS</td>
<td>Indian Administrative Service</td>
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<tr>
<td>ICANN</td>
<td>Internet Corporation for Assigned Names and Numbers</td>
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<tr>
<td>ICT</td>
<td>Information and Communication Technologies</td>
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<tr>
<td>IFMS</td>
<td>Integrated Financial Management System</td>
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<td>IFS</td>
<td>Indian Forest Service</td>
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<td>IndEA</td>
<td>India Enterprise Architecture</td>
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<td>IP</td>
<td>Internet Protocol</td>
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<td>IPS</td>
<td>Indian Police Service</td>
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<tr>
<td>Acronym</td>
<td>Description</td>
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<td>IRCTS</td>
<td>Indian Railways Catering and Tourism Corporation</td>
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<td>IT</td>
<td>Information Technology</td>
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<td>ITDA</td>
<td>Information Technology Development Agency</td>
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<tr>
<td>iTEAMS</td>
<td>Integrated Technology Enabled Agri Management System</td>
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<tr>
<td>JNU</td>
<td>Jawaharlal Nehru University</td>
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<tr>
<td>MATI</td>
<td>Meghalaya Administrative Training Institute</td>
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<tr>
<td>MeECL</td>
<td>Meghalaya Electronic Corporation Limited</td>
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<tr>
<td>MeitY</td>
<td>Ministry of Electronic and Information Technology</td>
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<td>MP-PSCGA</td>
<td>Madhya Pradesh - Public Service Guarantee Act 2010</td>
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<tr>
<td>NASSCOM</td>
<td>National Association of Software and Service Companies</td>
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<td>NE</td>
<td>North East</td>
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<tr>
<td>NeSDA</td>
<td>National e-Governance Service Delivery Assessment</td>
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<td>NIC</td>
<td>National Informatics Centre</td>
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<tr>
<td>NISG</td>
<td>National Institute for Smart Government</td>
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<tr>
<td>NTRO</td>
<td>National Technical Research Organisation</td>
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<tr>
<td>OSWAS</td>
<td>Odisha Secretariat Workflow Automation System</td>
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<tr>
<td>OTP</td>
<td>One Time Password</td>
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<td>PLCS</td>
<td>Pensioners Life Certificate Selfie</td>
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<td>PSU</td>
<td>Public Sector Undertaking</td>
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<td>RPA</td>
<td>Remotely Piloted Aircraft</td>
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<td>RTI</td>
<td>Right to Information</td>
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<td>SASGUJ</td>
<td>Secure and Safe Gujarat</td>
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<tr>
<td>SBI</td>
<td>State Bank of India</td>
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<tr>
<td>SDC</td>
<td>State Data Centre</td>
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<td>SeMT</td>
<td>State e-Governance Mission Team</td>
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<tr>
<td>SIO</td>
<td>State Informatics Officer</td>
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<tr>
<td>SSL</td>
<td>Secure Sockets Layer</td>
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<td>SWAN</td>
<td>State Wide Area Network</td>
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<tr>
<td>TDP NER</td>
<td>Telecom Development Plan for the North Eastern Region</td>
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<tr>
<td>TOGAF</td>
<td>The Open Group Architecture Framework</td>
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<tr>
<td>TSP</td>
<td>Telecom Service Provider</td>
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<tr>
<td>UAV</td>
<td>Unmanned Aerial Vehicle</td>
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<tr>
<td>UNSDG</td>
<td>United Nations Sustainable Development Goals</td>
</tr>
<tr>
<td>UPI</td>
<td>Unified Payments Interface</td>
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<tr>
<td>VPN</td>
<td>Virtual Private Network</td>
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