Use of IT in administration

1. e-Governance

e-Governance can be defined as the application of information and communication technology (ICT) for providing government services, exchange of information, transactions, integration of previously existing services and information portals.

Different Connotations of e-Governance

- e-Administration: The use of ICTs to modernize the state; the creation of data repositories for Management Information System (MIS) and computerization of records (land, health etc).
- e-Services: The emphasis here is to bring the state closer to the citizens.
 - For Examples: Provision of online services.
 - e-administration and e-services together constitute what is largely termed as e-government.
- **e-Governance:** The use of IT to improve the ability of the government to address the needs of society.
 - It includes the publishing of policy and program-related information to transact with citizens.
 - It extends beyond the provision of online services and covers the use of IT for strategic planning and reaching the development goals of the government.
- **e-Democracy:** The use of IT to facilitate the ability of all sections of society to participate in the governance of the state.
 - Emphasis is on bringing transparency, accountability, and participation of people.
 - It includes online disclosures of policies, online grievance redressal, e-referendums etc.

Objectives

- Better service delivery to citizens.
- Ushering in transparency and accountability.
- Empowering people through information.
- Improve efficiency within Government i.e between centre-state or inter-states.
- Improve interface with business and industry.

Pillars of e-Governance

- People
- Process
- Technology
- Resources

Types of Interaction in e-Governance

- G2G i.e. Government to Government
- G2C i.e. Government to Citizen
- G2B i.e. Government to Business
- G2E i.e. Government to Employees

2. SMART governance

SMART governance is about using the right technology to facilitate and support better planning and decision-making within governing bodies. Importance of Smart Governance There is a fundamental need for smart cities to establish a strong bridge between the government and its citizens. Smart governance refers to simple, ethical, accountable, accountable, and transparent governance. It also signifies fundamental changes in government functions by including the responsibilities of the executive, legislature, citizens as well as judiciary.

Definition of SMART Governance

SMART Governance is a further process of bringing Simple, Moral, Accountable, Responsive, and Transparent Governance.

- **Simple:** It means simplification of rules and regulations and government processes through the use of ICT, and providing user-friendly government.
- **Moral:** to suggest the emergence of a new system of moral values in the administrative and political system. Advancement of technology enhances the efficiency of anti-corruption police, agencies, judiciary, etc.
- Accountable: Improved design, development, and implementation of highly effective management information systems and mechanisms for measuring performance. This will ensure the accountability of the civil service functionaries.
- **Responsive:** Streamlining processes to accelerate service delivery, and make systems more responsive.
- **Transparent:** To make the process transparent by bringing the hitherto limited information in government documents into the public domain. It

will bring transparency, equality, and rule of law in the response to administrative agencies.

3. Use of Technology in Governance

Striving for E-Legislature

- 1. The role of Parliament and many state legislatures, as an institution of debate, deliberation and law-making have been disrupted due to Covid-19.
- 2. These legislative bodies are an institution of public trust and need to continue its role of scrutiny of government's actions, especially in times of crisis.
- 3. It is here that technology-centric solutions can ensure work continuity in law-making institutions even when meetings can't be held physically. For example:
 - i. These online meetings of legislative bodies will help in the furtherance of debate and deliberation on important issues.
 - ii. The establishment of e-legislature will help in reducing the frequent use of ordinances.
- 4. Following this, Virtual parliament has been set up in the democracies like the UK, New Zealand, etc.

Strengthening Parliamentary Committees

- 1. It is the stoppage in the work of parliamentary committees which needs immediate attention.
- 2. These committees are smaller sub-groups of MPs which meet outside the House to deliberate on issues of public importance. The committees play a critical role as they are tasked with the in-depth examination of government bills.
- 3. Thus, the use of ICT platforms will enable proper functioning of parliamentary committees.
- 4. Also, the added advantage could be that the committee could get to hear a wide range of stakeholders who might otherwise find it difficult to appear in person before the committees.

Virtual Judiciary

1. It is obvious that normalcy in the judicial process will not resume in a short time, even in an early period post lockdown phase.

- 2. Therefore, it is an opportunity of the judiciary to adopt Information and communication technology, so that justice can reach everyone without any delay.
- 3. Also, by adopting initiatives like **e-courts**_judiciary may reduce the backlog of cases.

Promoting Participative Democracy

- 1. There is an unprecedented opportunity for community collective choice, whereby citizens who are affected by a set of governing rules can help to select and frame policy, rank spending priorities, and can, in partnership with their local government representatives,
- 2. Such Mechanism may help in strengthening **Social audit**. For example, citizens can directly give suggestions to the government on **myGOV platform**.

Implementing Good Governance

- 1. Information Technology has ensured that a policy decision taken by the government can be quickly executed and implemented at multiple locations, across the length and breadth of the country.
- 2. It also ensures **transparency**, **accountability**—while assuring quick and effective responsiveness of government to citizens' problems and suggestions.

Achieving Sustainable Development Goals

1. Government has taken much of the **e-governance initiatives** for effective public service delivery. Also, when combined with emerging technologies, it can help in achieving **sustainable development goals.**

4. Tamilnadu e-Governance

1. Permanent Enrolment Centres (PECs)

ELCOT is one of the agencies empanelled by the Unique Identification Authority of India (UIDAI) to execute Aadhaar Enrolment activities in the State. ELCOT has established 227 PECs at 32 District Collectorates, 21 Municipal Corporation Headquarters, 45 Municipal Zonal Offices, 115 Municipalities, 5 Town Panchayats, 2 Revenue Divisional Offices, 4 Block Development Offices and 3 Provident Fund Offices.

So far, 22,32,807 new Aadhaar enrolments have been carried out and 54,71,475 Aadhaar Demographic Updation have been delivered. The transaction count done at all Permanent Enrolment Centres (PECs) as on 21.04.2022 is 77,04,282.

2. Permanent Enrolment Centres (PECs) in Educational Blocks under Samagra Shiksha

ELCOT is selected as an Enrolment Agency by School Education Department's Samagra Shiksha to establish Aadhaar Enrolment Centre in 505 centres at all 385 Educational Blocks for providing Aadhaar related services to school students. In the initial stage, 120 Aadhaar service centres have been established in 120 Educational Blocks since 03.01.2022. As on 21.04.2022, there have been 21,966 new Aadhaar enrolments and 80,914 Aadhaar updates.

3. Capacity Building

ELCOT has been playing an important role in supporting the training needs of Government departments since June 2007. So far, 1,21,890 participants have been benefited from various Government departments across the State.

4. Services rendered at Secretariat:

- Installation and maintenance of CCTV surveillance systems at the main building and Namakkal Kavignar Maaligai, Secretariat, with facility to monitor on 24x7 basis.
- Maintenance of Secretariat Network (SECNET) 24x7.
- Facilitating Network infrastructure for e-Office implementation at Secretariat.

5. Health department

Developed e-Paarvai, a cataract detection mobile app using AI and currently getting rolled out for the whole State. Feasibility study is completed for developing a Proof of Concept (PoC) for detecting Tuberculosis.

6. Face Recognition Attendance System (FRAS 2.0)

AI/ML based face recognition and attendance marking system developed by TNeGA and being used by TNeGA, TANGEDCO and 2 organisations in Kanyakumari. The next version FRAS 2.0 is developed using Android for scaling the current solution across the State and the first roll-out is planned for Commissionerate of Rehabilitation and Welfare of Non-Resident Tamils.

7. Integrated Child Development Scheme (ICDS)

Android based mobile app similar to 'Poshan Tracker' is being developed to capture the growth and nutrition data in Anganwadis. The data collected will be used to develop AI models to predict malnutrition for children aged 0-5. The data obtained will be linked to other relevant datasets for analytics and policy decisions.

8. Centre of Excellence in Emerging Technologies (CEET)-Ongoing e-Governance Projects:

- 1. Know Your Government, a State portal, will be developed and the existing State portal will be migrated to the new portal.
- 2. Next generation integrated service delivery platform, e-Sevai 2.0, will be developed using the latest cutting edge technologies to replace the existing e-Sevai platform. e-Sevai 2.0 will be modular, scalable and composable and will be integrated with SFDB, Blockchain and predictive service platform in the future that provide efficient citizen delivery.
- 3. Predictive Services Platform To build a framework for predictive and prescriptive governance, aimed at assisting policymakers in making informed and evidence-based decisions by providing them with critical, actionable insights and in making governance a seamless process. The end beneficiaries are the public, as life becomes much easier for them with Government services reaching their doorsteps without any explicit efforts from their side. Platform will be built on top of SFDB and Blockchain initially and scaled across department service portals.
- 4. Tamil Nadu Legislative Assembly Secretariat (TNLAS) Digitisation and Management of Electronic Records of Legislature (DMERL) project digitises the debate books and committee reports from the year 1921 in multiple phases.
- 5. Finance department and National Payment Corporation of India (NPCI) To develop a common digital payment solution to handle all C2G, G2G, G2C payments through a unified system. This will provide transparency in payments to Government services.
- 6. Commissionerate of Revenue Administration and Disaster Management To develop a common application for Disaster Relief Management, matching the relief needs and supplies during disaster situations and manage logistics during disasters.
- 7. Tamil Nadu Water Supply and Drainage Board (TWAD) A DPR for endto-end computerisation of department activities and work flow is under preparation.
- 8. Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO)–A mobile application for automatic capture of meter reading is being developed.

- 9. Environment, Climate Change and Forests Department A DPR has been prepared for end-to-end computerisation of department activities, digitize G2C services and to integrate them with e-Sevai 2.0.
- 10. Tourism, Culture and Religious Endowments Department A website has been developed for Aazadi ka Amrut Mahotsav Suthanthira Thirunaal Amudha Peruvizha (STAP).
- 11. Tamil Nadu Archives and Historical Research department A portal has been developed for digitization project.
- 12. Registration Department Digitization of registration documents prior to 1950-1974.
- 13. Tamil Nadu Forest Plantation Corporation Limited (TAFCORN) DPR has been prepared for end-to-end computerisation.
- 14. Recently developed the Chief Minister's Public Relief Fund (CMPRF) portal to collect donations from public and philanthropists for relief related activities in the State.
- 15.IT Nanban, a unified portal has been developed to connect the IT Industries, companies and Government that enables active participation to the growth of the State.
- 16. Micro, Small and Medium Enterprises department Developed 'Valar 4.0', a Networking Portal for Industries stakeholders in Tamil Nadu to promote collaboration between Industry and Academia on leveraging research to adopt technologies related to Industry 4.0.

9. Face Recognition System (FRS) and other AI Initiatives

An Artificial Intelligence (AI)-based Face Recognition System developed by Tamil Nadu e-Governance Agency is one of the milestones in the use of AI. The system is in use for day-to-day attendance in TNeGA, TANGEDCO, TANFINET and 2 organisations in Kanyakumari.

Some of the other applications developed using AI are as follows:

- Chatbot TNeGA has developed chatbots which provide conversational assistance in Tamil and English to citizens in availing various services from the Government of Tamil Nadu e-Sevai website (https://www.tnesevai.tn.gov.in).
- AI-based pest and disease identification Farmers can upload the photo of the plant infected by pests using Uzhavan app. AIbased pest identification model developed by TNeGA diagnoses the pest and suggests remedial measures.

10. Awards:

The AI based e-Paarvai solution developed to detect cataract using a mobile phone, won the National 'AI Game Changers 2021' award from NASSCOM. Capacity Building and Events:

AI Conclave 2021 – more than 100 companies participated in the event.

5. National E-Governance Plan [NeGP]

The **National e-Governance Plan (NeGP)** is an initiative introduced by the Ministry of Electronics and Information Technology. It aims to use the application of information and communication technologies to make the functioning of government more efficient and accountable.

The government approved the National e-Governance Plan on May 18, 2006. It is comprised of 27 Mission Mode Projects (MMPs) and eight components, which include core components and support components. In 2011, this was increased to 31 MMPs. Under NeGP 2.0 (introduced in 2015), there are 44 Mission Mode Projects (MMPs).

Key Facts about the National E-Governance Plan

The National e-Governance Plan was set up to integrate the e-governance initiatives at various levels of government and across the country. It aims to improve the effectiveness and transparency of exchanges across different government levels and improve the delivery of government services.

- **Vision:** The vision is to make public services more accessible and affordable for common citizens.
- **Scope:** The scope of the National e-Governance Plan covers Government-to-Government, Government-to-Business, Government-to-Citizen and Government-to-Employees interactions.
- Core Components: The National e-Governance Plan has certain core components, which include State Wide Area Networks (SWAN), State Data Centres (SDC), and Common Service Centres (CSC).
- **Support Components:** The support components include core policies, standards, HRD and training, and awareness and assessment.
- **NeGP 2.0:** NeGP 2.0 or e-Kranti was introduced by the government in March 2015 under the Digital India program to utilise emerging technologies such as cloud, mobile platforms (like smartphones and tablets) and geospatial information systems.

• **Initiatives:** Some of the e-governance initiatives include the Digital India initiative, Aadhaar, Digital Locker, computerisation of land records, E-Courts, e-procurement and G-I cloud.

National e-Governance Plan - Mission Mode Projects

A Mission Mode Project (MMP) is an individual project within the National e-Governance Plan that covers a particular aspect of governance, such as land records, banking, immigration, etc.

- MMPs are categorised as central, state or integrated projects.
- The Central Government implements central MMPs; the State Governments implement the State MMPs. Both Central and State Governments integrate integrated MMPs.
- The MMPs are divided as follows -

The MINIPs are divided as follows -						
Central MMPs	State MMPs	Integrated MMPs				
 Banking 	 Land Records 	 India Portal 				
• Insurance	Road Transport	 National e- 				
Income Tax	• e-District	Governance				
 Central Excise and 	 Commercial 	Service Delivery				
Customs	Taxes	Gateway				
 Ministry of 	Treasuries	Common Service				
Company Affairs	Computerisation	Centres				
(MCA 21)	Agriculture	• e-Courts				
• Pensions	Municipalities	Electronic Data				
 Passport 	Police - CCTNS	Interchange for				
• e-Office	(Crime &	e-Trade				
• UID	Criminal Tracking	• e-Procurement				
• Immigration/Visa	Network &	• e-Biz				
• Posts	Systems)					
	 Public 					
	Distribution					
	Systems (PDS)					
	 Health 					
	• Education					
	• e-Panchayats					
	 Employment 					
	Exchange					

In addition to the above 31 MMPs, NeGP 2.0 introduced 13 new MMPs in 2015, including e-Sansad, e-Vidhaan, Financial Inclusion, and Urban Governance.

24th National Conference on e-Governance (NCeG)

The 24th National Conference on e-Governance (NCeG) was organised on the 7th and 8th February 2022 by the Department of Administrative Reforms & Public Grievances and the Ministry of Electronics & Information Technology, in association with the State Government of Telangana.

The National e-Governance Plan offers a way ahead in simplifying governance through modern technology. It is a way to improve the delivery of government services to citizens and businesses and interactions within the government. It can increase transparency and accountability, speedy administration of government services, and reduce corruption.

6. e-Kranti

e-Kranti is an essential pillar of the Digital India initiative. Considering the critical need for e-Governance, mobile Governance and Good Governance in the country, the approach and key components of e-Kranti have been approved by the Union Cabinet with the vision of "Transforming e-Governance for Transforming Governance".

The e-Kranti framework addresses the electronic delivery of services through a portfolio of mission mode projects that cut across several Government Departments.

Mission: The mission of e – Kranti is to ensure a Government wide transformation by delivering all Government services electronically to the citizens through integrated and interoperable systems via multiple modes while ensuring efficiency, transparency and reliability of such services at affordable costs.

Objectives

The objectives of 'e-Kranti' are as follows:

- To redefine NeGP with transformational and outcome-oriented e-Governance initiatives
- To enhance the portfolio of citizen centric services
- To ensure optimum usage of core Information & Communication Technology (ICT)
- To promote rapid replication and integration of e-Governance applications

- To leverage emerging technologies
- To make use of more agile implementation models

Key principles of e-Kranti

- Transformation and not Translation All project proposals in e Kranti must involve a substantial transformation in the quality, quantity and manner of delivery of services and significant enhancement in productivity and competitiveness.
- Integrated Services and not Individual Services A common middleware and integration of the back-end processes and processing systems are required to facilitate integrated service delivery to citizens.
- Government Process Reengineering (GPR) To mandate GPR as the essential first step in all new MMPs without which a project may not be sanctioned. The degree of GPR should be assessed and enhanced for the existing MMPs.
- **ICT Infrastructure on Demand** Government departments should be provided with ICT infrastructures, such as connectivity, cloud and mobile platform on demand. In this regard, National Information Infrastructure (NII), which is at an advanced stage of project formulation, would be fast-tracked by DeitY.
- Cloud by Default The flexibility, agility and cost-effectiveness offered by cloud technologies would be fully leveraged while designing and hosting applications. Government Cloud shall be the default cloud for Government Departments.
- **Mobile First** All applications are designed/ redesigned to enable delivery of services through mobile.
- Fast Tracking Approvals To establish a fast track approval mechanism for MMPs, once the Detailed Project Report (DPR) of a project is approved by the Competent Authority, empowered committees may be constituted with delegated powers to take all subsequent decisions
- Mandating Standards and Protocols Use of e-Governance standards and protocols as notified by DeitY be mandated in all e-governance projects
- Language Localization It is imperative that all information and services in e-Governance projects are available in Indian languages as well.

- National GIS (Geo-Spatial Information System) NGIS to be leveraged as a platform and as a service in e-Governance projects.
- Security and Electronic Data Preservation All online applications and
 e-services to adhere to prescribed security measures including cyber
 security. The National Cyber Security Policy 2013 notified by DeitY must
 be followed.

7. Tamilnadu Information Communication Technology Policy

The Department of Information Technology of the Government of Tamilnadu has formulated the Information Communication Technology Policy, 2018 to promote the IT & <u>ITeS</u> sector and to increase software production, exports and employment generation in Tamilnadu. The ICT policy also promotes the growth of the IT & ITeS sector in the Tier-II cities. One of the primary focus is to attract investment in the Computer hardware sector as well. The ICT policy is evolved with following in mind:

- 1. Incentivising investment, employment and intellectual capital creation
- 2. Integration with initiatives of Vision 2013
- 3. Special attention to **Start ups**, MSMEs and employment of women

Objectives

The objectives of the policy are:

- Make Tamil Nadu the number one in the IT sector.
- To be a destination for foreign investors for their projects in the sector.
- For incremental direct investment from foreign and across the state.
- Create employment opportunities at large scale.
- Encourage youth of the state to the IT/ITeS sector.
- Enable Tamilnadu to be a cost-effective place for the development of IT/ITeS.
- Emphasise on the promotion of Green IT and ITeS.
- Improve the quality of life of the citizens through the IT/ITeS.
- Encourage entrepreneurs to begin Warehouse Start-ups.
- To make the usage of Tamil computing easier.
- The fast development of IT and ITeS in the southern districts.

Strategies

The following strategies are planned to make Tamilnadu a global hub for investment:

- Providing training for students at the industry level, so that it paves the way for employment.
- Support the Research and Development, Innovation and Entrepreneurship in the sector.
- Increase the IT base scope to animation, Gaming and Digital Entertainment, IT Product and Services in Engineering, Retail, and Health Management etc.
- Support the technology start ups, providing with quality infrastructure.
- Special incentives to encourage entrepreneurs, <u>SME</u>s, women and socially challenged people in the sector.

Area of Focus

To improve the sector of IT/ITeS, certain fields will be given more focus.

- Social, Mobile, Analytics and Cloud (SMAC).
- E-Commerce portal for the departments of government.
- E-Learning
- Massive Open Online Course content (MOOC)
- Content Creation
- Digital Management and Technology
- Business Intelligence Software and Analytics.
- Data warehousing
- Electronic System Design and Manufacturing (ESDM) training
- Tamil Computing
- Animation and Gaming

Skill Development

The Government has given focus to the area of skill development. A skill development Mission has been implemented.

- The students going to vocational streams will be guided about the academic stream.
- The government will impart employability skills to convey the challenges in the industry.
- Centre of excellence in technologies and research will be initiated by the government, through the collaboration of industries with colleges.
- To compete internationally, a skilled workforce will be created with the knowledge of foreign languages.

 National Knowledge Network (NKN) will be borrowed for the industryacademic purpose. The NKN is a National Level High-Speed Network which connects the academic institutions and also links with the global scientific community.

Benefits

The Government of Tamilnadu has decided to provide higher incentives to companies that invest in the Tier-II cities such as Coimbatore, Madurai, Trichy, Hosur, Salem, Tirunelveli and other rural locations.

Locations	Description – Districts classification			
A	Chennai, Thiruvallur and Kancheepuram			
В	Other than A and C (20 districts)			
	Madurai, Theni, Dindigul, Sivagangai,			
C/O	Ramanathapuram, Virudhunagar,			
	Tirunelveli, Thoothukudi and Kanyakumari			

Standard Fiscal Incentives

- 1. The new or expansion manufacturing units, located anywhere in the state will be given capital subsidy, and tax exemption for the power purchased from the TANGEDCO (Tamilnadu Generation and Distribution Corporation Ltd.) or consumed or generated from the captive sources will be based on investments in the fixed or eligible assets.
- 2. For location A and B, the subsidy will be paid at the end of 3 years and in the location at the end of 4 years, only when it satisfies the below table.
- 3. An additional capital subsidy of over 50% will be given for new or expansion IT/ITeS industries in the A districts.
- 4. An additional capital subsidy of 10% and 25% will be given to IT/ITeS industries in Districts B and C respectively.

Investment in fixed assets/eligible fixed assets (in crore)	Direct employment (in numbers)	Capital subsidy (in crore)	Electricity tax exemption from the date of commercial operation
5-50	500	0.30	2 years
50-100	500-1000	0.60	3 years
100-200	1000-2000	1.00	4 years
200-500	2000-4000	1.50	5 years

Special Incentives for MSME units

New and expansion MSME units will be given financial assistance on the following conditions:

- MSME units should reach the level of 50 employees in 3 years
- Specialised training will be given to employees through Tamilnadu Skill Development Corporation (TNSDC) if MSME units employ a minimum of 100 people.
- A start up or an MSME will be given a subsidy of 10% on lease rentals for 3 years. The total amount of rental cannot exceed 2 lakhs per annum.
- The government will facilitate the tie-ups to strengthen the MSMEs
- The government will link up small IT/ITeS companies to bigger firms

Fiscal Incentives

This incentive is provided for the following:

Criteria	Location A	Location B	Location C	
Investment range (in crore)	500 and above	350 and above	200 and above	
Employment (Minimum number of employees)	6,000	4,000	2,000	
Timeline within which) / /	
target is to be achieved	3	3	4	
(years)	211	2001	/ /	

- The companies which make an investment for their use are eligible for the incentive.
- The investment period will begin from the date of Memorandum of Understanding (MoU) with the government or any date that the government proposes.
- The expansion of industries that are in the state for over 10 years will be given extra benefits.
- To receive the fiscal incentive, employment criteria is mandatory.

Special Incentive for Locations B and C

Special incentives will be given for establishing the Sewage Treatment Plant and Reverse Osmosis Plant in the Locations B and C.

Reimbursement of Stamp Duty

Reimbursement of stamp duty and registration fee at the rate of 50% will be provided on the land transaction in location C, for the first transaction of that certain land. No reimbursement will be provided for the next transactions. This will be valid only till 3 years from the date of the transaction.

Other Incentives

- The MSMEs will be repaid 50% of the cost for the certification, which should be a maximum of Rs.5 lakhs. This incentive can be obtained only once.
- For the filing of patents, MSMEs will be repaid 50% of statutory fees. The amount for domestic patent should limit to Rs.3 lakh and for the international patent to Rs.5 lakh. This incentive can be obtained 5 times in 5 years.

Other Benefits

- 100% relaxation of Floor Space Index (FSI) will be sanctioned to all IT/ITeS parks in the state.
- Ecosystem development and physical infrastructure development will be initiated.
- IT Innovation and research will be taken care of by setting up research parks and creating funds and awards.
- Green IT parks will be initiated to provide environment-friendly sector.
- Annual award for excellence in export will be given.
- Special Awards will be given to units that provide at least 4% employment to challenged people.
- The Tamilnadu Industrial Guidance and Export Promotion Bureau will provide Single Window Facilitation. That is to avoid the delays in the procedure for the creation of IT infrastructure.
- Training will be given to the employees to upgrade their skills.

8. MCA 21

MCA 21 is an ambitious e-Governance project of **Ministry of Corporate Affairs**, **Government of India.** The core objective of this project is to transform the Ministry's mode of working from traditional paper to paperless format. Core philosophy is to encompass and facilitate stakeholders for access to database which would be of immense value further business operations. This database in

particular relates to the creation/subsistence of charges created against advances sanctioned and released by stake holders to the the corporate world.

Introduction:

This initiative was launched to deliver over 100 services to citizens electronically covering almost completely the Companies Act of 1956. These services are provided in easy and secured manner via Ministry of Corporate Affairs portal. The MCA 21 is also the first portal under the Government to use the Digital Identity of the Users. This project is the first successful Mission Mode Project under the National e-Governance Plan and has received the Prime Minister's Award for Excellence in Public Administration.

Revamp Of MCA21 Portal

In recent times the MCA Portal has been revamped and the revamped portal is more user friendly and explanatory for a user visiting MCA21 for the first time. The Portal has defined sections related to the most frequently used functionalities of MCA21 and a detailed step wise process has been defined to assist the user. The user's who are well acquainted with MCA21 portal functionalities have been provided with Quick Links within all the sections. A special tab 'Investor Services' was also added keeping in mind the protection of the interests of investors. This tab consists of link to all relevant websites like IEPF which help protect the interest of investors.

E-stamping for Whole of India:

The MCA 21 offers flexible Payment Options as mentioned – Challan, Credit Card, Debit Card, and Internet Banking. It provides uninterrupted service delivery we have contingency plan implemented through Data Centre and Disaster Recovery Centre.

Service Level Agreements are maintained and regularly monitored with the operators to ensure high performance.

Before introduction of e-Stamping, stamp instrument has to be submitted physically in paper format at Registrar of Companies office. This causes delay in service delivery. In the entire process of electronic filing this is the only process which uses paper extensively. In order to eliminate this bottleneck and to increase the efficiency of service delivery, e-stamping was envisaged. Estamping through the MCA21 system has been mandated for all the states and union territories in India. Certain eForms To Be Processed under STP Mode (Straight Through Processing), That Is The Same Shall Not Be Processed By The RoC User

- Form 2 and Form 3 regarding return of allotment of shares
- Form 18 for change in registered office by an existing company
- Form 32 for change in directors, etc. details by an existing company
- Form 8 and 17 in respect of charges (other than condonation of delay cases).
- Form 1A for name availability by a new company (this included simplification of the Name Availability Guidelines as well)

The companies which had defaulted in filing their annual returns and balance sheets for a continuous period of three years, have been moved into a separate basket as "Dormant" –companies. Such companies are restricted from doing their eFilings unless the default in filing is made good by them.

The companies which had defaulted in filing their annual returns and/ or balance sheets for any one year or more, have been marked as "Defaulting" companies. Such companies and their directors are restricted from doing any eFilings unless the default in filing is made good by them.

A detailed Complaint Monitoring system has been implemented in the MCA21 system for the MCA21 stake holders. The users can raise complaints, issues, queries, suggestions through the same and they are provided a unique ticket reference for the same. They can track the status of the same to completion using the ticket reference.

Digital Signatures

Earlier RoC officers used to manually sign the various certificates and send the same by post to the company. Now, the process of digital signing of various certificates by the MCA21 system has been introduced, where there is no manual intervention. Further the digitally signed certificates are sent by email to the company and are also made available on the MCA21 FO portal for verification.

Integration of Designated Partner Identification Number (DPIN)

The process of allotment of Director Identification Number (DIN) by MCA has been made completely paperless. This has been done by doing away with the requirement to file physical proofs; and instead the same are scanned to the DIN application itself. Also, providing Income-tax PAN has been made mandatory for all Indian directors. Further, the DIN application is processed by the system itself based on certification by the practising professional. MCA had separate systems

for allotment of DIN under Companies Act and for allotment of Designated Partner Identification Number (DPIN) under LLP Act. Now, MCA has integrated the two systems by having the common identifier as DIN only.

Integration with Income-Tax and Trademark Departaments

In a process of implementation of joined up services, integration with Incometax system for verifying particulars of the directors, etc. with their respective Income-tax PAN details was done. Implementation with Trademark system for providing search facility on the TMR database to both internal (RoC offices) as well as to the external stake holders (Company, professionals) has also been achieved.

Integration with Banks:

MCA has introduced a facility for the corporate to open a bank account through MCA21 system itself. The company is required to fill an electronic form on the MCA21 system itself and certain details, documents in respect of the company are sent to the concerned bank by the MCA21 system itself.

NEFT for making payments:

Initially, the MCA21 payments were allowed via Credit Card, Internet Banking & Physical Challan. Internet banking is restricted to 5 banks only. In order to eliminate inconveniences caused due to payment processing delays, MCA introduced payment of MCA fees via NEFT (National Electronic Fund Transfer) mode. Through this option stake holder can make payment of MCA21 fees through any bank which allows NEFT. Facility to make payment for various MCA21 services through the physical option (payment through challan at the bank counter) has been restricted only in case the amount payable is more than or equal to Rs. 50,000

Implementation of XBRL:

MCA 21 portal has implemented the <u>XBRL</u> For Filing Of Financial Statements By Certain Class Of Companies. Filing of financial statements by certain class of companies through Extensible Business Reporting Language (XBRL) has been implemented in the MCA21 system. This system entails tagging of the financial statements to the MCA <u>XBRL</u> taxonomy. MCA21 system has provided a tool to the stake holders to validate the XBRL documents before filing. Further the machine readable <u>XBRL</u> instance documents are converted to human readable pdf format by the MCA21 system.

Disabling Mark Urgent Functionality

Initially, while processing a work item by the MCA user, there was a facility to mark a work item as urgent to bypass the First in First Out (FIFO) processing. However, in order to bring in more transparency, this functionality has been stopped. The work items will be processed in the order of their filings only.

Introduction of Refund Process

Earlier there was no process in MCA21 for refund of fees wrongly paid by the stakeholder while availing various services at MCA 21. Hence, Ministry has decided to refund the statutory fees paid for certain services. New refund eForm needs to be filed by the stakeholder applying for refund and upon processing of the same the refund request shall be approved or rejected. The refund of MCA21 fees is available in the following cases: a) Multiple Payments of Form 1, Form 5; b) Incorrect Payments and c) Excess Payment. Refund process is not applicable for certain services/ eForms like Public Inspection of documents, Request for Certified Copies, Payment for transfer deeds, Stamp duty fee (D series SRN), IEPF Payment, STP Forms, DIN eForm, etc.

9. NATIONAL AGRICULTURE MARKET (e-NAM) Objectives

- To promote genuine price discovery, increase farmers' options for sale and access to markets.
- Liberal licensing of traders / buyers and commission agents. One license for a trader valid across all markets in the State.
- Harmonisation of quality standards of agricultural produce.
- Single point levy of market fees, i.e. on the first wholesale purchase from the farmer.
- To promote stable prices and availability of quality produce to consumers.
- Provision of Soil Testing Laboratories in/or near the selected mandi.

Salient Features

- It is a Central Sector scheme with funding coming from Agri-Tech Infrastructure Fund (AITF).
- e-NAM is a pan-India electronic trading portal which seeks to network the existing APMCs and other market yards to create a unified national market for agricultural commodities.
- Small Farmers Agribusiness Consortium (SFAC) has been selected as the lead agency to implement it.

- Until now, 1000 markets across 18 States and 3 UTs have been linked with the e-NAM. Budget 2021-22 proposes to link 1000 more mandis with it.
- During COVID-19, e-NAM platform /mobile app has been further strengthened by launching
 - Warehouse based trading module to facilitate trade from warehouses based on e-NWR (Negotiable Warehouse Receipt).
 - FPO trading module whereby FPOs can trade their produce from their collection center without bringing the produce to APMC.
- The e-NAM platform is made inter operable with ReMS platform of Govt. of Karnataka. This will facilitate famers of either platforms can sell their produce in other platform thereby increasing their market access.
- e-NAM is now developing as "Platforms of Platform" to create a digital ecosystem that leverage the expertise of individual platforms across various segments of agri-value chain.

10. NATIONAL BROADBAND MISSION

Objectives

- Broadband access to all villages by 2022
- Laying of incremental 30 lakhs route km of Optical Fiber Cable and increase in tower density from 0.42 to 1.0 tower per thousand of population by 2024.
- Creation of a digital fiber map of the Digital Communications network and infrastructure, including Optical Fiber Cables and Towers.
- Significantly improve quality of services for mobile and internet.
- Develop a Broadband Readiness Index (BRI).
- Address policy and regulatory changes required to accelerate the expansion and creation of digital infrastructure and services.

Salient Features

Principles	Vision			Funding		
Universality,	To fast	track gr	owth of	Investment of USD	100	
Affordability & Quality	digital communications			billion (Rs 7 Lakh Crore)		
	infrastructure, bridge the			will come from different		
	digital divide, facilitate		stakeholders	like		
	digital empowerment		government	and		
	and i	inclusion	and	industry, including	Rs	

provide	affordable	and	70,000 crore (10%) from	
universa	access	of	Universal	Service
broadband for all.			Obligation	Fund
			(USOF).	

NOTE: USOF is a statutory fund (under Indian Telegraph [Amendment] Act, 2003) and is utilized exclusively for meeting Universal Service Obligation i.e. ensuring that unserved/ underserved rural areas are effectively connected through a reliable and ubiquitous telecommunications network.

11. Potral

1. Shala Gunvatta (Shagun) Portal

- It is a twin track approach to monitor progress of implementation of the various components of SSA while also capturing and sharing of best practices from States and UTs.
- The portal has two parts
 - ✓ Online Monitoring will capture the progress in implementation.
 - ✓ SSA Repository is a repository of innovative practices, success stories, evaluation reports, and interventions initiated across all the States and Union Territories in the area of Elementary Education.

2. Vidwan portal

- VIDWAN is the premier database of profiles of scientists / researchers and other faculty members working at leading academic institutions and other R & D organisations involved in teaching and research in India.
- The database is developed and maintained by Information and Library Network Centre (INFLIBNET) with financial support from the National Mission on Education through ICT (NME-ICT).

3. DIKSHA (Digital Infrastructure for Knowledge Sharing) Portal

- It is an initiative of National Council for Education Research and Training (NCERT) which serves as National Digital Infrastructure for Teachers.
- It aids teachers to learn and train themselves for which assessment resources will be available.

DIKSHA Infrastructure

- ✓ Teacher & Leadership Training
- ✓ Lesson Plans & Teacher Tools
- ✓ Explanation Content
- ✓ Practice and Home work

- ✓ Question Banks & Exam Prep
- ✓ Assessments
- ✓ Quiz

4. Ishan Vikas

- A Special Scholarship Scheme for school students from northeast (8 states) to Premier institutes for general degree course, technical and professional courses including medical and para-medical courses.
- It is coordinated by IIT, Guwahati.
- Gives exposure to students in premier institutes such as- [IITs, National Institutes of Technology (NITs) and Indian Institutes of Science Education and Research (IISERs)].

5. Shala ASMITA (All School Monitoring Individual Tracing Analysis) Yojana

- To track the educational journey of school students from Class I to Class XII across the private and government schools.
- It will be an online database which will carry information of student attendance and enrolment, learning outcomes, mid-day meal service and infrastructural facilities among others.
- It will carry information about student attendance and enrolment, mid-day meal service, learning outcomes and infrastructural facilities, among other things, on one platform for both private and government schools.
- Students will be tracked through their Aadhaar numbers.

6. SWAYAM (Study Webs of Active- Learning for Young Aspiring Minds)

- To bridge the digital divide for students who have hither to remained untouched by the digital revolution and have not been able to join the mainstream of the knowledge economy.
- An indigenous developed IT platform that facilitates hosting of all the courses, taught in classrooms from 9th class till post-graduation to be accessed by anyone, anywhere at any time, free of cost.
- SWAYAM Prabha: It is an initiative to provide 32 High Quality Educational Channels through DTH (Direct to Home) across the length and breadth of the country on 24x7 basis.

7. NISHTHA

 NISHTHA was launched under the Centrally Sponsored Scheme of Samagra Shiksha in 2019-20.

- It is a capacity building programme for "Improving Quality of School Education through Integrated Teacher Training".
- The aim of this training is to motivate an d equip teachers to encourage and foster critical thinking in students, handle diverse situations and act as first level counsellors.
- Recently, the Ministry of Tribal Affairs and NCERT has come together on a joint mission for NISHTHA Programme for Eklavya Model Residential Schools (EMRS) Teachers and Principals.
 - EMRSs are a flagship intervention of Ministry of Tribal Affairs (MoTA) to provide quality education to tribal students in remote tribal areas.

12. NATIONAL SUPERCOMPUTING MISSION

Objectives

- To make India one of the world leaders in Supercomputing and to enhance India's capability in solving grand challenge problems of national and global relevance.
- To empower our scientists and researchers with state-of-the-art supercomputing facilities and enable them to carry out cutting-edge research in their respective domains.
- To minimize redundancies and duplication of efforts, and optimize investments in supercomputing.
- To attain global competitiveness and ensure self-reliance in the strategic area of supercomputing technology.

Salient Features

- It was launched in 2015 for 7 years and is jointly funded by the Department of Science and Technology (DST) and Ministry of Electronics and Information Technology (MeitY).
- It is being implemented by the Centre for Development of Advanced Computing (C-DAC), Pune and the Indian Institute of Science (IISc), Bengaluru.
- The mission aims at establishing supercomputer facilities across 70 national research and academic institutions and connecting them onto a National Knowledge Network (NKN).
- Focus: The NSM has focus on following three dimensions:
 - Creating better supercomputing infrastructure

- o Becoming more application-oriented
- o Investing in human capital
- First phase of NSM: In the first phase of the NSM, parts for the supercomputers were imported and assembled in India. Supercomputers assembled indigenously under this project were:
 - o Param Shivay'19
 - o Param Shakti
 - o Param Brahma
- Second phase of the NSM: It involves increasing the speed of the supercomputer network in the country to 16 petaflops.
 - o FLOPS (FLoating-point OPerations per Second) is a common benchmark measurement for rating the speed of microprocessors.
 - ✓ A MegaFLOPS is equal to one million FLOPS and a GigaFLOPS is equal to one billion FLOPS.
 - ✓ A TeraFLOPS is equal to one trillion FLOPS.
 - ✓ A PetaFLOPS can be measured as one thousand teraflops.
- Third phase of the NSM: This phase will take the speed of country's supercomputer network to 45 petaflops. Once completed around 75 institutions and thousands of researchers will have access to the supercomputers using the NKN
 - o NKN with its multi-gigabit capability is aimed at digitally connecting all the scholars and research institutes of the country.
 - By facilitating the flow of information and knowledge, the network creates a new paradigm of collaboration to enrich the research efforts in the country.

NOTE:

- First Indian supercomputer was PARAM 8000. PARAM Siddhi (global ranking 63 in TOP 500) is India's fastest supercomputer.
- ➤ World's Fastest Super Computer: Fugaku of Japan-speed of 415 petaFlops.
- ➤ SIMORGH (Mythical Persian bird): Iran has launched its most powerful supercomputer.

13. Digital Locker

 DigiLocker is a key initiative under Digital India, the Indian Government's flagship program aimed at transforming India into a digitally empowered society and knowledge economy.

- Digital Locker is a system to provide citizens with real-time access to dematerialised documents issued by various Government and Private Agencies.
- The Digital Locker shall provide citizens with a shareable private space on a public cloud and make all documents/certificates available on this cloud itself.
- This digital space can be utilized for storing personal documents such as university certificates, PAN cards, voter IDs, the URIs of the e-documents issued by various departments.
- The objective of the service is to decrease the use of physical documents and also to offer authenticity to e-documents.
- It shall also provide secure access to documents issued by the government.
- It also aims to deflate the expenses on the administrative front of the various governmental departments.

Digital Locker is one of the major initiatives under the Digital India Campaign of the Government of India and was released by the Electronics and Information Technology Department of the Indian Government.

Objectives of Digital Locker

Given below are the key objectives with which the Digital Locker was introduced by the Government of India:

- To Enable digital empowerment among the citizens of the country
- To minimize the physical usage of documents and enable the feature of esigning by making documents available electronically
- Digital Locker will increase the authenticity of documents by online upload and reduce the existence of fake documents
- Web portals and mobile applications shall be made available for easy access
- Reduce the administrative overhead of Government departments and agencies
- With the availability of documents online on the cloud, residents can easily access the documents anytime and anywhere
- Make sharing of documents easy
- Ensure privacy and authorized access to residents' data

Digital Locker Ecosystem

His main components of the Digital Locker Ecosystem are:

1. **Citizens** – An individual who uses the Digital Locker service based on the Aadhaar number.

- 2. **Issuers** Any public or private sector entity/organisation/department issuing digitally signed e-documents to individuals/entities and making them available within a repository for access through a digital locker of their choice. The issuer is also responsible to revoke/invalidate their own documents.
- 3. **Requestors** An entity/organisation/department requesting secure access with user consent to specific e-documents stored across the ecosystem to provide paperless service to end users.

Components of Digital Locker

- Dedicated 10 MB free personal storage space, linked to each resident's Aadhaar, to securely store e-documents and to store URI links of edocuments for accessing them directly from the repositories
- This 10 MB space shall be extended to 1 GB in the coming years
- There are three main technology components of the Digital Locker:
 - Repository It is a Collection of e-Documents that are uploaded by issuers in a standard format
 - Access Gateway It provides a secure online mechanism for requesters to access e-documents from various repositories in real-time using e-Document URI (Uniform Resource Indicator)
 - DigiLocker Portal It is a dedicated cloud-based personal storage space, linked to each resident's Aadhaar for storing e-documents, or URIs of e-documents.
- An online portal has been launched by the Government where the residents can login in and register themselves

14. Digital India

Digital India was an initiative taken by the Government of India for providing high-speed internet networks to rural areas. Digital India Mission was launched by PM Narendra Modi on 1st July 2015 as a beneficiary to other government schemes including Make in India, Bharatmala, Sagarmala, Startup India, BharatNet, and Standup India.

Digital India Mission is mainly focused on three areas:

- 1. Providing digital infrastructure as a source of utility to every citizen.
- 2. Governance and services on demand.
- 3. To look after the digital empowerment of every citizen.

Digital India was established with a vision of inclusive growth in areas of electronic services, products, manufacturing, and job opportunities.

Digital India aims to provide the much-needed thrust to the nine pillars of growth areas. Each of these areas is a complex programme in itself and cuts across multiple Ministries and Departments. The nine pillars of Digital India are given below:

- **Broadband Highways** This covers three sub components, namely Broadband for All Rural, Broadband for All Urban and National Information Infrastructure (NII).
- Universal Access to Mobile Connectivity- This initiative focuses on network penetration and filling the gaps in connectivity in the country.
- **Public Internet Access Programme** The two sub components of Public Internet Access Programme are Common Services Centres (CSCs) and Post Offices as multi-service centres.
- e-Governance: Reforming Government through Technology- Government Process Re-engineering using IT to simplify and make the government processes more efficient is critical for transformation to make the delivery of government services more effective across various government domains and therefore needs to be implemented by all Ministries/ Departments.
- e-Kranti Electronic Delivery of Services- To improve the delivery of public services and simplify the process of accessing them. In this regard, several e-governance initiatives have been undertaken by various State Governments and Central Ministries to usher in an era of e-Government. e-Governance in India has steadily evolved from the computerization of Government Departments to initiatives that encapsulate the finer points of Governance, such as citizen centricity, service orientation and transparency.
- Information for All- This pillar aims to ensure transparency and availability of reliable data generated by the line ministries for use, reuse and redistribution for the people of India.
- Electronics Manufacturing- This pillar focuses on promoting electronics manufacturing in the country.
- IT for Jobs- This pillar focuses on providing training to the youth in the skills required for availing employment opportunities in the IT/ITES sector.

• Early Harvest Programmes- This pillar consists of a group of different short-term projects which have immediate effect on the Indian digital ecosystem like IT platform for mass messaging, crowd Sourcing of eGreetings, biometric attendance in the government offices, WI-FI in all universities etc.

Objectives of Digital India

The motto of the Digital India Mission is 'Power to Empower'. There are three core components to the Digital India initiative. They are digital infrastructure creation, digital delivery of services, and digital literacy.

The major objectives of this initiative are listed below:

- 1. To provide high-speed internet in all gram panchayats.
- 2. To provide easy access to Common Service Centre (CSC) in all the locality.
- 3. Digital India is an initiative that combines a large number of ideas and thoughts into a single, comprehensive vision so that each of them is seen as part of a larger goal.
- 4. The Digital India Programme also focuses on restructuring many existing schemes that can be implemented in a synchronized manner.

Advantages of Digital India Mission

Digital India Mission is an initiative that encompasses plans to connect the rural areas of the country with high-speed internet networks. Public Internet Access Programme is one among the nine pillars of digital India. On the platform of digital adoption, India ranks amongst the top 2 countries globally and the digital economy of India is likely to cross \$1 trillion by the year 2023.

Some of the advantages of Digital India are:

- 1. There is an increase in electronic transactions related to e-governance.
- 2. An optical fiber network of 2, 74,246 km has connected over 1.15 lakh Gram Panchayats under the Bharat Net programme.
- 3. A Common Service Center (CSC) is created under the National e-Governance Project of the Indian government which provides access for information and communication technology (ICT). Through computer and Internet access, the CSCs provide multimedia content related to e-governance, education, health, telemedicine, entertainment, and other government and private services.
- 4. Establishment of digital villages along with well-equipped facilities such as solar lighting, LED assembly unit, sanitary napkin production unit, and Wi-Fi choupal.

5. Internet data is used as a major tool for the delivery of the services and the urban internet penetration has reached 64%.

Challenges of Digital India

The government of India has taken an initiative through the Digital India Mission to connect the rural areas of the country with high-speed internet networks. Apart from the various initiatives taken by Digital India, there are several challenges faced by it.

Some of the challenges and drawbacks of Digital Mission are mentioned below:

- 1. The daily internet speed, as well as the Wi-Fi hotspots, are slow as compared to other developed nations.
- 2. Most of the small and medium scale industry has to struggle a lot for adapting to the new modern technology.
- 3. Limited capability of entry-level smartphones for smooth internet access.
- 4. Lack of skilled manpower in the field of digital technology.
- 5. To look for about one million cybersecurity experts to check and monitor the growing menace of digital crime.
- 6. Lack of user education.

Digital India Initiatives

The Government has taken up many initiatives under the Digital India campaign. Discussed below are few such important initiatives:

- 1. **DigiLockers** This flagship initiative aims at 'Digital Empowerment' of the citizen by providing access to authentic digital documents to citizen's digital document wallet
- 2. **E-Hospitals** It is a Hospital Management Information System (HMIS) which is a one-stop solution in connecting patients, hospitals and doctors through a single digital platform. Till February 2021, as many as 420 e-Hospitals had been established under the Digital India campaign
- 3. **E-Pathshala** Developed by NCERT, e-Pathshala showcases and disseminates all educational e-resources including textbooks, audio, video, periodicals and a variety of other print and non-print materials through the website and mobile app
- 4. **BHIM** Bharat Interface for Money is an app that makes payment transactions simple, easy and quick using Unified Payments Interface (UPI)

Various Initiatives Under Digital India Initiatives

- **MyGov:** It aims to establish a link between Government and Citizens towards meeting the goal of good governance.
 - It encourages citizens as well as people abroad to participate in various activities i.e. 'Do', 'Discuss', 'Poll', 'Talk', 'Blog', etc.
- **DigiLocker:** It serves as a platform to enable citizens to securely store and share their documents with service providers who can directly access them electronically.
- e-Hospital-Online Registration Framework (ORF): It is an initiative to facilitate the patients to take online OPD appointments with government hospitals. This framework also covers patient care, laboratory services and medical record management.
- National Scholarships Portal (NSP): It provides a centralized platform for application and disbursement of scholarship to students under any scholarship scheme.
- **DARPAN:** It is an online tool that can be used to monitor and analyze the implementation of critical and high priority projects of the State.
 - o It facilitates presentation of real time data on Key Performance Indicators (KPIs) of selected schemes/projects to the senior functionaries of the State Government as well as district administration.
- PRAGATI (Pro-Active Governance And Timely Implementation): It has been aimed at starting a culture of Pro-Active Governance and Timely Implementation.
 - o It is also a robust system for bringing e-transparency and e-accountability with real-time presence and exchange among the key stakeholders.
 - o It was launched in 2015.
- Common Services Centres 2.0 (CSC 2.0): It is being implemented to develop and provide support to the use of information technology in rural areas of the country.
 - The CSCs are Information and Communication Technology (ICT) enabled kiosks with broadband

connectivity to provide various Governments, private and social services at the doorstep of the citizen.

- **Mobile Seva:** It provides government services to the people through mobile phones and tablets.
- **Jeevan Pramaan:** It is an Aadhaar based Biometric Authentication System for Pensioners.
 - The system provides authenticity to Digital Life Certificate without the necessity of the pensioner being present in person before his/ her Pension Dispensing Authority (PDA).
- National Centre of Geo-informatics (NCoG): Under this project, Geographic Information System (GIS) platform for sharing, collaboration, location based analytics and decision support system for Departments has been developed.
- National e-Governance Plan (NeGP): It takes a holistic view of e-Governance initiatives across the country, integrating them into a collective vision and a shared cause.
 - It comprises of 31 Mission Mode Projects, approved in 2006, but later it was integrated into Digital India Program.

15. e-Pramaan

e-Pramaan portal is a National e-Authentication service offered by DeitY. e-Pramaan gives a simple, convenient and secure way for the users to access government services via the internet/mobile as well as for the Government to assess the authenticity of the users. The e-Pramaan builds up confidence and trusts in online transactions and encourages the use of the e-services as a channel for service delivery. In this article, we will look at e-Pramaan Portal in detail.

Major Components of e-Pramaan Portal

- Identity Management (including Credential Registration)
- e-Authentication (including Step-up Authentication)
- Single Sign-on (SSO)
- Aadhaar based credential verification

Benefits of e-Pramaan Portal

• Transparency: e-authentication decisions are to be made openly and transparently.

- Cost-effectiveness: Government departments and agencies will not have to implement cumbersome and expensive e-authentication processes for low-risk or straightforward transactions.
- Consistency: Government departments and agencies can apply a consistent approach to selecting the appropriate e-authentication mechanism
- Risk management: The selection of e-authentication mechanisms is to be guided by the likelihood and impact of identified risks
- Trust: The mechanisms used will support online and mobile-based services and enhance safety, safety and trust in such transactions.
- Improved privacy: Personally identifiable information is collected only where necessary as per the sensitivity level of the applications or services• Efficiency: The time to deploy an e-Authentication capability for any Government application will be significantly reduced.

The framework gives various levels of authentication based on the sensitivity requirement of an e-Governance service.

