1. Abbreviations

AI	Artificial Intelligence
AR	Augmented Reality
CCTV	Closed-Circuit Television
DCFU	Data Centre Facilitation Unit
DR	Disaster Recovery
ESDM	Electronics System Design and Manufacturing
ICT	Information Communication Technology
IMEC	Inter-Ministerial Empowered Committee
IT	Information Technology
ITES	Information Technology Enabled Services
IOT	Internet of Things
IPR	Industrial Policy Resolution
ISP	Internet Service Provider
ML	Machine Learning
NIC	National Informatics Centre
OERC	Odisha Electricity Regulatory Commission
OPTCL	Odisha Power Transmission Corporation Limited
STPI	Software Technology Parks of India
UPS	Uninterruptible Power Supply
VLSI	Very Large Scale Integration
VR	Virtual Reality

2. Preface

Being at the cusp of a digital revolution powered by increasing broadband and internet penetration, exponential data uptake, the Government's focus on digitisation and increasing trend of technology adoption across industries, India is moving towards a data driven economy, involving enormous amount of

robust data consumption through processes and transactions, thereby increasing the requirement of data storage capacity and emphasizing on the importance of creating Data Centers that would safely store colossal amounts of data.

Amidst the growing clamour for data safety & privacy, residency and Government signaling its intent to move towards stringent data norms, data centre players have been searching for investment opportunities in setting up capacities to meet the existing demand as well as prepare for the future requirements.

Faster adoption of cloud, mobility based enterprise solutions, new digital channels, government policies and regulations especially of data localization are fueling the growth of data centres. Government of Odisha wishes to tap into this anticipated growth and attract investments into the State and provide Data Centre Companies with an attractive business environment. Data Centre Policy of the Government of Odisha, attempts to put in place a conducive environment for accelerated investment in Data Centre projects through strategic initiatives, concessions and facilitation so that Odisha can capitalize on the growth opportunities in the Data Centre sector and eventually emerge as a "Data Centre Hub" in the country.

Further, the investments in Data Centre Projects will also promote the allied activities in related sectors such as IT/ITES/ESDM, Cyber security, emerging technologies, etc. This policy will set a clear roadmap on how the State wishes to position itself with respect to data centres and allied sectors.

The Indian data centre market, which currently stands at around $4.5 billion, was slated to increase manifold by 2022 and the capacity, which stood at 1.3 million sq. ft. in 2007, has been pegged at around 10.9 million sq. ft. in 2018 as per a joint report by Cushman & Wakefield and Propstack. In fact, according to the report, India is poised to emerge as the fifth largest data center market in the world by 2050 and the second largest investor in data center space by then.

The Odisha Government is committed to modernise government ICT and lead by example in using cloud computing services so as to reduce costs, increase security and productivity as well as develop and provide excellent citizen services.

3. Objective

- Develop Odisha into a major "Data center Hub" by 2025;
- To attract investors and make Odisha the destination of choice in the Data Centre space;
- Create enabling and supporting ecosystem that facilitate setting up of at least 5 medium to large scale data center in next five years;
- To make available world class infrastructure with emphasis on promotion of Green IT & ITeS;
- To provide IT/ITeS companies with the best business climate;
- Create a robust institutional framework for effective implementation, monitoring and evaluation of this policy.

4. Vision

The State of Odisha aims to emerge amongst the top five "Data center Hubs" in India by 2025 through strategic partnerships, favorable ecosystem, investment and policy interventions.

5. Data Centre Scenario in Odisha

Today, Odisha is a fast-emerging regional hub for education, health care and Information Technology. The fastest growing software hub of Eastern India provides numerous possibilities for start-ups by the government. Bhubaneswar hosts the top Indian IT companies: TCS, Infosys, Wipro, Tech Mahindra, Capgemini and Mindtree.

The data center industry sprouted in the State around 2010, housing captive as well as commercial data centres like STPI, Bharti-AirTel, OPTCL, Odisha State Data Center and NIC's National Data Center.

Bhubaneswar can be an ideal destination for setting up of data centers as it is well connected to redundant high speed ISP connectivity, uninterrupted power supply, availability of plentiful clean water, readily available vast Government land bank, large talent pool. It offers significant cost advantages over other tier 1 & 2 cities for data centre operations, . The cost-of-living index of Bhubaneswar is lower compared to other tier 1 & 2 cities of the country.

6. Advantages of Odisha

The State of Odisha can be a favored destination for Data Centers due to the following reasons:

- Able, stable and visionary leadership .
- Emerging Investment destination of the country .

- One of the fastest growing economies in the country .
- Easy availability of key factors of production like Power, Water, Labor, Land etc.
- Power surplus State with low Industrial power tariffs .
- Odisha is very well connected to other large cities in India by air and railways and boasts of a robust road network. Odisha is served by major ports like Paradeep, Dhamara and Gopalpur.
- Presence of IT/ITeS industry which act as positive influencers for investors in these sectors .

- Availability of industry ready manpower due to presence of large number institutions and national institutes of higher learning .
- Institutional framework has already been created for promoting industries, IT/ITeS & Electronics/ESDM companies by notifying appropriate policy measures.

7. Strategies

In order to showcase Odisha as an ideal investment destination in the Data Centre space, the following strategies are envisaged :

- The Policy aims at creating a favorable climate for investments in the Data Centre Sector, both domestic investments and Foreign Direct Investments, and incentivizing the growth of a robust and sustainable Data Centre sector in the state
- Enabling a favorable ecosystem for the operations of Data Centers
- Provide industry-grade skill up gradation and training to the students to suit the requirements of industry and for obtaining gainful employment.
- Support Research & Development, Innovation and Entrepreneurship in IT/ ITeS Sector to take advantage of the Date Centres so set up
- Odisha will work with Department of Telecommunications (DoT) to facilitate robust and cost-effective connectivity backhaul

- Encouraging usage of various emerging technologies such as AR, VR, AI, IOT, ML, Animation, Gaming, Robotics and cloud

computing etc. through appropriate policy interventions in IT and ESDM sector.

8. Infrastructure

Data centres deliver efficient services to enterprises, organizations which improves their productivity and cost competitiveness and in turn, enhances their chances of being among the market leaders in respective sectors.

State Government shall provide requisite support for construction of Data Centre Park in Bhubaneswar or at any other location in Odisha. Additionally, identifying Data Centres as a separate infrastructure category, it is felt that its infrastructure requirements can be met through a unified data centre strategy/policy and comprehensive capacity building to meet flexibility needs of businesses/enterprises. Data Centres should be able to provide high levels of service and fast connectivity with low latency.

While considering the establishment of Data Centre the following infrastructure requirements should be considered and it would not be out of place to mention that Odisha is uniquely positioned to fulfilling all these requirements:-

- Located in a geographic location with low seismic activity, moderate weather and stable infrastructure.
- Odisha is well connected to all major Indian cities through air, rail and roads.
- A data centre should employ green technology to realize the goal of environmental protection, and should satisfy the following requirements:-
  - o Leverages green technology.
  - o Utilizes free air when outside temperatures are cool.
  - o Uses automated cooling and power mechanisms where applicable.
  - o Able to articulate water saving and other resource minimization solutions.
- Supports management of leading edge technologies to supports wide range of sectors in Odisha.

- Provides high levels of service and fast connectivity with low latency.
- Location has access to fiber and telecommunications paths.
- Location has access to more than one electricity grid.
- Equipped with providing reliable and resilient primary and backup connectivity and bandwidth.
- Provides at least 99.99% uptime and is at least a tier 3 facility.
- Accommodates 10% per year growth capacity and compute.
- Adequate rack space to meet server requirements and future state growth.
- Failover automatically to the backup DR site.
- No single point of failure.

9. Power

Power is of vital interest to the operation of Data Centres . Large Data Centres consume lot of electricity, almost often as much needed by a small town. Hence, it becomes imperative for the State Government to ensure continuous availability of quality power at affordable rates .

Physical infrastructure components comprise of UPS, isolation transformers and air-conditioning units, fire detection & control systems, diesel generator units, lighting systems, power units, CCTV surveillance systems and cabling.

The Government of Odisha shall channelize dedicated efforts in the above area to ensure the following :

- Establishment of dual power grid networks to ensure uninterrupted supply of electricity.
- Facilitate Data Centre Parks to setup own power generation units to ensure quality of power.
- Additional power generation capabilities through captive power sources such as solar farms shall be explored to supplement power sourcing. Companies willing to establish captive farms shall be extended complete support from the Government for obtaining approvals and permits .
- Government shall explore ways to provide power backup infrastructure to DCUs at a subsidized cost

- Given the significant consumption of fuel by backup power sources such as generator sets, the Government shall provide fuel at a **price lower than the market rates** to eligible players in the Data Centers Campus. Additional details on the same shall be provided in the operational guidelines to this Policy.

- Explore enabling effective open access system to allow Data Centre service providers to directly procure power from power generation companies (including renewable power generation units)
- Encourage efficient utilization of energy by promoting innovative techniques and solutions for energy management for reducing the carbon footprint of the Data Centers.

10. Business and Entrepreneurship

The State Government of Odisha aims to provide a technological ecosystem and requisite infrastructure for private businesses and entrepreneurs to develop the Data Centre sector in the state.

The Personal Data Protection Bill, 2018 ("Bill") and the Data Protection Committee's ("Committee") Report (released on 27 July 2018) contains the framework on protection of personal data in India. The recent Draft e-commerce policy indicates Government's thought process on storing data in India. The Reserve Bank of India (RBI) mandates that all data generated by the payment systems in India, is to be stored in India.

To fulfil the data localization regulatory requirement, Data Centres need to be established, regulated and function under the law in India. Earlier, the demand for companies to host their data in India stemmed from security perspective compared to the regulatory requirement now.

The Central Government understands that with a thriving digital economy, building strong competencies in IT Infrastructure, protecting nation's security and data of its citizens are very critical and is now among the top priorities of the Government. Odisha Government also realizes this. Government

of Odisha also realizes that there is an untapped business potential of Data Centres through various Government departments and small and medium firms operating in the state and neighboring states.

The Government shall act as a market maker for giving a fillip to Data Centre industry. An innovative *Start up – Boot up –Scale up* model would be followed for start-ups needing compute, network and storage requirement. The Government shall create a Startup Data Centre/earmark capacity within the existing Data Centres to promote startups requiring web services. These startups, incorporated in the State, can avail services of the Startup Data Centre/earmarked capacity within existing Data Centres, completely paid for by the Government. On successful scaling up of operations, the applications of the startup shall be migrated to larger establishments within the Data Centre ecosystem in the state , if need be.

11. Manufacturing

The Government of Odisha identifies electronics hardware manufacturing as one of the emerging sector, strongly aligned with a buoyant Data Centre ecosystem in the State.

IT industry and ESDM sector go hand in hand, and the presence of a local manufacturing industry can ensure flatter procurement process of requisite hardware, thus leading to considerable savings in time and cost.

The Electronics Policy of Government of Odisha lays emphasis on the development of ESDM sector, offering ecosystem support and various incentives/concessions to ESDM companies of the State. The objective is to promote Odisha as the perfect destination for electronics industry through creation of a maintainable ecosystem.

Since, ESDM has been identified as a priority sector by Government of Odisha with various incentives, subsidy and

exemptions, it can boost the manufacturing of critical hardware required for the operation of data centers, .

12. Cloud Computing and Emerging Technologies

Odisha is en route to emerging as one of the most favored destinations for IT and electronics investments. Known to be one of the firsts to get the all top four domestic IT companies to set up centres in the state, the state Government is sensing an opportunity to be the hub for emerging technologies and world class computing facilities.

Odisha Government operates a cloud enabled Data Centre(Odisha State Data Centre-OSDC) to serve the need of the State Government Departments. Odisha also houses the National Data Centre (NDC) of NIC, Govt. of India and Data Centres set up by STPI, which also cater to the increasing need of computing infrastructure requirement of the state and outside.

To promote entrepreneurial opportunities, promote employment creation and maximizing export to boost revenue, the state Government is aiming to create an ecosystem to focus on development of Software products/services leveraging new and emerging technologies on cloud platform. Besides, the global trend is shifting from in house deployment of the applications and computing facilities to the cloud, which necessitates cloud enabled Data Centres, as one of the key requirements of such industries.

The State Government has placed emerging technologies as a key focus area in the Odisha IT Policy .The State Government aspires to be a front runner in embracing all these new and emerging technologies. The following specialized areas has been identified under emerging technologies in Odisha IT Policy. The state Government believes that the rise in adoption of emerging technologies (like Cloud Computing, Artificial Intelligence, Machine Learning, Data Analytics, Internet of Things (IoT), Image Processing, Blockchain ,Virtual/Augmented

Reality(VR/AR/XR ,3D Printing ,Robotics, Unmanned Aerial Vehicles (UAV) ,etc.) will lead to increase in demand for Data Centres. To cater to the need of Data Centers, the State Government is willing to partner with the interested companies who will be willing to establish Industry Standard Data Centers in the state and the State Government will provide the necessary support w.r.t physical infrastructure, policy measures , human capital , etc.

13. Incentives :

(1) <u>Fiscal Incentives</u>:

13.1.1 Land Subsidy :

- Land will be provided at concessional rates by IDCO as per IPR .
- **Stamp Duty:** 100% stamp duty exemption on 1st transaction and 50% exemption on second transaction .
- **Reimbursement of Conversion Charges:** Reimbursement of 100% of land conversion charges payable for converting land from agricultural use to industrial use .
- **Building Fees Subsidy**: Maximum 50% reimbursement shall be made subject to a maximum of Rs.2 lakhs per unit on building fees and building plan approval cost paid to municipal authorities.

13.1.2 Data Centre Park Incentive:

- Land will be provided at concessional rates by IDCO as per prevailing IPR.
- **Stamp Duty** – There will be 100% stamp duty exemption on first transaction

- **Reimbursement of Conversion Charges** – Reimbursement of 100% of land conversion charges payable for converting land from agricultural use to industrial use.
- 100% reimbursement of electricity duty for 5 years
- **Infrastructure Development Subsidy** - 25% of FCI in building & State-of-the-art infrastructure with all basic amenities such as internal roads, water, power and other common facilities , excluding cost of land, limited to Rs.10 Cr.

- **Interest Subsidy** – @5% of term loan from Banks/ Financial Institutions limited to Rs. 25 crore for 7 years.
- If anchor unit is developing the Data Center park, the (Data Centre) unit will be eligible for the other incentives mentioned for Data Center Units over and above the incentives mentioned for Data Center Park. Such incentives will be given to only first two anchor units.

13.1.3 Capital Subsidy :

Capital subsidy will be provided @ 20% of FCI-fixed capital investment (excluding) land cost , subject to an upper cap of Rs. 25 crores per Data Centre Unit.

13.1.4 Power Incentives :

- 100% exemption on electricity duty & electrical inspection fee upto a contract demand of 5 MVA for a period of 10 years & Industrial Power Tariff will be applicable.
- Energy generated by standby Diesel Generator sets up to Contract demand will be exempted from electricity duty.
- **Power Bill Subsidy**: Power bill subsidy @30% for 5 years from the date of commencement of commercial operations, subject to an upper limit of Rs.2 Crores.
- **Energy Audit:** Reimbursement @75% of cost of Energy Audit subject to a cap of Rs.2 Lakhs.
- **Transmission and Wheeling Charges:** 100% reimbursement for Transmission and Wheeling charges for power consumption from captive renewable plant set up in the State

  - Data Centre Units(DCUs) shall be permitted to consume renewable energy procured directly from power producers in the State through open access system

13.1.5 GST Incentive :

Eligible units will get 100% reimbursement of Net SGST paid in cash on its outward supplies of goods and services for a period of maximum 7 years from the date of commencement of operation of the unit, limited to 100% of FCI (excluding land and building cost) .

13.1.6 Internet Bandwidth Subsidy:

The Data Centre Unit shall be entitled for reimbursement of 25% of internet bandwidth/ leased line/fiber connectivity charges subject to a maximum of Rs.25 lakhs per unit for a maximum period of three years from the date of commencement of operation. This will be reimbursed against actual bills/utilizations by the Data Centre units.

13.1.7 Human Capital Development Incentives :

- **Recruitment assistance**- One time Recruitment Assistance shall be provided @ Rs.8000 per newly recruited employee at executive level who are domiciles of Odisha with a maximum limit of Rs.30 lakhs per unit for a period of 03 years. Additional Rs.2000 per employee will be provided for employing women, SC/ST and the disabled .
- **Skill Gap Training Assistance** for Odisha domicile professionals, subject to an overall ceiling of INR 30 lakhs per unit
  - Overseas Training- 50% reimbursement of skill gap training up to Rs. 20,000 for male employees. However, reimbursement of training expenses will be 100% for Female, SC/ST and Physically disabled employees
  - Domestic Training- 50% reimbursement of training up to Rs. 10,000 for male employees. However, reimbursement of training expense will be 100% for Female, SC/ST and Physically disabled employees
- **Skill certifications**- Reimbursement of 50% of fee paid for obtaining industry recognized skill certifications limited to Rs.3 lakhs per year per unit.
- **Building a skilled resource base in the state**
  - Units getting any assistance under this Policy will be required to take interns in the period it gets such assistance. It can get reimbursement of 50% of stipend paid for each intern. However, the reimbursement will be for maximum 10 no. of interns.
  - Units can get reimbursement of 100% of stipend paid for each intern,if they have been selected through SDTE/OSDA, and this will be for maximum 10 interns.
  - The duration of such internship for which reimbursement would be made is maximum 06 months in both the cases

above & this mechanism will be different from Scheme of Apprenticeship by Government of India.

13.1.8 Reimbursement of EPF/ESI : Reimbursement of employer contribution on account of ESI/EPF will be provided for 5 years @50% for direct employees on payroll . 100% reimbursement will be done for Odisha domicile employees on the direct rolls of the company. .

13.1.9 Clean & Green Incentives :

25% subsidy on cleaner / greener initiatives/production measures will be provided limited to Rs.1 Crore by way of reimbursement, only on the basis of certification by accredited certifying agencies, Odisha State Pollution Control Board, etc.

13.1.10 Tailor Made Package of Incentives :

For mega projects, or for projects of strategic importance, customized package of incentives can be offered by the State Government.

(2) <u>Non-Fiscal Incentives</u>

The Non-Fiscal incentives are the general incentives available to the IT industry. The Data Centre units, by virtue of being critical units in nature, would serve clients on 24x7x365 basis. Therefore, these industries are classified under "Essential Services" and receive the following benefits:

1. Data Centre units shall be exempted from the provisions of chapter VI of factories Act 1948 (working hours for adults) as per the IPR 2015.

2. The Data Centre units shall be exempted from the purview of section 9, 10, 11 and 23 of Odisha Shops and Commercial Establishment Act-1956.

3. The Data Centre units shall be declared as public utility services for the purpose of applications of provisions under Chapter V of the I.D Act 1947 as per IPR 2015 and subsequent

notifications to be issued by Labour & ESI Department, Govt of Odisha from time to time.

General permission for three shift operations with women working in the night for Data Centre units is granted subject to the provision that the Data Centre unit(s) shall self-certify the precautions being taken and shall take all measures for safety and security of employees, especially women employees.

14. Policy Implementation Framework

- An Apex Committee chaired by Secretary, E&IT Department will be formed to monitor the policy implementation and for approval of incentives. This committee would meet every quarter to take note of the implementation of the policy with respect to its goals and objectives. This committee would also have members from other stakeholder Departments, related bodies, organizations in the Odisha Data Centre Policy-2022 implementation.
- The E&IT Department shall be responsible for the successful implementation of the Odisha Data Centre Policy-2022, drive the coordination among various stakeholders and bring about corrective measures, if any.
- The Odisha Computer Applications Centre (OCAC) under E&IT Department would be the Nodal Agency for implementation of the instant Policy. The Odisha Computer Applications Centre (OCAC) will be responsible for monitoring the progress of various activities under this Policy.

- A Project Implementation Unit (PIU)/Project Management Unit(PMU) will be set up in OCAC with induction of specialists with required skill sets for implementing the Odisha Data Centre Policy-2022, including administering/facilitating extension of various incentives/concessions available under the policy for eligible units and would provide all information to the High Level committee to take appropriate decisions.
- OCAC through its PIU/PMU would be responsible for executing the Odisha Data Centre Policy- 2022 , for implementation & facilitation of various activities i.e. application processing, inspection and field verification, issue of Operational Guidelines, release of incentives, etc.
- The formation of the Project Implementation Unit (PIU)/Project Management Unit(PMU) and notification of Operational Guidelines for implementation by PIU/PMU shall be done within

3 months of the notification of the Odisha Data Centre Policy-2022.

- A task force shall be set up by E&IT Department for consultation and recommendations for quick disposal all Odisha Data Centre Policy-2022 related issues.
- The State Government may amend, add , remove or modify any provision,part of this policy at any point of time.

15. Miscellaneous

- Units seeking to avail incentives/support under Odisha Data Centre Policy- 2022, shall be under obligation not to claim similar incentives/concession/support under any other Scheme of the State Government .
- Execution of various provisions covering the incentives, concessions etc. will be subject to the issue of detailed operational guidelines/statutory notifications, wherever necessary in respect by the Electronics & Information Technology Department and concerned Administrative Departments.
- Units for which, any package of incentives has already been sanctioned under earlier policies, shall not be eligible to avail benefits under this policy.
- Companies/units which get benefit from the Odisha Data Centre Policy-2022 will not get benefit from IPR in force for the same set of incentives and vice-versa.

- Units (except Startups) which will commence commercial operations post the date of notification of this policy will be eligible for availing of incentives under this Policy.

16. Conclusion

The focus of the Government of Odisha is to build strong and sustainable infrastructure which can help to develop an inclusive IT ecosystem in the state. Initiatives like 5T, Mo Sarkar and others would lead Odisha towards a digital economy. Inclusive digital economy means more and more data being generated across platforms such as Cloud and social media and at the same time being accessed by a sizeable number of citizens using web and mobile technology. All such data needs to be stored, managed and disseminated to users via public and private cloud, making data centres a key pillar in digital transformation.

A Data Centre plays a crucial role in servicing of various other IT Components of the state. And that's why with this policy, Odisha is striving to create an enabling regulatory framework along with incentives and facilitation to promote the establishment of international and domestic data centres.