

Odisha State Data Centre Policy - 2020

Policy Document for facilitation of Data Centre in Odisha



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1 Abbreviations

AI	Artificial Intelligence
AR	Augmented Reality
CCTV	Closed-Circuit Television
DR	Disaster Recovery
ESDM	Electronics System Design and Manufacturing
ICT	Information Communication Technology
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

Data Centre Policy of the Government of Odisha, attempts to put in place a conducive environment for accelerated investment in IT infrastructure projects through strategic initiatives, concessions and facilitation so that Odisha could capitalize on the growth opportunities in the IT/ITES/ESDM sector and eventually emerge as one of the foremost state in the country.

The policy shall act as a catalyst in the economic growth of Odisha creating models targeting at the IT/ITES/ESDM sector, resulting in young talent pool of the State to acquire higher degree of employment skills in the emerging technologies such as IOT, Cloud Computing, Artificial Intelligence, Blockchain.

With the advent of Digital India initiatives, 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 Centres that would safely store colossal amounts of digital data.

Amidst the growing clamour for data privacy, residency and Government signalling its intent to move towards stringent data norms, data centre players have been frantically 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 localisation are fuelling the growth of data centres. Government of Odisha wishes to tap into this expected growth and attract investments into the State and providing them with an attractive business environment. Further, the investments will also promote the allied activities in various sectors of the State such as IT/ITES/ESDM, Cyber security 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 center market, which currently stands at around \$4.5 billion, is slated to reach \$7 billion by 2020 and the capacity, which stood at 1.3 million sq.ft. in 2007, is 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 centre market in the world by 2050 and the second largest investor in data centre space by then.

In India, Government providing the real thrust to Data Centre sector with the digitization of its services by implementation of Digital India scheme and adoption of smart cities which will augment vast list of IoT devices all across the cities.

The Odisha Government is committed to modernizing government ICT and leading by example in using cloud computing services so as to reduce costs, increase security and productivity as well as develop excellent citizen services. The State Government shall adopt a Cloud-First approach with the aim of: Reducing costs, Increase security. Increase productivity thus improving citizen services

The Government of Odisha has recognized the potential of Data Centre for rapid and all-round development in general, and transformation of the state in particular. Its mission is to make all government services accessible to citizens through common service delivery outlets. Odisha also wanted to ensure efficiency, transparency and reliability of such services at an affordable cost to meet the basic needs of its citizens.

3 Objective

- a) Develop Odisha into a major “ Data centre Hub” by 2025;
- b) To attract investors and make Odisha the destination of choice in the sector ;
- c) Create enabling and supporting ecosystem that facilitate at least ten medium to large scale data centre in next five years ;
- d) To make available world class infrastructure with emphasis on promotion of Green IT & ITeS;
- e) To provide IT/ITeS companies with the best business climate;
- f) 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 centre Hubs” in India by 2025 through strategic partnerships, favourable 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 is the only tier-2 city in the country to host the top five Indian IT companies: TCS, Infosys, Wipro, Tech Mahindra and Mindtree.

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

Bhubaneswar can be an ideal destination for setting up of data centres as it is well connected to redundant high speed ISP connectivity, uninterrupted power supply offering significant cost advantages over tier 1 cities including readily available vast Government land bank.

6 Advantages of Odisha

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

- Able, stable and visionary leadership
- Emerging Investment destination of the country
- One of the fastest growing economies of the nation
- Easy availability of factor inputs like Power, Water, Labour, Land etc.
- Power surplus State with low Industrial power tariffs
- Proximity to Global electronics trading hubs & presence of sea ports
- Better sops for the 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 like IPR,ICT policy and ESDM Roadmap etc.

7 Strategies

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

- ✓ Support Research & Development, Innovation and Entrepreneurship in IT/ ITeS Sector
- ✓ ICT Policy encouraging usage of various emerging technologies such as AR, VR, AI, IOT, ML, Animation, Gaming, Robotics and cloud computing etc.
- ✓ Provide industry-grade skill up gradation and training to the students to suit the requirements of industry and for obtaining gainful employment.

8 Infrastructure

A plan-led approach to investments in Data Centres aims to contribute to enterprise and regional policy objectives and is a strategically important element of Odisha's future economic prospects. The potential cost benefits which could be provided by Data Centres are dependent on location, existing network capacity and the infrastructure required supplying the site. The situation involves a number of complex factors, and the Government aims to ensure the best outcome for Odisha's future economic and sustainable growth as the complementary strands of the Strategic Policy Framework are being progressed. Data centres deliver efficient services to SMEs which improve firm-level productivity and cost competitiveness, and thus enhance our overall national competitiveness.

The Government shall provide such promotional support as needed and also decided for construction of Data Centres Park in the technology business centre at Bhubaneswar. Additionally, to identify Data Centres as a separate infrastructure category, Infrastructure requirements can be satisfied through a unified data centre strategy and comprehensive capacity planning to meet flexibility needs of the business. Data centres should provide high levels of service and fast connectivity with low latency.

When selecting the establishment of Data Centre the following infrastructure requirements should be considered and Odisha is perfectly meeting all these requirements:-

- ✓ Located in a geographic location with low seismic activity, moderate weather and stable infrastructure.
- ✓ Location is easy to get to, e.g. distance from airport, railway station and near major roads.
- ✓ A data centre should employ green technology to realise environmental efficiencies, and should hold the following requirements:-
 - ❖ Leverages green technology.
 - ❖ Utilises free air when outside temperatures are cool.

- ❖ Uses automated cooling and power mechanisms where applicable.
- ❖ 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 fibre 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 to the Data Centres industry. Large data centres consume lot of electricity almost often as a small town. Hence, it becomes imperative for the Government for Odisha to ensure continuous availability of quality power at affordable rates for creating an attractive opportunity for data centres in the state.

Physical infrastructure components such as 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 channel dedicated efforts in this area to ensure the following

- The Government of Odisha shall establish dual power grid networks to ensure uninterrupted quality supply of electricity.
- 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 through a single window. Further, the Government shall also provide an initial investment subsidy as detailed under the Incentives section
- Since power consumption contributes to majority of data centres' expenses, the Government shall provide power to eligible data centres at the cost of generation.
- Government shall explore ways to provide power backup infrastructure to companies participating in the Data Centres Campus 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 Centres Campus. Additional details on the same shall be detailed out in the operational guidelines

10 Business and Entrepreneurship

The State Government of Odisha aims to provide a technological ecosystem and requisite infrastructure for private businesses and entrepreneurs, thus paying emphasis on inviting top notch companies to set up Data Centres 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 and the policymakers' insight 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) in April this year mandates that all data generated by the payment systems in India, is to be stored in India.

To fulfil the data localisation regulatory requirement, Data Centres need to be established, regulated and function under the law. Initially, the demand for companies to host their data in India stemmed from security perspective. The major issues with data localisation is not only of cyber security but also jurisdiction.

The 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 becoming mandatory for India. Odisha Government also realises the business potential of Data Centres through various Government departments and small and medium firms operating from State and neighbouring States. To encourage the growth of data centres establishments in the State, the Government shall take the first step and assure ten percent of the business to players with presence in their Data Centres Campus.

The Government shall act as a market maker for giving a massive fillip to Data Centre industry. An innovative Start up – Boot up –Scale up model would be followed for start-ups requiring compute, network and storage requirement. The Government shall create a Startup Data Centre within the Data Centres Campus to promote startups requiring web services. These startups, incorporated in the State, can avail services of the Startup Data Centre, 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 Centres Campus.

11 Manufacturing

The Government of Odisha identifies electronics hardware manufacturing as one of the emerging sector, strongly aligned with a buoyant data centres 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 faster growth prospects.

The ICT 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 growth of data centres, using the available incentive package.

Additionally, Government shall create special incentive scheme to further enhance the interest of ESDM sector industries in setting up their facilities in the State, willing to cater to the growth of Data Centre ecosystem. Government shall act as one of the foremost customers of VLSI, semiconductor chip design and embedded software components by procuring it from companies setting up factory out of the State.

12 Cloud Computing and Emerging Technologies

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

Odisha Government has world class cloud enabled data centres to serve the need of the state Government Departments. It also houses the National Data Centre (NDC) developed by NIC and Data Centres developed by STPI, which also caters the increasing need of computing infrastructure requirement of the state.

To promote entrepreneurial opportunities, substantive 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 this the global trend of shifting from in house deployment of the applications and computing facilities to the cloud, identifies 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 State ICT Policy-2020. 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 State ICT Policy-2020.

- Cloud Computing
- Artificial Intelligence
- Data Analytics
- Internet of Things (IoT)
- Image Processing
- Blockchain
- Cyber Security

- Virtual/Augmented Reality
- 3D Printing
- Robotics
- Unmanned Aerial Vehicles (UAV)

The state Government believes that the rise in adoption of emerging technologies in the state will explicitly increase the demand of data centres. Such increase demand in Data Centres will attract investors for setting up of data centres in the state. The State Government shall partner with the interested industries who will be willing to establish Industry Standard Data Centres in the state and will provide better facilities w.r.t lands, utilities, skilled manpower etc.

The State Government shall offer following facilities to industries/entrepreneur for development of solutions based on the identified areas of the emerging technology in State ICT Policy-2020.

1. Development of technology-based solution for sector specific areas such as Health/Education/Social Security's etc- Incentives as per the applicable policy of that sector and IPR/Start-up/ICT Policy.
2. Setting up of R & D and product innovation Centre of Excellence (CoE) on emerging technologies -Incentives as per Industry Policy, Start Up Policy and ICT policy.
3. Special incentives for Product based development in emerging technologies as per identified policies.

13 Incentives

Fiscal Incentives:

Applicable incentives mentioned in the ICT Policy for IT/ ITES industries shall be applicable for data centre firms. In addition to the incentives mentioned in the Policy, the following incentives shall be provided:

Allotment of Government Land: Government would encourage the Data Centre industries to attain minimum employee strength of 50; the industry will be eligible for applying for Land to build their own facility. Data centre units meeting the following criteria will only be considered for allotment of Land:

Land Area	Minimum Employees
Up to 0.5 Acre	50
Up to 1 Acre	100
More than 1 Acre	100 /Acre

Land would be allotted on payment of land cost as per the applicable IPR.

Building Fees Subsidy: Up to 50% reimbursement shall be made subject to a maximum of Rs.2 lakhs per unit on building fees and Building Plan approval cost as decided by BDA/ H&UD Department.

Electricity Subsidy:

Data centres are measured in two ways - on the power that they consume and the data that they store or process.

Data centre units being industries, for electricity industrial tariff will be applicable. Government will exempt these units from the Electricity Duty, Electrical Inspection fee up to a contract demand of 5 MVA for a period of 5 years from the date of availing power supply for production.

Energy generated by standby Diesel Generator sets up to 1MVA capacity will be exempted from electricity duty.

Internet Bandwidth Subsidy:

Each new Data Centre unit shall be entitled for reimbursement of 50% of internet bandwidth/ leased line charges subject to a maximum of Rs.2 lakhs per year per unit for a maximum period of three years from the date of commencement of data centre. This will be reimbursed against actual bills/utilizations by the Data Centre units.

Patent Filing Costs: The cost of filing and processing a patent application will be reimbursed to data centre start-ups

Government will facilitate IP development by the Data Centre units by reimbursing patent fees on acquisition as per the following table:

Patent Assistance		
Type of IT Unit	Total Limit : 10 Lakhs	Subsidy Limit
R & D/ Product	2 Lakhs/ Patent	75%

For projects of strategic importance, a tailor-made package of incentives shall be designed.

Non-Fiscal Incentives

The Non-Fiscal incentives are the general incentives available to the IT industry, intentionally. The Data Centre units, by virtue of being IT units, would serve global 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 in respect of safety and security of employees.

14 Conclusion

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

The viewpoint of the Odisha is that a Data centre plays a critical role in servicing of various other IT Components of the state. And that's why with this policy, the State is striving to create an enabling regulatory framework and incentives to promote the establishment of international and national data centres, content delivery networks and independent interconnect exchanges in India.