DATA CENTRES POLICY 2016

Information Technology, Electronics &
Communications Department
Government of Telangana

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INTRODUCTION

Nearly 70% of the world's internet traffic passes through Loudoun County, a county located in Virginia, USA, that is roughly one and a half times the size of Hyderabad. It is home to over 60 data centres, 3000 technology firms and over 9 million sft. of data centres are currently operational or under development. Two of the most significant factors that have contributed to its growth story have been robust connectivity, and economical real estate and power. Through this policy, the Telangana Government strives to script such a story within the State.

The world is moving towards more and more digital processes and transformations, increasing the amount of data generated, thereby increasing the data storage capacity required. Additionally, the growth of big data in the recent past is forcing every player, private or public, to focus on data collection for analysis. This is another major demand driver for the data centres industry. By catering to all the specific requirements of data centres and providing them with an attractive business environment, Telangana wishes to tap into this expected growth and attract investments into the State. Further, the investments will also promote the allied activities in the State such as stack manufacturing, cyber security, power etc. This policy will set a clear roadmap on how the State wishes to position itself with respect to data centres and allied activities.

GLOBAL AND NATIONAL CONTEXT

Rapidly-increasing data traffic is driving the data storage, which is resulting in continuous expansion of the global data centre market. The number of web and mobile applications being developed and used is on the rise thereby driving demand for web space. The advent of newer technologies such as data analytics, big data, Internet-of-Things, etc. is increasing the amount of data that is collected and stored. Fueled by these factors among others, the global data centres industry is expected to grow from US$ 14.59 Billion in 2014 to US$ 22.73 in 2019 at a CAGR of 9.3%. A similar trend is expected in India too, as more and more people become digitally enabled every day. Given the population of the country, Governments themselves are becoming major clients to these data centres as services are being shifted online, open data is being promoted, and a data-centric decision making approach is being adopted. According to a Gartner report in October 2015, the growth in India is expected at around 5.2% year-on-year propelling the industry to over US$2 Billion in 2016, fueled by an explosive growth in IaaS and SaaS models.

DATA CENTRE SCENARIO IN TELANGANA AND HYDERABAD

Hyderabad has always been one of the major IT players in the Country, having the second highest IT exports. Also, in the ICT Policy of the State, launched in April 2016, the Government has identified expansion of IT/ITeS units as a focus areas and is taking revolutionary measures in portraying the State as an ideal destination for IT investments. In addition to this, the Government has identified key emerging technologies and has promised policies in the areas of cyber security, data analytics etc. One of the core requirements of all the growth plans of the State is data centres. The State would like to tap into as much of this expected demand growth as possible internally.

Hyderabad, with the presence of large corporates and success of home-grown players, has already demonstrated its potential for attracting investments in the data centres industry. The data centres industry sprouted in the State in around 2008 when CtrlS was founded in Hyderabad. Today CtrlS owns India's first Tier 4 data centre, with a penalty backed SLA of 99.995% uptime. Today, they are Asia's largest Tier 4 data center with over 20,000 racks across 3,00,000 sft in three cities. Reliance, too is one of the largest players in the State and hosts data for the entire Bhutan Government. RuPay transactions, which range in a few crores per day, are also routed through the city's data centres.

However, if tier 2 locations are well-connected to internet and power, they offer significant cost advantages and have the potential to overtake tier 1 cities, especially because of the low manpower requirement of the industry and economical real estate available there. Power and connectivity are the major roadblocks for tier 2 cities such as Warangal stopping them from becoming attractive locations to set up data centres. Nonetheless, once the requisite infrastructure with respect to power and high speed connectivity is ensured, investments will start to pour in.

ADVANTAGE HYDERABAD

Traditionally, coastal areas have been some of the most sought after locations for setting up data centres, due to access to internet landing cables via sea routes. However, there are risks associated with these locations as well; coastal areas are prone to climate threats such as rising sea levels, tsunamis, floods, hurricanes etc. Additionally, with increasing connectivity to inland areas, there is a noticeable trend in data centres being set up in previously unconventional areas deep in land with other advantages such as having 24-hour power supply, being less prone to disasters, having an abundance of land parcels etc.

Hyderabad fits into this category perfectly and strives to capitalize on this changing trend. Hyderabad is already well connected, boasts of high quality infrastructure, large talent pool, is located in one of the least active seismic zones, and has low susceptibility to other natural hazards. These advantages, along with the conducive business environment that is being promoted here, positions Hyderabad as an ideal location for setting up data centres.

VISION: TELANGANA'S OUTLOOK TOWARDS DATA CENTRES

Telangana State has announced significant initiatives in the ICT policy launched on 4th April 2016. One of the major focus areas of the policy has been to identify and promote niche areas such as IoT, AVCG, cyber security, and data analytics. Revolutionary initiatives such as the IMAGE city, data analytics park, T-Hub etc. are already underway and are expected to position Hyderabad as a global player in these areas. Most of these areas are data-intensive and data centres are an integral requirement of these firms.

Understanding that these factors have the ability to spur growth in data centres and are critical for the sustenance of these focus areas, Telangana strives to cater to all this requirement in-house. Although the amount of employment generated through data centres is not as high as the other focus areas, the Government considers this to be an investment in developing a comprehensive eco-system. In addition, the Telangana Government, through its initiatives in open data, data-smart governance, eOffice initiatives etc., will also act as a major client for these centres.

INFRASTRUCTURE

The Government of Telangana has created dedicated state-of-the-art zones for entrepreneurship, gaming and animation, BFSI, etc. Further, the Government has also initiated the construction of Data Analytics Park in the technology business centre of Hyderabad. These focus areas of the Government demand world class facilities and services in the form of high speed connectivity, cyber security products, data centres, etc. for the creation of a highly efficient interlinked mesh of IT/ITES industry components. To complete the IT/ITES macrocosm in the State, the Government of Telangana shall earmark a land parcel in the city for constructing a Data Centres Campus.

The Data Centres Campus, in addition to hosting Government managed data storage facilities, shall cater to companies irrespective of their size and scale. Large companies interested in procuring Government land in the Data Centres Campus can set up their own facility. Small and medium companies, which specialize primarily in servers and racks, shall be provided with built up space equipped with basic infrastructure. Further, every player with presence in the Data Centres Campus shall be provided access to high speed fiber and continuous water supply for heavy duty cooling systems. Further, given the critical nature of data hosted at the Data Centres Campus and the importance of such a centralized facility, the Government shall, at its own cost, take up the responsibility of providing adequate security in and around the campus.

Additionally, to identify Data Centres as a separate infrastructure category, given the sector specific design and construction features, the Government of Telangana shall include Data Centres related infrastructure under the building permission rules. Further, the applications related to building permissions shall be covered under the single window clearance system of TS-iPASS, thus fast tracking approvals.

POWER

Power is of paramount importance to the Data Centres industry. Large data centres with several industry scale applications almost often consume as much electricity as a small town. Hence, it becomes imperative for the Government to ensure continuous availability of quality power at affordable rates for creating an attractive opportunity for data centres in the state. The Government of Telangana shall channel dedicated efforts in this area to ensure the following-

- Given the power heavy investment nature of data centres, and the power deficiency situation that exists across the country, the Government of Telangana shall establish dual power grid networks to ensure uninterrupted quality supply of electricity
- Data Centres shall be permitted to avail renewable energy under open access system from within the state after paying cost component to DISCOMs as fixed by the ERC (subject to maximum of one third of their total power requirements)
- Additional power generation capabilities through captive power sources such as solar and wind 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. Additional details on the same shall be detailed out in the operational guidelines
- 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

BUSINESS AND ENTREPRENEURSHIP

The Government of Telangana understands the importance of private sector in providing a thrust to the ecosystem, and will focus on attracting top performing and promising companies across the spectrum to the State. The Government also understands that the data centres are only as good as the applications that are hosted on them, and shall strive to attract companies developing widely used mobile and web applications to the State and offer competitive packages for data storage.

The Government also realizes the potential of data that is possessed by various departments and allied organizations and the business that it can generate. In order to spur 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 the Data Centres Campus.

In addition to providing business to mid and large scale players, the Government shall also create a payment on success facility for startups requiring virtual machines and data racks. The Government shall create a Startup Data Centre within the Data Centres Campus to promote startups requiring web services. These startups, incorporated in Hyderabad, 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 channeled to larger establishments within the Data Centres Campus.

MANUFACTURING

The Government of Telangana recognizes electronics hardware manufacturing as a propeller for creating a bustling data centres ecosystem in the state. IT industry and electronics hardware manufacturing go hand in hand, and the presence of a local manufacturing industry can ensure smoother procurement of requisite hardware, thus leading to faster growth prospects. The Government of Telangana has launched the Electronics Policy 2016 to promote Telangana as the ideal destination for electronics industry through creation of a sustainable ecosystem. To bolster manufacturing of hardware critical for the growth of data centres, the benefits offered under the Electronics Policy 2016 shall be applicable. Further, the Government shall also create attractive, tailor made packages for companies willing to manufacture data centre stacks in the State. In addition to providing financial incentives and subsidies, the Government shall also be among the primary consumers and procure hardware for the State Data Centre from companies manufacturing components out of Telangana.

CLOUD COMPUTING & EMERGING TECHNOLOGIES

Almost every new-age technology is data intensive and is required to process large packets of data. Telangana, continuing to be a frontrunner in various such emerging technologies as outlined in the ICT policy, identifies data centres as an essential service that forms the backbone of the industry. Moreover, there is a global trend in companies shifting away from in-house facilities for their server and data storage requirements to cloud computing from remote locations. Most IT firms too are updating their products to work on the cloud.

For example, one of the biggest players in the ERP space is currently developing a completely cloud-based ERP system, a fundamental shift from its traditional offering. This trend will only strengthen as more users get digitally connected and will therefore fuel the data centre demand. Hence, it is the need of the hour for the Government to facilitate growth in this segment. In order to do so, the Government of Telangana shall partner with leading organizations in the focus areas identified in the ICT policy to understand their requirements and provide them with access to better facilities.

INCENTIVES

Fiscal Incentives

Relevant incentives mentioned in the GO on Incentives for Expansion of IT/ITeS shall be applicable for data centre firms.

In addition to the IT/ITeS and Innovation Policy, the following incentives shall be provided:

Power: Incentives given to data centres with respect to power consumption have already been detailed out in the section titled 'Power'. Please refer to that section for further details.

Building Rules: Up to 50% rebate shall be given on building fees as decided by CCITI.

Land: Land shall be provided at a subsidized cost as decided by CCITI and concerned ministers.

Promoting Startups/SMEs:

Procurement: Additional preference shall be given to Startups/SMEs for procurement of data centre services by the Government. Separate guidelines will be issued for the same.

Subsidy on Lease Rentals: 25% Subsidy on Lease Rentals up to INR 5,00,000 per annum for a period of 3 years will also be provided.

R&D grants: The Government of Telangana will facilitate to provide specific R&D grants to companies in tune of 10% of overall R&D expenses of the company's Telangana operations or 2% of annual turnover of company's Telangana operations or INR 5,00,000, whichever is lesser.

Internet Costs: Data Centre Startups shall be provided 25% reimbursement on internet charges up to a maximum of INR 2,50,000 per year for the first three years of operation.

Patent Filing Costs: The cost of filing and processing a patent application will be reimbursed to data centre startups subject to a limit of INR 2,00,000 per Indian patent awarded and INR 10,00,000 for foreign patent awarded.

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

Non-Fiscal Incentives

Given below are the general incentives available to the ICT industry, automatically. The Data Centre firms, by virtue of being IT units, are serving global customers on 24x7x365 basis. Therefore, this industry is classified under "Essential Services" and enjoys the following benefits:

1. Data Centre firms are exempt from the purview of the Telangana Pollution Control Act, except in respect of IT parks/IT SEZ campuses with built up area over 20,000 sq.mt., special permissions need to be taken from SEIAA under MoEF.
2. Data Centre firms are exempt from the purview of statutory power cuts.
3. Data Centre firms are exempt from inspections under the following Acts and the Rules framed thereunder, barring inspections arising out of specific complaints. These units are permitted to file self-certificates, in the prescribed formats.
    - The Factories Act, 1948
    - The Maternity Benefit Act, 1961
    - The Telangana Shops & Establishments Act, 1988
    - The Contract Labour (Regulation & Abolition) Act,1970
    - The Payment of Wages Act, 1936
    - The Minimum Wages Act, 1948
    - The Employment Exchanges (Compulsory Notification of Vacancies) Act, 1959
4. General permission for three shift operations with women working in the night.
5. Data Centre Firms are declared as essential service under TS Essential Services Maintenance Act.

CONCLUDING NOTE

To build a robust and sustainable IT ecosystem, any Government should focus on "comprehensiveness," an approach which is usually missing. Many states view data centres as infrastructure but Telangana understands that they play an important role as a service to various other IT components. Identifying data centres as a crucial component and the missing piece to complete the already rich ecosystem here, the State has drafted the Data Centres Policy to plug in the gap and provide to all the stakeholders, a comprehensive IT architecture within the State.

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