

Interview with RANext

RANext is at the forefront of developing a top-tier neutral optical fiber infrastructure, which is rapidly transforming the smart living and urban development landscape. The digital expertise of RANext is revolutionizing residential complexes and cities, enhancing not only their intelligence but also their security. TelecomLive had a conversation with Gopa Kumar Krishna, CEO, RANext, part of the Space World Group.

Tell us about Space World group?

The current era is marked by a surge in data consumption and automation. A robust digital infrastructure is essential, especially in a country like India, where digital payment systems like UPI and the OTT entertainment sector are experiencing exponential growth, and remote work remains prevalent. These factors underscore the necessity of a solid infrastructure for the nation.

Space World is committed to establishing a digital infrastructure platform, aligning with the nation's ambitious five trillion economy goals. Digital infrastructure is anticipated to play a crucial role in the overall economic growth and development.

The Space World Group is strategically positioned to play a significant role in India's progress. The group's companies contribute in various ways to this national journey.

What role RANext technologies play into it?

RANext is dedicated to strengthening in-building



fiber infrastructure. We believe that establishing a digital neutral infrastructure within buildings offers numerous advantages to the entire ecosystem. It's surprising that in a nation like ours, despite the real estate sector offering top-tier services in luxury projects, digital infrastructure or neutral infrastructure has not become mainstream.

In many of the country's properties, you'll find that the shaft areas and other user spaces are cluttered with multiple fiber networks. This lack of a unified network is apparent. We encourage developers to consider: if a single pipeline can serve gas, water, and electricity needs, why should multiple fibers be required for different services within a building? For the average person, this means that currently, each mobile operator must separately provide broadband access within a

building. For instance, if I represent operator A, I would install my network to serve the end customer, followed by operator B and so on.

Take, for example, a building in Gurgaon where RANext has enabled 14 operators to function over a single network. Without this unified approach, the building would have 14 separate networks, each installed in a unique manner. We advocate for developers to adopt a neutral network, which represents the future for both the industry and the end-user.

RANext is deeply involved in creating a neutral network and fiber infrastructure within buildings, allowing multiple service providers to leverage this platform to offer their services to the entire ecosystem, ultimately benefiting the end-user, who is the primary customer.

RANext offers a diverse range of operator choices to buildings. In scenarios where operators might hesitate to service a building due to limited business potential, RANext's presence as a neutral conduit allows any operator to connect, even if it's for a single user. This creates a capital expenditure (CAPEX) free environment for operators and facilitates an easier market entry strategy. Moreover, with the Optical Network Terminal Distribution Method (ONDM), RANext enhances the digital infrastructure within buildings.

What benefits neutral network brings to the digital infrastructure?

A neutral network brings manifold benefits, serving the end customer and providing a competitive advantage. A critical factor is the support of ISPs. RANext has secured agreements with over 100 ISPs across the country, giving it a significant competitive edge.

To my knowledge, no other company has such extensive ISP support. The quality of our network deployment is recognized as one of the best in the industry, which is why ISPs choose to back us. RANext is a large organization with over 230 employees, operating in 20 cities, unmatched in its PAN India presence. Our geographical reach is a major strength.

With a single agreement, ISPs can expand their services to new cities using RANext's network. For instance, a prominent ISP from South India looking to expand to the North has two options: individually install networks in buildings and compete with established players like Airtel and Jio or

partner with RANext, which already has a network in place, allowing for immediate connection and service provision to end customers. RANext's strengths include high-quality network, extensive geographical coverage and strong ISP relationships.

We've expanded our services beyond broadband connectivity. Using the same fiber network, we can provide a suite of services including intercoms, video door phones, surveillance systems, smart meters, parking management and boom barriers. We've undertaken numerous projects, the most recent being with L&T in Mumbai, where we're the exclusive provider of end-to-end digital services on a fiber network.

How do you see the adoption of 5G/6G technologies? Do we have enough to cater the demand going to come from these emerging technologies?

The adoption of 5G and 6G technologies is on the rise and the device ecosystem is evolving to meet the demands of these technologies, requiring increased bandwidth. For instance, fully automating a home in a 6G environment necessitates a robust fiber backbone, which is essential for 5G as well, since it relies on microcells supported by fiber.

RANext is well-prepared for these technological advancements. We plan digital infrastructure with a long-term vision of 30 to 40 years. Once fiber is installed and the building is completed, there's no feasible way to retrofit the network without significant disruption. Therefore, our agreements with developers are for a minimum of 20 years, ensuring a lasting digital infrastructure.

RANext operates within three key segments of the real estate world: residential areas, commercial malls, and tech parks. We have a presence in numerous malls, recognizing the growing importance of digital connectivity in these spaces. Our third focus is on tech parks and office complexes that host companies like Microsoft, Bank of America, and Infosys. Nearly 75 multinational brands rely on RANext's infrastructure for their network needs.

What are the challenges faced by you during the design and implementation of fiber infrastructure? How do you overcome that?

One of our initial challenges was changing the mindset about the need for a neutral network. It took nearly 20 months to convince our first customer, a building owner, of the benefits. Even with top-tier architects and consultants, such as those working with Oberoi, we had to demonstrate that a neutral network is the future. Once convinced, Oberoi quickly adopted the concept for eight buildings.

After overcoming the initial resistance, the next challenge is the physical integration of the infrastructure. Buildings are typically designed with utilities like electricity, water, and gas in mind, but not for fiber networks. Our solution involves core cuttings—a specialized task requiring skilled labor to drill through the building, often from external manholes to the interior. For instance, with DLF, we had to navigate municipal regulations and civil engineering challenges to lay the fiber from the main road to the building.

Another challenge arises when only one operator seeks to connect to a building with many flats, such as a 500-unit complex dominated by two major service providers. If a new customer prefers a different operator, like Vodafone, the cost of setting up a separate network for a single connection is prohibitive.

We also face the task of allocating fiber in a way that's financially & logistically demanding. We aim to facilitate a shift in tenants from the dominant providers to new ones, ensuring a fair market share among operators. Supporting multiple operators, even those with a small market share, is another hurdle. Our robust network must accommodate all service providers.

Lastly, we contend with the legacy of cable operators who are accustomed to monopolies and resist the introduction of a neutral network. This resistance can lead to threats of damage to our infrastructure, especially in areas where these operators have historically dominated, such as Pune, Thane, and the outskirts of Kolkata and Lucknow. As a result, we often find ourselves in conflict with local operators and authorities.

Do you cater to only green field projects?

RANext serves both greenfield and brownfield projects. Greenfield projects offer a more favorable environment as we can be involved from the early stages of development.

In brownfield environments, we encounter space constraints and the need for technological upgrades. Many existing buildings, wired with copper that supports up to 40Mbps, require an upgrade to fiber to enable 1Gbps bandwidth. This transition is challenging, particularly in occupied buildings where residents are already settled. Our approach is to carefully plan and execute the upgrade with minimal disruption to the current occupants.

Apart from the top cities from where does you see the demand of fiber is coming?

RANext is strategically focused on high-rise buildings, which are becoming a prevalent form of development in cities of all tiers. While flat-based residential accommodations are popular, our business model is centered on high-rises due to their unique digital infrastructure needs. Our operations extend to malls, tech parks, and office buildings, where the potential for business growth is substantial. With the emergence of data centers in Class C cities, it's clear that India's growth is not limited to urban areas but is also thriving in semi-urban and rural regions. Currently, RANext has a presence in 20 cities, which, while not the largest, are significant in the digital landscape.

What are your future growth strategies and expansion plans?

Looking ahead, RANext aims to be one-stop solution for all digital infrastructure needs within a building. We intend to be an integral part of any digitalization effort, whether as direct service provider or as a key player in supporting ecosystem. Our expansion plans are ambitious, with a goal to establish a presence in 50 cities across India. Furthermore, leveraging our global product, we are considering opportunities to expand our operations beyond India. This global vision aligns with our commitment to being at the forefront of digital infrastructure development.