



## REQUEST FOR INFORMATION

**RELATED TO COMMUNICATIONS INFRASTRUCTURE AND  
ASSOCIATED INITIATIVES AT JOHN F. KENNEDY INTERNATIONAL  
AIRPORT**

**RFI RESPONSE DUE DATE: 2:00 P.M. EST, January 26, 2023**

**STRATEGIC PROCUREMENT ADVISOR:**

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Procurement Department  
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## **I. PURPOSE OF THIS REQUEST FOR INFORMATION (RFI)**

The purpose of this Request for Information ("RFI") is to determine market interest to design, build, finance, operate, maintain, or a combination thereof, the communications backbone infrastructure to serve the Central Terminal Area ("CTA") and Non-Central Terminal Area ("Non-CTA") cargo area nodes of John F. Kennedy International Airport ("**JFK**" or the "**Airport**"). The infrastructure will support systems that contribute to the provision of a world-class customer experience at JFK and shall be designed with flexibility to accommodate multiple and varied service offerings.

In addition, the Port Authority of New York and New Jersey ("Port Authority") is seeking ideas to promote and achieve broader community relation objectives of the redevelopment of JFK ("JFKR"), within the context of the scope of work summarized in Attachment A of this RFI. These objectives include, for example, the promotion of opportunities of local, minority-, women-owned, and service-disabled veteran-owned businesses in the redevelopment of JFK; connecting local residents to employment opportunities at JFK; enhancing education in the aviation and STEM (Science, Technology, Engineering and MATH) fields.

Section VII below includes questions that should be addressed in responses to this RFI. These questions pertain mainly to the Communication Backbone Providers.

This RFI is an inquiry only and seeks ideas and information from firms that specialize and have experience in designing, building, financing, operating and maintaining communications infrastructure ("Respondents"), either as a Communications Backbone Provider or as providers of similar services.

## **II. BACKGROUND INFORMATION**

### **JFK International Airport**

JFK is one of the busiest airports in the nation and is an indispensable part of global travel and the region's economy. The Airport handles nearly 62 million passengers a year, supports 280,000 jobs, including 41,000 airport jobs, and generates more than \$51 billion in sales and \$17.1 billion in wages. It is an essential component of the world's air transportation system and a regional economic driver. Located approximately 16 miles southeast of Midtown Manhattan, across 4,930 acres in Jamaica, Queens, JFK is the primary international airport serving New York City, and is the busiest international passenger gateway in North America. In 2018, the Airport generated \$51.3 billion in total revenue for the region, resulting in 279,000 jobs. Passenger growth is expected to dramatically increase as New York's economy continues to grow, with 75 million annual passengers expected by 2030 and 100 million passengers expected by 2050.

On October 4, 2018, the Port Authority announced a \$13 billion plan to transform JFK into a world-class, 21<sup>st</sup> century airport. This investment will reposition JFK as an interconnected, modern airport anchored by two new international terminal complexes with expanded taxiway and gate capacity, state of the art security and streamlined roadways.

Once completed, the transformed JFK (New JFK) will provide an outstanding world-class experience to customers, optimized land and airspace use, expanded economic opportunities for the Borough of Queens and the region, and continued economic development for our neighbors through job creation, and environmental stewardship of local wildlife and preservation of recreation.

The New JFK will feature:

- Unified terminal layout
- World-class amenities
- Redesigned on-airport traffic pattern
- Centralized ground transportation options
- Expanded taxiways and gate capacity
- State-of-the-art security
- Technology driven airport facilities
- Redevelopment of cargo handling facilities

The maps below (Figures 1 and 2) show a graphical representation of the existing Airport configuration, with access roads and major areas identified, as well as a view of the CTA.

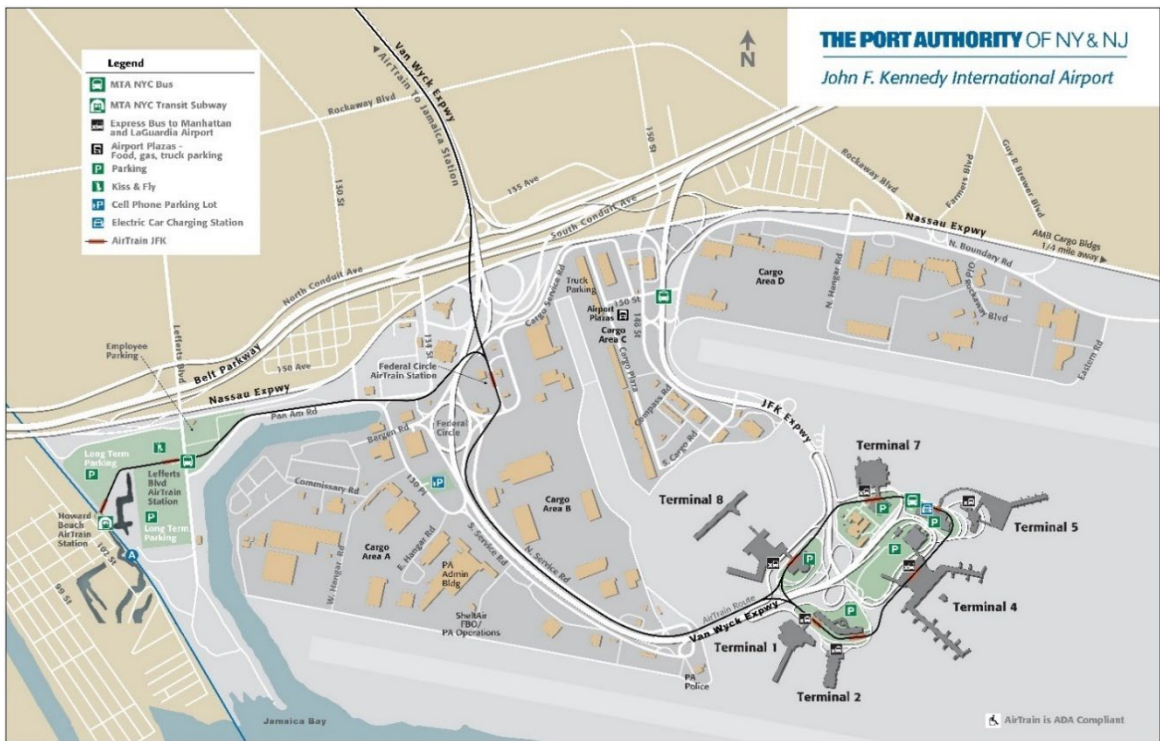


Figure 1: John F. Kennedy International Airport-Existing Conditions

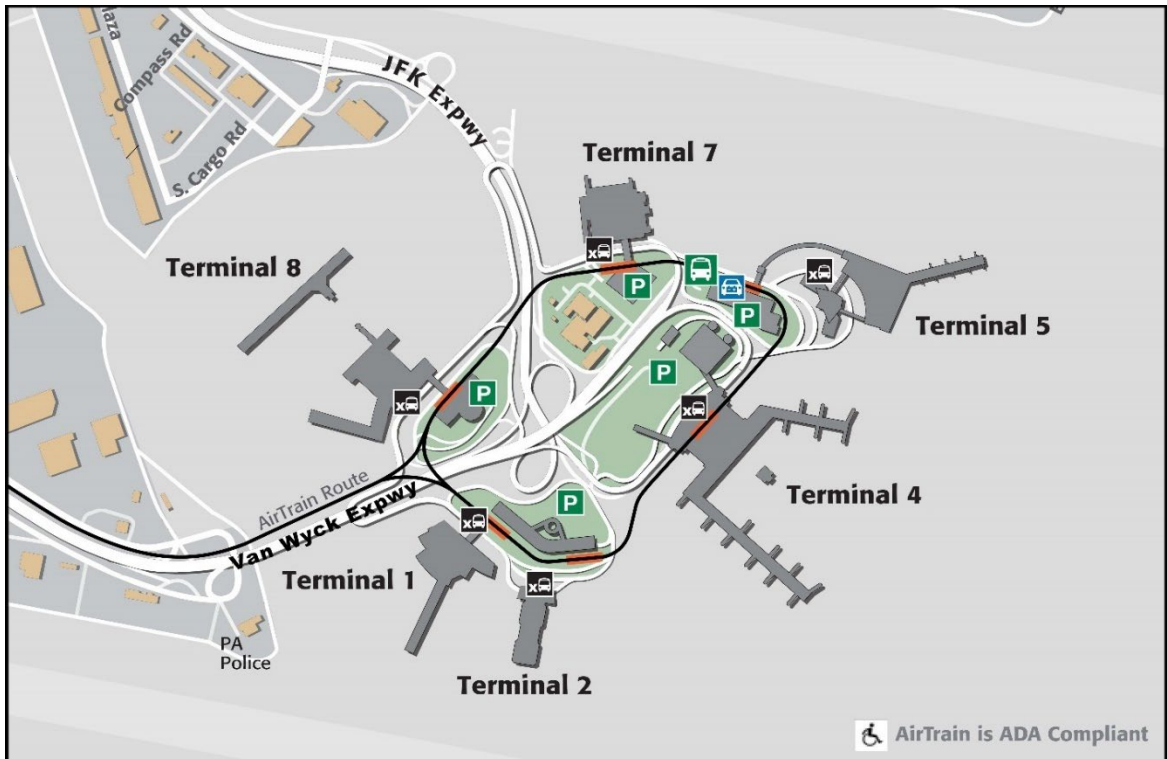


Figure 2: Central Terminal Area at John F. Kennedy International Airport-Existing Conditions

### The Communications Backbone Opportunity

As part of the New JFK plan, the communications backbone infrastructure is forecasted to serve over 85 million annual passengers within the next 20 years that transit through the CTA as well over 25,000 employees and a wide variety of systems that keep the Airport operational.

The current Port Authority network infrastructure fiber has been in existence for up to 30 years and copper wires have been in existence for up to 70 years. There are multiple facilities-based service providers operating independently, but within the Port Authority conduit and aerial systems. The Port Authority runs a critical wide area network PAWANET, using services provided by several communication carriers, as well as a Port Authority-owned fiber-optic cabling.

The Port Authority maintains numerous roles within the communications ecosystem at the Airport, such as:

- the real estate landlord for the entire Airport with leases having been issued for certain areas defined by “Metes and Bounds”.
- provider of access rights for utilities, including communications access rights whereby conduit and telephone systems have been built to support the Port Authority’s, lease holders’ and their sub-tenants’ service requirements.
- participant as a utility occupant and maintainer of a fiber-optic based ethernet network that it owns and operates as the PAWANET.

- operator of “micro data centers” on the Airport grounds that serve as communication vaults.

The Port Authority has determined that the existing cable and network infrastructure is inadequate in its ability to sustain connectivity for the anticipated future demands of end users as a result of terminal renovations. The need for improved and unified network connectivity at JFK has been apparent, including the need for a Communications Backbone Provider to manage and maintain system documentations. Respondents to this RFI should also consider Non-CTA areas in that there are network vaults located in various areas in the Non-CTA areas. Consideration for the non-CTA is required).

The future unified communications backbone should provide a solid network performance with exceptional flexibility, reliability, redundancy, resiliency, scalability, and security. The system must be able to withstand anything from a planned system outage to unexpected outages and at the same time be reliable, secure, and flexible to accommodate multiple networks and, future growth.

The communications backbone infrastructure is expected to serve all of the Airport's terminals and structures and non-CTA cargo areas. The interior portion of the CTA is bounded by the terminal access roads and totals approximately 50 acres. The total CTA, inclusive of the terminals, ramp and apron areas, roadways, and public parking facilities, totals approximately 880 acres.

The backbone infrastructure may utilize a combination of underground duct bank infrastructure and the existing AirTrain JFK guideway crawlspace (subject to the approval from the Port Authority and the AirTrain JFK operator and maintainer, based on the proposed solution) to accommodate a new fiber ring within the CTA as well as potential wireless communications for network redundancy.

Respondents to this RFI are encouraged to consider another option for vendors to include new fiber backbone outside the CTA for potential market or private vendor needs in and out of the Airport.

Due to the scope and scale of the CTA project and connection to non-CTA communication vaults, the Respondents should also consider the complexity of working to obtain different service level requirements of each airlines IT group, the Technology Department of the Port Authority, and all systems stakeholders prior to the design of the Communication infrastructure.

### III. SUBMISSION PROCESS AND TIMING

Responses to this RFI are due on the Response Due Date and time conveyed on the cover page of this RFI.

Note that, in addition to this RFI, any potential future Request for Qualifications (RFQs) will be publicly advertised. Any potential Request for Proposal (RFPs) will be issued only to firms qualified under the RFQ(s).

Each Respondent must email a .PDF copy of its response to Robert Chase Palmer at [ropalmer@panynj.gov](mailto:ropalmer@panynj.gov) no later than the Response Due Date and time conveyed on the cover page of this RFI. The subject line should clearly indicate the transmission is in response to this RFI listed on the cover page. Exclude any images in your response that could complicate the easy dissemination of your response. In addition, do not provide marketing materials.

The Response must also include or identify:

- Transmittal Letter / Executive Overview
- The name, address, and URL of the Respondent
- Contact information (name, title, email, telephone number) of the individual who shall act as the Respondent's contact with the Port Authority for further information requests and future solicitations, if any. In addition, at any time after the opening of the responses to the RFI, the Port Authority may request additional information relating to the Respondent's qualifications and will use this individual as the point of contact for these queries.
- A brief description of the Respondent, its lines of business, organization, mission, affiliates, objectives, location, years in business under its present business name, and a list of previous business names used, if any.
- A signed copy of Attachment B (*Agreement on Terms of Discussion*) hereof.
- Responses to questions/requests for information in Section VII (Questions for Respondents) and in Attachment A
- A description of the Respondent's experience, and a record of accomplishments, in the communications backbone infrastructure of similar size, complexity, and scale. This should include projects in which your firm participated as a Communications Backbone Provider (or as part of a joint venture, a special purpose vehicle, or other form of a consortium), and should identify your firm's level of participation in, for example, planning and design, development and construction, investment, ongoing operations and maintenance, etc. for the respective projects.

#### **IV. QUESTIONS**

Any questions by prospective Respondents concerning this request must be addressed by email to the Strategic Procurement Advisor listed on the cover page of this RFI.

#### **V. MEETINGS WITH SELECT RESPONDENTS**

At any time after the receipt of responses, Respondents may be asked to attend an informal discussion with Port Authority staff and their advisors regarding further clarification of the response or for additional information. The Port Authority may, based on review of submitted material and other information gathering, elect which Respondents with whom it wishes to meet. To facilitate the candid free flow and exchange of ideas and information, the Port Authority intends to meet with Respondents separately. The Port Authority will communicate the date, time, place and objectives of the meetings in due course. At this time, meetings are anticipated to occur at some time subsequent to the issuance of this RFI.

#### **VI. QUESTIONS FOR RESPONDENTS**

Responses to this RFI should address the following questions in addition to the scope specific questions that can be found in Attachment A: Scope of Work:

##### ***Technical Questions***

- a. What best practices would you recommend the Port Authority follow in the design, construction, operation, and maintenance of the project? Please use examples drawn from existing facilities and experience where possible.
- b. Besides a fiber optics backbone, what other best practices would you recommend as an approach to address the Port Authority's communications infrastructure challenges?
- c. How do you plan to adjust to Airport growth and changes in technologies over the concession period? Provide specific strategies or solutions, and from what best practices and other world-class facilities might these be drawn?
- d. Pertaining to project delivery, identify and prioritize risks (contract, project, schedule, etc.) and recommendations for mitigating such risks, and describe any necessary and ideal interaction and coordination between the developer and the Port Authority. Identify the top obstacle in the design, cost and time constraints as categories for implementing this scope of work and how do you plan to resolve them?
- e. What do you believe would be an ideal contracting structure for this project with respect to development, construction, and operation firms? What other project structures or options could be contemplated?
- f. What type of O&M responsibilities do you envision? With regard to Maintenance, what would be a reasonable response time?



- g. How might a Communications Backbone Provider proposal impact existing operation at the Airport? How might these impacts be mitigated? Evaluating the existing Terminal Tenants lease contracts to determine how much of an increase for this service shift, could also prove noteworthy.
- h. What type of asset management framework do you envision to manage the Communications Backbone as a portfolio of assets within JFK Airport? With regard to asset inventory data, what strategies would be ideal for managing the Communications Backbone and what technologies would be used to produce data analytics that support Port Authority asset management goals?
- i. Within the solution you are envisioning, what resource (fiber, networking, data center, etc.) management systems and processes would you implement to ensure accurate records are maintained and ensure management of appropriate capacity to serve airport needs?

***Financial and Commercial Questions***

- a. What types of revenue streams would a Communications Backbone Provider envision as part of this project? Consider breakdowns in general terms between various commercial components, including type and counterparty.
- b. What types of partnerships or contracting arrangements, if any, might a Communications Backbone Provider contemplate for the funding or financing of this project? What types of financing instruments would Communications Backbone Provider anticipate utilizing for this project?
- c. What type of financial compensation would a Communications Backbone Provider provide to the Port Authority? Consider upfront payments and ongoing fixed and variable payments.
- d. How long of a lease term would a developer require for this project? The current Port Authority lease with the City of New York expires December 31, 2060.
- e. During operations and maintenance phases, how would the communication backbone provider and user interact to maintain the continuity of the communication system and ensure that it remains “state of the art”?
- f. How would financing and revenues be structured in order to provide maximum equitable returns to you and the Port Authority (e.g. waterfall arrangements).
- g. What derivatives of a commercial model and contract durations would allow for maximum revenue and flexible terms?
- h. How should the agreements between the carriers/users and the Communications Backbone Provider be structured, while maintaining equitable conditions, and incentives for all? (The agreements need to emphasize the level playing field and must be structured in a way to ensure that all service providers will be treated equally and to promote fair business practices and open competition).

- i. What type of uses do you believe will be best supported by the communications backbone infrastructure? Provide your rationale and assumptions, including those that would form your base business or economic approach.
- j. What type of unique or unmet needs might a Communications Backbone Provider consider when developing the communications backbone infrastructure to enhance the overall Airport? The provider should consider that this CTA focused agreement could eventually expand to the entire Airport. Also, consider the current needs and those that would be applicable given the forecasted growth in passengers as well as changes in technology.
- k. How might a Communications Backbone Provider ensure a strong MBEWBE, SDVOB and Local Business Enterprise (LBE) presence? Provide any leading practices that might be utilized for outreach and recruitment.

## **VII. GENERAL**

- A. The Port Authority reserves the right to conduct interviews, issue a solicitation for a proposal, or to perform none of the above.
- B. Neither the expression of your organization's interest, nor the submission of your response to the RFI and any documents or other information supplied by you, nor any correspondence, discussions, meetings or other communications between your organization and the Port Authority, shall impose any obligation on the Port Authority. The Port Authority shall have no obligation to any Respondent. The Respondent's costs of participation in or information preparation are not compensable.
- C. At any time, in its sole discretion, the Port Authority may, by written addenda to this RFI, modify, amend, cancel, and/or reissue this RFI. If an addendum is issued prior to the date Information is due, it will be made available on the following website: <https://www.panynj.gov/port-authority/en/business-opportunities.html>
- D. Information submitted in response to this RFI is not generally considered confidential or proprietary. All information contained in the Information is subject to the "Agreement on Terms of Discussion" attached hereto as Attachment A.
- E. All materials submitted in response to or in connection with this RFI shall become the property of the Port Authority.
- F. No Respondent shall have any rights against the Port Authority arising from the contents of this RFI, the receipt of Information, or the incorporation in or rejection of Information contained in any response or in any other document. The Port Authority makes no representations, warranties, or guarantees that the information contained herein, or in any addenda hereto, is accurate, complete, or timely or that such information accurately represents the conditions that would be encountered during the performance of any subsequent contract, if any. The furnishing of such information by the Port Authority shall not create or be deemed to create any obligation or liability upon it for any reason whatsoever and each Respondent, by submitting its information, expressly agrees that it has not relied upon the foregoing

information, and that it shall not hold the Port Authority liable or responsible therefore in any manner whatsoever.

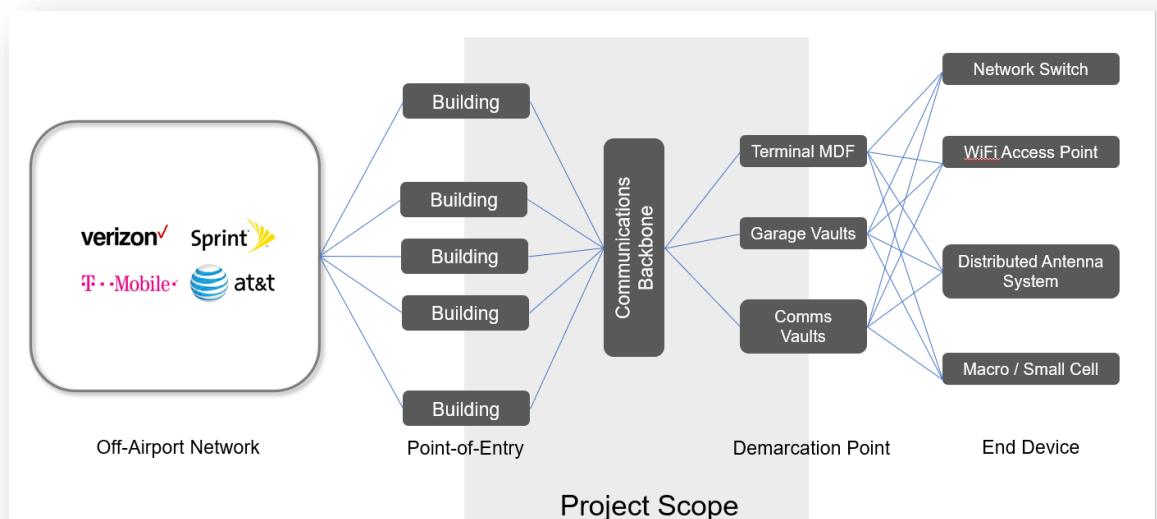
- G. Neither the Commissioners of the Port Authority, nor any of them, nor any officer, agent or employee thereof shall be charged personally with any liability by a Respondent or another or held liable to a Respondent or another under any term or provision of this RFI or any statements made herein or because of the submission or attempted submission of information or other response hereto or otherwise.

## ATTACHMENT A: SCOPE OF WORK

### VIII. Communications Backbone

#### **Scope**

The CTA is expected to be served by multiple providers at multiple points-of-entry. The Communications Backbone Provider will be responsible for connectivity between point of entry to the demarcation point at various CTA locations as shown in Figure 3. The provider is expected to be responsible for the physical infrastructure within the project scope, which includes but is not limited to fiber-optic and copper cabling, wireless infrastructure, duct banks, conduits, raceways, manholes etc.



*Figure 3: The Communications Backbone Project Scope*

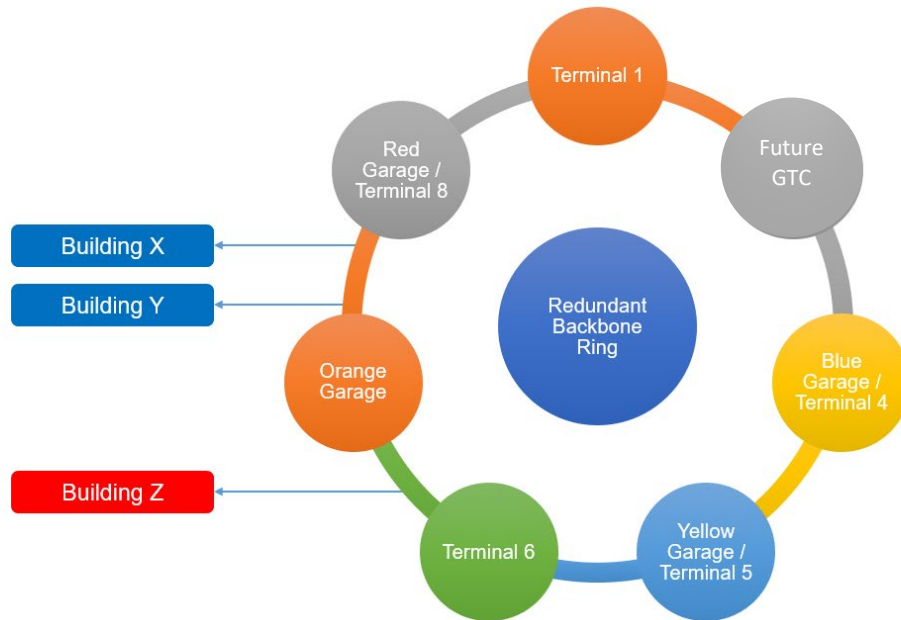
#### **Finance**

The Communications Backbone Provider will be responsible for the financing during the construction, operational, and maintenance phases of the project. The Port Authority welcomes ideas, concepts and models for commercial arrangements such as leasing options, service agreements and subscriptions to suit the various users at the airport. During any potential RFP process, Proposers will be encouraged to collaborate with potential users such as terminal developers, wired service providers, wireless cellular providers, airlines, federal agencies, and others while identifying potential options and solutions.

The project is expected to be profitable and financially viable. As such, the Port Authority expects related development, construction, operating, and maintenance costs to be the responsibility of the Communications Backbone Provider. The Port Authority expects revenue from the Communications Backbone Provider in the form of fixed annual rent with annual escalations as well as variable rent based on a percentage of revenues. Rates and other terms will be subject to negotiation.

## **Design and Build**

The Communication Backbone Provider will develop design alternatives (including wireless communications), obtain stakeholder approvals, and build a passive infrastructure such as duct banks, fiber optic cabling, and cooper cabling to support legacy applications as well as meet future demands.



*Figure 4: Backbone Fiber Ring at CTA*

Given the scope and size of the project, it is anticipated that development may occur in multiple phases based on the growth of the Airport and technological changes. Respondents are encouraged to express interest and present ideas for as much of the overall long-term plans and strategies as considered feasible and advantageous, whether in a single phase or across multiple phases.

The design and build component of the works will take place in parallel with other design and build efforts and will require close coordination by the Communications Backbone Provider with third parties. Respondents to this RFI should also consider the complexity of working to obtain different service level requirements of each airline's IT group, Port Authority IT, Service Provider QOS and all systems stakeholders prior to the design of the Communication infrastructure.

## **Operation and Maintenance**

The Communications Backbone Provider will be responsible for the management, sub-leasing, revenue collection, debt funding, operations, and maintenance of the communications backbone fiber ring infrastructure within the project scope. Accordingly, the Communications Backbone Provider is expected to propose a set of its own lease rates and terms. The Port Authority will retain certain leasing approval rights focused on

ensuring fair value and meeting the security requirements and overall goals of the Airport. The Communications Backbone Provider will maintain the backbone communication services under a long-term agreement.

### Organizational Structure

JFK is currently being provided communication services by multiple commercial carriers. These carriers utilize the existing underground duct bank system to extend the necessary telecommunications services to customers within the boundaries of the Airport. All air transportation carriers utilize services from these service providers. Additionally, the Port Authority, Fire Department of New York (FDNY) Federal Aviation Administration (FAA), US Customs and Border Protection (CBP), Transportation Security Administration (TSA), and other onsite customers are provisioned to use this duct bank system.

The communications backbone is a critical infrastructure, and the Communications Backbone Provider will be responsible for the fiber ring at the CTA loop and will be encouraged to develop fiber lease and service agreements with service providers; a diagram of expected responsibilities is shown in Figure 5. The Communications Backbone Provider will be required to treat all service providers equally to ensure fair business practices and promote competition, including any subsidiaries or parent entity of the backbone provider (i.e. the same agreements are to be used for any parties using the infrastructure).

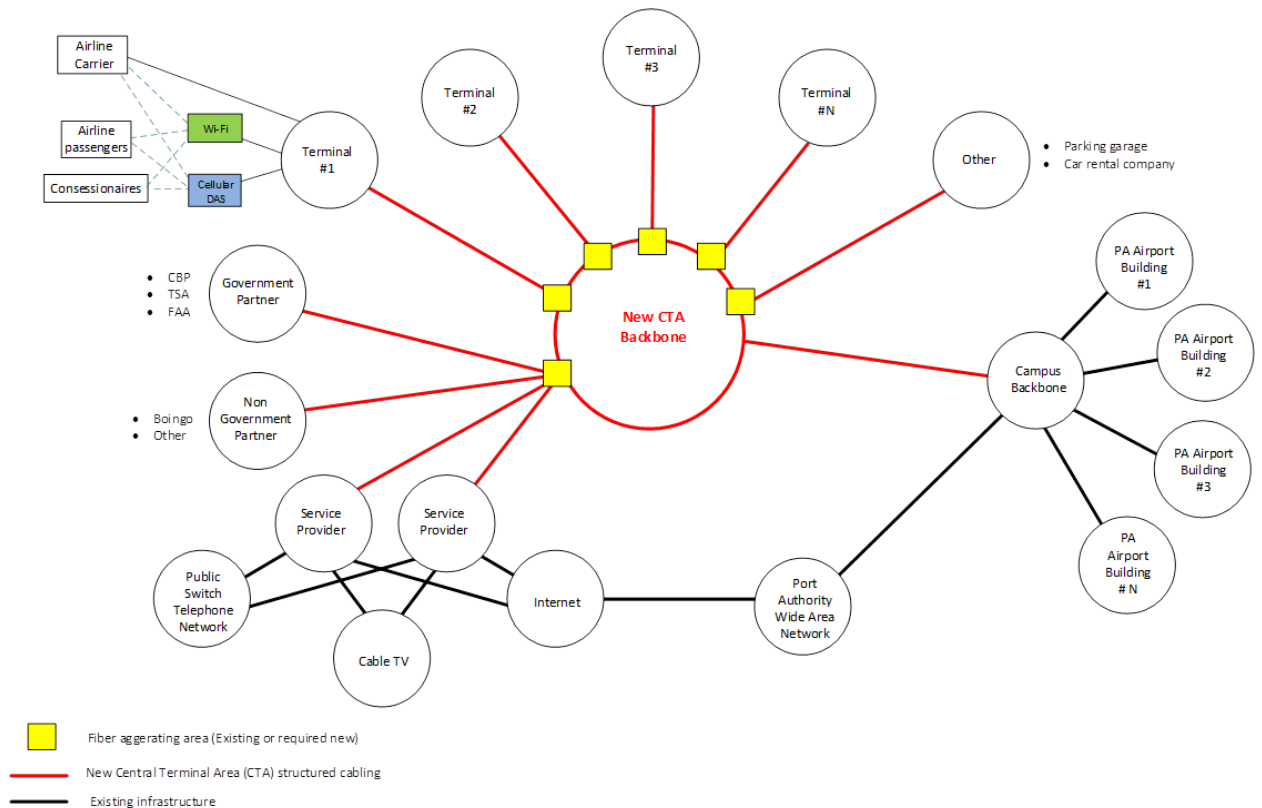


Figure 5: Backbone Provider Responsibility

### Design and Development Considerations

The Communications Backbone Provider must work with the carrier, terminal developers and other service providers to migrate existing communication services from the existing infrastructure to the new backbone. There is currently a fiber backbone ring in place utilizing various access points.

The Communications Backbone Provider may propose a brand-new passive fiber ring utilizing a mix of the AirTrain guideway and duct banks crawl space to run the fiber within the CTA and will be required to provide any additional pathways, access, auxiliary power and the like to support it. At designated fiber infrastructure aggregation points the Communications Backbone Provider will bring down the fiber to a ground level vault, which will act as an Edge Data Center (EDC). The EDC may be within the terminals, or standalone. At this time, it is anticipated that the EDC will be within the scope of work for the Communications Backbone Provider. From the EDC, fiber will be distributed horizontally (typically) to a terminal colocation area/hub, or Port Authority hub, by the respective service providers. The EDC will contain the termination patch panels for the backbone fiber.

For horizontal work within a terminal lease line, the design, installation and cost responsibility will be with the terminal developer for the provision of pathways. For the portion of works from the lease line to any Port Authority hub or transition point the pathway will be undertaken by the Port Authority or its appointed contractor.

In summary, all pathways above ground will be provided by the Communications Backbone Provider, and all horizontal below grade pathways are by the respective lease holders, and all fiber contained within is by the Communications Backbone Provider, which will be required to coordinate with the respective parties during all stages of design and construction.

The Communications Backbone Provider must work within the constraints of the JFKR project schedule during project planning and will be responsible for maintaining operation continuity for any portion of the current system affected by the works.

**ATTACHMENT B: Agreement on Terms of Discussion**

The Port Authority's receipt or discussion of any information (including information contained in any proposal, vendor qualification(s), ideas, models, drawings, or other material communicated or exhibited by the Respondent or on the Port Authority's behalf) shall not impose any obligations whatsoever on the Port Authority or entitle the Respondent to any compensation therefor (except to the extent specifically provided in such written agreement, if any, as may be entered into between the Port Authority and a Respondent). Any such information given to the Port Authority before, with or after this Agreement on Terms of Discussion ("Agreement"), either orally or in writing, is not given in confidence. Such information may be used, or disclosed to others, for any purpose at any time without obligation or compensation and without liability of any kind whatsoever. Any statement which is inconsistent with this Agreement, whether made as part of or in connection with this Agreement, shall be void and of no effect. This Agreement is not intended, however, to grant to the Port Authority rights to any matter, which is the subject of valid existing or potential letters patent.

Any information (including information contained in any proposal, vendor qualification(s), ideas, models, drawings, or other material communicated or exhibited by us or on our behalf) provided in connection with this procurement is subject to the provisions of the Port Authority Public Records Access Policy adopted by the Port Authority's Board of Commissioners, which may be found on the Port Authority website at: <http://corpinfo.panynj.gov/documents/Access-to-Port-Authority-Public-Records/>. The foregoing applies to any information, whether or not given at the invitation of the Port Authority.

\_\_\_\_\_  
(Company)

\_\_\_\_\_  
(Signature)

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(Title)

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(Date)

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