

# FirstNet Authority's Lack of NPSBN Contract Oversight for Coverage Puts at Risk First Responders' Ability to Serve the Public Effectively

FINAL REPORT NO. OIG-24-026-A

JUNE 5, 2024




U.S. Department of Commerce  
Office of Inspector General  
Office of Audit and Evaluation



June 5, 2024


**MEMORANDUM FOR:** Alan Davidson  
Assistant Secretary of Commerce for Communications and  
Information and NTIA Administrator  
National Telecommunications and Information Administration

Joseph M. Wassel  
Executive Director and Chief Executive Officer  
First Responder Network Authority

**FROM:**   
Arthur L. Scott, Jr.  
Assistant Inspector General for Audit and Evaluation

**SUBJECT:** *FirstNet Authority's Lack of NPSBN Contract Oversight for Coverage  
Puts at Risk First Responders' Ability to Serve the Public Effectively*  
Final Report No. OIG-24-026-A

Attached is our final report on our audit of Nationwide Public Safety Broadband Network coverage. Our audit objective was to determine whether the First Responder Network Authority (FirstNet Authority) is ensuring that AT&T is achieving the desired results for network coverage for each state and territory.

We found that FirstNet Authority did not independently verify AT&T's coverage reports before issuing \$ million in performance-based payments.

On April 1, 2024, we received the National Telecommunications and Information Administration's (NTIA's) response to our draft report. In response to our draft report, NTIA concurred with all our recommendations and described actions it intends to take to address them. With its response, NTIA provided an addendum with FirstNet Authority's comments on the draft report. Additionally, FirstNet Authority provided technical comments regarding the draft report. We reviewed NTIA's and FirstNet Authority's responses and comments and made minor changes to the final report where appropriate. Per requests made by FirstNet Authority, we have redacted certain business sensitive information and/or information otherwise protected from disclosure from the public version of this report. NTIA's formal response and FirstNet Authority's addendum are included in this final report as Appendix C. At AT&T's request, we met with AT&T representatives on May 9, 2024, for a listening session regarding their concerns about the issue reflected in this report.

Pursuant to Department Administrative Order 213-5, please submit to us an action plan that addresses the recommendations in this report within 60 calendar days. This final report will be

posted on our website pursuant to the Inspector General Act of 1978, as amended (5 U.S.C. §§ 404 & 420).

Pursuant to Pub. L. No. 117-263, Section 5274, non-governmental organizations and business entities specifically identified in this report have the opportunity to submit a written response for the purpose of clarifying or providing additional context to any specific reference. Any response must be submitted to Analee Striner-Brown, Division Director, at [astriner-brown@oig.doc.gov](mailto:astriner-brown@oig.doc.gov) and [OAE\\_ProjectTracking@oig.doc.gov](mailto:OAE_ProjectTracking@oig.doc.gov) within 30 days of the report's publication date.

The response will be posted on our public website at <https://www.oig.doc.gov/Pages/Audits-Evaluations.aspx>. If the response contains any classified or other non-public information, those portions should be identified as needing redaction in the response and a legal basis for the proposed redaction should be provided.

We appreciate the cooperation and courtesies extended to us by your staff during our audit. If you have any questions or concerns about this report, please contact me at (202) 577-9547 or Analee Striner-Brown, Director for Telecommunications, at (202) 893-8759.

#### Attachment

cc: Stephanie Weiner, Acting Chief Counsel and Audit Liaison, NTIA  
Josephine Scarlett, Senior Attorney Advisor and Audit Liaison, NTIA  
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# Report in Brief

June 5, 2024

## Background

The First Responder Network Authority (FirstNet Authority) was established within the National Telecommunications and Information Administration (NTIA) to ensure a Nationwide Public Safety Broadband Network (NPSBN) was established. FirstNet Authority provided information to each state and territory that specified its plan to build a radio access network (RAN) in each area. States and territories were responsible for determining whether to build their own RANs or allow FirstNet Authority to build them.

In March 2017, FirstNet Authority signed a 25-year contract with AT&T to establish the NPSBN, with a contract ceiling of up to \$100 billion and three task orders (TOs). By January 2018, all states and territories had opted to allow AT&T to build the RANs, and FirstNet Authority issued TO 4 for that purpose.

To comply with contract milestones, AT&T had to achieve 95 percent of its planned coverage for Band 14 (the dedicated spectrum for public safety) in rural and nonrural areas by March 2022 and 100 percent coverage by full operational capability in March 2023.

## Why We Did This Review

We announced two concurrent audits to determine whether FirstNet Authority is ensuring that AT&T is achieving the desired results for (1) device connection targets for each state and territory and (2) network coverage for each state and territory. We separated these objectives into three components that include (1) the evolution of the desired results for device connection targets and network coverage as executed through contract modifications, (2) oversight of device connection targets, and (3) oversight of network coverage. This report focuses on the third component: FirstNet Authority's oversight of network coverage.

## FIRST RESPONDER NETWORK AUTHORITY

### FirstNet Authority's Lack of NPSBN Contract Oversight for Coverage Puts at Risk First Responders' Ability to Serve the Public Effectively

OIG-24-026-A

## WHAT WE FOUND

Overall, we found that FirstNet Authority did not adequately assess AT&T's performance to ensure that it met the desired results for coverage in each state and territory. Specifically, FirstNet Authority did not independently verify AT&T's coverage claims to ensure accuracy before issuing performance-based payments. Consequently, FirstNet Authority cannot report with reasonable assurance that AT&T's coverage reports are reliable and accurate—resulting in uncertainty as to whether or not (1) AT&T met network coverage requirements and (2) the government received the services for which it paid. As a result of the internal control deficiencies regarding the lack of independent verification of coverage claims for performance-based payments, we are questioning those payments as unsupported costs.

## WHAT WE RECOMMENDED

We recommended that the Assistant Secretary of Commerce for Communications and Information and NTIA Administrator direct FirstNet Authority's Chief Executive Officer and Chief Procurement Officer to

1. Modify the NPSBN contract quality assurance surveillance plan (QASP) for TO 4 to include all items necessary for adequate contractor performance, the method used to measure each item, and any necessary details to perform adequate contract surveillance.
2. Modify the NPSBN contract QASP for TO 4 to ensure that it includes surveillance activities for all work requiring surveillance and contains measurable performance standards as required by Federal Acquisition Regulation Part 37.
3. Strengthen FirstNet Authority's contract monitoring activities, including developing and implementing procedures to
  - a. independently verify the accuracy of AT&T's coverage reports;
  - b. ensure timely and effective remediation of AT&T issues;
  - c. conduct on-site inspections;
  - d. collect, analyze, and use customer feedback to verify or validate AT&T's performance; and
  - e. use a propagation tool to confirm AT&T's reporting.
4. Develop and implement policies and procedures for monitoring contractor performance to ensure effective surveillance and, at a minimum, include the following: outlining roles and responsibilities, preparing and using the QASP, developing performance standards and methods of surveillance, monitoring contractor performance, and documenting surveillance activities in the contracting officer's representative's file.
5. Determine whether the services represented by the unsupported costs were provided by AT&T and recoup any costs that cannot be validated.

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*Cover: Herbert C. Hoover Building main entrance at 14th Street Northwest in Washington, DC. Completed in 1932, the building is named after the former Secretary of Commerce and 31st President of the United States.*

## Background

The Middle-Class Tax Relief and Job Creation Act of 2012 (the Act) established the First Responder Network Authority (FirstNet Authority) as an independent authority within the National Telecommunications and Information Administration (NTIA).<sup>1</sup> The Act states that FirstNet Authority shall ensure a Nationwide Public Safety Broadband Network (NPSBN) is established and authorizes FirstNet Authority to enter a public-private arrangement to construct, manage, and operate the NPSBN.<sup>2</sup> The Act also requires FirstNet Authority to consult with and provide plans to each state and territory that specify FirstNet Authority's plan to build a radio access network (RAN)<sup>3</sup> in each area.<sup>4</sup> However, each state and territory retained the responsibility to determine whether it would independently build its own RAN or allow FirstNet Authority to build it.<sup>5</sup>

In March 2017, FirstNet Authority signed a 25-year contract with AT&T to establish the NPSBN, with a contract ceiling of up to \$100 billion. FirstNet Authority issued three task orders (TOs), worth a combined \$ billion, when the contract was signed. By January 2018, all states and territories had opted to allow AT&T to build the RANs.

On March 30, 2018, FirstNet Authority issued TO 4 assigning AT&T the responsibility of building the RANs, which would provide coverage to all 56 states and territories. TO 4 incorporates the state commitments into the contract and is the final TO funded by the initial \$6.5 billion in funding; all other TOs include reinvestments to maintain and upgrade the NPSBN. FirstNet Authority payments for TO 4 to AT&T will total \$ billion.<sup>6</sup> As of August 2023, FirstNet Authority paid approximately \$ billion to AT&T for TO 4 requirements.

On October 19, 2021, FirstNet Authority issued TO 4 Modification 5, which created performance-based payments 1 and 2. The modification shifted a portion of the payment from the end of initial operational capability (IOC)-5 to earlier interim payments based on AT&T's completion of certain coverage requirements. In total, FirstNet Authority moved nearly \$ million of the \$ million previously planned for the IOC-5 coverage payment. FirstNet Authority retained the remaining \$ million of the original IOC-5 payment until the end of IOC-5, which occurred on March 30, 2022.

The Plan of Record (POR) is a summary of AT&T's deployment plans to meet state-specific commitments and includes AT&T's established sites integrated into the NPSBN and new site builds. In accordance with the NPSBN contract, AT&T had to achieve 95 percent of the POR

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<sup>1</sup> See Pub. L. No. 112-96, *Middle Class Tax Relief and Job Creation Act of 2012*, §§ 6204(a), 6206(b), codified at 47 U.S.C. §§ 1424(a), 1426(b).

<sup>2</sup> See 47 U.S.C. § 1426(b)(4).

<sup>3</sup> A RAN consists of all cell site equipment, antennas, and backhaul equipment that are required to enable wireless communications with devices.

<sup>4</sup> See 47 U.S.C. §§ 1426(c)(2); 1442(e)(1).

<sup>5</sup> See 47 U.S.C. § 1442(e)(2).

<sup>6</sup> FirstNet Authority began making TO 4 payments to AT&T in November 2018, with annual milestones due on March 30 of subsequent years through 2023.

for coverage on Band 14 (the dedicated spectrum for public safety) in rural and nonrural areas by March 2022 and 100 percent by March 2023, at full operational capability (FOC), to comply with contract milestones. By FOC, the NPSBN was required to cover [REDACTED] percent of the population and [REDACTED] percent of the geography of the United States with Band 14 coverage.

Prior to issuing IOC and FOC payments for TO 4, FirstNet Authority was supposed to verify whether AT&T had reached required milestones. FirstNet Authority's verification process consisted of reviewing deliverables received from AT&T, such as coverage maps and coverage statistics, to determine the percentage of POR coverage deployed. FirstNet Authority subject-matter experts (SMEs) reviewed the deliverables during the verification process and recommended either acceptance or denial of the deliverables, which they documented in a verification report. FirstNet Authority's contracting officer, working with contracting officer's representatives, then made the final determination regarding whether AT&T met coverage milestones. In addition to reviewing deliverables required for payment, FirstNet Authority received and reviewed deliverables and quality assurance surveillance plan (QASP) reports on a monthly, quarterly, semi-annual, or annual basis (depending on the deliverable or report) to monitor the progress of the NPSBN RAN deployment.

FirstNet Authority also received the results of drive tests conducted by its independent vendor and an AT&T vendor. The drive tests measured signal power on test routes and other metrics such as voice call success rates.

## Why We Did This Review

We audited FirstNet Authority's oversight of NPSBN coverage due to its importance in delivering NPSBN service to first responders. From fiscal years (FYs) 2020 to 2022, we reported NPSBN contract performance as a top management challenge for the U.S. Department of Commerce (the Department).<sup>7</sup> We also reported ensuring proper NPSBN coverage as a top management challenge in FY 2023.<sup>8</sup> Additionally, we issued reports in December 2021<sup>9</sup> and March 2023<sup>10</sup> that identified issues with FirstNet Authority's oversight of the NPSBN contract.

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<sup>7</sup> See (1) U.S. Department of Commerce Office of Inspector General, October 16, 2019. *Top Management and Performance Challenges Facing the Department of Commerce*, OIG-20-001. Washington, DC: DOC OIG, 12-13; (2) DOC OIG, October 15, 2020. *Top Management and Performance Challenges Facing the Department of Commerce in Fiscal Year 2021*, OIG-21-003. Washington, DC: DOC OIG, 12-14; and (3) DOC OIG, October 14, 2021. *Top Management and Performance Challenges Facing the Department of Commerce in Fiscal Year 2022*, OIG-22-001. Washington, DC: DOC OIG, 37-38.

<sup>8</sup> DOC OIG, October 13, 2022. *Top Management and Performance Challenges Facing the Department of Commerce in Fiscal Year 2023*, OIG-23-001. Washington, DC: DOC OIG, 28-29.

<sup>9</sup> DOC OIG, December 14, 2021. *FirstNet Authority Must Increase Governance and Oversight to Ensure NPSBN Security*, OIG-22-011-I. Washington DC: DOC OIG.

<sup>10</sup> DOC OIG, March 1, 2023. *FirstNet Authority Failed to Provide Adequate Contract Oversight for Its Initial Two Reinvestment Task Orders*, OIG-23-012-A. Washington DC: DOC OIG.

## Objective, Finding, and Recommendations

We announced two concurrent audits with the following objectives: (1) to determine whether FirstNet Authority is ensuring that AT&T is achieving the desired results for device connection targets for each state and territory and (2) to determine whether FirstNet Authority is ensuring that AT&T is achieving the desired results for network coverage for each state and territory. We separated these objectives into three different components that include (1) the evolution of the desired results for device connection targets and network coverage as executed through contract modifications, (2) oversight of device connection targets, and (3) oversight of network coverage. This report focuses on the third component: FirstNet Authority's oversight of network coverage. See Appendix A for a more detailed description of our scope and methodology.

Overall, we found that FirstNet Authority did not adequately assess AT&T's performance to ensure that it met the desired results for coverage in each state and territory. Specifically, FirstNet Authority did not independently verify AT&T's coverage claims to ensure accuracy before issuing performance-based payments. Consequently, FirstNet Authority cannot report with reasonable assurance that AT&T's coverage reports are reliable and accurate—resulting in uncertainty as to whether or not (1) AT&T met network coverage requirements and (2) the government received the services for which it paid \$ [REDACTED] million. As a result of the internal control deficiencies regarding the lack of independent verification of coverage claims for performance-based payments, we are questioning \$ [REDACTED] million as unsupported costs.

### FirstNet Authority Did Not Independently Verify AT&T's Coverage Reports Before Issuing \$ [REDACTED] Million in Performance-Based Payments

We found FirstNet Authority did not independently verify AT&T's coverage claims for accuracy; instead, it relied solely on AT&T's reporting. The Federal Acquisition Regulation (FAR) states that agencies shall ensure that services tendered by contractors meet contract requirements<sup>11</sup> and contracting offices are responsible for verifying that the contractor fulfills contract quality requirements.<sup>12</sup> The FAR also states that “[g]overnment contract quality assurance shall be performed at such times . . . and places . . . as may be necessary to determine that the supplies or services conform to contract requirements.”<sup>13</sup> The U.S. Government Accountability Office's (GAO's) *Standards for Internal Control in the Federal Government (Standards)* state, “Management evaluates both internal and external sources of data for reliability.”<sup>14</sup>

FirstNet Authority officials stated that they did not independently verify the accuracy of the coverage reports AT&T provided detailing coverage progress for IOC-5. FirstNet Authority

<sup>11</sup> Federal Acquisition Regulation § 46.102(b).

<sup>12</sup> FAR § 46.103.

<sup>13</sup> FAR § 46.401(a).

<sup>14</sup> U.S. Government Accountability Office, September 10, 2014. *Standards for Internal Control in the Federal Government*, GAO-14-704G. Washington, DC: GAO, 59. Available online at <https://www.gao.gov/products/gao-14-704g> (accessed December 19, 2023).



receives coverage deliverables such as (1) individual coverage maps for each state and territory, which provide a visual summary of predicted coverage; (2) the corresponding statistics file, which summarizes predicted coverage miles represented on the maps and compares the miles to the agreed-upon POR; and (3) a Band 14 Acceptance Report that notes the number of active cell sites in each state and territory. Although FirstNet Authority compares predicted coverage miles to the POR, FirstNet Authority's verification process only compares each of these reports to the others to verify the validity of the predicted coverage. All the predicted coverage included in the reports originates from the same AT&T system. We asked FirstNet Authority personnel if independent verification, outside of the report comparison, occurs prior to payment, and they stated that they do not independently verify AT&T-reported coverage claims. FirstNet Authority also stated that there is no law, policy, or regulation requiring that it performs independent verification.

Illustrating the consequence of not performing independent verification, FirstNet Authority missed opportunities to identify errors in the coverage reports, calling their accuracy into question. On two separate instances, FirstNet Authority determined that AT&T met the contract requirements and formally accepted AT&T's services, but later revoked the acceptances following AT&T's disclosure of errors. Although FirstNet Authority eventually addressed the reported errors, it did not institute additional verification until after AT&T reported errors the second time and only verified coverage for the areas where AT&T reported errors and a few other states. FirstNet Authority issued the final acceptance of IOC-5 coverage claims in June 2023, more than 1 year after the end of the IOC-5 period, after paying █ percent (\$█ million of \$█ million) of the total IOC-5 contracted payment early, and after the March 2023 due date for FOC.

We asked FirstNet Authority if it could have independently identified the issues with the IOC-5 coverage reports provided by AT&T, and contract oversight personnel stated that they had not and would not have discovered the errors in the coverage reports through FirstNet Authority's verification and acceptance processes.

To further compound this issue, FirstNet Authority received drive test data<sup>15</sup> from two sources—an AT&T vendor and an independently retained vendor. However, it did not use this information to verify AT&T's coverage claims. FirstNet Authority personnel stated that AT&T provided drive test data from its third-party vendor, which captured coverage information within major population centers and highways. FirstNet Authority personnel also stated that they wanted greater visibility of coverage in rural areas to gain confidence in AT&T coverage deliverables. As a result, FirstNet Authority entered into a contract with an independent vendor. The objective of this independent contract was to “gather, process, analyze, and report network coverage and performance data for the NPSBN . . .” The contract states that the test results “will be utilized to ensure continued coverage compliance . . .”<sup>16</sup> The drive test data from this vendor provided additional coverage measurements along rural routes, such as call drop rates and the ability to upload and

<sup>15</sup> Drive testing is a method of verifying the performance of a wireless broadband network. It consists of placing specialized equipment in a vehicle and using that equipment to measure network performance data such as upload and download speeds, signal strength, and data transmission delays throughout the service area.

<sup>16</sup> Quoted information was extracted from FirstNet Authority's contract with its vendor.

download files at the edge of the coverage area. Although FirstNet Authority received drive test results from both sources, it did not use the results to independently determine if AT&T coverage reports were accurate. Mobile wireless broadband network providers, as well as the Federal Communications Commission, used drive testing “to measure network performance and broadband speeds in various parts of the United States.”<sup>17</sup> FirstNet Authority could also have used this drive test data as part of its surveillance activities.

In addition, FirstNet Authority does not solicit feedback from public safety customers to determine whether coverage is available where it is needed, if the quality of service is sufficient to allow effective and efficient emergency response, or contractor compliance. FirstNet Authority collects public safety feedback through its Market Engagement Office. However, public safety personnel voluntarily offer this feedback, which is not coverage-specific but addresses a wide range of topics. Although FirstNet Authority states that it shares the feedback with AT&T, FirstNet Authority does not use the feedback to verify coverage claims or the quality of services NPSBN users receive. FirstNet Authority also did not perform any on-site inspections to verify coverage claims until after it revoked IOC-5 acceptance for a second time. In March 2023, we reported similar issues regarding user feedback and the lack of on-site inspections as a method of contract surveillance.<sup>18</sup> Further, as GAO previously reported,

Key practices for contract oversight call for obtaining information on end users’ satisfaction that can be used as a metric to gauge performance quality. For example, industry guidance on program management emphasizes that end-users’ satisfaction is a powerful metric that should be obtained to gauge program quality, noting that the benefits, product, or service delivered is best evaluated by those who receive it . . . By not obtaining and using this information to inform its oversight or related activities, FirstNet could be missing an opportunity to increase assurance of the program’s long-term success.<sup>19</sup>

## Causes

These issues occurred because FirstNet Authority’s NPSBN contract QASP did not ensure adequate surveillance for coverage requirements. Specifically, the QASP did not

- include measurable performance standards for all work requiring surveillance or
- sufficiently define the method of surveillance to adequately assess contractor performance.

The NPSBN contract states the QASP “sets forth the procedures and guidelines FirstNet will use to monitor, communicate, and confirm the required performance standards and quality service levels are delivered and reported by the Contractor.” Additionally, according

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<sup>17</sup> Federal Communications Commission, February 14, 2023. ‘Drive Tests’ and Other ‘Speed Tests’ Conducted to Validate Mobile Broadband Availability Data [online]. <https://www.fcc.gov/consumers/guides/drive-tests-and-other-speed-tests-conducted-validate-mobile-broadband-availability> (accessed December 14, 2023).

<sup>18</sup> OIG-23-012-A.

<sup>19</sup> GAO, January 27, 2020. *Public Safety Broadband Network: Network Deployment is Progressing, but FirstNet Could Strengthen Its Oversight*, GAO-20-346. Washington, DC: GAO. Available online at <https://www.gao.gov/products/gao-20-346> (accessed December 19, 2023).

to the FAR, the QASP should specify, among other things, the following: (1) all work requiring surveillance, (2) the method of surveillance, and (3) that the government inspection shall be documented.<sup>20</sup> The QASP did not include measurable performance quality standards as required by FAR § 37.603. The QASP only addresses meeting the percentage of coverage; it does not actually measure the quality of the coverage. For example, based on the current QASP elements, FirstNet Authority could not determine whether the NPSBN coverage AT&T provides is sufficient to allow users to upload or download files timely or make and retain calls throughout the coverage area, which could be necessary for first responders to respond to emergency situations. The QASP also does not capture live coverage data for FirstNet Authority to perform any validation of coverage.

Secondly, we found that the method of surveillance was inadequate. Specifically, the method of surveillance only listed “quarterly inspections of reports,” but does not identify what reports should be reviewed. Additionally, the QASP lacks detailed surveillance metrics that specify what and how SMEs will inspect, analyze, and document to independently verify contract requirements and ensure coverage and associated deliverables meet those requirements before payment. FirstNet Authority also does not use its rights to audit raw data, which are specified in the contract and could provide additional independent verification of reported coverage results. Reviewing only the AT&T self-reported coverage reports would not provide sufficient details to be able to adequately assess whether AT&T is meeting its coverage requirements. The GAO *Standards* state that management should rely on internal and external data that are “reasonably free from error and bias” and that management should evaluate data for reliability.<sup>21</sup>

Further, we found that FirstNet Authority utilized the wrong surveillance documentation for coverage to support performance-based payments of approximately \$ [REDACTED] million. FirstNet Authority utilized a POR to authorize the performance-based payments of approximately \$ [REDACTED] million that did not include all the new site locations required by the contract. Because of a modification that was issued, AT&T was able to delay its delivery of the POR that should have been due and utilized for IOC-5 verification activities.<sup>22</sup> However, FirstNet Authority went forward with authorizing the early payments despite not having the complete POR. Had it conducted adequate surveillance, FirstNet Authority would not have made or been able to justify the early payments.

We previously reported that the contracting officer’s representatives relied heavily on assistance from NPSBN Program Office personnel—such as TO leads and SMEs—to conduct NPSBN contract monitoring and surveillance activities; however, NPSBN Program Office personnel were not properly trained, certified, or formally appointed for performance surveillance functions, which is contrary to the FAR and the *Commerce*

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<sup>20</sup> FAR § 46.401.

<sup>21</sup> GAO *Standards*, 59.

<sup>22</sup> For details on the modifications made to the NPSBN contract related to coverage and the associated impacts, see DOC OIG, May 30, 2024. *FirstNet Authority Did Not Ensure the Nation’s First Responders’ Needs Were Continuing to Be Met Timely When Modifying Key Objectives of the NPSBN Contract*, OIG-24-024-A. Washington DC: DOC OIG.

*Acquisition Manual*.<sup>23</sup> The recommendations we made to address these concerns are still open. This lack of training also contributed to the above issues and will remain a concern until our recommendations are fully implemented.

Additionally, FirstNet Authority does not receive the right data for it to verify the accuracy of AT&T's coverage reports. Specifically, FirstNet Authority cannot see the parameters AT&T uses to produce its coverage reports, which is necessary to validate accuracy. The reports FirstNet Authority receives only include the output of AT&T's systems and propagation tool, which models the coverage area provided by NPSBN cell towers. The reports do not specify the parameters that AT&T entered into its propagation tool to produce them. For example, during IOC-5, AT&T used a [REDACTED] measurement parameter in 4 states instead of the [REDACTED] level required in the contract, which overstated coverage in a total of 14 states (4 states where the parameters were incorrect and 10 surrounding states). This same issue occurred in three territories. AT&T has twice informed FirstNet Authority that the coverage reports it provided to FirstNet Authority included errors, and FirstNet Authority acknowledged that it would not have been able to identify the errors if AT&T had not brought them to the attention of oversight personnel. Because AT&T did not provide the parameters used to create its coverage reports, FirstNet Authority could not identify incorrect coverage claims from AT&T. As a result, FirstNet Authority could not ensure that AT&T's coverage claims were accurate, increasing the risk that first responders will not receive the appropriate level of service. Based on our finding, we are questioning FirstNet Authority's performance-based payments to AT&T totaling \$ [REDACTED].

## Conclusion

The Act charges FirstNet Authority with overseeing the NPSBN contract to build, operate, and maintain the NPSBN based on commercial standards. The NPSBN was envisioned specifically to meet the needs of the public safety community, and it is in the national interest that a suitable NPSBN is delivered. Without sufficient contract oversight, the NPSBN may not deliver coverage that meets public safety user expectations. FirstNet Authority has no assurance that AT&T's coverage claims are accurate or that the quality of service is sufficient, increasing the risk that first responders may not have the network coverage they need to serve the public effectively. To mitigate this risk, FirstNet Authority must ensure that AT&T's coverage claims are accurate.

## Recommendations

We recommend that the Assistant Secretary of Commerce for Communications and Information and NTIA Administrator direct FirstNet Authority's Chief Executive Officer and Chief Procurement Officer to:

- I. Modify the NPSBN contract QASP for TO 4 to include all items necessary for adequate contractor performance, the method used to measure each item, and any necessary details to perform adequate contract surveillance.

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<sup>23</sup> OIG-23-012-A, 9-10.

2. Modify the NPSBN contract QASP for TO 4 to ensure that it includes surveillance activities for all work requiring surveillance and contains measurable performance standards as required by FAR Part 37.
3. Strengthen FirstNet Authority's contract monitoring activities, including developing and implementing procedures to
  - a. independently verify the accuracy of AT&T's coverage reports;
  - b. ensure timely and effective remediation of AT&T issues;
  - c. conduct on-site inspections;
  - d. collect, analyze, and use customer feedback to verify or validate AT&T's performance; and
  - e. use a propagation tool to confirm AT&T's reporting.
4. Develop and implement policies and procedures for monitoring contractor performance to ensure effective surveillance and, at a minimum, include the following: outlining roles and responsibilities, preparing and using the QASP, developing performance standards and methods of surveillance, monitoring contractor performance, and documenting surveillance activities in the contracting officer's representative's file.
5. Determine whether the services represented by the \$ [REDACTED] in unsupported costs were provided by AT&T and recoup any costs that cannot be validated.

# Summary of Agency Response and OIG Comments

On April 1, 2024, we received NTIA's response to our draft report. In response to our draft report, NTIA concurred with all our recommendations and described actions it intends to take to address them. With its response, NTIA provided an addendum with FirstNet Authority's response to the draft report. Additionally, FirstNet Authority provided technical comments regarding the draft report. We reviewed NTIA's and FirstNet Authority's responses and comments and made minor changes to the final report where appropriate. Per requests made by FirstNet Authority, we have redacted certain business sensitive information and/or information otherwise protected from disclosure from the public version of this report. NTIA's formal response and FirstNet Authority's addendum are included in this final report as appendix C. At AT&T's request, we met with AT&T representatives on May 9, 2024, for a listening session regarding their concerns about the issue reflected in this report.

## *FirstNet Authority's Response and Our Comments*

FirstNet Authority's response included statements that were inaccurate or misleading. To provide clarity and perspective, we are responding to those comments here. However, FirstNet Authority's comments do not change our conclusions and recommendations.

## *FirstNet Authority's Verification Process*

*FirstNet Authority Response:* “[FirstNet Authority] employs a meticulous process for verifying network coverage as documented in our comprehensive verification and validation reports in support of payments made at Task Order defined milestones;” “[t]he verification efforts involve comparing the actual network coverage as predicted by Radio Frequency (RF) coverage planning tools and algorithms against the benchmarks from the Plan of Record (POR);” and “AT&T's network performance has been validated through our contracted independent drive testing.” FirstNet Authority also referred to a “technical white paper released in December 2022 [detailing] the analytics behind the August 2021 coverage assessment.”

*OIG Comment:* We do not agree that FirstNet Authority's coverage verification process is “meticulous” or “comprehensive.” Specifically, we have completed a series of audits illustrating that FirstNet Authority has significant internal control deficiencies.<sup>24</sup> In our March 2023 report,<sup>25</sup> we identified four oversight-related deficiencies. Additionally, FirstNet Authority personnel stated multiple times that they do not complete independent verification. Further, as outlined in the present report, FirstNet Authority could not and did not identify IOC-5 errors in coverage claims—in fact, FirstNet Authority **twice** accepted AT&T's coverage claims and then rejected the claims when AT&T self-reported errors. Had FirstNet Authority

<sup>24</sup> See, e.g., DOC OIG, August 25, 2022. *FirstNet Authority Did Not Have Reliable Cost Estimates to Ensure It Awarded Two Reinvestment Task Orders at Fair and Reasonable Prices*, OIG-22-029-A. Washington DC: DOC OIG; and DOC OIG, November 28, 2022. *FirstNet Authority Could Not Demonstrate Investment Decisions Were the Best Use of Reinvestment Funds or Maximized the Benefits to Public Safety*, OIG-23-005-A. Washington DC: DOC OIG.

<sup>25</sup> OIG-23-012-A..

implemented a meticulous review process, it most likely would have identified errors in AT&T's reporting and would not have had to rely on AT&T to self-report.

We also do not agree that FirstNet Authority validates AT&T's predicted coverage claims using independent drive testing. During numerous interviews, FirstNet Authority personnel stated that drive test data was not used to verify predicted coverage claims.

Additionally, we do not agree that the December 2022 white paper details the analysis completed prior to making the performance-based payment. As noted during our exit conference with FirstNet Authority, FirstNet Authority made performance-based payments in November 2021 and January 2022. By December 2021, FirstNet Authority's independent contractor had only completed the drive test analysis for three states, which would not have been sufficient to verify national coverage to reveal or substantiate a "99% match between [FirstNet Authority's] 3<sup>rd</sup> party contracted drive test data and the required coverage metrics as outlined in the TO 4 requirements" prior to issuing the performance-based payments. Further, the white paper was not drafted until December 2022; therefore, it could not have been used to support the verification of coverage claims before FirstNet Authority made the performance-based payments.

#### *Network Coverage*

*FirstNet Authority Response:* "The network not only meets but surpasses the coverage goals set forth in state plans of the NPSBN Contract, providing robust support to first responders nationwide. By October 2021, indoor coverage in a significant amount of States and territories surpassed the outdoor coverage requirement, offering signal strength 16 times greater than initially promised."

*OIG Comment:* We do not agree that coverage goals were surpassed. Without independent verification of AT&T's coverage claims, FirstNet Authority cannot ensure that the coverage claims are correct—which calls into question its assertion that the coverage goals were surpassed.

Regarding indoor coverage, the scope of this audit was TO 4, which includes the building of the RAN to provide coverage in all 56 states and territories. In June 2022, FirstNet Authority signed a separate TO (TO 9) totaling nearly \$■ million with the purpose of delivering and distributing Band 14 extension services to improve coverage in targeted areas, including indoor coverage. Because our scope was limited to TO 4, we did not review TO 9; however, we are highlighting the existence of this TO so readers are not misled based on FirstNet Authority's comment.

#### *FirstNet Authority's Oversight*

*FirstNet Authority Response:* "We stand by the oversight we have given the NPSBN contract . . ."

*OIG Comment:* FirstNet Authority's response does not warrant altering our findings and recommendations. Again, as illustrated throughout this report, we have identified significant internal control weaknesses regarding contract oversight as it relates to coverage. Based on FirstNet Authority's comment that it stands by its oversight activities, we question whether

FirstNet Authority will sufficiently resolve the issues identified in this report or take the necessary actions to improve internal controls.



# Appendix A: Objective, Scope, and Methodology

We announced two concurrent audits with the following objectives: (1) to determine whether FirstNet Authority is ensuring that AT&T is achieving the desired results for device connection targets for each state and territory and (2) to determine whether FirstNet Authority is ensuring that AT&T is achieving the desired results for network coverage for each state and territory. We separated these objectives into three different components that include (1) the evolution of the desired results for device connection targets and network coverage as executed through contract modifications, (2) oversight of device connection targets, and (3) oversight of network coverage. This report focuses on the third component: FirstNet Authority's oversight of network coverage.

To accomplish our objective, we performed the following actions:

- Reviewed the following policies, practices, and guidance:
  - *Middle Class Tax Relief and Job Creation Act of 2012, Public Law 112-96*
  - NPSBN contract terms and conditions
  - FAR Part 4, *Administrative and Information Matters*
  - FAR Part 37, *Service Contracting*
  - FAR Part 46, *Quality Assurance*
  - FAR § 52.232-32, *Performance Based Payments*
  - U.S. Government Accountability Office, *Standards for Internal Control in the Federal Government, GAO-14-740G*
  - *NPSBN Deliverable Management Processes, version 0.4*
  - *NPSBN RTM Management Process, version 0.5*
  - *FirstNet Authority's Receipt, Inspection, Acceptance, and Invoice Processing*
- Interviewed FirstNet Authority officials responsible for contract oversight of TO 4.
- Selected a judgmental sample<sup>26</sup> of coverage claims and reviewed FirstNet Authority documentation that supported the verification, validation, and acceptance of those claims, including
  - contractor reports
  - Program Management Division verification reports
  - corrective action reports
  - corrective action plans

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<sup>26</sup> Due to the limited size of the universe, we did not use a statistical sample or project results.

- Performance Assessment Reports of QASP key performance indicators
- Reviewed drive test data provided by FirstNet Authority's contractor and analyzed the results.

We gained an understanding of the internal controls significant within the context of our audit objective by interviewing FirstNet Authority personnel and reviewing policies and procedures. In satisfying our audit objective, we did not rely on computer-processed data. Instead, we reviewed documentation submitted by AT&T to FirstNet Authority; therefore, we did not test the reliability of FirstNet Authority's information technology systems. We identified weaknesses in internal controls related to contract oversight as noted in the Objective, Finding, and Recommendations section of this report.

We conducted our review from July 2022 through November 2023 under the authority of the Inspector General Act of 1978, as amended (5 U.S.C. § 401 et seq.), and Department Organization Order 10-13, as amended October 21, 2020. We performed our fieldwork remotely.

We conducted this performance audit in accordance with generally accepted government auditing standards. These standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our finding and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our finding and conclusions based on our audit objective.

## Appendix B: Potential Monetary Benefits

Finding and Recommendation	Questioned Costs	Unsupported Costs	Potential Funds to Be Put to Better Use
Finding 1 and recommendation 5	\$0	\$ [REDACTED] <sup>a</sup>	\$0
<b>Total Potential Monetary Benefits</b>	<b>\$0</b>	<b>\$ [REDACTED]</b>	<b>\$0</b>

<sup>a</sup> This amount represents \$ [REDACTED] for performance-based payment 1 and \$ [REDACTED] for performance-based payment 2.

## Appendix C: Agency Response

NTIA's response to our draft report begins on the following page.




**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Telecommunications and**  
**Information Administration**  
Washington, D.C. 20230

April 1, 2024

TO: Arthur L. Scott Jr.  
Assistant Inspector General for Audit and Evaluation

THRU: MaryAnn Mausser  
Department of Commerce GAO/OIG Audit Liaison

FROM: Alan Davidson   
Assistant Secretary of Commerce for Communications and Information and NTIA  
Administrator

SUBJECT: Response for Draft Audit Report entitled *FirstNet Authority's Lack of NPSBN Contract Oversight for Coverage Puts at Risk First Responders' Ability to Serve the Public Effectively*

Report Date: February 29, 2024

Audited Entities: First Responder Network Authority (FirstNet Authority) and National Telecommunications and Information Agency (NTIA)

This memorandum contains the response from the National Telecommunications and Information Administration (NTIA) to the Office of the Inspector General (OIG) draft report entitled *FirstNet Authority's Lack of NPSBN Contract Oversight for Coverage Puts at Risk First Responders' Ability to Serve the Public Effectively*. NTIA concurs with all the recommendations in the draft report with the comments included below. We will prepare a formal action plan upon issuance of OIG's final report.

The OIG recommends that the Assistant Secretary of Commerce for Communications and Information and NTIA Administrator direct FirstNet Authority's Chief Executive Officer and Chief Procurement Officer to:

**OIG's Recommendation #1:** Modify the NPSBN contract QASP for TO4 to include all items necessary for adequate contractor performance, the method used to measure each item, and any necessary details to perform adequate contract surveillance.

NTIA concurs with the recommendation that FirstNet Authority should review the QASP for TO4 and, if appropriate, modify it to ensure it includes all items necessary for adequate contractor performance, the method used to measure each item, and any necessary details to perform adequate contract surveillance. As part of contract review referenced in

Recommendation #1 to the OIG Draft Report entitled FirstNet Authority Did Not Ensure the Nation's First Responders' Needs Were Continuing to Be Met Timely When Modifying Key Objectives of the NPSBN Contract ("OIG Draft Modifications Report"), OAM will assess whether FirstNet Authority has appropriately reviewed and, if appropriate, modified the QASP for TO4. NTIA, in conjunction with the Department, will take available steps to support that review.

**OIG's Recommendation #2:** Modify the NPSBN contract QASP for TO4 to ensure it includes surveillance activities for all work requiring surveillance and contains measurable performance standards as required by FAR Part 37.

NTIA concurs with the recommendation that FirstNet Authority should review the QASP for TO4 and, if appropriate, modify it to ensure it includes surveillance activities for all work requiring surveillance and contains measurable performance standards as required by FAR Part 37. As part of contract review referenced in Recommendation #1 to the OIG Draft Modifications Report, OAM will assess whether FirstNet Authority has appropriately reviewed and, if appropriate, modified the QASP for TO4. NTIA, in conjunction with the Department, will take available steps to support that review.

**OIG's Recommendation #3:** Strengthen FirstNet Authority's contract monitoring activities, including developing and implementing procedures to: a) independently verify accuracy of AT&T's coverage reports; b) ensure timely and effective remediation of AT&T issues; c) conduct on-site inspections; d) collect, analyze, and use customer feedback to verify or validate AT&T's performance; and e) use a propagation tool to confirm AT&T's reporting.

NTIA concurs with the recommendation that FirstNet Authority's contract monitoring activities should be reviewed by NTIA, in conjunction with the Department. As part of contract review referenced in Recommendation #1 to the OIG Draft Modifications Report, OAM will assess whether FirstNet Authority has appropriately engaged in contract monitoring activities, and NTIA will take available steps to support that review.

**OIG's Recommendation #4:** Develop and implement policies and procedures for monitoring contractor performance to ensure effective surveillance and, at a minimum, include the following: outlining roles and responsibilities, preparing and using the QASP, developing contractor performance, and documenting surveillance activities in the contracting officer's representative's file.

NTIA concurs with the recommendation that FirstNet Authority's contract monitoring policies and procedures should be reviewed. As part of contract review referenced in Recommendation #1 to the OIG Draft Modifications Report, OAM will assess FirstNet Authority's relevant policies and procedures. NTIA will coordinate with the appropriate subject matter experts in the Department and take available steps to support that review.

**OIG's Recommendation #5:** Determine whether the services represented by the \$ [REDACTED] in unsupported costs were provided by AT&T and recoup any costs that cannot be validated.

NTIA concurs with the recommendation that FirstNet Authority should review and confirm AT&T's costs and services provided. NTIA, in conjunction with the Department, will take available steps to support that review.

We look forward to working with you as we continue to address the recommendations in this report. Should you have questions, please contact Josephine Scarlett, NTIA Audit Liaison at [jscarlett@ntia.gov](mailto:jscarlett@ntia.gov).

Addendum: FirstNet Authority Response



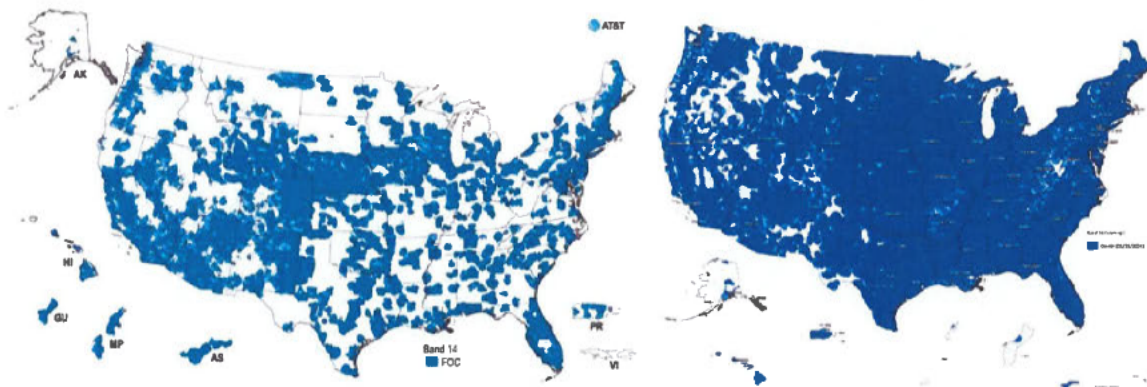
1 April 2024

Arthur L. Scott, Jr.  
Assistant Inspector General for Audit and Evaluation  
Office of Inspector General  
U.S. Department of Commerce  
1401 Constitution Avenue, N.W.  
Washington, DC 20230

Dear Mr. Scott,

Re: Audit Report re Oversight of NPSBN Coverage

The Nationwide Public Safety Broadband Network (NPSBN) has proven to be a pivotal element of emergency response communications by effectively connecting over 27,000 public safety agencies through almost 6 million device connections. This achievement is especially notable considering the project was completed on time, within budget and with network infrastructure capabilities that exceeded the initial contractual requirements. The network not only meets but surpasses the coverage goals set forth in state plans of the NPSBN Contract, providing robust support to first responders nationwide.



*Original Band 14 LTE coverage projected at contract award on the left and the current LTE build ten months post-FOC*



The First Responder Network Authority (FirstNet Authority) employs a meticulous process for verifying network coverage as documented in our comprehensive verification and validation reports in support of payments made at Task Order defined milestones. The verification efforts involve comparing the actual network coverage as predicted by Radio Frequency (RF) coverage planning tools and algorithms against the benchmarks from the Plan of Record (POR). The accuracy of this method has been thoroughly documented and is crucial for documenting the network's coverage footprint and integrity on an on-going basis. .

Furthermore, AT&T's network performance has been validated through our contracted independent drive testing, underscoring our commitment to transparency and excellence. A technical white paper released in December 2022 detailed the analytics behind the August 2021 coverage assessment, revealing a 99% match between our 3<sup>rd</sup> party contracted drive test data and the required coverage metrics as outlined in the Task Order 4 requirements. This independent evaluation confirms the careful preparation and analysis that preceded the initial performance-based payments, showcasing the network's superior coverage.

Remarkably, the actual network coverage extends beyond POR requirements in every state with network edge performance significantly exceeding the contractual thresholds. By October 2021, indoor coverage in a significant amount of States and territories surpassed the outdoor coverage requirements, offering signal strength 16 times greater than initially promised. This thread of exceeding expectations continues with recent data from January 2024 confirming the network's exceptional coverage and reliability. The success of the NPSBN is the result of a strategic public-private partnership between the FirstNet Authority and AT&T, guided by a 25-year contract and emphasizes rigorous oversight as well as adherence to high standards. This unique partnership has enabled the seamless expansion and enhancement of the network, reaffirming our commitment to America's first responders.

Looking forward, the FirstNet Authority remains dedicated to continued investments in enhancing the FirstNet network coverage to ensure that our nation's heroes have the reliable communication tools they need to protect and serve our communities. This ongoing effort underscores our pledge to support and expand the FirstNet network, continuing to elevate the standard of public safety infrastructure across the United States. We stand by the oversight we have given the NPSBN Contract and success here is not self-executing. Our efforts to significantly supplement the coverage received by first responders can vividly be seen in the maps displayed above.

As an organization we always strive to improve our processes and will work with the Department to demonstrate our continued compliance with the Office of Inspector General's recommendations.

Sincerely,

**JOSEPH WASSEL** Digitally signed by JOSEPH WASSEL  
Date: 2024.04.01 12:31:17 -04'00'

Joseph M. Wassel

Executive Director and CEO

# REPORT

# FRAUD & WASTE ABUSE



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