

While it is Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of)
)
Accelerating Wireless Deployment by Removing Barriers) WT Docket No. 17-79
to Infrastructure Investment)
)

COMMENTS OF NOKIA

Brian Hendricks
Jeffrey Marks
Government Relations

Nokia
1100 New York Avenue, NW
Suite 705 West
Washington, DC 20005

June 15, 2017

TABLE OF CONTENTS

I. INTRODUCTION AND SUMMARY	1
II. NOKIA IS A PIONEER IN SMALL CELL TECHNOLOGIES AND OTHER “SMART” TECHNOLOGIES THAT ARE REVOLUTIONIZING OUR COMMUNITIES	3
III. LOCAL GOVERNMENT PRACTICES HAVE IMPEDED THE TIMELY DEPLOYMENT OF WIRELESS BROADBAND.....	4
IV. THE COMMISSION SHOULD TAKE AN ACTIVE ROLE TO FACILITATE INFRASTRUCTURE SITING	9
A. Change the Conversation from Property Management to Promoting a Connected Community	10
B. Provide Tools, including Best Practices Guidance, that Make the Review Process Easier and Cheaper for Localities.....	11
C. Provide a Federal Backstop for All Practices that “Prohibit or Have the Effect of Prohibiting” Service	13
VIII. CONCLUSION.....	15

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of)
)
Accelerating Wireless Deployment by Removing Barriers) WT Docket No. 17-79
to Infrastructure Investment)
)

COMMENTS OF NOKIA

Nokia respectfully submits Comments in response to the above-captioned Notice of Proposed Rulemaking (“NPRM”) and Notice of Inquiry (“NOI”) to examine the regulatory impediments to wireless network infrastructure investment and deployment.¹ These Comments focus on the portions of the NPRM and NOI that seek solutions to the problems of deploying at the state and local level, with an emphasis on collaborative measures that will promote the rapid deployment of advanced wireless broadband service to all Americans.

I. INTRODUCTION AND SUMMARY

A leader in small cell technologies, Nokia is at the forefront of the technologies enabling communities that are smarter, safer and more sustainable. Nokia applauds the Commission’s efforts to streamline deployment of wireless infrastructure and encourages a continuing focus on reducing barriers to robust deployment. Facilities siting has proven to be a major impediment to connecting communities.

¹ *Accelerating Wireless Deployment by Removing Barriers to Infrastructure Investment*, Notice of Proposed Rulemaking and Notice of Inquiry, WT Docket No. 17-79, FCC 17-38 (rel. Apr. 21, 2017) (“NPRM and NOI”).

In these Comments, Nokia describes its own efforts in connecting communities throughout the United States and the world. These Comments then describe the challenges communities and industry are facing in trying to establish an approach to infrastructure planning that balances needs of localities to establish processes that allow for recovery of their costs and protection of local interests with the needs of network operators and equipment vendors to have predictable, expeditious, and cost-sensitive access to public rights-of-way and public-owned buildings and structures. Ultimately, Nokia believes further action by Congress and the Commission will be necessary to reach the optimal solution for our communities.

While the NPRM portion of this proceeding emphasizes preemption based purely on exceeding pre-determined reasonable timelines, this is a blunt instrument best included as part of a multi-pronged, collaborative approach. Indeed, processing time is only one of many issues that the Commission should address. To that end, Nokia respectfully requests that the Commission develop a set of tools that will make it easier for localities to run an efficient siting process as part of a strategy to improve quality of life for their communities. The Broadband Deployment Advisory Council (“BDAC”) promises to be a critical resource to further this process. By providing local jurisdictions with model processes and documents, the Commission can add substantial efficiencies for all parties involved, lowering transaction costs and shortening timelines.

Nokia advocates that the Commission serve as a “backstop” when the process breaks down, but also believes that preemption is best applied judiciously. Following a highly collaborative process where industry and state and local government can provide best practices and an assessment of needs that local siting processes must accommodate, Nokia believes the Commission can establish a model framework covering fees, application scope and procedures,

and approval timeframes for state and local consideration. Further, the Commission could make it clear that it will respect state and local processes that demonstrate fidelity to the model framework, while providing an alternative process for Commission preemption where the fees and procedures do not comport with the Commission's model framework.

II. NOKIA IS A PIONEER IN SMALL CELL TECHNOLOGIES AND OTHER "SMART" TECHNOLOGIES THAT ARE REVOLUTIONIZING OUR COMMUNITIES

Nokia is an innovation powerhouse, offering unparalleled leadership in the technologies that connect people and things. Nokia is leveraging its strengths to create a new type of network that is intelligent, efficient, and secure, and which will serve as a critical enabler of many capabilities and use cases associated with the Internet of Things ("IoT"). We are weaving together the networks, data, and device technologies to create the universal fabric of our connected lives.

Of particular relevance to this proceeding, Nokia is at the forefront of technologies that will make our communities smarter, safer and more sustainable. We work across ecosystems and are a trusted partner for our carriers, governments and enterprises. Nokia brings together under one company mobile broadband with fixed line access, and the underlying IP routing and optical technology that connects them. Nokia has made pioneering advancements in reducing the footprint of mobile base station infrastructure, from compact yet full power macro sites down to the full range of small cell solutions, which are expected to be critical to enabling 5G deployment and the IoT. Nokia also offers the industry's most comprehensive portfolio of services for integrating heterogeneous networks ("HetNets"), encompassing analysis, optimization, deployment, and management.

Complementing Nokia's comprehensive connectivity portfolio is our IMPACT ("Intelligent Management Platform for All Connected Things") Platform. The IMPACT Platform is a horizontal platform that manages connectivity, data collection, analytics, and business application development, on top of device and service management across all verticals. The IMPACT Platform can smooth the often-fragmented processes for smart communities, which often span applications and programs of multiple government departments, working with multiple technologies and timelines. Nokia's in-house know-how is augmented by the "ng Connect" program. With Nokia's "ng Connect" program, we have built an ecosystem of more than 300 members including leading network, consumer electronics, applications, platforms and content providers. The IoT community of the ng Connect program brings innovative companies together to collaborate on solution concepts, end-to-end prototypes, business models and market trials that will unleash the full potential of the IoT.

III. LOCAL GOVERNMENT PRACTICES HAVE IMPEDED THE TIMELY DEPLOYMENT OF WIRELESS BROADBAND

While it is true that next generation systems will depend on a massive deployment of new infrastructure, the need for increased wireless infrastructure has already reached a critical level. The problems of underserved or unserved communities are well known, and not limited to remote areas. Indeed, some of America's largest cities and their suburbs suffer from coverage gaps. The need for action is now.

Nokia's small cell solutions have been on the market for years, and we are pleased by the enthusiasm from our customers for these solutions. Unfortunately, being on the leading edge of small cell technology also means Nokia has experienced first-hand the frustration of local coverage needs being thwarted by local siting practices. Common problems fall into several related, and overlapping categories, as follows:

Undefined laws and processes; lack of personnel. Many jurisdictions have ill-defined processes for receiving and processing requests to site infrastructure. The advent of small cells and smart city technologies have brought these problems into sharp focus, and demonstrate the need for a new approach to broadband infrastructure. The lack of defined procedures leads to inefficiencies and haphazard results. Moreover, while Congress and the Commission have acted to remedy some of these inefficiencies, jurisdictions that lack defined procedures are often not familiar with the legal landscape intended to remove barriers to deployment.

For example, although some of the major markets are familiar with Section 6409(a) of the Spectrum Act, even those jurisdictions typically have not revised their processes to incorporate that law. Actions that qualify for 6409(a) streamlined treatment nevertheless can be delayed by localities seeking modified lease terms, for instance, when attempting to negotiate a master agreement or franchise license prior to requesting regulatory siting approvals. At present, local governments use these master agreements as a substitute for a comprehensive legal framework. The lack of clear procedures makes the application process much more difficult at the outset – it can be hard to know where to even start – let alone ultimately obtaining the required authorization to move forward.

It is therefore not surprising that jurisdictions that suffer from ill-defined, haphazard processes also lack the employee resources to process siting requests. Nokia is sympathetic to the fact that local jurisdictions face budgetary constraints. As discussed further below, however, lack of employee resources exacerbates a number of other impediments. In short, an unnecessary extra step (or steps) in the process that should result in modest delays can clog the deployment pipeline entirely when coupled with a lack of government personnel.

Redundant, fragmented procedures. Nokia often experiences layered review processes of multiple agencies within a jurisdiction. This issue can be exacerbated by a lack of processes or clear direction on which government body(ies) should be involved. Even where processes are clearly defined, however, multiple processes are often fragmented or non-uniform. This leads to review and approval timelines that are not easily discernable from one authority or interdepartmental agency to the next. As a result, the timelines to obtain the necessary regulatory approvals can be askew.

In one major city example, the process is fairly well defined, but involves three or four different phases, which occur in seriatim instead of concurrently. While review times should be in the 90-day range, approval often takes double that, layering delay on top of delay. Depending on the number of site applications that are under review with the locality, at any given time, the timelines to approval for the initial application can challenge the viability of the entire deployment.

Moratoria. One of the most important aspects of the NPRM is its recognition that some state and local jurisdictions may impose complete moratoria on processing applications.² The record compiled in response to the Wireless Telecommunications Bureau's Public Notice³ earlier this year demonstrates that the problem of moratoria is widespread and should be addressed.⁴ We agree that the Commission should take further action to clarify that moratoria are unlawful, and subject to Commission preemption. Further, applicants should not have to wait for a shot clock to run to challenge moratoria. If a state or locality imposes a moratorium on

² NPRM and NOI at ¶ 17,

³ *Streamlining Deployment of Small Cell Infrastructure by Improving Wireless Facilities Siting Policies*, *Mobilitie LLC Petition for Declaratory Ruling*, Public Notice, 31 FCC Rcd 13360 (2016).

⁴ *See, e.g.*, Comments of CTIA, WT Docket No. 16-421 at 12 (filed Mar. 8, 2017).

receipt or processing of siting applications, applicants should be able to immediately challenge that practice and obtain relief.

Onerous fees, including inspection fees, acquisition fees, and recurring fees.

Fees can threaten the economics of a deployment. Nokia has experienced site “inspection fees” of \$3,000 or even \$4,000 applicable to each location. Such per-location fees are particularly unreasonable when put in the context of hundreds of small cells planned for a single deployment. Many localities lack personnel to inspect individual macro-cell sites; it is hard to imagine the timeframes and expense that would be applied to small cell deployments under the current approval framework. That does not include other application fees and recurring fees associated with accessing the location.

Making matters worse, third party consultants see the complexities of city-wide deployments as a business opportunity, becoming a middle man. Unfortunately, the goal of the consultant is often *not* to maximize connectivity, but rather to maximize city revenues. Consulting agreements often provide broad marketing and management services rights, which include revenue sharing options with the locality based on the lease terms that the third party is able to negotiate with the carrier.

Nokia has recent experience with this problem. Often, consultants enter the mix in preparation for major events that lead to short-lived local economic development initiatives. From a business perspective, a service provider may plan to build for the longer term, with infrastructure intended to benefit a community long after the event is over. Too often, such events are seen as opportunities to charge higher fees and fail to result in the type of long-term economic development that would better serve residents and businesses. Once higher fees are charged due to an event-specific deployment, those rates then become precedent, and set a rate

floor for future deployments. In multiple cities where Nokia has participated in preparations for a short-lived event, we have found the elevated fees to be prohibitive and backed away from participation only later to see those elevated fees cited by consultants to localities as a benchmark for other longer term deployment projects.

It makes perfect sense that cash-strapped, thinly staffed localities would turn to such consultants with promises of enriching the community coffers. The risk, however, is that the ultimate beneficiary of such an arrangement is the consultant, and the citizenry loses through less robust deployment and higher subscription fees needed to support the expensive rights-of-way fees the consultant extracts. The introduction of a new layer of participant, the contracted consultant, with their own profit motivations skews the charges assessed against network operators and equipment vendors even further from the “cost recovery” level. Taken with the sheer number of small cells and distributed antenna systems (“DAS”) that are planned for 5G network densification efforts, the consultant-driven costs provide an almost insurmountable barrier to deployment in many jurisdictions.

The cottage industry of consultants has developed beyond the events context, and is proliferating across a widening geography. As noted, these consultants have an incentive to drive up the fees assessed in each subsequent jurisdiction to leverage ever increasing fees for their own financial gain due to the nature of their retention agreement compensation terms. Each locality becomes the new benchmark for the next consulting contract, driving rates ever higher.

The Commission should view the hiring of such consultants to negotiate siting rates with extreme scrutiny. Hiring of a third party to assist with a surge in applications connected to 5G deployment, which is not expected to remain at peak levels over the long term, may be a reasonable action by a locality and could even help address the resourcing issue

identified earlier in these comments. However, this type of retention becomes counter to the objective of facilitating broadband deployment when win bonuses or other fee level based compensation are utilized. Nokia encourages the Commission to state that this type of compensation is not appropriate and may be a basis for applicants in impacted jurisdictions to obtain relief from the Commission.

IV. THE COMMISSION SHOULD TAKE AN ACTIVE ROLE TO FACILITATE INFRASTRUCTURE SITING

In Nokia's view, solving the problem of local infrastructure deployment should be a cooperative process where the Commission brings together multiple stakeholders to develop, and provide to localities, guidelines on standards and procedures to better serve their citizens through increased connectivity. As described below, Nokia urges the Commission to help spread the concept of connected communities and to provide tools to city planners that will help them reach that goal. Among these tools should be a set of Best Practices, setting guidelines for infrastructure siting.

Nokia disfavors blanket preemption. In the first instance, blanket preemption under Section 253 of the Communications Act is limited to state or local statutes, regulations, and other legal requirements. While this clearly covers rules governing access to public rights-of-way, it may not reach restrictions on all of the buildings and structures necessary for densification of network deployments in support of 5G and IoT. Protracted litigation is a very real possibility of blanket preemption in the absence of clarification from Congress and such litigation would only delay the actual relief and resulting deployment by years.

Nokia respectfully suggests that the Commission tread carefully when considering whether to employ an "irrebuttable presumption" and strip the authority of local land use

regulators that fail to meet prescribed shot clock deadlines.⁵ While we agree that the Commission has broad legal authority to preempt, we also stress that localities should have discretion in managing their rights of way and other property and should have access to *some* process prior to preemption becoming effective. As such, we urge that the Commission develop clear Best Practices, including – as the Commission highlights – further guidance to address reasonable processing timeframes.⁶ The Commission should then act as a backstop where relief can be sought in the event localities’ siting practices fall outside the Best Practices tools developed through a Commission-led process. With clear authority and clear Best Practices, any review could be expedited without the need for preemption without process.

A. Change the Conversation from Property Management to Promoting a Connected Community

As described above, several legacy factors have come together to create roadblocks on the path to connected communities. The siting process typically involves multiple agencies and personnel resources already stretched thin, each trying to fulfill their important missions, such as protecting the environment, protecting historic features, balancing the city budget, etc. When viewed through this lens, a broadband provider can appear to government agencies as only a burden on city resources that needs to “get in line.” Often, it is no one’s job to promote broadband or to coordinate these disparate functions to result in a smooth process. Enter the expert consultant, who can ease the burden on the cities administrators at the expense of deterring robust deployment and raising costs to the cities and the service provider.

The Commission can help change the conversation. Localities should view themselves as partners in making their cities smarter, safer and more sustainable. The

⁵ NPRM and NOI at ¶¶ 10-16.

⁶ *Id.* ¶ 19.

Commission's BDAC, which seeks diverse representation, including from Federal, state, local and tribal officials, consumer groups, and industry, can be a valuable forum for education and collaboration to assist local leaders meet this goal. The positive economic impact of broadband infrastructure to supporting jobs and attracting residents is a far more effective tool for economic development than maximizing administrative fees that may be charged for application processing and rights of way. The Commission has a critical role in promoting that message.

B. Provide Tools, including Best Practices Guidance, that Make the Review Process Easier and Cheaper for Localities

In addition to promoting connected cities as an opportunity for localities (rather than a challenge to their scarce personnel resources), the Commission should develop a connectivity tool kit. The Commission can serve as an "honest broker" providing model ordinances, siting practices, and other guidelines to help government planners. It is Nokia's intention that these models and best practices can remove much of the complexity from the siting process. Localities can use this guidance to audit their own existing procedures. Nokia does not anticipate bright line rules, but rather the connectivity tool kit will demonstrate a range of what is reasonable.

Such guidelines will demystify the process. In this way, the Commission can help localities save time and money. Model processes and model fee guides should stem the need to pay expensive consultants to manage the process, or at least end the practice of hiring consultants whose motivation is to maximize fees rather than the public good.

This proceeding provides a tremendous opportunity to develop the record further and deliver, perhaps in concert with the newly announced BDAC, a set of model practices. To achieve this, Nokia recommends that the Commission continue to build the record in this proceeding, through participation from states and localities on the following:

- How localities determine fee levels for small cell and DAS systems, and the extent to which they reflect the recovery of costs incurred by the locality in reviewing and approving applications;
- The extent to which non-employee consultants are being retained by localities to negotiate siting agreements and whether the consulting contracts include incentives to maximize fees rather than to improve broadband connectivity throughout the community;
- The essential interests of local governments that require protection through their siting application processes (i.e., environmental concerns, public safety and health, etc.) and the ways in which their processes promote and secure those interests;
- Best practices (and, in particular, recent changes or adoptions) that speed the consideration of application review. For example, the Commission should seek additional information on the extent to which localities have enabled expedited review for micro-deployments (non-tower) of small cells and other such equipment and facilitated bundled applications in which multiple sites involving the same type of infrastructure can be considered simultaneously rather than as separate applications;
- How this proceeding to streamline siting of wireless infrastructure on rights of way can be applied to *all* government property (for example, sides of government buildings), to further extend broadband connectivity throughout the locality. This will not only provide a greater diversity of

property that can be used to site broadband infrastructure, but help serve localities away from rights of way.

With a robust record including the analysis described above, and in coordination with the BDAC, Nokia respectfully urges the Commission to issue a set of findings and recommendations that include: (1) current practices regarding fees for initial and recurring access and the extent to which those practices are reflective of cost recovery or something more and the impact on deployment; (2) whether there should be a rebuttable presumption against the hiring of consultants to negotiate siting fees, and whether certain fee structures and other contract terms used by consultants disserve the public interest and should be disfavored; and (3) whether there are model practices submitted by industry and states and localities such as multi-site applications and expedited review that can serve as a benchmark target for the Commission’s model. Ultimately, this collaborative process should lead to a package of model documents and procedures that localities can use to facilitate broadband connectivity in their communities.

C. Provide a Federal Backstop for All Practices that “Prohibit or Have the Effect of Prohibiting” Service

Nokia applauds that Commission for its aggressive proposals to enforce a reasonable timeline for processing of local siting applications.⁷ Nokia urges, however, that the Commission move with similar urgency to address the *causes* of delayed review, and unreasonable fees. It is not enough to only say “act faster.” There are a number of requirements that, on their own or in combination, “prohibit or have the effect of prohibiting service” and warrant scrutiny (and potentially preemption) from the Commission.

⁷ NPRM and NOI at ¶¶ 3-21.

Therefore, Nokia proposes that localities retain substantial discretion to manage the process of granting access to government owned property. Nokia also proposes, however, that the Commission provide a process whereby broadband providers can seek relief from patently unreasonable practices that fall outside the best practices identified and adopted by the Commission, as discussed above. An application for relief could request that the Commission grant approval of applications where it can show that the fees, timelines, or processes employed by a specific locality are outside the parameters established by the Commission. Applicants should not have to wait for a shot clock to expire to seek relief on unreasonable processes, fees or the like. But, critical to this is the publication of baseline Best Practice documents that set appropriate expectations on these key elements of the siting process.

Nokia is optimistic that the benefits of using the tools and guidelines produced through this Commission-initiated, collaborative process will be compelling to local governments. Where localities fail to follow Best Practice guidelines, including reasonable timelines, preemption authority should be exercised to remove barriers to bringing advanced wireless services to all Americans.

VIII. CONCLUSION

Nokia supports the Commission's efforts in this proceeding and welcomes the opportunity to participate in a collaborative process to facilitate deployment of wireless connectivity to communities throughout the United States.

Respectfully submitted,

Nokia

/Brian Hendricks/

Brian Hendricks

Jeffrey Marks

Government Relations

Nokia

1100 New York Avenue, NW

Suite 705 West

Washington, DC 20005

June 15, 2017