I'd like to begin my comments with a quote from the DIGITAL Reservations Act, legislation introduced by Secretary Haaland in 2020 when she was a member of the House.

"In the 1800s, the United States government forcibly removed Native Americans from their homelands to gain control of natural resources on their lands and placed Native Americans on desolate plots of land across the country leading to enormous economic and health disparities. In the modern era, the United States is again attempting to take resources from Native Nations in the form of spectrum licenses, against the treaties and precedent that affirms Tribal sovereignty. This administrative prohibition to granting sovereign Native Nations permanent access to spectrum licenses over their jurisdictions is a failure of the Federal government's trust responsibility, prioritizes private industry profits over the lives of Native Americans, and expands modern "digital reservations" over Tribal lands exacerbating existing disparities. Inability to employ telehealth contributes to the alarming disproportionate rates of COVID-19 on reservations. Without access to spectrum licenses over Tribal lands, Indian Tribes and Native Hawaiian organizations are restricted from successfully deploying wireless networks for their members."

Electromagnetic spectrum (spectrum) is a renewable and naturally occurring resource that is not human-made, but flows from, on, and over the land as a result of Earth's natural electromagnet forces and their interactions with celestial bodies. While humans are constantly learning how to better harness spectrum through technology that

allows us to see through our bodies (X-rays), communicate from a distance (wireless telecommunications), or heat up food (microwaves), that doesn't change the fact that spectrum itself is a natural resource. Just because you can make a car run with gas doesn't mean the gas isn't a natural resource attached to the land from whence it came. It follows that spectrum is a resource attached to the land it flows through, on, and over.

Because of this, Native Nations should have rights to spectrum far beyond the rights currently recognized by the U.S. government. In fact, Native Nations should have exclusive rights to the spectrum on and over their lands. Further, the United States owes Native Nations backpay for the spectrum licenses that have been sold on tribal lands since the first FCC spectrum auction in 1994. Any money the U.S. received from auctioning a spectrum license on tribal lands should have gone to the respective tribe, not to U.S. treasury, because the U.S. government was collecting money from the sale of a natural resource on tribal land.

The entire government has a trust responsibility to Native Nations, and NTIA is no exception. In November 2023, the Departments of the Interior and Commerce and the Federal Communications Commission announced a new Memorandum of Understanding (MOU) to advance electromagnetic spectrum access opportunities and the deployment of broadband and other wireless services on Tribal lands. The MOU acknowledges that The parties must work together to promote the deployment of broadband and other communications services on, and expand access to spectrum over, Tribal lands and Hawaiian home lands. This is a good first step toward fulfilling the trust responsibility,

but the trust responsibility will not be fulfilled regarding spectrum policy until the federal government recognizes each Native Nations' exclusive rights to the spectrum on and over their lands. If you're not familiar with the trust responsibility, it is an ethical and fiduciary obligation the U.S. government has to act in the best interest of Native Nations, to respect tribal sovereignty and self-determination, and to manage trust resources, which includes natural resources such as electromagnetic spectrum.

The Indigenous peoples within the present-day United States are not alone in their fight for spectrum rights. A coalition of Māori people in present-day New Zealand signed an MOU which mandates the Crown to hold for the benefit of all Māori at no cost 20% of all future Commercial Spectrum allocations. Similarly, Indigenous leadership in Canada and Mexico have called upon colonial governments to acknowledge Indigenous spectrum rights.

Your request for comments states that "NTIA serves as the President's principal advisor on telecommunications policies and manages the use of the radio-frequency spectrum by federal agencies." This positions NTIA perfectly to uphold the U.S. trust responsibility by choosing to respect tribal sovereignty and recognize broad spectrum rights for Native Nations As you know, sufficient access to spectrum is vital to a nation's national security, critical infrastructure, transportation, emergency response, public safety, scientific discovery, economic growth, competitive next-generation communications, and diversity, equity, and inclusion. These advantages apply not just to the United States, but

also to Native Nations who need spectrum to serve their citizens. Increased spectrum access allows each of the 574 federally recognized tribes, as well as the many other Indigenous nations to promulgate innovation, connectivity, and competition, create high-paying and highly skilled jobs, and produce improvements to the overall quality of life. Recognizing tribal sovereignty over spectrum allows Native Nations to reimagine their futures in a way that aligns with their priorities, and exercise self-determination.

Below are my comments on the specific questions posed by NTIA. The corresponding NTIA questions are in bold.

Pillar 1- A Spectrum Pipeline To Ensure U.S. Leadership in Spectrum-Based Technologies

1. How much, if at all, should our strategy by informed by work being performed within recognized standards-setting bodies (*e.g.,* 3GPP, IEEE), international agencies (*e.g.,* ITU), and non-U.S. regulators or policymakers (*e.g.,* the European Union)? What relationship (if any) should our strategy have to the work of these entities?

The NTIA should consider and follow the direction of the United Nations articulated in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), which the United States adopted in 2011. Article 26 of UNDRIP states that "Indigenous peoples have the right to own, use, develop and control the lands, territories

and resources that they possess by reason of traditional ownership or other traditional occupation or use, as well as those which they have otherwise acquired." Here, spectrum is the resource Indigenous peoples within the United States (including Nations of Hawai'i, Alaska Native Tribes, and Indigenous peoples of U.S. territories) have the right to own, use, develop, and control.

2. Describe why the amount of spectrum now available will be insufficient to deliver current or future services or capabilities of concern to stakeholders. We are particularly interested in any information on the utilization of existing spectrum resources (including in historically underserved or disconnected communities such as rural areas and Tribal lands) or technical specifications for minimum bandwidths for future services or capabilities. As discussed in greater detail in Pillar #3, are there options available for increasing spectrum access in addition to or instead of repurposing spectrum (*i.e.,* improving the technological capabilities of deployed systems, increasing or improving infrastructure build outs)?

In 2018 the government accountability office reported that only 18 tribal entities had ever held a spectrum license from the FCC, even though spectrum auctions began in 1994. With over 500 Native Nations federally recognized by the United States, 18 is a disgraceful number. In 2019, the FCC sought to remedy this with the 2.5 GHz Rural Tribal Priority Window (RTPW). While the 2020 RTPW did put more spectrum into the hands of Native Nations, it isn't nearly enough. First, the RTPW completely failed to

serve Urban tribes by arbitrarily deeming them ineligible for the spectrum opportunity. This is an unprecedented and unacceptable categorization that resulted in urban tribes lacking an invaluable resource in the midst of a global pandemic. The U.S. defends its arbitrary rural/urban categorization by stating the FCC "does have a statutory responsibility to manage the radio spectrum and Congress has exhorted us to speed the deployment of broadband to all Americans in a reasonable and timely manner." Again, I remind you of the trust responsibility the U.S. government owes Native Nations, which mandates the respect of tribal sovereignty and self-determination of tribes, regardless of whether the FCC or NTIA deem them rural or urban tribes. The cessation of the arbitrary urban/rural distinction will help ensure that all Native Nations will gain access to the spectrum they need, in the amounts they need it.

Further, as stated above, the U.S. government should not auction the spectrum on and over tribal lands. Because Native Nations need spectrum to serve their people, and because spectrum is a natural resource that may be leveraged to further develop a healthy economy on tribal lands, NTIA should recognize exclusive tribal rights to spectrum on tribal lands. This is in line with the DIGITAL Reservations Act, which prohibits the FCC from selling tribal spectrum licenses at private auctions to for-profit corporations and permanently eliminates the public availability of spectrum over Tribal lands. This is the only solution that thoroughly ensures sufficient amounts of spectrum for Native Nations.

Pillar #2- Long Term Spectrum Planning

3. How can federal and non-federal stakeholders best engage in productive and ongoing dialogue regarding spectrum allocation and authorization, repurposing, sharing, and coordination? Learning from prior experiences, what can be done to improve federal/non-federal spectrum coordination, compatibility, and interference protection assessments to avoid unnecessary delays resulting from non-consensus?

Each and every spectrum auction that includes spectrum on tribal lands should trigger tribal consultation. By not consulting with the respective Native Nation before selling spectrum, a tribal natural resource, at auction, the United States has failed to uphold the trust responsibility it has to federally recognized tribes. Executive Order 13175 states that "[e]ach agency shall have an accountable process to ensure meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications. "Policies that have tribal implications" refers to regulations, legislative comments or proposed legislation, and other policy statements or actions that have substantial direct effects on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes. Historically, the federal government selling a natural resource sourced from tribal land is a policy that has tribal implications. Therefore, the federal government has a duty to consult with a Native Nation before selling spectrum on their lands. This is a duty the U.S. government has failed to uphold since the beginning of spectrum auctions in 1994.

4. What technical and policy-focused activities can the U.S. Government implement that will foster trust among spectrum stakeholders and help drive consensus among all parties regarding spectrum allocation decisions?

The federal government has a literal trust responsibility to Native Nations, which largely falls on the FCC and NTIA in the realm of spectrum management. The trust responsibility is based on Treaties (the Supreme law of the land, according to the U.S. Constitution), Supreme Court Case Law, and legislation such as the Indian Self Determination Education and Assistance Act. It is a moral and fiduciary obligation that is legally binding upon the United States, and failure to uphold the trust responsibility could result in litigation and monetary compensation to Native Nations. Upholding this trust responsibility in this context may look like implementing the following measures:

- Recognize the sovereignty of Native Nations by recognizing their exclusive rights to the spectrum on and over their lands.
- Take steps to understand the importance of spectrum to Native Nations in governing their citizens, providing them resources, connectivity, educations, health, and safety.
- Cease the auctioning of spectrum on tribal lands, and work with Native Nations to develop a regulatory mechanism that respects tribal sovereignty, minimizes

interference at the boundaries of tribal lands, and returns tribal spectrum that is currently licensed to non-tribal entities.

- If a Native Nation chooses not to manage their own spectrum, develop a system of accounting that allows revenue from the sale of spectrum on their lands to go into a trust account for the benefit of the respective Native Nation (this would look similar to the way the Department of Interior manages other natural resources on behalf of tribes, such as oil and gas).
- Account for previous sales of spectrum on tribal lands that were routed to the U.S. treasury, and pay each respective Native Nation for the natural resource that was sold from their land. This includes regulatory and licensing fees that have historically funded the FCC's regulatory activities.
- Work with Native Nations who need support in building the capacity to manage and regulate their own spectrum on their lands.

7. What is needed to develop, strengthen, and diversify the spectrum workforce to ensure an enduring, capable and inclusive workforce to carry out the long-term plans (including specifically in rural and Tribal communities)?

There are many organizations currently working to educate tribal stakeholders and administrators on how to effectively create and manage their telecommunications networks. This includes the Internet Society, Connect Humanity's Indigenous

Connectivity Institute, Natives in Tech, and the National Tribal Telecommunications Association, to name a few. These organizations and other Native-led organizations that prioritize this work should be supported with federal funding, and Indigenous knowledge should be leveraged and appropriately compensated for educational and capacity-building initiatives in this space.

Pillar #3—Unprecedented Spectrum Access and Management Through Technology Development

2. What policies should the National Spectrum Strategy identify to enable development of new and innovative uses of spectrum?

By recognizing Native Nations' rights to their spectrum, the federal government is allowing those Nations to develop and innovate their own priorities and uses for their spectrum. Figuring out how to best recognize tribal spectrum sovereignty is the only policy NTIA should be focusing on when it comes to spectrum innovation on tribal lands.

3. How can data-collection capabilities or other resources, such as testbeds, be leveraged (including those on Tribal lands and with Tribal governments)?

In any conversion about Indigenous data, meaning data mined from Indigenous lands, or from Indigenous people, the CARE principles for Indigenous data governance

developed with the leadership of Stephanie Russe Carroll and Maui Hudson should govern. The CARE Principles for Indigenous Data Governance are people and purpose-oriented, reflecting the crucial role of data in advancing Indigenous innovation and self-determination. These principles complement the existing FAIR principles encouraging open and other data movements to consider both people and purpose in their advocacy and pursuits. The CARE Principles state that the process of collecting and holding Indigenous data should be for the Collective benefit of the respective Indigenous group, the Indigenous group should retain the Authority to control the data itself and its uses, and the process should be led with Responsibility and Ethics.[1]

Ahéhee,

Darrah Blackwater 4/4/2023

[1] Carroll, S.R., Garba, I., Figueroa-Rodríguez, O.L., Holbrook, J., Lovett, R., Materechera, S., Parsons, M., Raseroka, K., Rodriguez-Lonebear, D., Rowe, R., Sara, R., Walker, J.D., Anderson, J. and Hudson, M., 2020. The CARE Principles for Indigenous Data Governance. *Data Science Journal*, 19(1), p.43. DOI: http://doi.org/10.5334/dsj-2020-043