

NTIA Government-to-Government Tribal Consultation: National Spectrum Strategy

Zoom Meeting

1:00-3:00 p.m., Tuesday, April 18, 2023

Introductory Remarks

Adam Geisler, Division Chief for the Tribal Connectivity and Nation-to-Nation Coordination Division at NTIA, opened the meeting. He explained that the purpose of this meeting was to engage in a government-to-government tribal consultation to further NTIA's efforts around the National Spectrum Strategy (NSS). Because this was a government-to-government meeting, he said attendance was limited to representatives with authority to speak on behalf of their tribe. He noted that there will be another tribal consultation on Thursday, April 20, 2023. He said that if representatives were not prepared to provide comments today, they could present their comments on Thursday. He said that written comments should be submitted by 5 p.m. Eastern Time on April 21, 2023.

OJ Semans, Sr., Executive Director of the Coalition of Large Tribes (COLT) and a member of the Rosebud Sioux Tribe, delivered a prayer and invocation.

Scott Blake Harris, Senior Spectrum Advisor and Director of the NSS, introduced the representatives from NTIA: Paul Ransom, Senior Technical Expert at the Office of Spectrum Management (OSM) and Technical Lead for the NSS, and Derek Khlopin, Deputy Associate Administrator for Spectrum Planning and Policy in OSM. He also introduced Matthew Pearl, the Director of Emerging Technology on the Staff of the National Security Council at the White House. The White House's Pearl explained that tribal equity and the NSS were both priorities for the Biden administration.

NTIA's Harris provided background on the NSS. He spoke about the importance of spectrum for wireless communications, weather forecasting, location services, space exploration, aviation safety, national defense, and many other critical areas. He explained that increasing demand for spectrum in the public and private sectors motivated the creation of the NSS. He said that the NSS aims to identify spectrum bands that can be studied for more intensive use and to improve coordination with federal, tribal, and private entities.

NTIA's Harris described the NSS outreach process. He said that NTIA began with the public request for comments. There were two public listening sessions. Public comments were due on April 17. This meeting is one of two tribal consultations. A second tribal consultation will take place on Thursday, April 20, 2023.

Questions

NTIA's **Geisler** described the process for discussing the five questions NTIA had posed to tribal leadership. He explained that there should be about 20 minutes for each question. He said that

responses to the questions should be no longer than two minutes. Participants used the “raise hand” function on Zoom to indicate a desire to speak.

Question 1: How could transparency and communications related to spectrum allocation decisions be improved to increase Tribal Nations’ trust in the process?

OJ Semans, Sr., Executive Director of COLT and a member of the Rosebud Sioux Tribe, answered that tribes deal with several agencies on grant applications and other topics. He recommended that (1) government agencies should be required to certify that they have received the permission of tribes to use spectrum on tribal land.

NTIA’s Harris reformulated this point for clarification: as there are applications for spectrum licenses that might impact tribal lands or might be allowed access to tribal lands, the tribes should be informed of such applications at the time they’re made, or at the time they’re granted. Semans confirmed this reformulation was accurate and added that (2) tribes should also have opportunity to comment in advance of proceedings. He said that sometimes spectrum is given to the tribes, but the tribes cannot access it, or they do not have information about how spectrum issues could affect the tribes positively or negatively. He also provided background on COLT, which consists of 51 tribes that have a land base of 100,000 acres or more. Of the 574 tribes, only 51 tribes meet that criterion. However, those 51 tribes control approximately 95% of all tribal lands in the lower 48.

Brodie Ford, Chief Network Engineer for the Spokane Tribe of Indians, said it is important to know who owns specific bands of spectrum. He said that the lack of clarity about spectrum access rights has caused issues for tribal leaders and other organizations. He supported Semans’ idea about increased communication on spectrum issues with tribal leaders. He agreed that tribal leaders should have opportunities to comment on spectrum applications throughout the application process. He thought it would be useful to see proposed implementation plans attached to applications with a clear timeline. This would help tribes make decisions about which projects to pursue. He said that this form of information sharing would improve transparency and mutual respect between the tribes and the US government.

NTIA’s Harris clarified that Ford requested (1) advance notice about applications for use of spectrum impacting tribal lands, (2) access to a database or list of spectrum ownership by band, and (3) that tribal nations have an opportunity to compete for FCC license auctions. Ford confirmed these points, but he added that (4) tribes should have a right of refusal for issues related to tribal lands.

Reggie Tupponce, Tribal Administrator for the Upper Mattaponi Tribe (Virginia) and Vice President for the Southeast Region of the National Congress of American Indians (NCAI), recommended (1) a priority window for tribes to apply for spectrum use. He explained that the Upper Mattaponi, Pamunkey, and Rappahannock Tribes formed a consortium to apply for 2.5 GHz spectrum. The consortium also applied for a waiver due to a lack of trust land. He said that the consortium’s waiver process remains stalled with the FCC. The consortium contacted the FCC and their congressperson, but it has received no response. Based on this experience, he said that poor communication and long application processes were problems to address.

NTIA's Harris clarified that application processes should be transparent and communicative. NTIA's Harris said NTIA would follow up with colleagues elsewhere on this issue. NTIA's Geisler asked if Tupponce had specific recommendations. NTIA's Harris said that solutions would also be appreciated. Tupponce said that (2) email updates, (3) online system updates, and (4) website updates about the status of ongoing applications would improve communication in the application process.

Will Micklin, Vice President of the Central Council of Tlingit and Haida Indians and CEO of the Ewiiapaayp Band of Kumeyaay Indians, said that he is involved in broadband deployment and the tribal priority window licensing of 2.5 GHz spectrum. He said that understanding spectrum band allocations can be difficult. He also said that interacting with the FCC and NTIA can be formalized and unfriendly. He discussed how many tribes lack the administrative capacity and funding to engage subject matter experts on spectrum for extended application processes. He described problems with spectrum being subleased to mobile wireless companies, and then that spectrum remaining unused. He said that tribes often lack access to high-speed communications. Many areas rely on 3G and 4G because 5G is not available. He said that has to do with the dependence of radio spectrum on fiber to get a high-speed signal to the towers. In his opinion, there is a need for more towers at greater density to provide higher speeds. He also said that sufficient funding is not available to get fiber to rural tribal areas. He described how other countries have better network speeds, bandwidth, and deployment at a lower cost than the United States. He said tribes often receive services last in deployment processes. He described problems with dated broadband standards and topographic challenges to fiber deployment in many tribal areas.

For solutions, he recommended (1) a national conversation about unused, licensed spectrum which includes the tribes; (2) a national conversation about fiber deployments for the tribes; (3) support for tribal spectrum allocation and redeployment for effective use; and (4) recentering discussions about mobile broadband on infrastructural barriers which hinder deployment on tribal lands. Overall, he recommended (5) breaking down barriers between the various parties interested in spectrum.

NTIA's Ransom thanked Micklin for his comments and restated the importance of communication with the FCC and NTIA. He also noted the importance of making next-generation services available in tribal areas. He asked Micklin to expand on these points in written comments. NTIA's Geisler highlighted Micklin's point about encumbered spectrum not being deployed in a timely fashion – which correlated the experiences of previous speakers.

Valerie Fast Horse, IT Director for the Coeur d'Alene Tribe, said the Coeur d'Alene tribe will be submitting written comments. She noted that the previous speakers had indicated that many tribes have immediate spectrum-related needs to address. She described how, in addition to examples of stakeholders not using encumbered spectrum, her tribe faces issues with spectrum being used selectively – such as towers directed to serve urban areas, while not serving the reservation. In this case, partially used spectrum could serve their reservation if it were not currently encumbered. She said that the Coeur d'Alene tribe uses many unlicensed frequencies, such as 5 GHz, but this spectrum is not contiguous. There are spaces between the channels, so they cannot use the entire wide channel. She said that families do not have the bandwidth they need, which became particularly evident with home internet use during the coronavirus

pandemic. She described an interest in Wi-Fi 7, but said it is primarily for indoor use, whereas her tribe would also need outdoor connectivity.

Fast Horse recommended (1) spectrum audits on tribal land to determine which bands of spectrum are in use and (2) for NTIA, FCC, or other agencies to inform tribes about available spectrum.

A speaker from NTIA asked about whether Fast Horse was familiar with Citizens Broadband Radio Service (CBRS) spectrum. Fast Horse responded that while her tribe was familiar with CBRS, it would not provide sufficient bandwidth for her tribe's needs. She also discussed the 2.5 GHz spectrum which is being held by private companies and universities. She said that there is an ideal tower location for 2.5 GHz spectrum use, but that the FCC said they cannot place towers outside the reservation.

NTIA's Harris reiterated that the NSS will be completed before the end of the year.

[Question 2: What actions or recommendations would promote the deployment and availability of next-generation products and services to Tribal lands?](#)

Brodie Ford, Chief Network Engineer for the Spokane Tribe of Indians, said that (1) tribal lands would make good locations for pilot programs for next-generation technologies due to their varied and difficult terrain. He also said many tribes are not aware of next-generation technologies and that funding often does not exist for these products. Pilot programs can help tribes learn about new technologies and inform their decisions about which next-generation technologies are worthy of funding applications.

NTIA's Harris said that pilot programs are a great idea. He said it would be beneficial to mention pilot programs in the NSS.

OJ Semans, Sr., Executive Director of COLT and a member of the Rosebud Sioux Tribe, described the out-of-date technologies still in use in many tribal communities. He recommended (1) including tribes earlier in various processes. He also supported the idea of pilot projects, but he said companies often lack knowledge about tribes. He said that (2) tribes need to be included in discussions on new technologies.

NTIA's Harris clarified that Semans' point also applies to companies licensed or hoping to be licensed on or near tribal lands. Semans agreed with this clarification.

Josh Snow, President of Trace Fiber Networks and member of the Chickasaw Nation, began with a description of his company's efforts to build a spectrum portfolio. He said that tribal credits in auctions have been ineffective because tribes were left with no leverage after giving carriers their permission for credit purposes. As a result, services were often not deployed in tribal areas. He said that more than a tribal letter of consent is necessary. He recommended (1) including tribal nations more in the spectrum allocation process to prevent issues with non-deployment to tribal areas.

A speaker from NTIA asked whether the 2.5 GHz early filing window was a good, repeatable process. Snow responded that it was a good experience. However, he also noted that bandwidth

was often insufficient for the effective deployment of a wireless system. He described failed efforts to bargain with national carriers to acquire a contiguous spectrum band. He said he was aware of how valuable mid-band spectrum was, but he said perhaps (2) there is underutilized or unused spectrum which could be allocated to tribal nations. He described the importance of cores and suggested (3) getting the spectrum allocation, then maybe some set asides for an open core and even the open radio access network (ORAN) where spectrum is being shared – as it is in Europe.

NTIA's Ransom asked for more information about ORAN. Snow responded that he had considered ORAN, but the nationwide carriers did not appear to be interested. He said this was due to existing economic incentives. He described efforts to hopefully use 28 GHz for private LTE.

Will Micklin, Vice President of the Central Council of Tlingit and Haida Indians and CEO of the Ewiiapaayp Band of Kumeyaay Indians, had two suggestions: (1) regulate internet providers so they are required to provide services on tribal lands and (2) to encourage pilot projects in rural and remote tribal areas. He also described examples of fallow spectrum being held by entities without their knowledge.

NTIA's Harris thanked Micklin. He noted the repeated references to communications companies not utilizing their spectrum to provide services to tribal lands.

Sorhna Li, Government Liaison for the Scotts Valley Band of Pomo Indians (California), began with a reminder that many tribes do not have trust land and only have fee land. She recommended that (1) any communications with tribes should include tribes with fee land in their contiguous area.

Kerry Ivory, Administrator for the Native Village of Ouzinkie, began by describing a situation where many Kodiak villages lack cell phone access. She said this was because a national carrier had left the area. She described this as a problem because spectrum and towers are available, but cellular service is not available. She said many people in her community do not have knowledge of spectrum-related topics, so she recommended (1) targeted training to allow people to take advantage of opportunities.

Speakers from NTIA supported this recommendation about training and outreach.

[Question 3: What initiatives on Tribal lands \(e.g., testbeds\) or partnerships with Tribal governments should be considered that would enable more robust and quicker implementation of spectrum sharing to meet spectrum access needs?](#)

OJ Semans, Sr., Executive Director of COLT and a member of the Rosebud Sioux Tribe, said he thought this was an important question. He recommended that (1) 2.5 GHz spectrum should be issued to tribes. He said that 2.5 GHz could form the basis for leasing spectrum to national carriers or for developing their own systems. He noted that some spectrum licenses may have been forgotten or elapsed due to deadlines on tribes.

NTIA's Harris asked for clarification on whether other licensees had deadlines. Semans said he could only confirm deadlines on licenses for tribes. He added that he would like for (2) the Bureau of Indian Affairs to be included in NSS discussions.

Sorhna Li, Government Liaison for the Scotts Valley Band of Pomo Indians (California), suggested that (1) any training piece put into the NSS should also include reference to the existing tribal Temporary Assistance for Needy Families (TANF) and Workforce Innovation and Opportunity Act (WIOA) programs.

NTIA's Geisler asked for clarification on the TANF and WIOA acronyms. Li responded that that she mentioned these examples to remind meeting participants of existing training programs.

Ophelia Watahomigie-Corliss, member of the Havasupai Tribe and Tribal Broadband Connectivity Program (TBCP) Director, described issues with companies not using available spectrum. She also discussed long-term negotiations with the FCC about providing service to the Havasupai Tribe.

NTIA speakers asked for clarification about the long-term negotiations with the FCC. Watahomigie-Corliss said the FCC ultimately claimed that the Havasupai Tribe's wireless internet service provider (WISP) had filed paperwork in the wrong category. She suggested that (1) online processes could be clearer to avoid these types of delays.

Leslie Hardwick, Spokane Tribe of Indians and the Telecom Billing Manager for the local tribal internet service provider, said she was stepping in for Ford. She said Ford had the recommendation that (1) regulators allow the tribes to skip the official application processes for testing new technologies on their respective reservations. She also said Ford recommended (2) allowing for a grace period of six to 12 months for tribes to work with new technologies, to discover if these technologies are even viable for their residents.

Question 4: What, if anything, can NTIA do to develop, strengthen, and diversify the spectrum workforce within Tribal Nations to ensure an enduring, capable, and inclusive workforce?

Sorhna Li, Government Liaison for the Scotts Valley Band of Pomo Indians (California), began by saying her response to the previous question should probably be filed under this question. She noted that during the coronavirus pandemic, funding was available to tribal government for training in the healthcare industry through the Department of Housing and Urban Development (HUD). She suggested that NTIA could similarly (1) provide an opportunity in a non-competitive fashion that would allow tribal governments, particularly financially stressed governments, to conduct spectrum-related training.

NTIA's Harris said, while no funding is currently available, funding is still something which NTIA can suggest. NTIA's Geisler asked for clarification on the HUD program. Li noted that it was two rounds, so everyone eventually received funding. She said it is frustrating when the federal government issues competitive grants as it can be difficult for needy communities to access them. She also said that (2) NTIA could develop educational materials with a tribal focus

and an understanding of historical trauma. Culturally sensitive educational materials could then be provided to the tribal governments.

Leslie Hardwick, Spokane Tribe of Indians and the Telecom Billing Manager for the local tribal internet service provider, said that (1) NTIA could conduct listening sessions with tribes to share any concerns and (2) designate a liaison for each tribe.

Ophelia Watahomigie-Corliss, member of the Havasupai Tribe and TBCP Director, noted that a lack of internet access in some tribal communities makes the webinar format and online training difficult and unfamiliar. She suggested that (1) there could be in-person training camps.

Question 5: Are there any other questions raised by our Request for Comments that are of interest to Tribal Nations?

Valerie Fast Horse, IT Director for the Coeur d'Alene Tribe, suggested that (1) funding for these training camps could be provided by auctioning spectrum. She said that instead of proceeds going to the treasury, funding could go to the tribes, tribal training programs, tribal access to spectrum, or related approaches. She also suggested (2) holding consultations with the tribes on the funding issue.

Ophelia Watahomigie-Corliss, member of the Havasupai Tribe and TBCP Director, pointed out that smaller tribes do not have a grant writer or the ability to hire a grant writer. She also said that some tribes are far from universities and cannot easily attend in-person training sessions.

NTIA's Harris acknowledged that it is difficult to have a single solution for every tribe. NTIA's Geisler noted that different tribal contexts and cultures preclude the possibility of a single solution.

Conclusion

NTIA's Harris concluded by saying that written comments are due April 21 at 5 p.m. Eastern Time. Comments can be sent to nsstribalconsultations@ntia.gov. On the NTIA website, there will be an email address that is open to anybody: tribal members, tribal governments, and other members of the public. That email address will continue to be a forum for any other thoughts that people happen to have after the formal comment period has ended.

NTIA's Geisler reiterated that the tribal consultation on Thursday will operate in the same manner as today's consultation.