

**STATEMENT OF
CHAIRWOMAN JESSICA ROSENWORCEL**

Re: *In the Matter of Single Network Future: Supplemental Coverage from Space, Space Innovation*, GN Docket No. 23-65, IB Docket No. 22-271, Notice of Proposed Rulemaking (March 16, 2023)

We are fast heading to a world where next-generation wireless networks will connect everyone and everything around us. They will open up possibilities for communications that we cannot even fully imagine today. But we will not be successful in our effort to make this always-on connectivity available to everyone, everywhere if we limit ourselves to using only one technology. We are going to need it all—fiber networks, licensed terrestrial wireless systems, next-generation unlicensed technology, and satellite broadband. But if we do this right, these networks will seamlessly interact in a way that is invisible to the user. We won't need to think about what network, where, and what services are available. Connections will just work everywhere, all the time.

That vision is what we call the Single Network Future—and the opportunities are big. But the path to this future is going to require many steps—and we take an important one today.

Instead of talking just in generalities about what lies ahead, let me provide a clear example of what it means to have a Single Network Future with coverage everywhere.

Consider Angeles National Forest in California. This is a wilderness area nestled between the San Gabriel Mountains and the Sierra Pelona Mountains. That puts it just north of Los Angeles. The area is welcome retreat from the hustle and bustle of the city.

The landscapes here are pretty amazing, but the topography makes it difficult to get a consistent wireless signal. Back in December, a couple was traveling in this area and their car went off the road. In fact, it fell 300 feet from the Angeles Forest Highway. This is a really remote area. There was no cell service. No one would have known to look for them. Plus, this is the kind of environment that—beautiful as it is—gets really treacherous at night, when the temperatures drop to dangerous levels.

Now this story could have happened in lots of places. And it could have ended for this couple right there, but it did not. They survived, with some grit, some luck, and some new technology. They had a phone that had a new feature: the ability to connect directly to satellite signals delivered from space. A help message reached first responders with their precise location. Within 30 minutes, a rescue helicopter was airlifting the couple to a hospital.

What is so striking about this story is that it demonstrates how bringing satellite and terrestrial wireless capabilities together can accomplish what neither network can do on its own. We are starting to see direct satellite-to-smartphone communication move from sci-fi fantasy to real-world prospect. Because small startups, big operators, handset providers, and even software companies have all announced new plans to connect satellites directly to our devices so that we stay always connected—especially when the unthinkable occurs.

This is really neat. But it is important to remember for now these early space communications projects may not provide high-speed broadband from the stratosphere to our phones. But to start, they could deliver low-bandwidth connectivity suitable for emergency calls and texts in remote settings where terrestrial networks do not reach.

For this innovation to have a chance to deliver at scale—and for us to move toward a full Single Network Future with more providers, in more spectrum bands, and a global footprint—regulators will need to develop frameworks that support its development. After all, not everyone will have all the pieces to make this work. Some business and technology models will require new and different regulatory approvals before they can get off the ground. There are challenges with access to airwaves, frequencies

that are not all globally aligned, possibilities for interference that must be managed, and standards work that could help grow these capabilities. But what is clear is that with the growing interest in the possibilities of convergence of satellite and terrestrial services, an ad-hoc, case-by-case approach to these new ventures is not enough.

Last month I spoke about this vision of the Single Network Future at Mobile World Congress in Barcelona. There was a lot of interest from regulators and companies around the globe. Because the framework we are proposing is the first of its kind anywhere in the world. We are going to lead.

This is what that leadership looks like—today we are proposing a way forward for Supplemental Coverage from Space. This would allow a satellite operator to partner with a terrestrial mobile licensee to get access to their terrestrial spectrum through a lease arrangement and modification to the satellite operator's license. Then the satellite system can provide service directly to the subscribers of the wireless carrier in areas where the carrier lacks coverage. While our starting proposal focuses on frequency bands where the wireless licensee has nationwide service, we do not want to limit our efforts. So we also seek comment on how this could work if the mobile carrier has less than a nationwide footprint and still protects spectrum rights and prevents harmful interference.

Our approach is designed to make it easier for satellite operators collaborating with terrestrial providers to obtain authorization for converged services. By providing clear rules, I believe we can kick start more innovation in the space economy while also expanding wireless coverage in remote, unserved, and underserved areas. We can make mobile dead zones a thing of the past. But even better, we have an opportunity to bring our spectrum policies into the future and move past the binary choices between mobile spectrum on the one hand or satellite spectrum on the other. That means we can reshape the airwave access debates of old and develop new ways to get more out of our spectrum resources.

This is exciting, so let's get to it.

Thank you to the staff who have made this latest entry in our Space Innovation Agenda possible, including Steve Buenzow, Melissa Conway, Lloyd Coward, Peter Daronco, Tom Derenge, Kaya DeRose, Kamran Etemad, Garnet Hanly, Kari Hicks, Joyce Jones, Alice Koethe, Lamine Kone, Susannah Larson, John Lockwood, Jon Markman, Roger Noel, Jess Quinley, John Schauble, Blaise Scinto, Larry Somers, Joel Taubenblatt, and Janet Young from the Wireless Telecommunications Bureau; Gregory Baker, Jennifer Gilsenan, Nese Guendelsberger, Dante Ibarra, Karl Kensinger, Kathryn Medley, Kerry Murray, Robert Nelson, Stephanie Neville, Kathy O'Brien, Jim Schlichting, Tom Sullivan, Troy Tanner, and Merissa Velez from the International Bureau; Jamie Coleman, Michael Ha, Ira Keltz, Juan Montenegro, Nick Oros, Jamison Prime, Ron Repasi, Dana Shaffer, Tom Struble, and Aniqah Tahsin from the Office of Engineering and Technology; Doug Klein, David Koneczal, and Bill Richardson from the Office of General Counsel; Judith Dempsey, Lonnie Hofmann, Kate Matraves, Giulia McHenry, Daniel Shiman, Don Stockdale, and Patrick Sun from the Office of Economics and Analytics; Brenda Boykin, John Evanoff, David Furth, Shabbir Hamid, Debra Jordan, David Kirschner, Ahmed Lahjouji, Erika Olsen, Rasoul Safavian, Rachel Wehr, and James Wiley from the Public Safety and Homeland Security Bureau; Loyaan Egal, Eric Ehrenreich, Kathy Harvey, Jeremy Marcus, Victoria Randazzo, and Salomon Satche from the Enforcement Bureau; and Michael Gussow, Joy Ragsdale, and Chana Wilkerson from the Office of Communications Business Opportunities.