



November 10, 2015

The Honorable John Thune
United States Senate
512 Dirksen Senate Office Building
Washington, DC 20510

Dear Chairman Thune:

The Telecommunications Industry Association appreciates the opportunity to provide feedback on the staff discussion draft of the MOBILE NOW Act. We applaud the Senate Commerce Committee for considering steps to improve federal spectrum policy and promote wireless infrastructure deployment.

The staff discussion draft of the MOBILE NOW Act is a thoughtful proposal with many new ideas that hold the potential to meaningfully improve government policy in these areas. In particular, we appreciate the Committee's general view favoring incentive-based mechanisms (via retained auction or leasing revenue) that creatively reward agencies for wise use of spectrum, rather than a "command and control" model.

TIA is continuing to review the draft in consultation with our member companies, several of whom are currently participating in the World Radio Conference (WRC-15) outside the United States. We believe it will take some time to gather careful comments from all relevant stakeholders, including government stakeholders, since the Draft is technically complex.

Therefore, our feedback (enclosed) is very provisional and preliminary, and we recommend that the Committee take the necessary time to receive more feedback prior to holding a markup.

For further information, please contact me at dsrihari@tiaonline.org or at 703-907-7715. Thank you again, and we look forward to working with you on these important issues.

Sincerely,

/s/ Dileep Srihari

Dileep Srihari
Director, Government Affairs

Cc: Ranking Member Nelson (staff)
Enc.: TIA Feedback on MOBILE NOW Act

Telecommunications Industry Association
Feedback on MOBILE NOW Act
Staff Discussion Draft – circulated Nov. 6, 2015

The Telecommunications Industry Association (“TIA”) appreciates the work of the Senate Commerce Committee on legislation to improve federal spectrum policy and promote wireless infrastructure deployment. The discussion draft of the MOBILE NOW Act (“Draft”) is a thoughtful proposal with many new ideas that hold the potential to meaningfully improve government policy in these areas. In particular, we appreciate the Committee’s general view favoring incentive-based mechanisms (via retained auction or leasing revenue) that creatively reward agencies for wise use of spectrum, rather than a “command and control” model.

TIA is continuing to review the Draft in consultation with our member companies, several of whom are currently participating in the World Radio Conference (WRC-15) outside the United States. We believe it will take some time to gather careful comments from all relevant stakeholders, including government stakeholders, since the Draft is technically complex.

Therefore, our feedback below is very provisional and preliminary, and we recommend that the Committee take the necessary time to receive more feedback prior to holding a markup.

Nevertheless, we offer the following initial thoughts in response to the Committee’s preferred deadline. Our feedback begins with general comments regarding the unique circumstances of spectrum legislation and CBO scoring, with suggestions for provisional / fallback investment priorities if revenues are higher than anticipated. We then provide section-by-section feedback regarding the Draft.

Provisional / Fallback Funding Proposals

A. Lessons from the 2012 Spectrum Act and the Spectrum Pipeline Act of 2015. The 30 MHz of federal spectrum required to be auctioned by the Spectrum Pipeline Act of 2015 received a positive budget score from the Congressional Budget Office (“CBO”) of approx. \$5.5 billion, which was largely used to offset other budget items in the recently-enacted Bipartisan Budget Act of 2015.¹ A thumbnail calculation (pop. 320 million) suggests that CBO used a valuation of approximately **\$0.57 per MHz-pop**, which was approximately the sale price (\$0.52) for the *unpaired* 15 MHz of spectrum in the recent AWS-3 auction.

We assume that the Draft’s basic design is to achieve a positive score from requiring the auction of additional spectrum (Secs. 3-4), which would then be used to offset the agency re-allocation incentives (Sec. 5) and other portions of the bill. However, the following lessons have been learned in recent years:

- *Spectrum auctions often produce revenues far greater than anticipated.* This would be especially true here if 50 MHz of spectrum is ultimately auctioned as *paired* spectrum,

¹ See [CBO Estimate of Budgetary Effects of the Bipartisan Budget Act of 2015](#) (first table).

with the recent AWS-3 auction yielding \$2.72 per MHz-pop – *five times greater* than the unpaired block.

- *The 2012 Spectrum Act was wise to include some “fallback” provisions.* That Act provided \$115 million for Next-Generation 911 implementation grants and \$200 million in additional public safety research funding, but this funding could only be realized *after* an enormous \$20.4 billion amount was allocated to deficit reduction as part of a broader budget deal.² In 2012, many believed that these fallback provisions would never be triggered, but ultimately they were fully funded after AWS-3 auction revenues proved astronomically higher than predicted.
- *If Congress does not include “fallback” or conditional provisions for how such extra revenue should be handled at the time of enactment, then CBO will simply incorporate any extra revenues by making an upward revision in its budget baseline.*³ This deprives the committees of jurisdiction of any control or budgetary “credit” for how such extra revenue would be spent.

Given these realities, TIA believes that ***IF*** the Committee decides to require auctioning more spectrum for budget scoring purposes, then it ***MUST*** include fallback instructions for how spectrum auction revenue should be allocated, i.e., if it winds up being much larger than what CBO predicts at the present time.

B. Investment Priority – Advanced ICT Spectrum Research. The Committee should enact the Advanced Information and Communications Technology Research program, using the legislative text from S. 911 (112th Congress) as a starting point, and provide significant funding for it using provisional / “fallback” language if necessary.

Prior to the adoption of the 2012 Spectrum Act, the President proposed a major funding commitment -- \$3 billion – to a Wireless Innovation Fund (“WIN” fund.) This eventually materialized in legislative text as [S. 911 \(112th Congress\)](#) at § 224 (pp. 47-53), which would have provided funding to various agencies including NIST, the National Science Foundation, and DARPA to conduct transformative telecom research. Ultimately, only a separate provision regarding public safety-specific R&D survived in the final version of the 2012 Spectrum Act.

² See 47 U.S.C. § 1457(b).

³ See CBO, [The Budget and Economic Outlook: 2015 to 2025](#) (Jan. 2015) at p. 111 (“CBO estimates that the net proceeds over the next two years will be about \$27 billion more than the agency had previously anticipated. Those results led CBO to boost its estimates of the net proceeds from other auctions that may be held before the Federal Communications Commission’s auction authority expires in 2022”); see also [CBO Letter to Senator Heller](#) (Apr. 21, 2015) at p. 5 (“Any differences between the actual auction proceeds and CBO’s estimate of those proceeds will increase or decrease the future budget deficits that CBO expects and will be reflected in the agency’s subsequent baseline projections.”)

TIA strongly believes that spectrum R&D is the “seed corn” that has enabled more efficient uses of spectrum by federal and commercial users alike.⁴ This results in macroeconomic benefits to the U.S. economy as well as direct benefits to the Treasury when more spectrum is made available for auction. Some recent progress has been made – public-safety specific funding was included in the 2012 law, and funding for federal government planning was included in the recent Spectrum Pipeline Act. But fundamental research for spectrum R&D remains underfunded and unaddressed by Congress, so the Committee should include it here.

C. Investment Priority – Dig-Once. As described further below, TIA strongly supports “dig-once” legislation. Incorporating such legislation alongside spectrum auction legislation may offer a unique opportunity to provide “boot-strap” funding to establish a robust national broadband conduit program, with initial costs eventually being recovered through access fees.

D. Investment Priority – NTIA. The Draft would significantly increase the role of NTIA in several ways. Putting aside the merits of those proposals, we believe that NTIA needs to be better staffed to engage more closely with other agencies, especially if its role increases as envisioned.⁵ If federal spectrum incentives and/or direct leasing via auction are the path forward, the Committee should ensure that NTIA has the necessary resources to manage any such processes.

Sec. 5 – Reallocation Incentives

A. Ensuring the Money Stays with the Agency. Some agencies may fear that any incentive money will simply be “taken away” by appropriators during the next round. We are unclear regarding how federal agencies view the proposals in the Draft, and urge the Committee to seek their input if this has not been done. Perhaps the Committee should consider requiring agencies to designate how the money will be spent, reporting this to the committees of jurisdiction, and then enjoying some level of (at least political) immunity from having the funds subsequently removed. Alternatively, perhaps the use of separate Treasury funds, as contemplated in the Draft’s provision regarding leasing (p. 27, lines 1-18) may be more appropriate.

B. Incentivizing Joint Action. In multiple-user scenarios, the Draft wisely encourages joint efforts by *all* agencies to clear a particular band of spectrum by providing a higher 25% cap vs. that available for sharing (pp. 10-11). But even in situations where a sharing outcome is inevitable, the Committee should still encourage joint action. This could be done by slightly

⁴ See [TIA Comments to OSTP on Spectrum Policy](#) (Mar. 20, 2014) at 8 (“TIA OSTP Comments”).

⁵ See [TIA OSTP Comments](#) at 4 (“[A]s various spectrum-related efforts in recent years have demonstrated, a stronger level of coordination or management for federal spectrum usage may be required. Indeed, in some cases NTIA has occasionally had difficulties even obtaining current information from other departments, making it difficult for the agency to effectively respond to Administration and Congressional requests for more detailed information regarding federal use. It may be valuable to have NTIA be staffed to engage more closely with other spectrum management offices to ensure that there is greater currency to government records of use, providing greater transparency for management purposes.”)

increasing the 5%-per-agency cap, but only if *all* agencies in a particular band participate simultaneously. This may also require raising the 15% joint-action cap in sharing scenarios.

C. Who Initiates The Process? The Draft is unclear regarding who initiates the process to reallocate or share a particular spectrum band, raising several related questions:

- Is the transition / initiative process initiated by (1) a federal agency (or group of agencies) who self-organize, (2) the private sector regarding a particular band, or (3) the Technical Panel itself?
 - As originally envisioned in the 2012 Spectrum Act, the Technical Panel was designed to be *reactive* to agency implementation plan rather than a *pro-active* initiator of change, so reposing this task in the Technical Panel may be a poor fit.
- How would such a request be made – by a letter to NTIA from the private sector, or from an agency to NTIA, some other method?
- What would happen if there are multiple proposals involving overlapping bands?

Considering potential bands for transition has traditionally been a major undertaking for government and the private sector alike. For that and other reasons, the Committee should provide guidance on the questions above to ultimately help all stakeholders develop a “firm list” of which band or bands are under potential consideration.

D. The Technical Panel’s Role. The Committee should re-think how, and to whom, the incentive negotiation task is committed. (p. 11, lines 9-17, etc.) This could include modifications of the qualifications of the Technical Panel, expansion of the Technical Panel to encompass more members, or other possible solutions to help manage what could otherwise become a complex inter-governmental negotiation process with potential conflicts of interest.

Reason: The Technical Panel was established by the 2012 Spectrum Act, and consists of three members, appointed by NTIA, OMB, and the FCC. By statute, each member of the Technical Panel “shall be a radio engineer or a technical expert.” 47 U.S.C. § 923(h)(3)(B)(ii). This originally made some sense, given that the Technical Panel’s assigned task was to review agency transition plans, and assess their reasonableness regarding proposed timelines, costs, and system capabilities. In a subsequent rulemaking, TIA proposed that appointing agencies should consider including individuals with a broad range of experience to participate.⁶

Now, the Draft would substantially change the role of the Technical Panel by tasking it with negotiating spectrum incentive agreements with federal agencies. This task may be ill-suited to a *technical* panel chartered for a different purpose, particularly since the Act seems to contemplate that one element of the government (the Panel) will effectively be negotiating with another (the agency) regarding a percentage that is “no higher than necessary to provide an incentive.” Draft at p. 11. Such negotiations and valuations may benefit significantly from individuals with different types of expertise.

⁶ See [TIA Comments to NTIA on Technical Panel & Dispute Resolution Panel](#) (Aug. 1, 2012) at 5 (“TIA cautions against additional requirements that may unnecessarily narrow the universe of eligible representatives and exclude otherwise qualified representatives.”)

E. Sharing restrictions. On p. 13, lines 10-15, modify to read as follows: “(IV) the frequency band will be less encumbered by sharing restrictions relating to geography, time, power levels, **or other relevant factors**; and”. *Reason:* while sharing based on geography, time, and power levels could be important factors in determining whether a sharing agreement makes sense, we are still in the early days of spectrum sharing. It may be that other types of sharing not yet contemplated within “geography,” “time,” or “power levels” may eventually prove useful, and such sharing should not be precluded by statute from consideration.

F. Use of funds for telecommunications purposes. On p. 14, line 1, replace the word “communications” with the phrase “telecommunications, radiocommunications,”. *Reason:* In this context, “any communications ... purpose within the scope of the statutory mission of the Federal agency” could be broadly interpreted – or misinterpreted – to allow the use of funds for public relations purposes etc. Specifying “telecommunications” and “radiocommunications” would avoid that problem, and is more consistent with other parts of the NTIA Organization Act, including 47 U.S.C. § 901.

Sec. 7 – Unlicensed Use in Guard Bands

A. “Licensed” vs. “auctioned” frequencies. On p. 21, lines 16 and 24, and p. 22, line 11, replace the word “auctioned” with “licensed.” *Reason:* The basic principles of licensed vs. unlicensed service models – including the duty of unlicensed operators under Part 15 to protect licensees from harmful interference – has remained a consistent principle. *See, e.g.,* 47 CFR § 15.5. Even as the FCC has sometimes enabled more unlicensed operations by examining harmful interference more closely, it has never claimed to deviate from this central principle.

By using the word “auctioned,” the Draft would potentially treat guard bands in “auctioned” frequencies differently from guard bands in other licensed frequencies that were not assigned by competitive bidding, insofar as a wide-ranging guard band rulemaking may be contemplated by Sec. 7(a). This would be inconsistent with the longstanding principle above.

B. Guard band size. On p. 22, add a new Sec. 7(e) to clarify that guard bands should be “no larger than is technically reasonable to prevent harmful interference between licensed services outside the guard bands.” *Reason:* The 2012 Spectrum Act limited guard bands in the 600 MHz incentive auction using this proposed language. *See* 47 U.S.C. § 1454(b). Including this practice in statute more generally should promote good spectrum policy decisions, whereby unlicensed spectrum is specifically allocated by design, rather than by expanding guard bands in licensed spectrum.

Note that this would not restrict unlicensed operations; indeed, the Draft explicitly contemplates that more spectrum may be made available for unlicensed technologies. *See* Sec. 3(a)(2). But those decisions should be intentional and deliberate. They should not occur via pressure to create oversized guard bands in spectrum where a higher-level policy decision has been made to support licensed uses, and adding the text above would prevent that.

Sec. 11 – Federal Spectrum Leasing

We appreciate the Committee’s innovative and thoughtful proposal regarding spectrum leasing. If done properly, spectrum leasing may hold the potential to make additional spectrum available for non-Federal use over the long term. We are unclear whether the Committee’s intention is to promote (A) significant and viable long-term network buildout using leased spectrum, or (B) to permit small, low-cost, low-stakes use of spectrum on an occasional or supplementary basis. With that ambiguity in mind, below are some potential concerns for the Committee to consider:

A. Nation-wide coverage is needed for commercial viability. Operating a viable commercial service typically requires a particular spectrum band to be available across wide geographic areas, or on a regional / nationwide basis. Consider, for example, the effects of the original exclusion zones in the 3.5 GHz proceeding that blocked service in 60% of the country, and would have prevented viable commercial deployment.

The Draft contains language referencing particular geographic areas (p. 24, lines 20-22). However, we understand that language as referring to an agency’s authorization to move ahead with leasing, rather than the basis for eventual lease terms. But if this is not correct, the text should be clarified.

B. Leasing could undercut transition or sharing incentives. Providing a lease option to federal agencies may create dis-incentives for those agencies to more permanently transition or share spectrum, which may undercut the reallocation incentives of Section 5. Indeed, the Draft makes leasing potentially more attractive by segregating lease funds into a separate Treasury account that the agency may use for a non-telecommunications purpose, i.e., facilities. (p. 27, lines 1-18)

This may be viewed favorably to the treatment of incentive revenue under Section 5. Use of Section 5 incentives can be applied to telecommunications or spectrum-related purposes, or to sequestration relief (p. 14), and the latter is a powerful incentive. Yet there appears to be no similar mechanism – i.e., a separate Treasury account – that might help to protect those funds from reallocation through the appropriations process.

C. Perpetual leasing could lead to agency warehousing and an outdated spectrum “ownership” model. A very attractive “lease option” could lead to agencies retaining – “owning” – and leasing spectrum over long periods of time for which they no longer have any legitimate need. Ultimately, federal agencies with little or no reason to remain connected to a particular spectrum band could still be acting as “landlords” over spectrum many decades into the future. Such an “agency ownership” model is not good spectrum policy.⁷ The Committee should consider provisions whereby if a particular band of spectrum has been leased for many years, it is eventually considered for a more permanent transition.

⁷ See [TIA OSTP Comments](#) at 5-6 (“TIA does not support moving towards a model of agency ‘ownership’ of spectrum. [It] would diminish the prospects for centralized control and (certainly) for transparency. *** In today’s world, spectrum ownership would make it more difficult to transition agencies towards a more flexible approach for meeting their communications needs. *** Indeed, any legacy uses of agency spectrum for communications purposes may need to be re-evaluated in favor of a more flexible approach that will ultimately benefit the agencies themselves.”)

D. A 90-day termination provision could restrict investment. Section 11(b)(2) (pp. 25-26) may be confusing. The language appears to suggest that even if a non-Federal entity has signed a long lease, e.g., 15 years, that the government may change its mind at any time and conduct a more traditional spectrum auction with just 90 days' notice. While the idea of allowing rapid auction-based transitions is laudable, deploying a commercial network on spectrum that can be taken back on 90 days' notice does not seem likely to actually promote extensive investment. *However*, if the Committee's intention is to promote leasing as a modest spectrum boost rather than a means to deploy a major network – i.e., to ensure that it does not undercut the Section 5 incentives – then this provisions may actually help achieve that effect.

Sec. 13 – Timeliness of Federal Agency Action

We recommend adding the words “on wireless deployment” at the end of the title for clarity and consistency with Sec. 14. TIA supports these provisions to promote wireless facilities deployments on federal property, especially the inclusion of a 90-day deadline (p. 29, line 19) and the designation of a single point of contact (p. 30, line 17).

Sec. 14 – Timeless of Local Action on Wireless Deployment

Consistent with federalism concerns, the Committee should consider encouraging states to also name single points of contact, as the Draft requires of federal executive agencies. We understand that Kentucky has done this regarding tower siting applications. Overall, the Draft's language is positive, even as the phrase “reasonable period of time” (p. 33, line 8) remains subjective.

Sec. 15 – Dig Once

TIA has been a long-standing and strong supporter of “dig once” legislation. According to some estimates, more than half of the costs of new broadband deployment are expenses that can be ascribed to the digging up and repaving of roadways. Further, it is estimated that the inclusion of broadband conduit in highway construction would add less than 1% to the cost of the overall project. It also limits the negative impact on communities by reducing the amount of time that roads are under construction.

Including “dig-once” legislation in a package with federal spectrum legislation may offer unique opportunities relating to CBO scoring. For example, administrative costs associated with establishing a national program to coordinate “dig once” evaluations could likely be covered easily. In addition, the allocation of a relatively small portion of spectrum auction revenue to bootstrap a funded conduit program – with money to be eventually recovered through access fees – could potentially prove enormously beneficial in the long term. Even a small amount of funding could pay massive long-term dividends. We encourage the Committee to consider more ambitious approaches as it assembles a final package.

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