

REMARKS OF THOMAS SUGRUE – AS DELIVERED TO THE MEETING OF
THE PUBLIC SAFETY NATIONAL COORDINATION COMMITTEE – JANUARY
14, 2000 – WASHINGTON, DC

Thank you Kathy and good afternoon to all of you.

Thank you for coming and giving me the opportunity to address the NCC as it pursues its important mission.

I think some congratulations are in order. I have been keeping tabs on the NCC's work by reading your quarterly reports and talking with the FCC staff who have worked with you. In a little less than a year you have organized yourself into an effective team and are on the threshold of delivering your first recommendations to the FCC on February 25th.

The NCC has made substantial progress, and its been done by people who have other full-time responsibilities – I realize you all have day jobs. And that's clear from the fact that my staff tells me that the time stamps on your e-mails and list server exchanges show that you have been burning more than a little midnight oil. I think that's remarkable and, on behalf of the Commission – and the Country if I can be so presumptuous – I want to thank you for your fine efforts to date.

We look forward to receiving your recommendations in February. What you have to say on the issue of trunking and on technical standards is going to be critical to the Commission's decision making process.

Spectrum efficiency, speed of deployment and cost are important factors that are going to be looked at when the FCC evaluates your recommendations. Today, 24 MHz of public safety spectrum may seem like a lot. But if the demand for public safety channels continues at the current rate – and I have every reason to believe that it will – the entire 24 MHz could be quickly swallowed up unless we adopt rules to ensure that it will be used efficiently and wisely.

Spectrum efficiency demands that each transmission occupies no more bandwidth than is necessary to establish a quality communications path. As you know, the Commission segmented the 700 MHz narrowband spectrum into 6.25 kHz channels. We did this in the expectation that the technology necessary to accommodate one voice channel in a 6.25 kHz bandwidth will be developed and will be suitable for public safety's purposes.

Now, we may not be there yet. But I think it is important to keep this goal in mind as we address these issues. Technology changes rapidly. The cellular telephone that weighed six pounds has been transformed to a device that I can carry in my shirt pocket. Large scale integration is approaching the point where it

may be possible to put most of a radio's circuitry on a single chip. Software-defined radios are already on the drawing board. New data compression and digital modulation techniques let us squeeze more bits into a smaller bandwidth. The trend is to smaller, smarter radios that use less of the spectrum resource.

Having said that, I should also say that the FCC's goal of long term efficient spectrum use must also accommodate public safety's near term needs for access to 700 MHz channels as well as cost considerations. I agree that there are pressing need for additional public safety channels and that these near term needs must be met with today's technology and at a reasonable cost. But I think that we can all agree that does not mean that we should start down a path today that effectively freezes 700 MHz public safety spectrum at the level of current technology for the foreseeable future.

What I think the Commission would find most valuable from you in February is a recommendation for standards that represent the latest in today's technology and that have a clear, timely and realistic migration path to more spectrum-efficient technology in the future.

Of course, this is no small task. That's why we sought the opinion of a committee of experts. Now, it may turn out that the technical standards that you recommend in February will be the standards that the NCC incorporates into its final recommendations at the conclusion of its work in two or three years. But we understand there is some sentiment to characterize these as final standards and we think that doing so could send the signal that this is "as far as we go" – that the task of considering technical standards is over and will come to a full stop as soon as the initial recommendations are made.

I think that would be unfortunate and unnecessary.

On the other hand, I've heard concerns that if the initial recommendation is not characterized as a final one we will have only an interim standard that could change substantially when final rules are put into place. The argument goes that, if the NCC recommendation only results in interim rules, then the 700 MHz spectrum will not be used. Public safety licensees would be reluctant to buy interim standard radios that could be made obsolete if the rules changed. Manufacturers would be unlikely to spend research and development money to build interim standard radios that would have to be redesigned in a few years. We in the Wireless Bureau would also be concerned about such a scenario. And we certainly would have no interest in recommending to the Commission adoption of an approach to standards that would quickly render obsolete any equipment built to an interim standard.

And we agree with you that we do not want confusion or uncertainty about standards to delay indefinitely the ability of public safety users to make use of this very valuable spectrum resource.

So I think we're on the same page as far as long-term goals. And I hope that no matter how the standard is characterized, it both permits near term deployment of 700 MHz systems and enables the long term realization of the spectrum efficiency benefits of developments in technology. Therefore, striking that balance and explaining how your recommendations strike that balance will be very useful to us.

We are also looking to the NCC for other recommendations that will permit more efficient spectrum use. Trunking is a technology that has conserved spectrum and reduced infrastructure cost in most land mobile radio services. On the general category channels, the FCC is requiring trunking on all systems with six or more channels. Should the FCC also require trunking on the interoperability channels? I understand that there may be some remaining difference of opinion on that subject. On the one hand, some NCC members believe that operational considerations make trunking a bad choice for the interoperability channels. Other NCC members think that trunking should be permitted. They believe that the interoperability channels can be made available on a secondary basis to become part of larger trunked systems for day to day communications. However, if this kind of trunking is done, there would have to be provisions for immediately returning the trunked channels to conventional use for interoperability in the event of an emergency.

Here, as with the technical standards, the Commission has the same goal: recommendations from the NCC that offer spectrum efficiency consistent with rapid deployment of the technology, affordable cost, and conformity to public safety's operational requirements.

I understand that there are some gaps to be filled before the NCC can finalize its February recommendations. So far the NCC has made considerable progress on recommendations for narrowband voice channels. But you have not yet addressed the matter of data transmission on the narrowband channels.

The Commission provided wideband channels for data transmission; but for slow-speed data, the narrowband channels are more spectrum efficient and cost effective. So, the Commission is looking to the NCC to recommend narrowband technical standards that include data transmission as well as voice. I hope that those standards can be provided as part of your February recommendations.

In a similar vein, I understand that the subcommittees have encountered difficulty defining a wideband data standard. This occurred primarily because there is not a lot of information on user requirements and because there is little wideband mobile data equipment on the market. Last month, Kathy Wallman asked TIA to develop a wideband data standard and I am told that her request is being considered by the TIA standards committee. However, while the TIA process plays out, it may be possible for the NCC to look at least at minimum

wideband data standards that can be put in place to meet the user requirements we know about now. This is another subject that, if possible, I hope you can address in your February recommendations.

Finally, as the NCC moves past its February recommendations and into its second year of operation, I would like to re-emphasize just how important this work is that you are doing. You are working with the largest allocation of spectrum ever made to public safety. And because this is newly allocated spectrum, you are writing your recommendations on a clean slate. In these circumstances getting it right the first time is crucial.

Remember, too, that it is not only technical issues that you need to be concerned about. The most technically perfect recommendations will do little good if they act to restrain competition and render 700 MHz public safety systems unaffordable. Instead, the public safety community will be best served if the recommendations you adopt result in vigorous competition among manufacturers.

I look forward to seeing your recommendations in February and I will be following your progress beyond that date as you work through the coming years to develop your final report to the Commission.

Thank you for all of your hard work. Thanks especially for the fine leadership of your chair, Kathy Wallman, and the wise guidance provided by the NCC steering committee. And, of course, thanks for your kind attention in listening to me this afternoon.