The premise is very simple. Over the air broadcasters, the people who bring you TV that you can get with rabbit ears, pay nothing to the government for the allocated digital spectrum over which tv is delivered. Not only do they pay nothing to the government for that spectrum, they are no longer only using it exclusively to deliver a tv signal. They have about 19.2mbs of digital bandwidth available to them and rather than using it all for the delivery of the highest quality tv signal, they are now trying to slice and dice that bandwidth and monetize it in any way they possibly can. They create new tv channels, they lease it to companies who use it for other applications. They basically auction it off to where ever they can find the most profitable revenue stream. So why should the broadcaster be allowed to keep the bandwidth they are not using for their TV channel ? Rather than their auctioning it off , lets let the government reclaim it and auction it off. Offered on a national basis, the sum value is greater than its parts and should be able to put a pretty penny in the federal coffers at a time it is sorely needed .

It makes perfect sense to me. Except that no one has really taken a contrary view on how that spectrum could be used in the future. No one has asked the question of whether or not we will regret having reclaimed that bandwidth in the future. Of course the cynic in me always looks to see how the government might be wrong. What would cause us to regret reclaiming and reselling the spectrum ?

At least a couple things I can think of.

1. The simplest revolves around a question: Will there be higher bandwidth applications in the future that consumers will expect to be delivered for free to our TVs ? On the bottom of the importance scale could be 3D TV. Of course whether or not TV is delivered in 3D is not very important. No more important than needing to have color delivered over the air as black and white disappeared. But if 3D does become important to consumers and an expectation of the TV viewing experience (there are technologies that dont require glasses, and they will improve in quality and decrease in price), if over the air broadcasters are not required to offer it, consumers will be at the mercy of cable/telco/satellite tv distributors to charge whatever they want and the value and most likely sustainability of over the air broadcasters will decline considerably.

As I said, 3D TV is an example, but not necessarily a good one. Ask yourself a simple question. What type of high bandwidth applications could you imagine being delivered to our future digital TVs in 5, 10, 20 years ? Now that TV is delivered digitally over the air, and all new TVs are digital, basically computers behind a screen, is there any reason not to believe that an entirely new generation of applications will be developed that benefit from being delivered over the air ? That what we call TV today, could look very antiquated in 1o years if we only had the bandwidth to enable it ?

Of course this is where people chime in and say “the internet can support all of that”. Not so fast. The beauty of broadcast TV is that it has 2 very unique features that differentiate it from delivery of content over the internet. The first of which is economic. The marginal cost per viewer is zero. In other words, it costs the same amount to deliver the 19.2mbs of applications and content to the first viewer as it does to every possible viewer. That is not the case with the internet. If that were the case there would be no need for companies like Akamai to even exist. Every additional internet viewer or user costs the broadcaster of the content money. Each incremental viewer requires a variety of additional resources, from CPU cycles to bandwidth. Broadcasting over the air is always cheaper than on the net.

The 2nd feature that differentiates it significantly from the internet is the fact that it is a true broadcast medium. There is no contention for the bandwidth that is being delivered. On the internet if someone in your neighborhood is using a lot of bandwidth, your performance could slow down. With a broadcast medium, you can run into distance limitations, and like the internet delivered over cable, there could be interference issues, but unlike the internet, the performance and quality of broadcast tv is never impacted by the number of people receiving the signal or the other things they may be using the shared bandwidth for. Thats important.

Why is it important ? For national security reasons ?

Right now the spectrum is officially owned by the government and broadcasters have an obligation to act in the interests of the people, as defined by the FCC. If we auction off the spectrum to private interests, its gone. It is owned privately. The government cant get it back no matter how badly it needs it without taking steps that are damning in their very nature.

What could the government need the spectrum for ?

2. National Security. Thats what the government could need it for. I don’t know of a single person with a technology background that doesn’t believe there will be a cyber attack of some consequence in the next 10 years that will essentially shut down a city, region of the country or worse. I was in NY during the blackout 6 years ago. That was bad. We relied on backup generators to power our TVs and battery powered radios. But things have changed considerably in just 6 years. We have become far more digitally dependent. Much of our lives is transported through the internet, and that dependence is increasing. It is going to happen. Hopefully it will be on a small scale and we will immediately get smart enough to prevent it from happening again. But what happens while an entire city’s internet and digital infrastructure is down ? How do we communicate or receive communications ?

We get our communications through broadcast. Im not talking about being able to get your CBS evening news over the air to your TV. Im not talking about whether or not you have access to a crank powered radio to hear the latest. Im talking about the value of having 19.2mbs of bandwidth that is able to reach most of the population in the continental US and deliver whatever type of information /data that we may need.

This isnt something that could easily happen today. But if there was a huge emergency, it sure would be nice if the government could step in and reclaim as much bandwidth as they need and broadcast whatever they need to broadcast to us. (im sure they will use satellite as well, but far from enough people have receivers). It may be video. It may be maps localized to show us trouble spots. It may be information about utilities. It may be instructions on how to solve a problem caused by the cyber attack. Who knows. But i would rather be in a position where the bandwidth, and enough of it, was available for broadcast rather than reading how “shortsighted we were to sell off the bandwidth to wireless providers rather than consider how we could have used this broadcast bandwidth in a national or regional emergency”

I also know that once it happened twice (they would say the first time was a unique exception), then there would be a mandate to require that all new HDTVs and (possibly phones and future digital devices) to also be able to receive data from broadcast sources and store it on internal and/or external storage to be viewable on the tv , and potentially an executable file that provides support and help in the emergency.

The bottom line is whether or not there are applications that would benefit national security. I dont know, but i think we have to at least consider the possibility.

Of course this is all pie in the sky hypothetics. Maybe someone has already thought this side of it through. Maybe its ridiculous on its face. I dont know.

But maybe not. I think there is a greater than zero chance that in the next 10 years broadcast bandwidth can be of value to the country in an emergency. We need to at least consider this before we sell off the spectrum