

[please note that I obviously do not live in Alaska!]

Although I work for a mobile phone manufacturer these are my personal views, concerning public interest issues.

The emphasis on flexibility and free-markets does not take account of the 'consumer surplus' element of economic value ie the regulator always needs to check that spectrum use IS being optimised by the market, and market failure is not occurring, perhaps disenfranchising certain sectors of the community.

My other point regards interference temperature/UWB. The idea requires an agreement of a protection distance over which interference might be caused. To allow for two people with laptops sitting adjacent in a meeting, one with UWB one with WLAN 802.11a this will be <1m.

Shannon's law states that any increase in noise will reduce capacity, so the whole concept is dubious, except where there is no scarcity of spectrum. Certainly UWB devices should 'listen first'.

Generally I can only envisage the idea working in certain bands, since if UWB could make use of the 'underlay' spectrum then so could most incumbent users eg 802.11a WLAN. There is a danger also that power levels will be increased to compensate, over years (in turn increasing the noise...)

I note from the R&O (para 38) that it was assumed that radios >2/3GHz use directional antennas. Clearly this will increasingly not be the case, and I would have thought that UWB should be confined to, say, 7-10GHz, if 'UWB bans' are to be avoided in buildings.

regards

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