

BEYOND LICENCE vs. UNLICENCED: SPECTRUM ACCESS RIGHTS CONTINUA

by

Robert Horvitz

Director, Open Spectrum Foundation

Among other activities, the Open Spectrum Foundation surveys licence-exempt radio regulations on an ongoing global basis. WiFi rules in about 170 countries have been analysed, and "thumbnail sketches" of most of them are in the third part of this paper. Differences among national rules for WiFi arise from variables like indoor vs. outdoor deployment, integral antenna vs. separate antenna, commercial vs. noncommercial use, self-use vs. public service offerings, etc. A more significant finding is that when one adopts a global perspective - which is the view that large producers of WiFi equipment have - one sees a continuum of spectrum access rights, ranging from prohibitively restrictive to completely unregulated, with dozens of degrees of freedom and constraint in between. Regardless of whether WiFi is licenced or unlicenced, regulators impose conditions on its use, and these conditions shape WiFi's local development. Thus, licensing is often an issue that is secondary to conditions of use. In addition, many regulators use class licences to approximate licence exemption, which further blurs the licencing issue. The ITU has on several occasions endorsed licence exemption as a "best practice" under certain conditions, so one wonders why the Radio Regulations still say no private transmitting station may operate without a licence. A Study Question is proposed in Section 2 of this paper to close this gap between current practice and traditional policy

WiFi's spectrum access rights continuum emerged spontaneously and transnationally. Is there any reason to create something similar at the national level? Konston and O'Hehir propose to use scorecards to evaluate spectrum efficiency and other equipment parameters. Depending on their score, devices would enjoy "progressively expanded tiers of spectrum access rights" in proportion to their performance. Reconciling this sliding-scale system with existing methods of awarding spectrum access (purchase, trade, auction or tender) would be a challenge, but it could produce a multidimensional valuation scheme that combines performance and price.