

Description of project

The RadioFrame System (RFS) is a highly flexible and modular digital communications system that provides wireless access, transport and applications for indoor wireless device users. This initial system architecture is intended for use worldwide and provides for all cellular and PCS standards currently in use worldwide including TDMA, CDMA, and GSM. In addition, specialized standards like Motorola's iDEN and Wireless LAN standards like IEEE 802.11b are also supported. The bands that are supported are:

Band	Frequencies	output power	Ant. Gain	EIRP
SMR (iDEN)	851 – 869 MHz	+8 dBm	0 dBm	.006 Watts
E-GSM 900 Low Band	902-928 MHz	+20 dBm	0 dBm	.1 Watts
NA-GSM 850 Low Band	869 – 894 MHz	+20 dBm	0 dBm	.1 Watts
DCS 1800 High Band	1805 - 1880 MHz	+20 dBm	0 dBm	.1 Watts
PCS 1900	1930 - 1990 MHz	+20 dBm	0 dBm	.1 Watts

Experiments would entail combining existing standards as previously granted by the FCC (iDEN and 802.11b) with other standards that have not yet been added to RadioFrame's existing grant. Other experiments are also needed to ensure compliance with European standards in the E-GSM, GSM 1800, and GSM 1900 in accordance with European Telecommunication Standards. Testing would also include proof of performance to ensure that all supported standards would be compatible with out degradation of an already approved system. Testing shall be performed in accordance with the following standards:

47 CFR 2, 15.247 and 90
ETSI 301 087
ANSI/IEEE STD 802.11, 1999 Edition
IEEE Std 802.11b-1999