ELECENG 2FL3 ASSIGNMENT 1

Raeed Hassan
McMaster University

Application 0: TV broadcast
TV broadcasting is the method of delivering audio and video to a television for consumption. Television is generally broadcasted using terrestrial radio waves (over-the-air television), transmitted through coaxial cables (cable television) or relayed from satelittes (direct broadcast satelitte) [1]. In Canada, digital television uses the 700 MHz band, using channels 52-69 which occupy 6 MHz frequency ranges from 698 MHz to 806 MHz [2].

Application 4: Satellite radio
Satellite radio is a broadcasting-satelitte service that uses satellites to transmit radio waves to deliver audio that is received by the public, typically used by motor vehicule occupants [3]. The frequencies allocated for broadcasting-satelitte services in Canada fall into the 2300 MHz - 24500 MHz frequency range, which is in the microwave range [2].

Application 20: Fiber-optic networks
Fiber-optics networks are networks of that share and transmit information through fiber-optic communication. Fiber-optic communication is a method of transmitting information through the process of sending light through fibers of glass, and is used for a wide variety of applications, most notably for internet access [4]. The fibers used for fiber-optic communication can operate at wavelengths ranging from 800 nm - 1600 nm, however the most common wavelengths used in fiber-optics are 850 nm (353 THz), 1300 nm (231 THz), and 1550 nm (193 THz) [5]. These frequencies are in the infrared range.

References

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