



Monitoring Replacement Frequencies – Licensees in the Sharing Zone

This guidance is provided to 800 MHz licensees within 110 kilometers (68.35 miles) of the U.S.-Mexico border (the “Sharing Zone” as defined in Section 90.619(a) of the Federal Communications Commission’s (FCC’s) rules). Licensees that operate in the Sharing Zone have been provided replacement frequencies by the 800 MHz Transition Administrator, LLC (TA). However, the specific site-locations and technical parameters of 800 MHz systems currently licensed or operating in the Sharing Zone in Mexico have not yet been provided by Mexico to the FCC or the TA. The FCC’s August 16, 2013 Public Notice stated that “licensees in the Sharing Zone may need to monitor their replacement frequencies prior to infrastructure retuning to ensure there is no harmful interference from users that have not properly cleared on the replacement frequencies.” Licensees reconfiguring their systems in the Sharing Zone in the U.S. are advised that they may consider monitoring their replacement frequencies at the appropriate time to confirm that Mexican systems are not operating on the replacement frequencies. The licensee’s costs to develop and implement a monitoring plan should be negotiated and agreed to with Sprint as a component of the Frequency Reconfiguration Agreement.

Timing of the Monitoring Process

Sprint, working in conjunction with the TA and the FCC, will notify licensees when their replacement frequencies in the Sharing Zone in the U.S. are clear and ready for their use. The monitoring process should commence after receiving this notification and before infrastructure retuning commences. Monitoring ahead of this notification is not advised as licensees may detect signals from licensees, both in Mexico and the U.S., that are still in the process of reconfiguring and erroneously report them as interference.

Considerations for Frequency Monitoring

- Develop a monitoring plan and include it and the related costs in the licensee’s cost estimate for reconfiguration.
- Consider monitoring at base station location(s) for each replacement frequency (base station and mobile). Frequency monitoring at a high elevation will result in worst case signal levels from stations operating on the monitored frequencies. If no interfering signals are detected at the high elevation site, then the replacement frequencies should be usable with no further testing.
- Systems in Mexico, and U.S. licensees in the Sharing Zone that are clearing replacement frequencies for other licensees, are licensed on an offset or “splinter” channel plan, so licensees should consider monitoring the frequencies 12.5 kHz adjacent to the licensee’s proposed replacement frequencies in order to detect or confirm interference.
- For simulcast systems, consider if monitoring can be limited to the sites most likely to be impacted by Mexican systems, rather than monitoring each site in the system.
- The length of time to monitor should be sufficient to detect traffic on a reasonably loaded land mobile radio system. Frequency monitoring should be done at various times of day and on various days of the week over one or two weeks, unless possible interference is detected and additional testing is required.
- If strong signals are detected on the base station sites, additional testing at key locations in the service area may be warranted to determine if the signal will actually interfere with operations.
- Monitoring methodology and equipment will vary by licensee. However, if interference that may be harmful to a licensee’s operations is detected and confirmed, such interference will need to be measured and recorded to gather as much information as possible for reporting purposes.

Reporting Harmful Interference

When reporting interfering signals, licensees should provide as much of the following information as possible:

- Physical location, coordinates, and date and time at which the interfering signal was detected and analyzed.
- The frequencies on which the signal was detected.
- The signal strength, antenna model, and antenna system gain or loss.
- Any recorded audio the licensee was able to capture.
- The test methodology and type of equipment.

Any confirmed interference prior to channel “cut-over” should be reported via email to the TA at comments@800ta.org and to Sprint at 800mhz@sprint.com as soon as possible. The TA will then coordinate with Sprint and the FCC on the report and resolution. The licensee will be contacted after the evaluation and be advised of the subsequent steps.

About the 800 MHz Transition Administrator

800 MHz Transition Administrator, LLC (“TA LLC”) is the Transition Administrator (“TA”) for the reconfiguration of the 800 MHz band mandated by the Federal Communications Commission (“FCC”). TA LLC has contracted with Deloitte Consulting LLP, Squire Sanders (US) LLP, and Baseline Wireless Services, LLC to perform the duties of the TA. Among its duties, the TA establishes reconfiguration guidelines, specifies replacement channels, reviews reconfiguration cost estimates, monitors payment of reconfiguration costs, manages the relocation schedule, facilitates issue resolution and administers the alternative dispute resolution process. TA LLC uses information it receives solely for the purposes of administering the 800 MHz reconfiguration process and may disclose such information to the FCC or other authorized parties pursuant to the requirements of the 800 MHz Order or other applicable laws.