

Form 442 Question 7: Experimentation Description

The purpose of the test will be to verify correct function of a new GSM network design in an open-air test range with realistic service loads from a set of about 1,000 test users. These users will be allowed to place calls and send text messages to each other through the system under test (BTS units + local PBX) for one week while on-site engineers observe the operation of the system. The test system will be deployed at multiple tower sites to facilitate testing of handover functions. The specific area and time of this test correspond to the Burning Man festival, a gathering of about 50,000 people in temporary city constructed in a remote area of the Black Rock Desert. This festival affords a unique opportunity to have a realistic population of test users, realistic usage patterns and realistic suburban propagation conditions in an area that otherwise lacks useful cellular coverage. This is an engineering test, not a service rollout. The test will include only voluntary, informed participants.

The test network will be run in the DCS-1800 band, a band not normally used for cellular service in the US but widely used in ITU regions 1 and 3. According to FCC ULS records, the DCS-1800 spectrum is not currently used for any application in the test area. The spectrum used for the DCS-1800 downlink band is not licensed to anyone on the test area. The spectrum used for the DCS-1800 uplink band is licensed for AWS service, but none of the license holders actually operate AWS systems in the test area and frequency coordination is not expected to be a problem.

The test network will use network identity parameters that, by international convention, are associated with test networks (MCC=001 MNC=01). This choice of a non-US service band and test network identity will prevent non-participant phones from accidentally attempting to attach to the test network and will limit network access to users who perform manual network selection with unlocked handsets. The handsets to be used are standard GSM consumer devices supplied by the test participants. Test operators will establish informed consent with users through targeted media announcements prior to the festival, posted public notices at the festival site, local media announcements at the festival site, manual network selection and text messaging notifications. Test users will be informed via text message that they are participants in an experiment, not normal cellular subscribers, and that the operator of the test system is not a telephone carrier. Test users will not pay or be paid for their participation. At the end of the Burning Man festival, the system will be dismantled and removed.