

Test Logs

FCC ID: VUIPR1450-48

Test Model: PR1450-48I

Series Model: PR1450-48E

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Table of Contents

1	CBSD Registration Process.....	3
1.1	WINNF.FT.D.REG.2.....	3
1.2	WINNF.FT.D.REG.4.....	6
1.3	WINNF.FT.D.REG.6.....	8
1.4	WINNF.FT.C.REG.9.....	12
1.5	WINNF.FT.C.REG.11.....	14
1.6	WINNF.FT.C.REG.13.....	16
1.7	WINNF.FT.C.REG.15.....	19
1.8	WINNF.FT.C.REG.17.....	21
1.9	WINNF.FT.C.REG.19.....	24
1.10	WINNF.FT.C.REG.20.....	26
2	CBSD Spectrum Grant Process	36
2.1	WINNF.FT.C.GRA.1.....	36
2.2	WINNF.FT.C.GRA.2.....	39
3	CBSD Heart Beat Process.....	42
3.1	WINNF.FT.D.HBT.2.....	42
3.2	WINNF.FT.C.HBT.3.....	50
3.3	WINNF.FT.C.HBT.5.....	54
3.4	WINNF.FT.C.HBT.6.....	57
3.5	WINNF.FT.C.HBT.7.....	62
3.6	WINNF.FT.D.HBT.8.....	67
3.7	WINNF.FT.C.HBT.9.....	74
3.8	WINNF.FT.C.HBT.10.....	78
3.9	WINNF.FT.C.HBT.11.....	83
4	CBSD Measurement Report.....	88
4.1	WINNF.FT.D.MES.2.....	88
5	CBSD Relinquishment Process.....	98
5.1	WINNF.FT.D.RLQ.2.....	98
5.2	WINNF.FT.D.RLQ.4.....	105
5.3	WINNF.FT.D.RLQ.6.....	112
6	CBSD Deregistration Process	120
6.1	WINNF.FT.D.DRG.2.....	120
6.2	WINNF.FT.D.DRG.4.....	127
6.3	WINNF.FT.C.DRG.5.....	134
7	CBSD Security Validation	138
7.1	WINNF.FT.C.SCS.1.....	138
7.2	WINNF.FT.C.SCS.2.....	139
7.3	WINNF.FT.C.SCS.3.....	139
7.4	WINNF.FT.C.SCS.4.....	139
7.5	WINNF.FT.C.SCS.5.....	139
8	CBSD RF Power Measurement.....	140
8.1	WINNF.PT.C.HBT.1(Max Eirp = 12 dBm/MHz).....	140
8.2	WINNF.PT.C.HBT.1(Max Eirp = 16 dBm/MHz).....	158
8.3	WINNF.PT.C.HBT.1(Max Eirp = 20 dBm/MHz).....	177

1 CBSD Registration Process

1.1 WINNF.FT.D.REG.2

2024-12-31T07:47:13.375Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2024-12-31T07:47:13.377Z - INFO - the selected test from the user : WINNF.FT.D.REG.2 is starting now

2024-12-31T07:47:38.904Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "CB987",
    "cbsdCategory": "A",
    "cbsdInfo": {
      "firmwareVersion": "1.0.2.2p2",
      "hardwareVersion": "1.1",
      "model": "PR1450-48E",
      "softwareVersion": "2.1.0",
      "vendor": "Pegatron"
    },
    "cbsdSerialNumber": "D823634126",
    "fccId": "VUIPR1450-48",
    "groupingParam": [
      {
        "groupId": "group1",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 240,
      "antennaBeamwidth": 30,
      "antennaDowntilt": 3,
      "antennaGain": 4,
      "antennaModel": "Wire_dipole",
      "eirpCapability": 30,
      "height": 12.0,
      "heightType": "AGL",
      "horizontalAccuracy": 45.0,
      "indoorDeployment": true,
      "latitude": 37.425056,
      "longitude": -22.084113,
      "verticalAccuracy": 2.0
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "PEGATRON"
  },
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "CB987",
    "cbsdCategory": "A",
    "cbsdInfo": {
```

```

        "firmwareVersion": "1.0.2.2p2",
        "hardwareVersion": "1.1",
        "model": "PR1450-48l",
        "softwareVersion": "2.1.0",
        "vendor": "Pegatron"
    },
    "cbsdSerialNumber": "D823956047",
    "fccId": "VUIPR1450-48",
    "groupingParam": [
        {
            "groupId": "group1",
            "groupType": "INTERFERENCE_COORDINATION"
        }
    ],
    "installationParam": {
        "antennaAzimuth": 240,
        "antennaBeamwidth": 30,
        "antennaDowntilt": 3,
        "antennaGain": 9,
        "antennaModel": "Wire_dipole",
        "eirpCapability": 30,
        "height": 12.0,
        "heightType": "AGL",
        "horizontalAccuracy": 45.0,
        "indoorDeployment": true,
        "latitude": 37.425056,
        "longitude": -22.084113,
        "verticalAccuracy": 2.0
    },
    "measCapability": [
        "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "PEGATRON"
    }
]
}
2024-12-31T07:47:39.018Z - INFO - engine sent successfully, the response to CBRS : {
    "registrationResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "response": {
                "responseCode": 0
            }
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "response": {
                "responseCode": 0
            }
        }
    ]
}
2024-12-31T07:47:40.407Z - INFO - arrived to nstep starting question answer session with the technician
2024-12-31T07:47:40.408Z - INFO - the question is : Were there RF transmissions from the CBSD2 during
the test? please choose one of the answers :
2024-12-31T07:47:46.469Z - INFO - for the question : Were there RF transmissions from the CBSD2 during
the test? , the user choose n
2024-12-31T07:47:46.470Z - INFO - the question is : Were there RF transmissions from the CBSD1 during

```

the test? please choose one of the answers :

2024-12-31T07:47:49.558Z - INFO - for the question : Were there RF transmissions from the CBSD1 during the test? , the user choose n

2024-12-31T07:47:50.680Z - INFO - The final result of the test : WINNF.FT.D.REG.2 is - passed

1.2 WINNF.FT.D.REG.4

2024-12-31T07:45:41.112Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2024-12-31T07:45:41.113Z - INFO - the selected test from the user : WINNF.FT.D.REG.4 is starting now

2024-12-31T07:45:51.895Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "CB987",
    "cbsdCategory": "A",
    "cbsdInfo": {
      "firmwareVersion": "1.0.2.2p2",
      "hardwareVersion": "1.1",
      "model": "PR1450-48E",
      "softwareVersion": "2.1.0",
      "vendor": "Pegatron"
    },
    "cbsdSerialNumber": "D823634126",
    "fccId": "VUIPR1450-48",
    "groupingParam": [
      {
        "groupId": "group1",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 240,
      "antennaBeamwidth": 30,
      "antennaDowntilt": 3,
      "antennaGain": 4,
      "antennaModel": "Wire_dipole",
      "eirpCapability": 30,
      "height": 12.0,
      "heightType": "AGL",
      "horizontalAccuracy": 45.0,
      "indoorDeployment": true,
      "latitude": 37.425056,
      "longitude": -22.084113,
      "verticalAccuracy": 2.0
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "PEGATRON"
  },
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "CB987",
    "cbsdCategory": "A",
    "cbsdInfo": {
      "firmwareVersion": "1.0.2.2p2",
      "hardwareVersion": "1.1",
      "model": "PR1450-48I",
      "softwareVersion": "2.1.0",
```

```

    "vendor": "Pegatron"
  },
  "cbsdSerialNumber": "D823956047",
  "fccId": "VUIPR1450-48",
  "groupingParam": [
    {
      "groupId": "group1",
      "groupType": "INTERFERENCE_COORDINATION"
    }
  ],
  "installationParam": {
    "antennaAzimuth": 240,
    "antennaBeamwidth": 30,
    "antennaDowntilt": 3,
    "antennaGain": 9,
    "antennaModel": "Wire_dipole",
    "eirpCapability": 30,
    "height": 12.0,
    "heightType": "AGL",
    "horizontalAccuracy": 45.0,
    "indoorDeployment": true,
    "latitude": 37.425056,
    "longitude": -22.084113,
    "verticalAccuracy": 2.0
  },
  "measCapability": [
    "RECEIVED_POWER_WITHOUT_GRANT"
  ],
  "userId": "PEGATRON"
}
]
}
2024-12-31T07:45:52.024Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "response": {
        "responseCode": 0
      }
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2024-12-31T07:45:53.127Z - INFO - arrived to nstep starting question answer session with the technician
2024-12-31T07:45:53.127Z - INFO - the question is : Were there RF transmissions from the CBSD2 during the
test? please choose one of the answers :
2024-12-31T07:46:10.570Z - INFO - for the question : Were there RF transmissions from the CBSD2 during
the test? , the user choose n
2024-12-31T07:46:10.570Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the
test? please choose one of the answers :
2024-12-31T07:46:12.492Z - INFO - for the question : Were there RF transmissions from the CBSD1 during
the test? , the user choose n
2024-12-31T07:46:13.108Z - INFO - The final result of the test : WINNF.FT.D.REG.4 is - passed

```



```

        "cpiName": "Pega_Bob",
        "installCertificationTime": "2024-11-05T07:42:46Z",
        "cpild": "123456789"
    },
    "cbdsdSerialNumber": "VUIPR1450-48"
}
2024-12-31T07:50:43.060Z - INFO - verified signature on cpiSignatureData
2024-12-31T07:50:43.062Z - INFO - cbdsdCategory= 'A', removing optional param from cpi_schema
2024-12-31T07:50:43.067Z - INFO - cpiSignatureData data successfully validated against jsonschema
2024-12-31T07:50:43.100Z - INFO - Registration message contains cpiSignatureData
2024-12-31T07:50:43.101Z - INFO - protectedHeader = {u'alg': u'RS256', u'typ': u'JWT'}
2024-12-31T07:50:43.101Z - INFO - encodedCpiSignedData contents = {
    "installationParam": {
        "eirpCapability": 30.0,
        "antennaAzimuth": 240,
        "heightType": "AGL",
        "antennaModel": "Wire_dipole",
        "longitude": -22.084113,
        "height": 12.0,
        "indoorDeployment": true,
        "antennaBeamwidth": 30,
        "horizontalAccuracy": 45.0,
        "antennaDowntilt": 3,
        "latitude": 37.425056,
        "antennaGain": 9.0,
        "verticalAccuracy": 2.0
    },
    "fcclId": "VUIPR1450-48",
    "professionalInstallerData": {
        "cpiName": "Pega_Bob",
        "installCertificationTime": "2024-11-05T07:42:46Z",
        "cpild": "123456789"
    },
    "cbdsdSerialNumber": "VUIPR1450-48"
}
2024-12-31T07:50:43.103Z - INFO - verified signature on cpiSignatureData
2024-12-31T07:50:43.103Z - INFO - cbdsdCategory= 'A', removing optional param from cpi_schema
2024-12-31T07:50:43.111Z - INFO - cpiSignatureData data successfully validated against jsonschema
2024-12-31T07:50:43.113Z - INFO - engine sent successfully, the response to CBRS : {
    "registrationResponse": [
        {
            "cbdsdId": "VUIPR1450-48Mock-SASD823634126",
            "response": {
                "responseCode": 0
            }
        },
        {
            "cbdsdId": "VUIPR1450-48Mock-SASD823956047",
            "response": {
                "responseCode": 0
            }
        }
    ]
}
2024-12-31T07:50:44.903Z - INFO - arrived to nstep starting question answer session with the technician
2024-12-31T07:50:44.904Z - INFO - the question is : Were there RF transmissions from the CBSD2 during the test? please choose one of the answers :
2024-12-31T07:50:54.608Z - INFO - for the question : Were there RF transmissions from the CBSD2 during

```

the test? , the user choose n

2024-12-31T07:50:54.609Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :

2024-12-31T07:50:58.199Z - INFO - for the question : Were there RF transmissions from the CBSD1 during the test? , the user choose n

2024-12-31T07:50:58.975Z - INFO - The final result of the test : WINNF.FT.D.REG.6 is - passed

1.4 WINNF.FT.C.REG.9

2024-12-31T07:51:48.299Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2024-12-31T07:51:48.300Z - INFO - the selected test from the user : WINNF.FT.D.REG.9 is starting now

2024-12-31T07:51:55.937Z - INFO - registration request from CBRS : {

```

"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "CB987",
    "cbsdCategory": "A",
    "cbsdInfo": {
      "firmwareVersion": "1.0.2.2p2",
      "hardwareVersion": "1.1",
      "model": "PR1450-48E",
      "softwareVersion": "2.1.0",
      "vendor": "Pegatron"
    },
    "cbsdSerialNumber": "D823634126",
    "fccId": "VUIPR1450-48",
    "groupingParam": [
      {
        "groupId": "group1",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 240,
      "antennaBeamwidth": 30,
      "antennaDowntilt": 3,
      "antennaGain": 4,
      "antennaModel": "Wire_dipole",
      "eirpCapability": 30,
      "height": 12.0,
      "heightType": "AGL",
      "horizontalAccuracy": 45.0,
      "indoorDeployment": true,
      "latitude": 37.425056,
      "longitude": -22.084113,
      "verticalAccuracy": 2.0
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "PEGATRON"
  },
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "CB987",
    "cbsdCategory": "A",
    "cbsdInfo": {
      "firmwareVersion": "1.0.2.2p2",
      "hardwareVersion": "1.1",
      "model": "PR1450-48I",
      "softwareVersion": "2.1.0",

```

```

    "vendor": "Pegatron"
  },
  "cbsdSerialNumber": "D823956047",
  "fccId": "VUIPR1450-48",
  "groupingParam": [
    {
      "groupId": "group1",
      "groupType": "INTERFERENCE_COORDINATION"
    }
  ],
  "installationParam": {
    "antennaAzimuth": 240,
    "antennaBeamwidth": 30,
    "antennaDowntilt": 3,
    "antennaGain": 9,
    "antennaModel": "Wire_dipole",
    "eirpCapability": 30,
    "height": 12.0,
    "heightType": "AGL",
    "horizontalAccuracy": 45.0,
    "indoorDeployment": true,
    "latitude": 37.425056,
    "longitude": -22.084113,
    "verticalAccuracy": 2.0
  },
  "measCapability": [
    "RECEIVED_POWER_WITHOUT_GRANT"
  ],
  "userId": "PEGATRON"
}
]
}
2024-12-31T07:51:56.072Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "response": {
        "responseCode": 102
      }
    },
    {
      "response": {
        "responseCode": 102
      }
    }
  ]
}
2024-12-31T07:51:57.310Z - INFO - arrived to nstep starting question answer session with the technician
2024-12-31T07:51:57.310Z - INFO - the question is : Were there RF transmissions from the CBSD2 during
the test? please choose one of the answers :
2024-12-31T07:52:08.650Z - INFO - for the question : Were there RF transmissions from the CBSD2 during
the test? , the user choose n
2024-12-31T07:52:08.650Z - INFO - the question is : Were there RF transmissions from the CBSD1 during
the test? please choose one of the answers :
2024-12-31T07:52:10.159Z - INFO - for the question : Were there RF transmissions from the CBSD1 during
the test? , the user choose n
2024-12-31T07:52:10.609Z - INFO - The final result of the test : WINNF.FT.D.REG.9 is - passed

```

1.5 WINNF.FT.C.REG.11

2024-12-31T07:52:57.696Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2024-12-31T07:52:57.696Z - INFO - the selected test from the user : WINNF.FT.D.REG.11 is starting now

2024-12-31T07:53:02.915Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "CB987",
    "cbsdCategory": "A",
    "cbsdInfo": {
      "firmwareVersion": "1.0.2.2p2",
      "hardwareVersion": "1.1",
      "model": "PR1450-48E",
      "softwareVersion": "2.1.0",
      "vendor": "Pegatron"
    },
    "cbsdSerialNumber": "D823634126",
    "fccId": "VUIPR1450-48",
    "groupingParam": [
      {
        "groupId": "group1",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 240,
      "antennaBeamwidth": 30,
      "antennaDowntilt": 3,
      "antennaGain": 4,
      "antennaModel": "Wire_dipole",
      "eirpCapability": 30,
      "height": 12.0,
      "heightType": "AGL",
      "horizontalAccuracy": 45.0,
      "indoorDeployment": true,
      "latitude": 37.425056,
      "longitude": -22.084113,
      "verticalAccuracy": 2.0
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "PEGATRON"
  },
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "CB987",
    "cbsdCategory": "A",
    "cbsdInfo": {
      "firmwareVersion": "1.0.2.2p2",
      "hardwareVersion": "1.1",
      "model": "PR1450-48I",
      "softwareVersion": "2.1.0",
```

```

    "vendor": "Pegatron"
  },
  "cbsdSerialNumber": "D823956047",
  "fccId": "VUIPR1450-48",
  "groupingParam": [
    {
      "groupId": "group1",
      "groupType": "INTERFERENCE_COORDINATION"
    }
  ],
  "installationParam": {
    "antennaAzimuth": 240,
    "antennaBeamwidth": 30,
    "antennaDowntilt": 3,
    "antennaGain": 9,
    "antennaModel": "Wire_dipole",
    "eirpCapability": 30,
    "height": 12.0,
    "heightType": "AGL",
    "horizontalAccuracy": 45.0,
    "indoorDeployment": true,
    "latitude": 37.425056,
    "longitude": -22.084113,
    "verticalAccuracy": 2.0
  },
  "measCapability": [
    "RECEIVED_POWER_WITHOUT_GRANT"
  ],
  "userId": "PEGATRON"
}
]
}
2024-12-31T07:53:03.049Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "response": {
        "responseCode": 200
      }
    },
    {
      "response": {
        "responseCode": 200
      }
    }
  ]
}
2024-12-31T07:53:04.707Z - INFO - arrived to nstep starting question answer session with the technician
2024-12-31T07:53:04.707Z - INFO - the question is : Were there RF transmissions from the CBSD2 during
the test? please choose one of the answers :
2024-12-31T07:53:11.435Z - INFO - for the question : Were there RF transmissions from the CBSD2 during
the test? , the user choose n
2024-12-31T07:53:11.435Z - INFO - the question is : Were there RF transmissions from the CBSD1 during
the test? please choose one of the answers :
2024-12-31T07:53:12.419Z - INFO - for the question : Were there RF transmissions from the CBSD1 during
the test? , the user choose n
2024-12-31T07:53:12.964Z - INFO - The final result of the test : WINNF.FT.D.REG.11 is - passed

```

1.6 WINNF.FT.C.REG.13

2024-12-31T07:58:45.568Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2024-12-31T07:58:45.569Z - INFO - the selected test from the user : WINNF.FT.D.REG.13 is starting now

2024-12-31T07:58:53.929Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "CB987",
    "cbsdCategory": "A",
    "cbsdInfo": {
      "firmwareVersion": "1.0.2.2p2",
      "hardwareVersion": "1.1",
      "model": "PR1450-48E",
      "softwareVersion": "2.1.0",
      "vendor": "Pegatron"
    },
    "cbsdSerialNumber": "D823634126",
    "fccId": "VUIPR1450-48",
    "groupingParam": [
      {
        "groupId": "group1",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 240,
      "antennaBeamwidth": 30,
      "antennaDowntilt": 3,
      "antennaGain": 4,
      "antennaModel": "Wire_dipole",
      "eirpCapability": 30,
      "height": 12.0,
      "heightType": "AGL",
      "horizontalAccuracy": 45.0,
      "indoorDeployment": true,
      "latitude": 37.425056,
      "longitude": -22.084113,
      "verticalAccuracy": 2.0
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "PEGATRON"
  }
]
```

2024-12-31T07:58:54.036Z - INFO - engine sent successfully, the response to CBRS : {

```
"registrationResponse": [
  {
    "response": {
      "responseCode": 103
    }
  }
]
```

2024-12-31T07:58:55.922Z - INFO - registration request from CBRS : {

```

    "registrationRequest": [
      {
        "airInterface": {
          "radioTechnology": "NR"
        },
        "callSign": "CB987",
        "cbsdCategory": "A",
        "cbsdInfo": {
          "firmwareVersion": "1.0.2.2p2",
          "hardwareVersion": "1.1",
          "model": "PR1450-48I",
          "softwareVersion": "2.1.0",
          "vendor": "Pegatron"
        },
        "cbsdSerialNumber": "D823956047",
        "fccId": "VUIPR1450-48",
        "groupingParam": [
          {
            "groupId": "group1",
            "groupType": "INTERFERENCE_COORDINATION"
          }
        ],
        "installationParam": {
          "antennaAzimuth": 240,
          "antennaBeamwidth": 30,
          "antennaDowntilt": 3,
          "antennaGain": 9,
          "antennaModel": "Wire_dipole",
          "eirpCapability": 30,
          "height": 12.0,
          "heightType": "AGL",
          "horizontalAccuracy": 45.0,
          "indoorDeployment": true,
          "latitude": 37.425056,
          "longitude": -22.084113,
          "verticalAccuracy": 2.0
        },
        "measCapability": [
          "RECEIVED_POWER_WITHOUT_GRANT"
        ],
        "userId": "PEGATRON"
      }
    ]
  }

```

2024-12-31T07:58:56.029Z - INFO - engine sent successfully, the response to CBRS : {

```

    "registrationResponse": [
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823956047",
        "response": {
          "responseCode": 0
        }
      }
    ]
  }

```

2024-12-31T07:58:57.586Z - INFO - arrived to nstep starting question answer session with the technician

2024-12-31T07:58:57.587Z - INFO - the question is : Were there RF transmissions from the CBSD2 during the test? please choose one of the answers :

2024-12-31T07:59:00.326Z - INFO - for the question : Were there RF transmissions from the CBSD2 during the test? , the user choose n

2024-12-31T07:59:00.326Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :

2024-12-31T07:59:00.936Z - INFO - for the question : Were there RF transmissions from the CBSD1 during the test? , the user choose n

2024-12-31T07:59:01.326Z - INFO - The final result of the test : WINNF.FT.D.REG.13 is - passed

1.7 WINNF.FT.C.REG.15

2024-12-31T08:01:14.844Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2024-12-31T08:01:14.844Z - INFO - the selected test from the user : WINNF.FT.D.REG.15 is starting now

2024-12-31T08:01:24.931Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "CB987",
    "cbsdCategory": "A",
    "cbsdInfo": {
      "firmwareVersion": "1.0.2.2p2",
      "hardwareVersion": "1.1",
      "model": "PR1450-48E",
      "softwareVersion": "2.1.0",
      "vendor": "Pegatron"
    },
    "cbsdSerialNumber": "D823634126",
    "fccId": "VUIPR1450-48",
    "groupingParam": [
      {
        "groupId": "group1",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 240,
      "antennaBeamwidth": 30,
      "antennaDowntilt": 3,
      "antennaGain": 4,
      "antennaModel": "Wire_dipole",
      "eirpCapability": 30,
      "height": 12.0,
      "heightType": "AGL",
      "horizontalAccuracy": 45.0,
      "indoorDeployment": true,
      "latitude": 37.425056,
      "longitude": -22.084113,
      "verticalAccuracy": 2.0
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "PEGATRON"
  },
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "CB987",
    "cbsdCategory": "A",
    "cbsdInfo": {
      "firmwareVersion": "1.0.2.2p2",
      "hardwareVersion": "1.1",
      "model": "PR1450-48I",
      "softwareVersion": "2.1.0",
```

```

    "vendor": "Pegatron"
  },
  "cbsdSerialNumber": "D823956047",
  "fccId": "VUIPR1450-48",
  "groupingParam": [
    {
      "groupId": "group1",
      "groupType": "INTERFERENCE_COORDINATION"
    }
  ],
  "installationParam": {
    "antennaAzimuth": 240,
    "antennaBeamwidth": 30,
    "antennaDowntilt": 3,
    "antennaGain": 9,
    "antennaModel": "Wire_dipole",
    "eirpCapability": 30,
    "height": 12.0,
    "heightType": "AGL",
    "horizontalAccuracy": 45.0,
    "indoorDeployment": true,
    "latitude": 37.425056,
    "longitude": -22.084113,
    "verticalAccuracy": 2.0
  },
  "measCapability": [
    "RECEIVED_POWER_WITHOUT_GRANT"
  ],
  "userId": "PEGATRON"
}
]
}
2024-12-31T08:01:25.052Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "response": {
        "responseCode": 101
      }
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2024-12-31T08:01:26.860Z - INFO - arrived to nstep starting question answer session with the technician
2024-12-31T08:01:26.860Z - INFO - the question is : Were there RF transmissions from the CBSD2 during
the test? please choose one of the answers :
2024-12-31T08:01:32.106Z - INFO - for the question : Were there RF transmissions from the CBSD2 during
the test? , the user choose n
2024-12-31T08:01:32.107Z - INFO - the question is : Were there RF transmissions from the CBSD1 during
the test? please choose one of the answers :
2024-12-31T08:01:33.874Z - INFO - for the question : Were there RF transmissions from the CBSD1 during
the test? , the user choose n
2024-12-31T08:01:35.928Z - INFO - The final result of the test : WINNF.FT.D.REG.15 is - passed

```

1.8 WINNF.FT.C.REG.17

2024-12-31T08:02:29.419Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2024-12-31T08:02:29.420Z - INFO - the selected test from the user : WINNF.FT.D.REG.17 is starting now

2024-12-31T08:02:41.958Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "CB987",
    "cbsdCategory": "A",
    "cbsdInfo": {
      "firmwareVersion": "1.0.2.2p2",
      "hardwareVersion": "1.1",
      "model": "PR1450-48E",
      "softwareVersion": "2.1.0",
      "vendor": "Pegatron"
    },
    "cbsdSerialNumber": "D823634126",
    "fccId": "VUIPR1450-48",
    "groupingParam": [
      {
        "groupId": "group1",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 240,
      "antennaBeamwidth": 30,
      "antennaDowntilt": 3,
      "antennaGain": 4,
      "antennaModel": "Wire_dipole",
      "eirpCapability": 30,
      "height": 12.0,
      "heightType": "AGL",
      "horizontalAccuracy": 45.0,
      "indoorDeployment": true,
      "latitude": 37.425056,
      "longitude": -22.084113,
      "verticalAccuracy": 2.0
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "PEGATRON"
  }
]
```

2024-12-31T08:02:42.063Z - INFO - engine sent successfully, the response to CBRS : {

```
"registrationResponse": [
  {
    "response": {
      "responseCode": 100
    }
  }
]
```

2024-12-31T08:02:43.947Z - INFO - registration request from CBRS : {

```

  "registrationRequest": [
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "CB987",
      "cbsdCategory": "A",
      "cbsdInfo": {
        "firmwareVersion": "1.0.2.2p2",
        "hardwareVersion": "1.1",
        "model": "PR1450-48I",
        "softwareVersion": "2.1.0",
        "vendor": "Pegatron"
      },
      "cbsdSerialNumber": "D823956047",
      "fccId": "VUIPR1450-48",
      "groupingParam": [
        {
          "groupId": "group1",
          "groupType": "INTERFERENCE_COORDINATION"
        }
      ],
      "installationParam": {
        "antennaAzimuth": 240,
        "antennaBeamwidth": 30,
        "antennaDowntilt": 3,
        "antennaGain": 9,
        "antennaModel": "Wire_dipole",
        "eirpCapability": 30,
        "height": 12.0,
        "heightType": "AGL",
        "horizontalAccuracy": 45.0,
        "indoorDeployment": true,
        "latitude": 37.425056,
        "longitude": -22.084113,
        "verticalAccuracy": 2.0
      },
      "measCapability": [
        "RECEIVED_POWER_WITHOUT_GRANT"
      ],
      "userId": "PEGATRON"
    }
  ]
}

```

2024-12-31T08:02:44.018Z - INFO - engine sent successfully, the response to CBRS : {

```

  "registrationResponse": [
    {
      "response": {
        "responseCode": 100
      }
    }
  ]
}

```

2024-12-31T08:02:45.441Z - INFO - arrived to nstep starting question answer session with the technician

2024-12-31T08:02:45.441Z - INFO - the question is : Were there RF transmissions from the CBSD2 during the test? please choose one of the answers :

2024-12-31T08:02:48.933Z - INFO - for the question : Were there RF transmissions from the CBSD2 during

the test? , the user choose n

2024-12-31T08:02:48.933Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :

2024-12-31T08:02:49.946Z - INFO - for the question : Were there RF transmissions from the CBSD1 during the test? , the user choose n

2024-12-31T08:02:50.410Z - INFO - The final result of the test : WINNF.FT.D.REG.17 is - passed

1.9 WINNF.FT.C.REG.19

2024-12-31T08:03:35.066Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2024-12-31T08:03:35.066Z - INFO - the selected test from the user : WINNF.FT.D.REG.19 is starting now

2024-12-31T08:03:44.936Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "CB987",
    "cbsdCategory": "A",
    "cbsdInfo": {
      "firmwareVersion": "1.0.2.2p2",
      "hardwareVersion": "1.1",
      "model": "PR1450-48E",
      "softwareVersion": "2.1.0",
      "vendor": "Pegatron"
    },
    "cbsdSerialNumber": "D823634126",
    "fccId": "VUIPR1450-48",
    "groupingParam": [
      {
        "groupId": "group1",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 240,
      "antennaBeamwidth": 30,
      "antennaDowntilt": 3,
      "antennaGain": 4,
      "antennaModel": "Wire_dipole",
      "eirpCapability": 30,
      "height": 12.0,
      "heightType": "AGL",
      "horizontalAccuracy": 45.0,
      "indoorDeployment": true,
      "latitude": 37.425056,
      "longitude": -22.084113,
      "verticalAccuracy": 2.0
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "PEGATRON"
  },
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "CB987",
    "cbsdCategory": "A",
    "cbsdInfo": {
      "firmwareVersion": "1.0.2.2p2",
      "hardwareVersion": "1.1",
      "model": "PR1450-48I",
      "softwareVersion": "2.1.0",
```

```

        "vendor": "Pegatron"
    },
    "cbsdSerialNumber": "D823956047",
    "fccId": "VUIPR1450-48",
    "groupingParam": [
        {
            "groupId": "group1",
            "groupType": "INTERFERENCE_COORDINATION"
        }
    ],
    "installationParam": {
        "antennaAzimuth": 240,
        "antennaBeamwidth": 30,
        "antennaDowntilt": 3,
        "antennaGain": 9,
        "antennaModel": "Wire_dipole",
        "eirpCapability": 30,
        "height": 12.0,
        "heightType": "AGL",
        "horizontalAccuracy": 45.0,
        "indoorDeployment": true,
        "latitude": 37.425056,
        "longitude": -22.084113,
        "verticalAccuracy": 2.0
    },
    "measCapability": [
        "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "PEGATRON"
    }
]
}
2024-12-31T08:03:45.048Z - INFO - engine sent successfully, the response to CBRS : {
    "registrationResponse": [
        {
            "response": {
                "responseCode": 201
            }
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "response": {
                "responseCode": 0
            }
        }
    ]
}
2024-12-31T08:03:46.082Z - INFO - arrived to nstep starting question answer session with the technician
2024-12-31T08:03:46.082Z - INFO - the question is : Were there RF transmissions from the CBSD2 during
the test? please choose one of the answers :
2024-12-31T08:03:51.645Z - INFO - for the question : Were there RF transmissions from the CBSD2 during
the test? , the user choose n
2024-12-31T08:03:51.645Z - INFO - the question is : Were there RF transmissions from the CBSD1 during
the test? please choose one of the answers :
2024-12-31T08:03:52.251Z - INFO - for the question : Were there RF transmissions from the CBSD1 during
the test? , the user choose n
2024-12-31T08:03:52.810Z - INFO - The final result of the test : WINNF.FT.D.REG.19 is - passed

```

1.10 WINNF.FT.C.REG.20

2024-12-31T08:04:33.104Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2024-12-31T08:04:33.105Z - INFO - the selected test from the user : WINNF.FT.C.REG.20_1 is starting now

2024-12-31T08:05:39.939Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "CB987",
    "cbsdCategory": "A",
    "cbsdInfo": {
      "firmwareVersion": "1.0.2.2p2",
      "hardwareVersion": "1.1",
      "model": "PR1450-48I",
      "softwareVersion": "2.1.0",
      "vendor": "Pegatron"
    },
    "cbsdSerialNumber": "D823956047",
    "fccId": "VUIPR1450-48",
    "groupingParam": [
      {
        "groupId": "group1",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 240,
      "antennaBeamwidth": 30,
      "antennaDowntilt": 3,
      "antennaGain": 9,
      "antennaModel": "Wire_dipole",
      "eirpCapability": 30,
      "height": 12.0,
      "heightType": "AGL",
      "horizontalAccuracy": 45.0,
      "indoorDeployment": true,
      "latitude": 37.425056,
      "longitude": -22.084113,
      "verticalAccuracy": 2.0
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "PEGATRON"
  }
]
```

2024-12-31T08:05:40.022Z - INFO - engine sent successfully, the response to CBRS : {

```
"registrationResponse": [
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823956047",
    "response": {
      "responseCode": 0
    }
  }
]
```

```

}
2024-12-31T08:05:40.935Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    }
  ]
}
}
2024-12-31T08:05:40.942Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
}
2024-12-31T08:05:41.935Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "operationParam": {
        "maxEirp": 20.0,
        "operationFrequencyRange": {
          "highFrequency": 3640000000,
          "lowFrequency": 3600000000
        }
      }
    }
  ]
}
}
2024-12-31T08:05:41.942Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "channelType": "GAA",
      "grantExpireTime": "2025-01-07T08:05:41Z",
      "grantId": "409639935",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}

```

```

    }
  }
]
}
2024-12-31T08:05:42.934Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "409639935",
      "operationState": "GRANTED"
    }
  ]
}
2024-12-31T08:05:42.940Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "409639935",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2024-12-31T08:09:02Z"
    }
  ]
}
2024-12-31T08:06:30.944Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "409639935",
      "operationState": "AUTHORIZED"
    }
  ]
}
2024-12-31T08:06:30.946Z - INFO - Time interval between two heartbeat request messages is: 48.010184,
limit is: 65.0
2024-12-31T08:06:30.951Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "409639935",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2024-12-31T08:09:50Z"
    }
  ]
}
2024-12-31T08:07:30.938Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "409639935",
      "operationState": "AUTHORIZED"
    }
  ]
}
2024-12-31T08:07:30.940Z - INFO - Time interval between two heartbeat request messages is: 59.99331,

```

limit is: 65.0

2024-12-31T08:07:30.944Z - INFO - engine sent successfully, the response to CBRS : {

```
"heartbeatResponse": [
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823956047",
    "grantId": "409639935",
    "response": {
      "responseCode": 0
    },
    "transmitExpireTime": "2024-12-31T08:10:50Z"
  }
]
```

2024-12-31T08:08:30.957Z - INFO - heartbeat request from CBRS : {

```
"heartbeatRequest": [
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823956047",
    "grantId": "409639935",
    "operationState": "AUTHORIZED"
  }
]
```

2024-12-31T08:08:30.959Z - INFO - Time interval between two heartbeat request messages is: 60.019804,
limit is: 65.0

2024-12-31T08:08:30.964Z - INFO - engine sent successfully, the response to CBRS : {

```
"heartbeatResponse": [
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823956047",
    "grantId": "409639935",
    "response": {
      "responseCode": 0
    },
    "transmitExpireTime": "2024-12-31T08:11:50Z"
  }
]
```

2024-12-31T08:09:30.942Z - INFO - heartbeat request from CBRS : {

```
"heartbeatRequest": [
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823956047",
    "grantId": "409639935",
    "operationState": "AUTHORIZED"
  }
]
```

2024-12-31T08:09:30.944Z - INFO - Time interval between two heartbeat request messages is: 59.984666,
limit is: 65.0

2024-12-31T08:09:30.948Z - INFO - engine sent successfully, the response to CBRS : {

```
"heartbeatResponse": [
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823956047",
    "grantId": "409639935",
    "response": {
      "responseCode": 0
    },
    "transmitExpireTime": "2024-12-31T08:12:50Z"
  }
]
```

```

}
2024-12-31T08:10:30.949Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "409639935",
      "operationState": "AUTHORIZED"
    }
  ]
}
2024-12-31T08:10:30.952Z - INFO - Time interval between two heartbeat request messages is: 60.006738,
limit is: 65.0
2024-12-31T08:10:30.967Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "409639935",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2024-12-31T08:13:50Z"
    }
  ]
}
2024-12-31T08:10:32.471Z - INFO - arrived to nstep starting question answer session with the technician
2024-12-31T08:10:32.472Z - INFO - the question is : Did CBSD1 transmit power prior to AUTHORIZED state
(first successful HBT response)? please choose one of the answers :
2024-12-31T08:10:47.907Z - INFO - for the question : Did CBSD1 transmit power prior to AUTHORIZED state
(first successful HBT response)? , the user choose n
2024-12-31T08:10:47.909Z - INFO - the question is : Did CBSD1 transmit only within the frequency range
specified in its grantRequest message? please choose one of the answers :
2024-12-31T08:10:49.354Z - INFO - for the question : Did CBSD1 transmit only within the frequency range
specified in its grantRequest message? , the user choose y
2024-12-31T08:10:49.849Z - INFO - The final result of the test : WINNF.FT.C.REG.20_1 is - passed

2024-12-31T08:14:56.571Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
2024-12-31T08:14:56.571Z - INFO - the selected test from the user : WINNF.FT.C.REG.20_2 is starting now
2024-12-31T08:15:07.734Z - INFO - registration request from CBRS : {
  "registrationRequest": [
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "CB987",
      "cbsdCategory": "A",
      "cbsdInfo": {
        "firmwareVersion": "1.0.2.2p2",
        "hardwareVersion": "1.1",
        "model": "PR1450-48I",
        "softwareVersion": "2.1.0",
        "vendor": "Pegatron"
      },
      "cbsdSerialNumber": "D823956047",
    }
  ]
}

```

```

        "fccId": "VUIPR1450-48",
        "groupingParam": [
            {
                "groupId": "group1",
                "groupType": "INTERFERENCE_COORDINATION"
            }
        ],
        "installationParam": {
            "antennaAzimuth": 240,
            "antennaBeamwidth": 30,
            "antennaDowntilt": 3,
            "antennaGain": 9,
            "antennaModel": "Wire_dipole",
            "eirpCapability": 30,
            "height": 12.0,
            "heightType": "AGL",
            "horizontalAccuracy": 45.0,
            "indoorDeployment": true,
            "latitude": 38.425056,
            "longitude": -22.084113,
            "verticalAccuracy": 2.0
        },
        "measCapability": [
            "RECEIVED_POWER_WITHOUT_GRANT"
        ],
        "userId": "PEGATRON"
    }
]
}
2024-12-31T08:15:07.834Z - INFO - engine sent successfully, the response to CBRS : {
    "registrationResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "response": {
                "responseCode": 0
            }
        }
    ]
}
2024-12-31T08:15:08.687Z - INFO - spectrumInquiry request from CBRS : {
    "spectrumInquiryRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "inquiredSpectrum": [
                {
                    "highFrequency": 3700000000,
                    "lowFrequency": 3550000000
                }
            ]
        }
    ]
}
2024-12-31T08:15:08.695Z - INFO - engine sent successfully, the response to CBRS : {
    "spectrumInquiryResponse": [
        {
            "availableChannel": [
                {
                    "channelType": "GAA",

```

```

        "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
        },
        "ruleApplied": "FCC_PART_96"
    }
},
"cbstdId": "VUIPR1450-48Mock-SASD823956047",
"response": {
    "responseCode": 0
}
}
]
}
2024-12-31T08:15:09.694Z - INFO - grant request from CBRS : {
    "grantRequest": [
        {
            "cbstdId": "VUIPR1450-48Mock-SASD823956047",
            "operationParam": {
                "maxEirp": 20.0,
                "operationFrequencyRange": {
                    "highFrequency": 3640000000,
                    "lowFrequency": 3600000000
                }
            }
        }
    ]
}
}
2024-12-31T08:15:09.705Z - INFO - engine sent successfully, the response to CBRS : {
    "grantResponse": [
        {
            "cbstdId": "VUIPR1450-48Mock-SASD823956047",
            "channelType": "GAA",
            "grantExpireTime": "2025-01-07T08:15:09Z",
            "grantId": "912044316",
            "heartbeatInterval": 60,
            "response": {
                "responseCode": 0
            }
        }
    ]
}
}
2024-12-31T08:15:10.687Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbstdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "912044316",
            "operationState": "GRANTED"
        }
    ]
}
}
2024-12-31T08:15:10.693Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbstdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "912044316",
            "response": {
                "responseCode": 0
            }
        }
    ]
}
}

```

```

    },
    "transmitExpireTime": "2024-12-31T08:18:30Z"
  }
]
}
2024-12-31T08:15:39.684Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "912044316",
      "operationState": "AUTHORIZED"
    }
  ]
}
2024-12-31T08:15:39.687Z - INFO - Time interval between two heartbeat request messages is: 28.997561,
limit is: 65.0
2024-12-31T08:15:39.693Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "912044316",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2024-12-31T08:18:59Z"
    }
  ]
}
}
2024-12-31T08:16:39.680Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "912044316",
      "operationState": "AUTHORIZED"
    }
  ]
}
}
2024-12-31T08:16:39.682Z - INFO - Time interval between two heartbeat request messages is: 59.994998,
limit is: 65.0
2024-12-31T08:16:39.687Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "912044316",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2024-12-31T08:19:59Z"
    }
  ]
}
}
2024-12-31T08:17:39.667Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "912044316",
      "operationState": "AUTHORIZED"
    }
  ]
}
}

```

```

    ]
  }
2024-12-31T08:17:39.669Z - INFO - Time interval between two heartbeat request messages is: 59.987357,
limit is: 65.0
2024-12-31T08:17:39.677Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "912044316",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2024-12-31T08:20:59Z"
    }
  ]
}
2024-12-31T08:18:39.659Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "912044316",
      "operationState": "AUTHORIZED"
    }
  ]
}
2024-12-31T08:18:39.660Z - INFO - Time interval between two heartbeat request messages is: 59.99178,
limit is: 65.0
2024-12-31T08:18:39.665Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "912044316",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2024-12-31T08:21:59Z"
    }
  ]
}
2024-12-31T08:19:39.659Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "912044316",
      "operationState": "AUTHORIZED"
    }
  ]
}
2024-12-31T08:19:39.661Z - INFO - Time interval between two heartbeat request messages is: 59.999883,
limit is: 65.0
2024-12-31T08:19:39.667Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "912044316",
      "response": {
        "responseCode": 0
      },
    }
  ]
}

```

"transmitExpireTime": "2024-12-31T08:22:59Z"

}

]

}

2024-12-31T08:19:40.875Z - INFO - arrived to nstep starting question answer session with the technician

2024-12-31T08:19:40.875Z - INFO - the question is : Did CBSD1 transmit power prior to AUTHORIZED state (first successful HBT response)? please choose one of the answers :

2024-12-31T08:19:52.609Z - INFO - for the question : Did CBSD1 transmit power prior to AUTHORIZED state (first successful HBT response)? , the user choose n

2024-12-31T08:19:52.610Z - INFO - the question is : Did CBSD1 transmit only within the frequency range specified in its grantRequest message? please choose one of the answers :

2024-12-31T08:19:53.731Z - INFO - for the question : Did CBSD1 transmit only within the frequency range specified in its grantRequest message? , the user choose y

2024-12-31T08:19:54.248Z - INFO - The final result of the test : WINNF.FT.C.REG.20_2 is - passed

2 CBSD Spectrum Grant Process

2.1 WINNF.FT.C.GRA.1

2025-01-02T09:04:53.901Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2025-01-02T09:04:53.901Z - INFO - the selected test from the user : WINNF.FT.C.GRA.1 is starting now

2025-01-02T09:05:35.436Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "CB987",
    "cbsdCategory": "A",
    "cbsdInfo": {
      "firmwareVersion": "1.0.2.2p2",
      "hardwareVersion": "1.1",
      "model": "PR1450-48I",
      "softwareVersion": "2.1.0",
      "vendor": "Pegatron"
    },
    "cbsdSerialNumber": "D823956047",
    "fccId": "VUIPR1450-48",
    "groupingParam": [
      {
        "groupId": "group1",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 240,
      "antennaBeamwidth": 30,
      "antennaDowntilt": 3,
      "antennaGain": 9,
      "antennaModel": "Wire_dipole",
      "eirpCapability": 30,
      "height": 12.0,
      "heightType": "AGL",
      "horizontalAccuracy": 45.0,
      "indoorDeployment": true,
      "latitude": 37.425056,
      "longitude": -22.084113,
      "verticalAccuracy": 2.0
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "PEGATRON"
  }
]
```

2025-01-02T09:05:35.527Z - INFO - engine sent successfully, the response to CBRS : {

```
"registrationResponse": [
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823956047",
    "response": {
      "responseCode": 0
    }
  }
]
```

```

    }
  ]
}
2025-01-02T09:05:36.461Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    }
  ]
}
2025-01-02T09:05:36.469Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-01-02T09:05:37.433Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "operationParam": {
        "maxEirp": 12.0,
        "operationFrequencyRange": {
          "highFrequency": 3640000000,
          "lowFrequency": 3600000000
        }
      }
    }
  ]
}
2025-01-02T09:05:37.440Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "response": {
        "responseCode": 400
      }
    }
  ]
}

```

] }
}

2025-01-02T09:05:38.947Z - INFO - arrived to nstep starting question answer session with the technician

2025-01-02T09:05:38.947Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :

2025-01-02T09:08:52.232Z - INFO - for the question : Were there RF transmissions from the CBSD1 during the test? , the user choose n

2025-01-02T09:08:52.625Z - INFO - The final result of the test : WINNF.FT.C.GRA.1 is - passed

2.2 WINNF.FT.C.GRA.2

2025-01-02T09:09:09.571Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2025-01-02T09:09:09.571Z - INFO - the selected test from the user : WINNF.FT.C.GRA.2 is starting now

2025-01-02T09:09:15.455Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "CB987",
    "cbsdCategory": "A",
    "cbsdInfo": {
      "firmwareVersion": "1.0.2.2p2",
      "hardwareVersion": "1.1",
      "model": "PR1450-48I",
      "softwareVersion": "2.1.0",
      "vendor": "Pegatron"
    },
    "cbsdSerialNumber": "D823956047",
    "fccId": "VUIPR1450-48",
    "groupingParam": [
      {
        "groupId": "group1",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 240,
      "antennaBeamwidth": 30,
      "antennaDowntilt": 3,
      "antennaGain": 9,
      "antennaModel": "Wire_dipole",
      "eirpCapability": 30,
      "height": 12.0,
      "heightType": "AGL",
      "horizontalAccuracy": 45.0,
      "indoorDeployment": true,
      "latitude": 37.425056,
      "longitude": -22.084113,
      "verticalAccuracy": 2.0
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "PEGATRON"
  }
]
```

2025-01-02T09:09:15.542Z - INFO - engine sent successfully, the response to CBRS : {

```
"registrationResponse": [
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823956047",
    "response": {
      "responseCode": 0
    }
  }
]
```

```

}
2025-01-02T09:09:17.436Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    }
  ]
}
}
2025-01-02T09:09:17.447Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
}
2025-01-02T09:09:19.447Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "operationParam": {
        "maxEirp": 12.0,
        "operationFrequencyRange": {
          "highFrequency": 3640000000,
          "lowFrequency": 3600000000
        }
      }
    }
  ]
}
}
2025-01-02T09:09:19.454Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "response": {
        "responseCode": 401
      }
    }
  ]
}
}

```

2025-01-02T09:09:20.585Z - INFO - arrived to nstep starting question answer session with the technician
2025-01-02T09:09:20.586Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :
2025-01-02T09:14:29.486Z - INFO - for the question : Were there RF transmissions from the CBSD1 during the test? , the user choose n
2025-01-02T09:14:30.085Z - INFO - The final result of the test : WINNF.FT.C.GRA.2 is - passed

3 CBSD Heart Beat Process

3.1 WINNF.FT.D.HBT.2

2024-12-31T08:32:30.109Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2024-12-31T08:32:30.110Z - INFO - the selected test from the user : WINNF.FT.D.HBT.2 is starting now

2024-12-31T08:32:40.730Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "CB987",
    "cbsdCategory": "A",
    "cbsdInfo": {
      "firmwareVersion": "1.0.2.2p2",
      "hardwareVersion": "1.1",
      "model": "PR1450-48E",
      "softwareVersion": "2.1.0",
      "vendor": "Pegatron"
    },
    "cbsdSerialNumber": "D823634126",
    "fccId": "VUIPR1450-48",
    "groupingParam": [
      {
        "groupId": "group1",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 240,
      "antennaBeamwidth": 30,
      "antennaDowntilt": 3,
      "antennaGain": 4,
      "antennaModel": "Wire_dipole",
      "eirpCapability": 30,
      "height": 12.0,
      "heightType": "AGL",
      "horizontalAccuracy": 45.0,
      "indoorDeployment": true,
      "latitude": 37.425056,
      "longitude": -22.084113,
      "verticalAccuracy": 2.0
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "PEGATRON"
  },
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "CB987",
    "cbsdCategory": "A",
    "cbsdInfo": {
      "firmwareVersion": "1.0.2.2p2",
      "hardwareVersion": "1.1",
      "model": "PR1450-48I",
```

```

        "softwareVersion": "2.1.0",
        "vendor": "Pegatron"
    },
    "cbsdSerialNumber": "D823956047",
    "fccId": "VUIPR1450-48",
    "groupingParam": [
        {
            "groupId": "group1",
            "groupType": "INTERFERENCE_COORDINATION"
        }
    ],
    "installationParam": {
        "antennaAzimuth": 240,
        "antennaBeamwidth": 30,
        "antennaDowntilt": 3,
        "antennaGain": 9,
        "antennaModel": "Wire_dipole",
        "eirpCapability": 30,
        "height": 12.0,
        "heightType": "AGL",
        "horizontalAccuracy": 45.0,
        "indoorDeployment": true,
        "latitude": 37.425056,
        "longitude": -22.084113,
        "verticalAccuracy": 2.0
    },
    "measCapability": [
        "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "PEGATRON"
    }
]
}
2024-12-31T08:32:40.874Z - INFO - engine sent successfully, the response to CBRS : {
    "registrationResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "response": {
                "responseCode": 0
            }
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "response": {
                "responseCode": 0
            }
        }
    ]
}
2024-12-31T08:32:41.726Z - INFO - spectrumInquiry request from CBRS : {
    "spectrumInquiryRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "inquiredSpectrum": [
                {
                    "highFrequency": 3700000000,
                    "lowFrequency": 3550000000
                }
            ]
        }
    ]
}

```

```

    ],
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    }
  ]
}

2024-12-31T08:32:41.746Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "response": {
        "responseCode": 0
      }
    },
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "response": {
        "responseCode": 0
      }
    }
  ]
}

2024-12-31T08:32:42.724Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "operationParam": {
        "maxEirp": 20.0,
        "operationFrequencyRange": {
          "highFrequency": 3640000000,
          "lowFrequency": 3600000000
        }
      }
    }
  ]
}

```

```

    }
  },
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823956047",
    "operationParam": {
      "maxEirp": 20.0,
      "operationFrequencyRange": {
        "highFrequency": 3640000000,
        "lowFrequency": 3600000000
      }
    }
  }
]
}
2024-12-31T08:32:42.739Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "channelType": "GAA",
      "grantExpireTime": "2025-01-07T08:32:42Z",
      "grantId": "630878411",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "channelType": "GAA",
      "grantExpireTime": "2025-01-07T08:32:42Z",
      "grantId": "897211753",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2024-12-31T08:32:43.722Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "630878411",
      "operationState": "GRANTED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "897211753",
      "operationState": "GRANTED"
    }
  ]
}
2024-12-31T08:32:43.732Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "630878411",

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        "response": {
            "responseCode": 0
        },
        "transmitExpireTime": "2024-12-31T08:36:03Z"
    },
    {
        "cbsdId": "VUIPR1450-48Mock-SASD823956047",
        "grantId": "897211753",
        "response": {
            "responseCode": 0
        },
        "transmitExpireTime": "2024-12-31T08:36:03Z"
    }
]
}
2024-12-31T08:32:51.714Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "630878411",
            "operationState": "AUTHORIZED"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "897211753",
            "operationState": "AUTHORIZED"
        }
    ]
}
2024-12-31T08:32:51.715Z - INFO - Time interval between two heartbeat request messages is: 7.99141, limit is: 65.0
2024-12-31T08:32:51.720Z - INFO - Time interval between two heartbeat request messages is: 7.99141, limit is: 65.0
2024-12-31T08:32:51.725Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "630878411",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2024-12-31T08:36:11Z"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "897211753",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2024-12-31T08:36:11Z"
        }
    ]
}
2024-12-31T08:33:51.654Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "630878411",

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        "operationState": "AUTHORIZED"
    },
    {
        "cbsdId": "VUIPR1450-48Mock-SASD823956047",
        "grantId": "897211753",
        "operationState": "AUTHORIZED"
    }
]
}
2024-12-31T08:33:51.655Z - INFO - Time interval between two heartbeat request messages is: 59.940637,
limit is: 65.0
2024-12-31T08:33:51.660Z - INFO - Time interval between two heartbeat request messages is: 59.940637,
limit is: 65.0
2024-12-31T08:33:51.666Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "630878411",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2024-12-31T08:37:11Z"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "897211753",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2024-12-31T08:37:11Z"
        }
    ]
}
2024-12-31T08:34:51.665Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "630878411",
            "operationState": "AUTHORIZED"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "897211753",
            "operationState": "AUTHORIZED"
        }
    ]
}
2024-12-31T08:34:51.667Z - INFO - Time interval between two heartbeat request messages is: 60.010492,
limit is: 65.0
2024-12-31T08:34:51.672Z - INFO - Time interval between two heartbeat request messages is: 60.010492,
limit is: 65.0
2024-12-31T08:34:51.678Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "630878411",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2024-12-31T08:37:11Z"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "897211753",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2024-12-31T08:37:11Z"
        }
    ]
}

```

```

    },
    "transmitExpireTime": "2024-12-31T08:38:11Z"
  },
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823956047",
    "grantId": "897211753",
    "response": {
      "responseCode": 0
    },
    "transmitExpireTime": "2024-12-31T08:38:11Z"
  }
]
}
2024-12-31T08:35:51.652Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "897211753",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "630878411",
      "operationState": "AUTHORIZED"
    }
  ]
}
2024-12-31T08:35:51.654Z - INFO - Time interval between two heartbeat request messages is: 59.988002,
limit is: 65.0
2024-12-31T08:35:51.659Z - INFO - Time interval between two heartbeat request messages is: 59.988002,
limit is: 65.0
2024-12-31T08:35:51.665Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "897211753",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2024-12-31T08:39:11Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "630878411",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2024-12-31T08:39:11Z"
    }
  ]
}
2024-12-31T08:36:51.658Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "630878411",
      "operationState": "AUTHORIZED"
    },
  ],

```

```

    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "897211753",
      "operationState": "AUTHORIZED"
    }
  ]
}
2024-12-31T08:36:51.660Z - INFO - Time interval between two heartbeat request messages is: 60.005005,
limit is: 65.0
2024-12-31T08:36:51.668Z - INFO - Time interval between two heartbeat request messages is: 60.005005,
limit is: 65.0
2024-12-31T08:36:51.679Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "630878411",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2024-12-31T08:40:11Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "897211753",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2024-12-31T08:40:11Z"
    }
  ]
}
2024-12-31T08:36:53.375Z - INFO - arrived to nstep starting question answer session with the technician
2024-12-31T08:36:53.375Z - INFO - the question is : Did CBSD2 transmit power prior to AUTHORIZED state
(first successful HBT response)? please choose one of the answers :
2024-12-31T08:37:23.695Z - INFO - for the question : Did CBSD2 transmit power prior to AUTHORIZED state
(first successful HBT response)? , the user choose n
2024-12-31T08:37:23.696Z - INFO - the question is : Did CBSD2 transmit only within the frequency range
specified in its grantRequest message? please choose one of the answers :
2024-12-31T08:37:26.304Z - INFO - for the question : Did CBSD2 transmit only within the frequency range
specified in its grantRequest message? , the user choose y
2024-12-31T08:37:26.305Z - INFO - the question is : Did CBSD1 transmit power prior to AUTHORIZED state
(first successful HBT response)? please choose one of the answers :
2024-12-31T08:37:28.954Z - INFO - for the question : Did CBSD1 transmit power prior to AUTHORIZED state
(first successful HBT response)? , the user choose n
2024-12-31T08:37:28.954Z - INFO - the question is : Did CBSD1 transmit only within the frequency range
specified in its grantRequest message? please choose one of the answers :
2024-12-31T08:37:31.571Z - INFO - for the question : Did CBSD1 transmit only within the frequency range
specified in its grantRequest message? , the user choose y
2024-12-31T08:37:32.286Z - INFO - The final result of the test : WINNF.FT.D.HBT.2 is - passed

```

3.2 WINNF.FT.C.HBT.3

2025-01-02T10:41:05.825Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2025-01-02T10:41:05.826Z - INFO - the selected test from the user : WINNF.FT.C.HBT.3 is starting now

2025-01-02T10:41:46.185Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "CB987",
    "cbsdCategory": "A",
    "cbsdInfo": {
      "firmwareVersion": "1.0.2.2p2",
      "hardwareVersion": "1.1",
      "model": "PR1450-48I",
      "softwareVersion": "2.1.0",
      "vendor": "Pegatron"
    },
    "cbsdSerialNumber": "D823956047",
    "fccId": "VUIPR1450-48",
    "groupingParam": [
      {
        "groupId": "group1",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 240,
      "antennaBeamwidth": 30,
      "antennaDowntilt": 3,
      "antennaGain": 9,
      "antennaModel": "Wire_dipole",
      "eirpCapability": 30,
      "height": 12.0,
      "heightType": "AGL",
      "horizontalAccuracy": 45.0,
      "indoorDeployment": true,
      "latitude": 37.425056,
      "longitude": -22.084113,
      "verticalAccuracy": 2.0
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "PEGATRON"
  }
]
```

2025-01-02T10:41:46.270Z - INFO - engine sent successfully, the response to CBRS : {

```
"registrationResponse": [
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823956047",
    "response": {
      "responseCode": 0
    }
  }
]
```

```

2025-01-02T10:41:47.185Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    }
  ]
}
2025-01-02T10:41:47.192Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-01-02T10:41:48.186Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "operationParam": {
        "maxEirp": 20.0,
        "operationFrequencyRange": {
          "highFrequency": 3640000000,
          "lowFrequency": 3600000000
        }
      }
    }
  ]
}
2025-01-02T10:41:48.193Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "channelType": "GAA",
      "grantExpireTime": "2025-01-09T10:41:48Z",
      "grantId": "345705593",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}

```

```

    }
  ]
}
2025-01-02T10:41:49.192Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "345705593",
      "operationState": "GRANTED"
    }
  ]
}
2025-01-02T10:41:49.197Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "345705593",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T10:45:09Z"
    }
  ]
}
2025-01-02T10:42:30.166Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "345705593",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-02T10:42:30.167Z - INFO - Time interval between two heartbeat request messages is: 40.97392,
limit is: 65.0
2025-01-02T10:42:30.172Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "345705593",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T10:45:50Z"
    }
  ]
}
2025-01-02T10:43:30.165Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "345705593",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-02T10:43:30.166Z - INFO - Time interval between two heartbeat request messages is: 59.999289,
limit is: 65.0

```

```
2025-01-02T10:43:30.171Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "345705593",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T10:46:50Z"
    }
  ]
}
2025-01-02T10:44:30.189Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "345705593",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-02T10:44:30.191Z - INFO - Time interval between two heartbeat request messages is: 60.024464,
limit is: 65.0
2025-01-02T10:44:30.196Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "345705593",
      "response": {
        "responseCode": 105
      },
      "transmitExpireTime": "2025-01-02T10:44:30Z"
    }
  ]
}
2025-01-02T10:44:32.036Z - INFO - arrived to nstep starting question answer session with the technician
2025-01-02T10:44:32.037Z - INFO - the question is : Did the CBSD stop RF transmission within 60 seconds
of receiving Heartbeat response with responseCode = 105? please choose one of the answers :
2025-01-02T10:48:13.723Z - INFO - for the question : Did the CBSD stop RF transmission within 60 seconds
of receiving Heartbeat response with responseCode = 105? , the user choose y
2025-01-02T10:48:14.125Z - INFO - The final result of the test : WINNF.FT.C.HBT.3 is - passed
```

3.3 WINNF.FT.C.HBT.5

2024-12-31T08:41:53.669Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2024-12-31T08:41:53.669Z - INFO - the selected test from the user : WINNF.FT.C.HBT.5 is starting now

2024-12-31T08:42:03.666Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "CB987",
    "cbsdCategory": "A",
    "cbsdInfo": {
      "firmwareVersion": "1.0.2.2p2",
      "hardwareVersion": "1.1",
      "model": "PR1450-48I",
      "softwareVersion": "2.1.0",
      "vendor": "Pegatron"
    },
    "cbsdSerialNumber": "D823956047",
    "fccId": "VUIPR1450-48",
    "groupingParam": [
      {
        "groupId": "group1",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 240,
      "antennaBeamwidth": 30,
      "antennaDowntilt": 3,
      "antennaGain": 9,
      "antennaModel": "Wire_dipole",
      "eirpCapability": 30,
      "height": 12.0,
      "heightType": "AGL",
      "horizontalAccuracy": 45.0,
      "indoorDeployment": true,
      "latitude": 37.425056,
      "longitude": -22.084113,
      "verticalAccuracy": 2.0
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "PEGATRON"
  }
]
```

2024-12-31T08:42:03.786Z - INFO - engine sent successfully, the response to CBRS : {

```
"registrationResponse": [
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823956047",
    "response": {
      "responseCode": 0
    }
  }
]
```

```

}
2024-12-31T08:42:05.670Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    }
  ]
}
}
2024-12-31T08:42:05.678Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
}
2024-12-31T08:42:07.658Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "operationParam": {
        "maxEirp": 20.0,
        "operationFrequencyRange": {
          "highFrequency": 3640000000,
          "lowFrequency": 3600000000
        }
      }
    }
  ]
}
}
2024-12-31T08:42:07.664Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "channelType": "GAA",
      "grantExpireTime": "2025-01-07T08:42:07Z",
      "grantId": "696558990",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}

```

```

    }
  }
]
}
2024-12-31T08:42:09.661Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "696558990",
      "operationState": "GRANTED"
    }
  ]
}
2024-12-31T08:42:09.667Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "696558990",
      "response": {
        "responseCode": 501
      },
      "transmitExpireTime": "2024-12-31T08:42:09Z"
    }
  ]
}
2024-12-31T08:42:51.655Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "696558990",
      "operationState": "GRANTED"
    }
  ]
}
2024-12-31T08:42:51.657Z - INFO - Time interval between two heartbeat request messages is: 41.993294,
limit is: 65.0
2024-12-31T08:42:51.663Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "696558990",
      "response": {
        "responseCode": 501
      },
      "transmitExpireTime": "2024-12-31T08:42:51Z"
    }
  ]
}
2024-12-31T08:42:52.747Z - INFO - arrived to nstep starting question answer session with the technician
2024-12-31T08:42:52.748Z - INFO - the question is : Did the CBSD transmit at any time during the test?
please choose one of the answers :
2024-12-31T08:43:05.212Z - INFO - for the question : Did the CBSD transmit at any time during the test? , the
user choose n
2024-12-31T08:43:05.677Z - INFO - The final result of the test : WINNF.FT.C.HBT.5 is - passed

```

3.4 WINNF.FT.C.HBT.6

2025-01-02T10:53:31.856Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2025-01-02T10:53:31.857Z - INFO - the selected test from the user : WINNF.FT.C.HBT.6 is starting now

2025-01-02T10:53:42.167Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "CB987",
    "cbsdCategory": "A",
    "cbsdInfo": {
      "firmwareVersion": "1.0.2.2p2",
      "hardwareVersion": "1.1",
      "model": "PR1450-48I",
      "softwareVersion": "2.1.0",
      "vendor": "Pegatron"
    },
    "cbsdSerialNumber": "D823956047",
    "fccId": "VUIPR1450-48",
    "groupingParam": [
      {
        "groupId": "group1",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 240,
      "antennaBeamwidth": 30,
      "antennaDowntilt": 3,
      "antennaGain": 9,
      "antennaModel": "Wire_dipole",
      "eirpCapability": 30,
      "height": 12.0,
      "heightType": "AGL",
      "horizontalAccuracy": 45.0,
      "indoorDeployment": true,
      "latitude": 37.425056,
      "longitude": -22.084113,
      "verticalAccuracy": 2.0
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "PEGATRON"
  }
]
```

2025-01-02T10:53:42.252Z - INFO - engine sent successfully, the response to CBRS : {

```
"registrationResponse": [
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823956047",
    "response": {
      "responseCode": 0
    }
  }
]
```

```

2025-01-02T10:53:43.164Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    }
  ]
}
2025-01-02T10:53:43.171Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-01-02T10:53:44.164Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "operationParam": {
        "maxEirp": 20.0,
        "operationFrequencyRange": {
          "highFrequency": 3640000000,
          "lowFrequency": 3600000000
        }
      }
    }
  ]
}
2025-01-02T10:53:44.172Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "channelType": "GAA",
      "grantExpireTime": "2025-01-09T10:53:44Z",
      "grantId": "84588480",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}

```

```

    }
  ]
}
2025-01-02T10:53:45.165Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "84588480",
      "operationState": "GRANTED"
    }
  ]
}
2025-01-02T10:53:45.170Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "84588480",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T10:57:05Z"
    }
  ]
}
2025-01-02T10:54:30.163Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "84588480",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-02T10:54:30.165Z - INFO - Time interval between two heartbeat request messages is: 44.998404,
limit is: 65.0
2025-01-02T10:54:30.170Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "84588480",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T10:57:50Z"
    }
  ]
}
2025-01-02T10:55:30.163Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "84588480",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-02T10:55:30.165Z - INFO - Time interval between two heartbeat request messages is: 60.000762,
limit is: 65.0

```

```
2025-01-02T10:55:30.169Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "84588480",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T10:58:50Z"
    }
  ]
}
2025-01-02T10:56:30.163Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "84588480",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-02T10:56:30.164Z - INFO - Time interval between two heartbeat request messages is: 59.998881,
limit is: 65.0
2025-01-02T10:56:30.169Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "84588480",
      "response": {
        "responseCode": 501
      },
      "transmitExpireTime": "2025-01-02T10:56:30Z"
    }
  ]
}
2025-01-02T10:57:30.166Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "84588480",
      "operationState": "GRANTED"
    }
  ]
}
2025-01-02T10:57:30.168Z - INFO - Time interval between two heartbeat request messages is: 60.003226,
limit is: 65.0
2025-01-02T10:57:30.173Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "84588480",
      "response": {
        "responseCode": 501
      },
      "transmitExpireTime": "2025-01-02T10:57:30Z"
    }
  ]
}
```

2025-01-02T10:57:32.099Z - INFO - arrived to nstep starting question answer session with the technician
2025-01-02T10:57:32.099Z - INFO - the question is : Did the CBSD stop RF transmission within 60 seconds of receiving Heartbeat response with responseCode = 501? please choose one of the answers :
2025-01-02T11:00:40.449Z - INFO - for the question : Did the CBSD stop RF transmission within 60 seconds of receiving Heartbeat response with responseCode = 501? , the user choose y
2025-01-02T11:00:40.690Z - INFO - The final result of the test : WINNF.FT.C.HBT.6 is - passed

3.5 WINNF.FT.C.HBT.7

2025-01-03T05:55:52.873Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2025-01-03T05:55:52.874Z - INFO - the selected test from the user : WINNF.FT.C.HBT.7 is starting now

2025-01-03T05:56:10.560Z - INFO - registration request from CBRS : {

```

  "registrationRequest": [
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "CB987",
      "cbsdCategory": "A",
      "cbsdInfo": {
        "firmwareVersion": "1.0.2.2p2",
        "hardwareVersion": "1.1",
        "model": "PR1450-48I",
        "softwareVersion": "2.1.0",
        "vendor": "Pegatron"
      },
      "cbsdSerialNumber": "D823956047",
      "fccId": "VUIPR1450-48",
      "groupingParam": [
        {
          "groupId": "group1",
          "groupType": "INTERFERENCE_COORDINATION"
        }
      ],
      "installationParam": {
        "antennaAzimuth": 240,
        "antennaBeamwidth": 30,
        "antennaDowntilt": 3,
        "antennaGain": 9,
        "antennaModel": "Wire_dipole",
        "eirpCapability": 30,
        "height": 12.0,
        "heightType": "AGL",
        "horizontalAccuracy": 45.0,
        "indoorDeployment": true,
        "latitude": 37.425056,
        "longitude": -22.084113,
        "verticalAccuracy": 2.0
      },
      "measCapability": [
        "RECEIVED_POWER_WITHOUT_GRANT"
      ],
      "userId": "PEGATRON"
    }
  ]

```

2025-01-03T05:56:10.645Z - INFO - engine sent successfully, the response to CBRS : {

```

  "registrationResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "response": {
        "responseCode": 0
      }
    }
  ]

```

```

}
2025-01-03T05:56:11.546Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    }
  ]
}
}
2025-01-03T05:56:11.554Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
}
2025-01-03T05:56:12.549Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "operationParam": {
        "maxEirp": 20.0,
        "operationFrequencyRange": {
          "highFrequency": 3640000000,
          "lowFrequency": 3600000000
        }
      }
    }
  ]
}
}
2025-01-03T05:56:12.559Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "channelType": "GAA",
      "grantExpireTime": "2025-01-10T05:56:12Z",
      "grantId": "864911955",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}

```

```

    }
  }
]
}
2025-01-03T05:56:13.546Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "864911955",
      "operationState": "GRANTED"
    }
  ]
}
2025-01-03T05:56:13.550Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "864911955",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-03T05:59:33Z"
    }
  ]
}
2025-01-03T05:57:00.574Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "864911955",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-03T05:57:00.575Z - INFO - Time interval between two heartbeat request messages is: 47.02804,
limit is: 65.0
2025-01-03T05:57:00.583Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "864911955",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-03T06:00:20Z"
    }
  ]
}
2025-01-03T05:58:00.546Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "864911955",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-03T05:58:00.547Z - INFO - Time interval between two heartbeat request messages is: 59.972101,

```

limit is: 65.0

2025-01-03T05:58:00.551Z - INFO - engine sent successfully, the response to CBRS : {

```
"heartbeatResponse": [
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823956047",
    "grantId": "864911955",
    "response": {
      "responseCode": 0
    },
    "transmitExpireTime": "2025-01-03T06:01:20Z"
  }
]
```

2025-01-03T05:59:00.559Z - INFO - heartbeat request from CBRS : {

```
"heartbeatRequest": [
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823956047",
    "grantId": "864911955",
    "operationState": "AUTHORIZED"
  }
]
```

2025-01-03T05:59:00.561Z - INFO - Time interval between two heartbeat request messages is: 60.013719,
limit is: 65.0

2025-01-03T05:59:00.566Z - INFO - engine sent successfully, the response to CBRS : {

```
"heartbeatResponse": [
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823956047",
    "grantId": "864911955",
    "response": {
      "responseCode": 502
    },
    "transmitExpireTime": "2025-01-03T05:59:00Z"
  }
]
```

2025-01-03T05:59:02.555Z - INFO - relinquishment request from CBRS : {

```
"relinquishmentRequest": [
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823956047",
    "grantId": "864911955"
  }
]
```

2025-01-03T05:59:02.563Z - INFO - engine sent successfully, the response to CBRS : {

```
"relinquishmentResponse": [
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823956047",
    "grantId": "864911955",
    "response": {
      "responseCode": 0
    }
  }
]
```

2025-01-03T05:59:04.066Z - INFO - arrived to nstep starting question answer session with the technician

2025-01-03T05:59:04.066Z - INFO - the question is : Did the CBSD stop RF transmission within 60 seconds of receiving Heartbeat response with responseCode = 502? please choose one of the answers :

2025-01-03T06:02:08.488Z - INFO - for the question : Did the CBSD stop RF transmission within 60 seconds of receiving Heartbeat response with responseCode = 502? , the user choose y
2025-01-03T06:02:09.166Z - INFO - The final result of the test : WINNF.FT.C.HBT.7 is - passed

3.6 WINNF.FT.D.HBT.8

2024-12-31T09:06:14.741Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2024-12-31T09:06:14.742Z - INFO - the selected test from the user : WINNF.FT.D.HBT.8 is starting now

2024-12-31T09:06:21.645Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "CB987",
    "cbsdCategory": "A",
    "cbsdInfo": {
      "firmwareVersion": "1.0.2.2p2",
      "hardwareVersion": "1.1",
      "model": "PR1450-48E",
      "softwareVersion": "2.1.0",
      "vendor": "Pegatron"
    },
    "cbsdSerialNumber": "D823634126",
    "fccId": "VUIPR1450-48",
    "groupingParam": [
      {
        "groupId": "group1",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 240,
      "antennaBeamwidth": 30,
      "antennaDowntilt": 3,
      "antennaGain": 4,
      "antennaModel": "Wire_dipole",
      "eirpCapability": 30,
      "height": 12.0,
      "heightType": "AGL",
      "horizontalAccuracy": 45.0,
      "indoorDeployment": true,
      "latitude": 37.425056,
      "longitude": -22.084113,
      "verticalAccuracy": 2.0
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "PEGATRON"
  }
]
```

2024-12-31T09:06:21.744Z - INFO - engine sent successfully, the response to CBRS : {

```
"registrationResponse": [
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823634126",
    "response": {
      "responseCode": 0
    }
  }
]
```

```

}
2024-12-31T09:06:22.633Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    }
  ]
}
}
2024-12-31T09:06:22.668Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
}
2024-12-31T09:06:22.683Z - INFO - registration request from CBRS : {
  "registrationRequest": [
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "CB987",
      "cbsdCategory": "A",
      "cbsdInfo": {
        "firmwareVersion": "1.0.2.2p2",
        "hardwareVersion": "1.1",
        "model": "PR1450-48I",
        "softwareVersion": "2.1.0",
        "vendor": "Pegatron"
      },
      "cbsdSerialNumber": "D823956047",
      "fccId": "VUIPR1450-48",
      "groupingParam": [
        {
          "groupId": "group1",
          "groupType": "INTERFERENCE_COORDINATION"
        }
      ],
      "installationParam": {

```

```

        "antennaAzimuth": 240,
        "antennaBeamwidth": 30,
        "antennaDowntilt": 3,
        "antennaGain": 9,
        "antennaModel": "Wire_dipole",
        "eirpCapability": 30,
        "height": 12.0,
        "heightType": "AGL",
        "horizontalAccuracy": 45.0,
        "indoorDeployment": true,
        "latitude": 37.425056,
        "longitude": -22.084113,
        "verticalAccuracy": 2.0
    },
    "measCapability": [
        "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "PEGATRON"
}
]
}
2024-12-31T09:06:22.816Z - INFO - engine sent successfully, the response to CBRS : {
    "registrationResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "response": {
                "responseCode": 0
            }
        }
    ]
}
2024-12-31T09:06:23.635Z - INFO - spectrumInquiry request from CBRS : {
    "spectrumInquiryRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "inquiredSpectrum": [
                {
                    "highFrequency": 3700000000,
                    "lowFrequency": 3550000000
                }
            ]
        }
    ]
}
2024-12-31T09:06:23.648Z - INFO - engine sent successfully, the response to CBRS : {
    "spectrumInquiryResponse": [
        {
            "availableChannel": [
                {
                    "channelType": "GAA",
                    "frequencyRange": {
                        "highFrequency": 3700000000,
                        "lowFrequency": 3550000000
                    },
                    "ruleApplied": "FCC_PART_96"
                }
            ]
        },
        "cbsdId": "VUIPR1450-48Mock-SASD823956047",

```

```

    "response": {
      "responseCode": 0
    }
  ]
}
2024-12-31T09:06:23.659Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "operationParam": {
        "maxEirp": 20.0,
        "operationFrequencyRange": {
          "highFrequency": 3640000000,
          "lowFrequency": 3600000000
        }
      }
    }
  ]
}
2024-12-31T09:06:23.678Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "channelType": "GAA",
      "grantExpireTime": "2025-01-07T09:06:23Z",
      "grantId": "208439723",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2024-12-31T09:06:24.632Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "operationParam": {
        "maxEirp": 20.0,
        "operationFrequencyRange": {
          "highFrequency": 3640000000,
          "lowFrequency": 3600000000
        }
      }
    }
  ]
}
2024-12-31T09:06:24.644Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "channelType": "GAA",
      "grantExpireTime": "2025-01-07T09:06:24Z",
      "grantId": "483282156",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}

```

```

    }
  }
]
}
2024-12-31T09:06:24.655Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "208439723",
      "operationState": "GRANTED"
    }
  ]
}
2024-12-31T09:06:24.665Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "208439723",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2024-12-31T09:09:44Z"
    }
  ]
}
2024-12-31T09:06:25.630Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "483282156",
      "operationState": "GRANTED"
    }
  ]
}
2024-12-31T09:06:25.635Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "483282156",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2024-12-31T09:09:45Z"
    }
  ]
}
2024-12-31T09:06:51.631Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "483282156",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "208439723",
      "operationState": "AUTHORIZED"
    }
  ]
}

```

```

    ]
  }
2024-12-31T09:06:51.632Z - INFO - Time interval between two heartbeat request messages is: 26.000727,
limit is: 65.0
2024-12-31T09:06:51.637Z - INFO - Time interval between two heartbeat request messages is: 26.975541,
limit is: 65.0
2024-12-31T09:06:51.641Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "483282156",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2024-12-31T09:10:11Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "208439723",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2024-12-31T09:10:11Z"
    }
  ]
}
2024-12-31T09:07:51.651Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "208439723",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "483282156",
      "operationState": "AUTHORIZED"
    }
  ]
}
2024-12-31T09:07:51.652Z - INFO - Time interval between two heartbeat request messages is: 60.020221,
limit is: 65.0
2024-12-31T09:07:51.658Z - INFO - Time interval between two heartbeat request messages is: 60.020221,
limit is: 65.0
2024-12-31T09:07:51.664Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "208439723",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2024-12-31T09:11:11Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "483282156",
      "response": {

```

```

        "responseCode": 0
      },
      "transmitExpireTime": "2024-12-31T09:11:11Z"
    }
  ]
}
2024-12-31T09:08:51.628Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "208439723",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "483282156",
      "operationState": "AUTHORIZED"
    }
  ]
}
2024-12-31T09:08:51.631Z - INFO - Time interval between two heartbeat request messages is: 59.977329,
limit is: 65.0
2024-12-31T09:08:51.636Z - INFO - Time interval between two heartbeat request messages is: 59.977329,
limit is: 65.0
2024-12-31T09:08:51.641Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "208439723",
      "response": {
        "responseCode": 500
      },
      "transmitExpireTime": "2024-12-31T09:08:51Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "483282156",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2024-12-31T09:12:11Z"
    }
  ]
}
2024-12-31T09:08:52.918Z - INFO - arrived to nstep starting question answer session with the technician
2024-12-31T09:08:52.918Z - INFO - the question is : Did the CBSD2 stop RF transmission within 60 seconds
of receiving Heartbeat response with responseCode = 500? please choose one of the answers :
2024-12-31T09:10:14.555Z - INFO - for the question : Did the CBSD2 stop RF transmission within 60
seconds of receiving Heartbeat response with responseCode = 500? , the user choose y
2024-12-31T09:10:14.555Z - INFO - the question is : Did the CBSD1 transmit power prior to AUTHORIZED
state (first successful HBT response)? please choose one of the answers :
2024-12-31T09:10:30.648Z - INFO - for the question : Did the CBSD1 transmit power prior to AUTHORIZED
state (first successful HBT response)? , the user choose n
2024-12-31T09:10:31.641Z - INFO - The final result of the test : WINNF.FT.D.HBT.8 is - passed

```

3.7 WINNF.FT.C.HBT.9

2025-01-03T06:25:34.303Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2025-01-03T06:25:34.305Z - INFO - the selected test from the user : WINNF.FT.C.HBT.9 is starting now

2025-01-03T06:25:46.383Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "CB987",
    "cbsdCategory": "A",
    "cbsdInfo": {
      "firmwareVersion": "1.0.2.2p2",
      "hardwareVersion": "1.1",
      "model": "PR1450-48I",
      "softwareVersion": "2.1.0",
      "vendor": "Pegatron"
    },
    "cbsdSerialNumber": "D823956047",
    "fccId": "VUIPR1450-48",
    "groupingParam": [
      {
        "groupId": "group1",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 240,
      "antennaBeamwidth": 30,
      "antennaDowntilt": 3,
      "antennaGain": 9,
      "antennaModel": "Wire_dipole",
      "eirpCapability": 30,
      "height": 12.0,
      "heightType": "AGL",
      "horizontalAccuracy": 45.0,
      "indoorDeployment": true,
      "latitude": 37.425056,
      "longitude": -22.084113,
      "verticalAccuracy": 2.0
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "PEGATRON"
  }
]
```

2025-01-03T06:25:46.483Z - INFO - engine sent successfully, the response to CBRS : {

```
"registrationResponse": [
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823956047",
    "response": {
      "responseCode": 0
    }
  }
]
```

```

}
2025-01-03T06:25:47.349Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    }
  ]
}
}
2025-01-03T06:25:47.357Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
}
2025-01-03T06:25:48.370Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "operationParam": {
        "maxEirp": 20.0,
        "operationFrequencyRange": {
          "highFrequency": 3640000000,
          "lowFrequency": 3600000000
        }
      }
    }
  ]
}
}
2025-01-03T06:25:48.376Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "channelType": "GAA",
      "grantExpireTime": "2025-01-10T06:25:48Z",
      "grantId": "632962160",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}

```

```

    }
  }
]
}
2025-01-03T06:25:49.351Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "632962160",
      "operationState": "GRANTED"
    }
  ]
}
2025-01-03T06:26:20.345Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "632962160",
      "operationState": "GRANTED"
    }
  ]
}
2025-01-03T06:26:20.346Z - INFO - request message received while HBT is absent, sleep 174 sec before
responding
2025-01-03T06:26:51.345Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "632962160",
      "operationState": "GRANTED"
    }
  ]
}
2025-01-03T06:26:51.345Z - INFO - request message received while HBT is absent, sleep 143 sec before
responding
2025-01-03T06:27:22.358Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "632962160",
      "operationState": "GRANTED"
    }
  ]
}
2025-01-03T06:27:22.358Z - INFO - request message received while HBT is absent, sleep 111 sec before
responding
2025-01-03T06:27:53.385Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "632962160",
      "operationState": "GRANTED"
    }
  ]
}
2025-01-03T06:27:53.385Z - INFO - request message received while HBT is absent, sleep 80 sec before
responding
2025-01-03T06:28:24.345Z - INFO - heartbeat request from CBRS : {

```

```

    "heartbeatRequest": [
      {
        "cbstdId": "VUIPR1450-48Mock-SASD823956047",
        "grantId": "632962160",
        "operationState": "GRANTED"
      }
    ]
  }
}
2025-01-03T06:28:24.345Z - INFO - request message received while HBT is absent, sleep 50 sec before
responding
2025-01-03T06:28:55.345Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbstdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "632962160",
      "operationState": "GRANTED"
    }
  ]
}
}
2025-01-03T06:28:55.346Z - INFO - request message received while HBT is absent, sleep 19 sec before
responding
2025-01-03T06:29:09.459Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbstdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "632962160",
      "response": {
        "responseCode": 501
      },
      "transmitExpireTime": "2025-01-03T06:29:09Z"
    }
  ]
}
}
2025-01-03T06:29:10.528Z - INFO - arrived to nstep starting question answer session with the technician
2025-01-03T06:29:10.528Z - INFO - the question is : Were there RF transmissions from the CBSD during the
test? please choose one of the answers :
2025-01-03T06:29:13.458Z - INFO - engine sent successfully, the response to CBRS : "list index out of
range"
2025-01-03T06:29:13.466Z - INFO - engine sent successfully, the response to CBRS : "list index out of
range"
2025-01-03T06:29:14.365Z - INFO - engine sent successfully, the response to CBRS : "list index out of
range"
2025-01-03T06:29:14.396Z - INFO - engine sent successfully, the response to CBRS : "list index out of
range"
2025-01-03T06:29:14.446Z - INFO - engine sent successfully, the response to CBRS : "list index out of
range"
2025-01-03T06:29:14.446Z - INFO - engine sent successfully, the response to CBRS : "list index out of
range"
2025-01-03T06:32:35.460Z - INFO - for the question : Were there RF transmissions from the CBSD during
the test? , the user choose n
2025-01-03T06:32:36.187Z - INFO - The final result of the test : WINNF.FT.C.HBT.9 is - passed

```

3.8 WINNF.FT.C.HBT.10

2025-01-03T06:32:53.627Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2025-01-03T06:32:53.629Z - INFO - the selected test from the user : WINNF.FT.C.HBT.10 is starting now

2025-01-03T06:33:11.362Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "CB987",
    "cbsdCategory": "A",
    "cbsdInfo": {
      "firmwareVersion": "1.0.2.2p2",
      "hardwareVersion": "1.1",
      "model": "PR1450-48I",
      "softwareVersion": "2.1.0",
      "vendor": "Pegatron"
    },
    "cbsdSerialNumber": "D823956047",
    "fccId": "VUIPR1450-48",
    "groupingParam": [
      {
        "groupId": "group1",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 240,
      "antennaBeamwidth": 30,
      "antennaDowntilt": 3,
      "antennaGain": 9,
      "antennaModel": "Wire_dipole",
      "eirpCapability": 30,
      "height": 12.0,
      "heightType": "AGL",
      "horizontalAccuracy": 45.0,
      "indoorDeployment": true,
      "latitude": 37.425056,
      "longitude": -22.084113,
      "verticalAccuracy": 2.0
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "PEGATRON"
  }
]
```

```
}
}
```

2025-01-03T06:33:11.465Z - INFO - engine sent successfully, the response to CBRS : {

```
"registrationResponse": [
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823956047",
    "response": {
      "responseCode": 0
    }
  }
]
```

```
}
```

```

2025-01-03T06:33:12.389Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    }
  ]
}
2025-01-03T06:33:12.407Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-01-03T06:33:13.357Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "operationParam": {
        "maxEirp": 20.0,
        "operationFrequencyRange": {
          "highFrequency": 3640000000,
          "lowFrequency": 3600000000
        }
      }
    }
  ]
}
2025-01-03T06:33:13.364Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "channelType": "GAA",
      "grantExpireTime": "2025-01-10T06:33:13Z",
      "grantId": "234154917",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}

```

```

    }
  ]
}
2025-01-03T06:33:14.343Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "234154917",
      "operationState": "GRANTED"
    }
  ]
}
2025-01-03T06:33:14.349Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "234154917",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-03T06:36:34Z"
    }
  ]
}
2025-01-03T06:34:09.343Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "234154917",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-03T06:34:09.345Z - INFO - Time interval between two heartbeat request messages is: 54.999598,
limit is: 65.0
2025-01-03T06:34:09.349Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "234154917",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-03T06:37:29Z"
    }
  ]
}
2025-01-03T06:35:09.357Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "234154917",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-03T06:35:09.359Z - INFO - Time interval between two heartbeat request messages is: 60.014164,
limit is: 65.0

```

```

2025-01-03T06:35:09.361Z - INFO - LAST HBT RESPONSE THAT SET TRANSMIT_EXPIRE_TIME WAS AT:
2025-01-03 06:34:09.343685
2025-01-03T06:35:41.378Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "234154917",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-03T06:35:41.378Z - INFO - request message received while HBT is absent, sleep 172 sec before
responding
2025-01-03T06:36:09.343Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "234154917",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-03T06:36:09.344Z - INFO - request message received while HBT is absent, sleep 145 sec before
responding
2025-01-03T06:36:41.343Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "234154917",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-03T06:36:41.344Z - INFO - request message received while HBT is absent, sleep 113 sec before
responding
2025-01-03T06:37:09.343Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "234154917",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-03T06:37:09.343Z - INFO - request message received while HBT is absent, sleep 85 sec before
responding
2025-01-03T06:37:41.358Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "234154917",
      "operationState": "GRANTED"
    }
  ]
}
2025-01-03T06:37:41.359Z - INFO - request message received while HBT is absent, sleep 53 sec before
responding
2025-01-03T06:38:09.344Z - INFO - heartbeat request from CBRS : {

```

```

    "heartbeatRequest": [
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823956047",
        "grantId": "234154917",
        "operationState": "GRANTED"
      }
    ]
  }

```

2025-01-03T06:38:09.345Z - INFO - request message received while HBT is absent, sleep 25 sec before responding

2025-01-03T06:38:29.465Z - INFO - engine sent successfully, the response to CBRS : {

```

    "heartbeatResponse": [
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823956047",
        "grantId": "234154917",
        "response": {
          "responseCode": 501
        },
        "transmitExpireTime": "2025-01-03T06:38:29Z"
      }
    ]
  }

```

2025-01-03T06:38:30.972Z - INFO - arrived to nstep starting question answer session with the technician

2025-01-03T06:38:30.972Z - INFO - the question is : Did the CBSD stop RF transmissions within (transmitExpireTime + 60seconds) of last valid heartbeat response? please choose one of the answers :

2025-01-03T06:38:33.478Z - INFO - engine sent successfully, the response to CBRS : "list index out of range"

2025-01-03T06:38:34.370Z - INFO - engine sent successfully, the response to CBRS : "list index out of range"

2025-01-03T06:38:34.415Z - INFO - engine sent successfully, the response to CBRS : "list index out of range"

2025-01-03T06:38:34.441Z - INFO - engine sent successfully, the response to CBRS : "list index out of range"

2025-01-03T06:38:34.446Z - INFO - engine sent successfully, the response to CBRS : "list index out of range"

2025-01-03T06:38:34.447Z - INFO - engine sent successfully, the response to CBRS : "list index out of range"

2025-01-03T06:41:36.986Z - INFO - for the question : Did the CBSD stop RF transmissions within (transmitExpireTime + 60seconds) of last valid heartbeat response? , the user choose y

2025-01-03T06:41:37.410Z - INFO - The final result of the test : WINNF.FT.C.HBT.10 is - passed

3.9 WINNF.FT.C.HBT.11

2025-01-03T06:41:56.711Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2025-01-03T06:41:56.711Z - INFO - the selected test from the user : WINNF.FT.C.HBT.11 is starting now

2025-01-03T06:42:07.347Z - INFO - registration request from CBRS : {

```

    "registrationRequest": [
      {
        "airInterface": {
          "radioTechnology": "NR"
        },
        "callSign": "CB987",
        "cbsdCategory": "A",
        "cbsdInfo": {
          "firmwareVersion": "1.0.2.2p2",
          "hardwareVersion": "1.1",
          "model": "PR1450-48I",
          "softwareVersion": "2.1.0",
          "vendor": "Pegatron"
        },
        "cbsdSerialNumber": "D823956047",
        "fcclId": "VUIPR1450-48",
        "groupingParam": [
          {
            "groupId": "group1",
            "groupType": "INTERFERENCE_COORDINATION"
          }
        ],
        "installationParam": {
          "antennaAzimuth": 240,
          "antennaBeamwidth": 30,
          "antennaDowntilt": 3,
          "antennaGain": 9,
          "antennaModel": "Wire_dipole",
          "eirpCapability": 30,
          "height": 12.0,
          "heightType": "AGL",
          "horizontalAccuracy": 45.0,
          "indoorDeployment": true,
          "latitude": 37.425056,
          "longitude": -22.084113,
          "verticalAccuracy": 2.0
        },
        "measCapability": [
          "RECEIVED_POWER_WITHOUT_GRANT"
        ],
        "userId": "PEGATRON"
      }
    ]
  }
}
2025-01-03T06:42:07.441Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "response": {
        "responseCode": 0
      }
    }
  ]
}

```

```

}
2025-01-03T06:42:09.360Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    }
  ]
}
}
2025-01-03T06:42:09.368Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
}
2025-01-03T06:42:11.343Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "operationParam": {
        "maxEirp": 20.0,
        "operationFrequencyRange": {
          "highFrequency": 3640000000,
          "lowFrequency": 3600000000
        }
      }
    }
  ]
}
}
2025-01-03T06:42:11.350Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "channelType": "GAA",
      "grantExpireTime": "2025-01-03T06:48:11Z",
      "grantId": "885551611",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}

```

```

    }
  }
]
}
2025-01-03T06:42:13.373Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "885551611",
      "operationState": "GRANTED"
    }
  ]
}
2025-01-03T06:42:13.379Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "885551611",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-03T06:45:33Z"
    }
  ]
}
2025-01-03T06:43:09.366Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "885551611",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-03T06:43:09.367Z - INFO - Time interval between two heartbeat request messages is:
55.992349, limit is: 65.0
2025-01-03T06:43:09.373Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "885551611",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-03T06:46:29Z"
    }
  ]
}
2025-01-03T06:44:09.344Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "885551611",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-03T06:44:09.346Z - INFO - Time interval between two heartbeat request messages is:

```

59.97917, limit is: 65.0

2025-01-03T06:44:09.350Z - INFO - engine sent successfully, the response to CBRS : {

```
"heartbeatResponse": [
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823956047",
    "grantId": "885551611",
    "response": {
      "responseCode": 0
    },
    "transmitExpireTime": "2025-01-03T06:47:29Z"
  }
]
```

2025-01-03T06:45:09.344Z - INFO - heartbeat request from CBRS : {

```
"heartbeatRequest": [
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823956047",
    "grantId": "885551611",
    "operationState": "AUTHORIZED"
  }
]
```

2025-01-03T06:45:09.346Z - INFO - Time interval between two heartbeat request messages is:

59.999023, limit is: 65.0

2025-01-03T06:45:09.350Z - INFO - engine sent successfully, the response to CBRS : {

```
"heartbeatResponse": [
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823956047",
    "grantId": "885551611",
    "response": {
      "responseCode": 0
    },
    "transmitExpireTime": "2025-01-03T06:48:11Z"
  }
]
```

2025-01-03T06:46:09.342Z - INFO - heartbeat request from CBRS : {

```
"heartbeatRequest": [
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823956047",
    "grantId": "885551611",
    "grantRenew": true,
    "operationState": "AUTHORIZED"
  }
]
```

2025-01-03T06:46:09.344Z - INFO - Time interval between two heartbeat request messages is:

59.998778, limit is: 65.0

2025-01-03T06:46:09.349Z - INFO - grantRenew received in HBT request message

2025-01-03T06:46:09.350Z - INFO - engine sent successfully, the response to CBRS : {

```
"heartbeatResponse": [
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823956047",
    "grantExpireTime": "2025-01-03T06:52:09Z",
    "grantId": "885551611",
    "response": {
      "responseCode": 0
    },
  },
]
```

```

        "transmitExpireTime": "2025-01-03T06:49:29Z"
      }
    ]
  }
  2025-01-03T06:47:09.377Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823956047",
        "grantId": "885551611",
        "operationState": "AUTHORIZED"
      }
    ]
  }
  2025-01-03T06:47:09.379Z - INFO - Time interval between two heartbeat request messages is:
  60.034973, limit is: 65.0
  2025-01-03T06:47:09.385Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823956047",
        "grantId": "885551611",
        "response": {
          "responseCode": 0
        },
        "transmitExpireTime": "2025-01-03T06:50:29Z"
      }
    ]
  }
  2025-01-03T06:47:11.031Z - INFO - arrived to nstep starting question answer session with the technician
  2025-01-03T06:47:11.031Z - INFO - the question is : Did the CBSD renew its grant successfully? please
  choose one of the answers :
  2025-01-03T06:51:02.318Z - INFO - for the question : Did the CBSD renew its grant successfully? , the
  user choose y
  2025-01-03T06:51:02.647Z - INFO - The final result of the test : WINNF.FT.C.HBT.11 is - passed

```

4 CBSD Measurement Report

4.1 WINNF.FT.D.MES.2

2024-12-31T09:26:40.698Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2024-12-31T09:26:40.699Z - INFO - the selected test from the user : WINNF.FT.D.MES.2 is starting now

2024-12-31T09:26:59.889Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "CB987",
    "cbsdCategory": "A",
    "cbsdInfo": {
      "firmwareVersion": "1.0.2.2p2",
      "hardwareVersion": "1.1",
      "model": "PR1450-48E",
      "softwareVersion": "2.1.0",
      "vendor": "Pegatron"
    },
    "cbsdSerialNumber": "D823634126",
    "fcclId": "VUIPR1450-48",
    "groupingParam": [
      {
        "groupId": "group1",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 240,
      "antennaBeamwidth": 30,
      "antennaDowntilt": 3,
      "antennaGain": 4,
      "antennaModel": "Wire_dipole",
      "eirpCapability": 30,
      "height": 12.0,
      "heightType": "AGL",
      "horizontalAccuracy": 45.0,
      "indoorDeployment": true,
      "latitude": 37.425056,
      "longitude": -22.084113,
      "verticalAccuracy": 2.0
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "PEGATRON"
  }
]
```

2024-12-31T09:27:00.007Z - INFO - Response message contains measReportConfig

2024-12-31T09:27:00.008Z - INFO - engine sent successfully, the response to CBRS : {

```
"registrationResponse": [
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823634126",
    "measReportConfig": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ]
  }
]
```

```

    "response": {
      "responseCode": 0
    }
  ]
}
2024-12-31T09:27:01.880Z - INFO - registration request from CBRS : {
  "registrationRequest": [
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "CB987",
      "cbsdCategory": "A",
      "cbsdInfo": {
        "firmwareVersion": "1.0.2.2p2",
        "hardwareVersion": "1.1",
        "model": "PR1450-48I",
        "softwareVersion": "2.1.0",
        "vendor": "Pegatron"
      },
      "cbsdSerialNumber": "D823956047",
      "fcclId": "VUIPR1450-48",
      "groupingParam": [
        {
          "groupId": "group1",
          "groupType": "INTERFERENCE_COORDINATION"
        }
      ],
      "installationParam": {
        "antennaAzimuth": 240,
        "antennaBeamwidth": 30,
        "antennaDowntilt": 3,
        "antennaGain": 9,
        "antennaModel": "Wire_dipole",
        "eirpCapability": 30,
        "height": 12.0,
        "heightType": "AGL",
        "horizontalAccuracy": 45.0,
        "indoorDeployment": true,
        "latitude": 37.425056,
        "longitude": -22.084113,
        "verticalAccuracy": 2.0
      },
      "measCapability": [
        "RECEIVED_POWER_WITHOUT_GRANT"
      ],
      "userId": "PEGATRON"
    }
  ]
}
2024-12-31T09:27:01.967Z - INFO - Response message contains measReportConfig
2024-12-31T09:27:01.967Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "measReportConfig": [
        "RECEIVED_POWER_WITHOUT_GRANT"
      ]
    }
  ]
}

```

```

    ],
    "response": {
      "responseCode": 0
    }
  }
]
}
2024-12-31T09:27:51.901Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ],
      "measReport": {
        "rcvdPowerMeasReports": [
          {
            "measBandwidth": 10000000,
            "measFrequency": 3550000000,
            "measRcvdPower": -96.0
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3560000000,
            "measRcvdPower": -96.0
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3570000000,
            "measRcvdPower": -96.0
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3580000000,
            "measRcvdPower": -96.0
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3590000000,
            "measRcvdPower": -96.0
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3600000000,
            "measRcvdPower": -96.0
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3610000000,
            "measRcvdPower": -96.0
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3620000000,
            "measRcvdPower": -95.0
          }
        ]
      }
    }
  ]
}

```

```

    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3630000000,
      "measRcvdPower": -84.0
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3640000000,
      "measRcvdPower": -76.0
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3650000000,
      "measRcvdPower": -86.0
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3660000000,
      "measRcvdPower": -86.0
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3670000000,
      "measRcvdPower": -86.0
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3680000000,
      "measRcvdPower": -66.0
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3690000000,
      "measRcvdPower": -66.0
    }
  ]
}
},
{
  "cbsdId": "VUIPR1450-48Mock-SASD823956047",
  "inquiredSpectrum": [
    {
      "highFrequency": 3700000000,
      "lowFrequency": 3550000000
    }
  ],
  "measReport": {
    "rcvdPowerMeasReports": [
      {
        "measBandwidth": 10000000,
        "measFrequency": 3550000000,
        "measRcvdPower": -96.0
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3560000000,
        "measRcvdPower": -96.0
      }
    ]
  }
}

```

```
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3570000000,
      "measRcvdPower": -96.0
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3580000000,
      "measRcvdPower": -96.0
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3590000000,
      "measRcvdPower": -96.0
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3600000000,
      "measRcvdPower": -96.0
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3610000000,
      "measRcvdPower": -96.0
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3620000000,
      "measRcvdPower": -95.0
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3630000000,
      "measRcvdPower": -84.0
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3640000000,
      "measRcvdPower": -76.0
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3650000000,
      "measRcvdPower": -86.0
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3660000000,
      "measRcvdPower": -86.0
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3670000000,
      "measRcvdPower": -86.0
    },
    {
      "measBandwidth": 10000000,
```

```

        "measFrequency": 3680000000,
        "measRcvdPower": -66.0
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3690000000,
        "measRcvdPower": -66.0
      }
    ]
  }
}

2024-12-31T09:27:51.929Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "response": {
        "responseCode": 0
      }
    },
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "response": {
        "responseCode": 0
      }
    }
  ]
}

2024-12-31T09:27:52.880Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "measReport": {
        "rcvdPowerMeasReports": [
          {
            "measBandwidth": 10000000,
            "measFrequency": 3550000000,

```

```
        "measRcvdPower": -96.0
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3560000000,
        "measRcvdPower": -96.0
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3570000000,
        "measRcvdPower": -96.0
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3580000000,
        "measRcvdPower": -96.0
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3590000000,
        "measRcvdPower": -96.0
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3600000000,
        "measRcvdPower": -96.0
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3610000000,
        "measRcvdPower": -96.0
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3620000000,
        "measRcvdPower": -95.0
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3630000000,
        "measRcvdPower": -84.0
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3640000000,
        "measRcvdPower": -76.0
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3650000000,
        "measRcvdPower": -86.0
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3660000000,
        "measRcvdPower": -86.0
    },
    {

```

```

        "measBandwidth": 10000000,
        "measFrequency": 3670000000,
        "measRcvdPower": -86.0
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3680000000,
        "measRcvdPower": -66.0
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3690000000,
        "measRcvdPower": -66.0
      }
    ]
  },
  "operationParam": {
    "maxEirp": 20.0,
    "operationFrequencyRange": {
      "highFrequency": 3640000000,
      "lowFrequency": 3600000000
    }
  }
},
{
  "cbsdId": "VUIPR1450-48Mock-SASD823956047",
  "measReport": {
    "rcvdPowerMeasReports": [
      {
        "measBandwidth": 10000000,
        "measFrequency": 3550000000,
        "measRcvdPower": -96.0
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3560000000,
        "measRcvdPower": -96.0
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3570000000,
        "measRcvdPower": -96.0
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3580000000,
        "measRcvdPower": -96.0
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3590000000,
        "measRcvdPower": -96.0
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3600000000,
        "measRcvdPower": -96.0
      }
    ]
  }
},

```

```

        {
            "measBandwidth": 10000000,
            "measFrequency": 3610000000,
            "measRcvdPower": -96.0
        },
        {
            "measBandwidth": 10000000,
            "measFrequency": 3620000000,
            "measRcvdPower": -95.0
        },
        {
            "measBandwidth": 10000000,
            "measFrequency": 3630000000,
            "measRcvdPower": -84.0
        },
        {
            "measBandwidth": 10000000,
            "measFrequency": 3640000000,
            "measRcvdPower": -76.0
        },
        {
            "measBandwidth": 10000000,
            "measFrequency": 3650000000,
            "measRcvdPower": -86.0
        },
        {
            "measBandwidth": 10000000,
            "measFrequency": 3660000000,
            "measRcvdPower": -86.0
        },
        {
            "measBandwidth": 10000000,
            "measFrequency": 3670000000,
            "measRcvdPower": -86.0
        },
        {
            "measBandwidth": 10000000,
            "measFrequency": 3680000000,
            "measRcvdPower": -66.0
        },
        {
            "measBandwidth": 10000000,
            "measFrequency": 3690000000,
            "measRcvdPower": -66.0
        }
    ],
    "operationParam": {
        "maxEirp": 20.0,
        "operationFrequencyRange": {
            "highFrequency": 3640000000,
            "lowFrequency": 3600000000
        }
    }
}
]
}
2024-12-31T09:27:52.928Z - INFO - engine sent successfully, the response to CBRS : {

```

```
"grantResponse": [  
  {  
    "cbsdId": "VUIPR1450-48Mock-SASD823634126",  
    "channelType": "GAA",  
    "grantExpireTime": "2025-01-07T09:27:52Z",  
    "grantId": "865631839",  
    "heartbeatInterval": 60,  
    "response": {  
      "responseCode": 0  
    }  
  },  
  {  
    "cbsdId": "VUIPR1450-48Mock-SASD823956047",  
    "channelType": "GAA",  
    "grantExpireTime": "2025-01-07T09:27:52Z",  
    "grantId": "210057937",  
    "heartbeatInterval": 60,  
    "response": {  
      "responseCode": 0  
    }  
  }  
]
```

2024-12-31T09:27:54.778Z - INFO - arrived to nstep starting question answer session with the technician

2024-12-31T09:28:20.329Z - INFO - The final result of the test : WINNF.FT.D.MES.2 is - passed

5 CBSD Relinquishment Process

5.1 WINNF.FT.D.RLQ.2

2025-01-03T06:57:30.593Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2025-01-03T06:57:30.593Z - INFO - the selected test from the user : WINNF.FT.D.RLQ.2 is starting now

2025-01-03T06:57:41.360Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "CB987",
    "cbsdCategory": "A",
    "cbsdInfo": {
      "firmwareVersion": "1.0.2.2p2",
      "hardwareVersion": "1.1",
      "model": "PR1450-48E",
      "softwareVersion": "2.1.0",
      "vendor": "Pegatron"
    },
    "cbsdSerialNumber": "D823634126",
    "fccId": "VUIPR1450-48",
    "groupingParam": [
      {
        "groupId": "group1",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 240,
      "antennaBeamwidth": 30,
      "antennaDowntilt": 3,
      "antennaGain": 4,
      "antennaModel": "Wire_dipole",
      "eirpCapability": 30,
      "height": 12.0,
      "heightType": "AGL",
      "horizontalAccuracy": 45.0,
      "indoorDeployment": true,
      "latitude": 37.425056,
      "longitude": -22.084113,
      "verticalAccuracy": 2.0
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "PEGATRON"
  },
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "CB987",
    "cbsdCategory": "A",
    "cbsdInfo": {
      "firmwareVersion": "1.0.2.2p2",
      "hardwareVersion": "1.1",
      "model": "PR1450-48I",
```

```

        "softwareVersion": "2.1.0",
        "vendor": "Pegatron"
    },
    "cbsdSerialNumber": "D823956047",
    "fccId": "VUIPR1450-48",
    "groupingParam": [
        {
            "groupId": "group1",
            "groupType": "INTERFERENCE_COORDINATION"
        }
    ],
    "installationParam": {
        "antennaAzimuth": 240,
        "antennaBeamwidth": 30,
        "antennaDowntilt": 3,
        "antennaGain": 9,
        "antennaModel": "Wire_dipole",
        "eirpCapability": 30,
        "height": 12.0,
        "heightType": "AGL",
        "horizontalAccuracy": 45.0,
        "indoorDeployment": true,
        "latitude": 37.425056,
        "longitude": -22.084113,
        "verticalAccuracy": 2.0
    },
    "measCapability": [
        "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "PEGATRON"
    }
]
}
2025-01-03T06:57:41.526Z - INFO - engine sent successfully, the response to CBRS : {
    "registrationResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "response": {
                "responseCode": 0
            }
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "response": {
                "responseCode": 0
            }
        }
    ]
}
2025-01-03T06:57:42.341Z - INFO - spectrumInquiry request from CBRS : {
    "spectrumInquiryRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "inquiredSpectrum": [
                {
                    "highFrequency": 3700000000,
                    "lowFrequency": 3550000000
                }
            ]
        }
    ]
}

```

```

    ]
  },
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823956047",
    "inquiredSpectrum": [
      {
        "highFrequency": 3700000000,
        "lowFrequency": 3550000000
      }
    ]
  }
]
}
2025-01-03T06:57:42.361Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "response": {
        "responseCode": 0
      }
    },
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-01-03T06:57:43.341Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "operationParam": {
        "maxEirp": 10.0,
        "operationFrequencyRange": {
          "highFrequency": 3640000000,
          "lowFrequency": 3600000000
        }
      }
    }
  ]
}

```

```

    }
  },
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823956047",
    "operationParam": {
      "maxEirp": 20.0,
      "operationFrequencyRange": {
        "highFrequency": 3640000000,
        "lowFrequency": 3600000000
      }
    }
  }
]
}
2025-01-03T06:57:43.360Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "channelType": "GAA",
      "grantExpireTime": "2025-01-10T06:57:43Z",
      "grantId": "55960609",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "channelType": "GAA",
      "grantExpireTime": "2025-01-10T06:57:43Z",
      "grantId": "580101582",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-01-03T06:57:44.382Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "55960609",
      "operationState": "GRANTED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "580101582",
      "operationState": "GRANTED"
    }
  ]
}
2025-01-03T06:57:44.392Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "55960609",

```

```

        "response": {
            "responseCode": 0
        },
        "transmitExpireTime": "2025-01-03T07:01:04Z"
    },
    {
        "cbsdId": "VUIPR1450-48Mock-SASD823956047",
        "grantId": "580101582",
        "response": {
            "responseCode": 0
        },
        "transmitExpireTime": "2025-01-03T07:01:04Z"
    }
]
}
2025-01-03T06:58:09.340Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "580101582",
            "operationState": "AUTHORIZED"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "55960609",
            "operationState": "AUTHORIZED"
        }
    ]
}
2025-01-03T06:58:09.342Z - INFO - Time interval between two heartbeat request messages is: 24.958607,
limit is: 65.0
2025-01-03T06:58:09.347Z - INFO - Time interval between two heartbeat request messages is: 24.958607,
limit is: 65.0
2025-01-03T06:58:09.351Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "580101582",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-03T07:01:29Z"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "55960609",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-03T07:01:29Z"
        }
    ]
}
2025-01-03T06:59:09.373Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "55960609",

```

```

        "operationState": "AUTHORIZED"
    },
    {
        "cbsdId": "VUIPR1450-48Mock-SASD823956047",
        "grantId": "580101582",
        "operationState": "AUTHORIZED"
    }
]
}
2025-01-03T06:59:09.375Z - INFO - Time interval between two heartbeat request messages is: 60.032564,
limit is: 65.0
2025-01-03T06:59:09.380Z - INFO - Time interval between two heartbeat request messages is: 60.032564,
limit is: 65.0
2025-01-03T06:59:09.384Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "55960609",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-03T07:02:29Z"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "580101582",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-03T07:02:29Z"
        }
    ]
}
2025-01-03T06:59:50.359Z - INFO - relinquishment request from CBRS : {
    "relinquishmentRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "55960609"
        }
    ]
}
2025-01-03T06:59:50.364Z - INFO - engine sent successfully, the response to CBRS : {
    "relinquishmentResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "55960609",
            "response": {
                "responseCode": 0
            }
        }
    ]
}
2025-01-03T06:59:52.375Z - INFO - relinquishment request from CBRS : {
    "relinquishmentRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "580101582"
        }
    ]
}

```

```
]
}
2025-01-03T06:59:52.382Z - INFO - engine sent successfully, the response to CBRS : {
  "relinquishmentResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "580101582",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
}
2025-01-03T06:59:53.740Z - INFO - arrived to nstep starting question answer session with the technician
2025-01-03T06:59:53.740Z - INFO - the question is : Did CBSD2 cease RF transmission before receipt of
Relinquishment Request by Test Harness? please choose one of the answers :
2025-01-03T07:01:47.306Z - INFO - for the question : Did CBSD2 cease RF transmission before receipt of
Relinquishment Request by Test Harness? , the user choose y
2025-01-03T07:01:47.306Z - INFO - the question is : Did CBSD1 cease RF transmission before receipt of
Relinquishment Request by Test Harness? please choose one of the answers :
2025-01-03T07:01:48.864Z - INFO - for the question : Did CBSD1 cease RF transmission before receipt of
Relinquishment Request by Test Harness? , the user choose y
2025-01-03T07:01:49.292Z - INFO - The final result of the test : WINNF.FT.D.RLQ.2 is - passed
```

5.2 WINNF.FT.D.RLQ.4

2025-01-03T07:07:52.343Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2025-01-03T07:07:52.343Z - INFO - the selected test from the user : WINNF.FT.D.RLQ.4 is starting now

2025-01-03T07:07:56.557Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "CB987",
    "cbsdCategory": "A",
    "cbsdInfo": {
      "firmwareVersion": "1.0.2.2p2",
      "hardwareVersion": "1.1",
      "model": "PR1450-48E",
      "softwareVersion": "2.1.0",
      "vendor": "Pegatron"
    },
    "cbsdSerialNumber": "D823634126",
    "fccId": "VUIPR1450-48",
    "groupingParam": [
      {
        "groupId": "group1",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 240,
      "antennaBeamwidth": 30,
      "antennaDowntilt": 3,
      "antennaGain": 4,
      "antennaModel": "Wire_dipole",
      "eirpCapability": 30,
      "height": 12.0,
      "heightType": "AGL",
      "horizontalAccuracy": 45.0,
      "indoorDeployment": true,
      "latitude": 37.425056,
      "longitude": -22.084113,
      "verticalAccuracy": 2.0
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "PEGATRON"
  }
]
```

2025-01-03T07:07:56.653Z - INFO - engine sent successfully, the response to CBRS : {

```
"registrationResponse": [
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823634126",
    "response": {
      "responseCode": 0
    }
  }
]
```

```

}
2025-01-03T07:07:57.549Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    }
  ]
}
2025-01-03T07:07:57.558Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-01-03T07:07:58.594Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "operationParam": {
        "maxEirp": 10.0,
        "operationFrequencyRange": {
          "highFrequency": 3640000000,
          "lowFrequency": 3600000000
        }
      }
    }
  ]
}
2025-01-03T07:07:58.607Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "channelType": "GAA",
      "grantExpireTime": "2025-01-10T07:07:58Z",
      "grantId": "284952672",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}

```

```

    }
  }
]
}
2025-01-03T07:07:58.621Z - INFO - registration request from CBRS : {
  "registrationRequest": [
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "CB987",
      "cbsdCategory": "A",
      "cbsdInfo": {
        "firmwareVersion": "1.0.2.2p2",
        "hardwareVersion": "1.1",
        "model": "PR1450-48I",
        "softwareVersion": "2.1.0",
        "vendor": "Pegatron"
      },
      "cbsdSerialNumber": "D823956047",
      "fccId": "VUIPR1450-48",
      "groupingParam": [
        {
          "groupId": "group1",
          "groupType": "INTERFERENCE_COORDINATION"
        }
      ],
      "installationParam": {
        "antennaAzimuth": 240,
        "antennaBeamwidth": 30,
        "antennaDowntilt": 3,
        "antennaGain": 9,
        "antennaModel": "Wire_dipole",
        "eirpCapability": 30,
        "height": 12.0,
        "heightType": "AGL",
        "horizontalAccuracy": 45.0,
        "indoorDeployment": true,
        "latitude": 37.425056,
        "longitude": -22.084113,
        "verticalAccuracy": 2.0
      },
      "measCapability": [
        "RECEIVED_POWER_WITHOUT_GRANT"
      ],
      "userId": "PEGATRON"
    }
  ]
}
2025-01-03T07:07:58.691Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "response": {
        "responseCode": 0
      }
    }
  ]
}

```

```

}
2025-01-03T07:07:59.559Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    }
  ]
}
}
2025-01-03T07:07:59.606Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
}
2025-01-03T07:07:59.606Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "284952672",
      "operationState": "GRANTED"
    }
  ]
}
}
2025-01-03T07:07:59.627Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "284952672",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-03T07:11:19Z"
    }
  ]
}
}
2025-01-03T07:08:00.548Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {

```

```

    "cbsdId": "VUIPR1450-48Mock-SASD823956047",
    "operationParam": {
      "maxEirp": 20.0,
      "operationFrequencyRange": {
        "highFrequency": 3640000000,
        "lowFrequency": 3600000000
      }
    }
  }
]
}
2025-01-03T07:08:00.555Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "channelType": "GAA",
      "grantExpireTime": "2025-01-10T07:08:00Z",
      "grantId": "7925502",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-01-03T07:08:01.548Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "7925502",
      "operationState": "GRANTED"
    }
  ]
}
2025-01-03T07:08:01.554Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "7925502",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-03T07:11:21Z"
    }
  ]
}
2025-01-03T07:08:42.548Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "284952672",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "7925502",
      "operationState": "AUTHORIZED"
    }
  ]
}

```

```

    ]
  }
2025-01-03T07:08:42.549Z - INFO - Time interval between two heartbeat request messages is: 42.939822,
limit is: 65.0
2025-01-03T07:08:42.554Z - INFO - Time interval between two heartbeat request messages is: 40.999126,
limit is: 65.0
2025-01-03T07:08:42.558Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "284952672",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-03T07:12:02Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "7925502",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-03T07:12:02Z"
    }
  ]
}
2025-01-03T07:09:42.547Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "284952672",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "7925502",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-03T07:09:42.549Z - INFO - Time interval between two heartbeat request messages is: 59.999737,
limit is: 65.0
2025-01-03T07:09:42.553Z - INFO - Time interval between two heartbeat request messages is: 59.999737,
limit is: 65.0
2025-01-03T07:09:42.558Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "284952672",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-03T07:13:02Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "7925502",
      "response": {

```

```

        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-03T07:13:02Z"
    ]
  }
}
2025-01-03T07:10:32.547Z - INFO - relinquishment request from CBRS : {
  "relinquishmentRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "284952672"
    }
  ]
}
2025-01-03T07:10:32.552Z - INFO - engine sent successfully, the response to CBRS : {
  "relinquishmentResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "response": {
        "responseCode": 102,
        "responseData": [
          "grantId"
        ]
      }
    }
  ]
}
}
2025-01-03T07:10:33.546Z - INFO - relinquishment request from CBRS : {
  "relinquishmentRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "7925502"
    }
  ]
}
}
2025-01-03T07:10:33.552Z - INFO - engine sent successfully, the response to CBRS : {
  "relinquishmentResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "response": {
        "responseCode": 102,
        "responseData": [
          "grantId"
        ]
      }
    }
  ]
}
}
2025-01-03T07:10:35.516Z - INFO - arrived to nstep starting question answer session with the technician
2025-01-03T07:10:35.516Z - INFO - the question is : Did CBSD2 cease RF transmission before receipt of
Relinquishment Request by Test Harness? please choose one of the answers :
2025-01-03T07:12:39.084Z - INFO - for the question : Did CBSD2 cease RF transmission before receipt of
Relinquishment Request by Test Harness? , the user choose y
2025-01-03T07:12:39.084Z - INFO - the question is : Did CBSD1 cease RF transmission before receipt of
Relinquishment Request by Test Harness? please choose one of the answers :
2025-01-03T07:12:40.329Z - INFO - for the question : Did CBSD1 cease RF transmission before receipt of
Relinquishment Request by Test Harness? , the user choose y
2025-01-03T07:12:40.633Z - INFO - The final result of the test : WINNF.FT.D.RLQ.4 is - passed

```

5.3 WINNF.FT.D.RLQ.6

2025-01-03T07:19:00.049Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2025-01-03T07:19:00.051Z - INFO - the selected test from the user : WINNF.FT.D.RLQ.6 is starting now

2025-01-03T07:19:15.586Z - INFO - registration request from CBRS : {

```

    "registrationRequest": [
      {
        "airInterface": {
          "radioTechnology": "NR"
        },
        "callSign": "CB987",
        "cbsdCategory": "A",
        "cbsdInfo": {
          "firmwareVersion": "1.0.2.2p2",
          "hardwareVersion": "1.1",
          "model": "PR1450-48E",
          "softwareVersion": "2.1.0",
          "vendor": "Pegatron"
        },
        "cbsdSerialNumber": "D823634126",
        "fccId": "VUIPR1450-48",
        "groupingParam": [
          {
            "groupId": "group1",
            "groupType": "INTERFERENCE_COORDINATION"
          }
        ],
        "installationParam": {
          "antennaAzimuth": 240,
          "antennaBeamwidth": 30,
          "antennaDowntilt": 3,
          "antennaGain": 4,
          "antennaModel": "Wire_dipole",
          "eirpCapability": 30,
          "height": 12.0,
          "heightType": "AGL",
          "horizontalAccuracy": 45.0,
          "indoorDeployment": true,
          "latitude": 37.425056,
          "longitude": -22.084113,
          "verticalAccuracy": 2.0
        },
        "measCapability": [
          "RECEIVED_POWER_WITHOUT_GRANT"
        ],
        "userId": "PEGATRON"
      }
    ]
  }
}
2025-01-03T07:19:15.654Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "response": {
        "responseCode": 0
      }
    }
  ]
}

```

```

}
2025-01-03T07:19:16.587Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    }
  ]
}
}
2025-01-03T07:19:16.595Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
}
2025-01-03T07:19:17.574Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "operationParam": {
        "maxEirp": 10.0,
        "operationFrequencyRange": {
          "highFrequency": 3640000000,
          "lowFrequency": 3600000000
        }
      }
    }
  ]
}
}
2025-01-03T07:19:17.589Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "channelType": "GAA",
      "grantExpireTime": "2025-01-10T07:19:17Z",
      "grantId": "337360721",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}

```

```

    }
  }
]
}
2025-01-03T07:19:17.600Z - INFO - registration request from CBRS : {
  "registrationRequest": [
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "CB987",
      "cbsdCategory": "A",
      "cbsdInfo": {
        "firmwareVersion": "1.0.2.2p2",
        "hardwareVersion": "1.1",
        "model": "PR1450-48I",
        "softwareVersion": "2.1.0",
        "vendor": "Pegatron"
      },
      "cbsdSerialNumber": "D823956047",
      "fcclId": "VUIPR1450-48",
      "groupingParam": [
        {
          "groupId": "group1",
          "groupType": "INTERFERENCE_COORDINATION"
        }
      ],
      "installationParam": {
        "antennaAzimuth": 240,
        "antennaBeamwidth": 30,
        "antennaDowntilt": 3,
        "antennaGain": 9,
        "antennaModel": "Wire_dipole",
        "eirpCapability": 30,
        "height": 12.0,
        "heightType": "AGL",
        "horizontalAccuracy": 45.0,
        "indoorDeployment": true,
        "latitude": 37.425056,
        "longitude": -22.084113,
        "verticalAccuracy": 2.0
      },
      "measCapability": [
        "RECEIVED_POWER_WITHOUT_GRANT"
      ],
      "userId": "PEGATRON"
    }
  ]
}
2025-01-03T07:19:17.721Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "response": {
        "responseCode": 0
      }
    }
  ]
}

```

```

}
2025-01-03T07:19:18.562Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "337360721",
      "operationState": "GRANTED"
    }
  ]
}
2025-01-03T07:19:18.569Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "337360721",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-03T07:22:38Z"
    }
  ]
}
2025-01-03T07:19:18.582Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    }
  ]
}
2025-01-03T07:19:18.603Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-01-03T07:19:19.556Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {

```

```

        "cbsdId": "VUIPR1450-48Mock-SASD823956047",
        "operationParam": {
            "maxEirp": 20.0,
            "operationFrequencyRange": {
                "highFrequency": 3640000000,
                "lowFrequency": 3600000000
            }
        }
    }
}
]
}
2025-01-03T07:19:19.563Z - INFO - engine sent successfully, the response to CBRS : {
    "grantResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "channelType": "GAA",
            "grantExpireTime": "2025-01-10T07:19:19Z",
            "grantId": "745232898",
            "heartbeatInterval": 60,
            "response": {
                "responseCode": 0
            }
        }
    ]
}
2025-01-03T07:19:20.556Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "745232898",
            "operationState": "GRANTED"
        }
    ]
}
2025-01-03T07:19:20.561Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "745232898",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-03T07:22:40Z"
        }
    ]
}
2025-01-03T07:19:42.570Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "337360721",
            "operationState": "AUTHORIZED"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "745232898",
            "operationState": "AUTHORIZED"
        }
    ]
}

```

```

    ]
  }
  2025-01-03T07:19:42.572Z - INFO - Time interval between two heartbeat request messages is:
24.007745, limit is: 65.0
  2025-01-03T07:19:42.579Z - INFO - Time interval between two heartbeat request messages is:
22.014208, limit is: 65.0
  2025-01-03T07:19:42.587Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823634126",
        "grantId": "337360721",
        "response": {
          "responseCode": 0
        },
        "transmitExpireTime": "2025-01-03T07:23:02Z"
      },
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823956047",
        "grantId": "745232898",
        "response": {
          "responseCode": 0
        },
        "transmitExpireTime": "2025-01-03T07:23:02Z"
      }
    ]
  }
  2025-01-03T07:20:42.559Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823956047",
        "grantId": "745232898",
        "operationState": "AUTHORIZED"
      },
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823634126",
        "grantId": "337360721",
        "operationState": "AUTHORIZED"
      }
    ]
  }
  2025-01-03T07:20:42.560Z - INFO - Time interval between two heartbeat request messages is:
59.98833, limit is: 65.0
  2025-01-03T07:20:42.564Z - INFO - Time interval between two heartbeat request messages is:
59.98833, limit is: 65.0
  2025-01-03T07:20:42.568Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823956047",
        "grantId": "745232898",
        "response": {
          "responseCode": 0
        },
        "transmitExpireTime": "2025-01-03T07:24:02Z"
      },
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823634126",
        "grantId": "337360721",
        "response": {

```

```

        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-03T07:24:02Z"
    }
  ]
}
2025-01-03T07:21:42.587Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "337360721",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "745232898",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-03T07:21:42.589Z - INFO - Time interval between two heartbeat request messages is:
60.028933, limit is: 65.0
2025-01-03T07:21:42.593Z - INFO - Time interval between two heartbeat request messages is:
60.028933, limit is: 65.0
2025-01-03T07:21:42.598Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "337360721",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-03T07:25:02Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "745232898",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-03T07:25:02Z"
    }
  ]
}
2025-01-03T07:21:50.588Z - INFO - relinquishment request from CBRS : {
  "relinquishmentRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "337360721"
    }
  ]
}
2025-01-03T07:21:50.594Z - INFO - engine sent successfully, the response to CBRS : {
  "relinquishmentResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "response": {
        "responseCode": 103,

```

```

      "responseData": [
        "grantId"
      ]
    }
  ]
}
2025-01-03T07:21:52.577Z - INFO - relinquishment request from CBRS : {
  "relinquishmentRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "745232898"
    }
  ]
}
2025-01-03T07:21:52.586Z - INFO - engine sent successfully, the response to CBRS : {
  "relinquishmentResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "response": {
        "responseCode": 103,
        "responseData": [
          "grantId"
        ]
      }
    }
  ]
}

```

2025-01-03T07:21:54.227Z - INFO - arrived to nstep starting question answer session with the technician

2025-01-03T07:21:54.227Z - INFO - the question is : Did CBSD2 cease RF transmission before receipt of Relinquishment Request by Test Harness? please choose one of the answers :

2025-01-03T07:24:03.562Z - INFO - for the question : Did CBSD2 cease RF transmission before receipt of Relinquishment Request by Test Harness? , the user choose y

2025-01-03T07:24:03.562Z - INFO - the question is : Did CBSD1 cease RF transmission before receipt of Relinquishment Request by Test Harness? please choose one of the answers :

2025-01-03T07:24:04.731Z - INFO - for the question : Did CBSD1 cease RF transmission before receipt of Relinquishment Request by Test Harness? , the user choose y

2025-01-03T07:24:04.987Z - INFO - The final result of the test : WINNF.FT.D.RLQ.6 is - passed

6 CBSD Deregistration Process

6.1 WINNF.FT.D.DRG.2

2025-01-03T07:29:40.376Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2025-01-03T07:29:40.378Z - INFO - the selected test from the user : WINNF.FT.D.DRG.2 is starting now

2025-01-03T07:29:54.593Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "CB987",
    "cbsdCategory": "A",
    "cbsdInfo": {
      "firmwareVersion": "1.0.2.2p2",
      "hardwareVersion": "1.1",
      "model": "PR1450-48E",
      "softwareVersion": "2.1.0",
      "vendor": "Pegatron"
    },
    "cbsdSerialNumber": "D823634126",
    "fccId": "VUIPR1450-48",
    "groupingParam": [
      {
        "groupId": "group1",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 240,
      "antennaBeamwidth": 30,
      "antennaDowntilt": 3,
      "antennaGain": 4,
      "antennaModel": "Wire_dipole",
      "eirpCapability": 30,
      "height": 12.0,
      "heightType": "AGL",
      "horizontalAccuracy": 45.0,
      "indoorDeployment": true,
      "latitude": 37.425056,
      "longitude": -22.084113,
      "verticalAccuracy": 2.0
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "PEGATRON"
  }
]
```

2025-01-03T07:29:54.670Z - INFO - engine sent successfully, the response to CBRS : {

```
"registrationResponse": [
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823634126",
    "response": {
      "responseCode": 0
    }
  }
]
```

```

    ]
  }
  2025-01-03T07:29:55.564Z - INFO - spectrumInquiry request from CBRS : {
    "spectrumInquiryRequest": [
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823634126",
        "inquiredSpectrum": [
          {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          }
        ]
      }
    ]
  }
  ]
}
  2025-01-03T07:29:55.584Z - INFO - engine sent successfully, the response to CBRS : {
    "spectrumInquiryResponse": [
      {
        "availableChannel": [
          {
            "channelType": "GAA",
            "frequencyRange": {
              "highFrequency": 3700000000,
              "lowFrequency": 3550000000
            },
            "ruleApplied": "FCC_PART_96"
          }
        ],
        "cbsdId": "VUIPR1450-48Mock-SASD823634126",
        "response": {
          "responseCode": 0
        }
      }
    ]
  }
}
  2025-01-03T07:29:55.595Z - INFO - registration request from CBRS : {
    "registrationRequest": [
      {
        "airInterface": {
          "radioTechnology": "NR"
        },
        "callSign": "CB987",
        "cbsdCategory": "A",
        "cbsdInfo": {
          "firmwareVersion": "1.0.2.p2",
          "hardwareVersion": "1.1",
          "model": "PR1450-48I",
          "softwareVersion": "2.1.0",
          "vendor": "Pegatron"
        },
        "cbsdSerialNumber": "D823956047",
        "fccId": "VUIPR1450-48",
        "groupingParam": [
          {
            "groupId": "group1",
            "groupType": "INTERFERENCE_COORDINATION"
          }
        ]
      }
    ]
  }

```

```

        "installationParam": {
            "antennaAzimuth": 240,
            "antennaBeamwidth": 30,
            "antennaDowntilt": 3,
            "antennaGain": 9,
            "antennaModel": "Wire_dipole",
            "eirpCapability": 30,
            "height": 12.0,
            "heightType": "AGL",
            "horizontalAccuracy": 45.0,
            "indoorDeployment": true,
            "latitude": 37.425056,
            "longitude": -22.084113,
            "verticalAccuracy": 2.0
        },
        "measCapability": [
            "RECEIVED_POWER_WITHOUT_GRANT"
        ],
        "userId": "PEGATRON"
    }
}
]
}
2025-01-03T07:29:55.731Z - INFO - engine sent successfully, the response to CBRS : {
    "registrationResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "response": {
                "responseCode": 0
            }
        }
    ]
}
}
2025-01-03T07:29:56.586Z - INFO - grant request from CBRS : {
    "grantRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "operationParam": {
                "maxEirp": 10.0,
                "operationFrequencyRange": {
                    "highFrequency": 3640000000,
                    "lowFrequency": 3600000000
                }
            }
        }
    ]
}
}
}
2025-01-03T07:29:56.599Z - INFO - engine sent successfully, the response to CBRS : {
    "grantResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "channelType": "GAA",
            "grantExpireTime": "2025-01-10T07:29:56Z",
            "grantId": "972496885",
            "heartbeatInterval": 60,
            "response": {
                "responseCode": 0
            }
        }
    ]
}
}

```

```

    ]
  }
  2025-01-03T07:29:56.613Z - INFO - spectrumInquiry request from CBRS : {
    "spectrumInquiryRequest": [
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823956047",
        "inquiredSpectrum": [
          {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          }
        ]
      }
    ]
  }
  ]
}
  2025-01-03T07:29:56.629Z - INFO - engine sent successfully, the response to CBRS : {
    "spectrumInquiryResponse": [
      {
        "availableChannel": [
          {
            "channelType": "GAA",
            "frequencyRange": {
              "highFrequency": 3700000000,
              "lowFrequency": 3550000000
            },
            "ruleApplied": "FCC_PART_96"
          }
        ],
        "cbsdId": "VUIPR1450-48Mock-SASD823956047",
        "response": {
          "responseCode": 0
        }
      }
    ]
  }
  ]
}
  2025-01-03T07:29:57.580Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823634126",
        "grantId": "972496885",
        "operationState": "GRANTED"
      }
    ]
  }
  ]
}
  2025-01-03T07:29:57.602Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823634126",
        "grantId": "972496885",
        "response": {
          "responseCode": 0
        },
        "transmitExpireTime": "2025-01-03T07:33:17Z"
      }
    ]
  }
  ]
}
  2025-01-03T07:29:57.610Z - INFO - grant request from CBRS : {
    "grantRequest": [

```

```

    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "operationParam": {
        "maxEirp": 20.0,
        "operationFrequencyRange": {
          "highFrequency": 3640000000,
          "lowFrequency": 3600000000
        }
      }
    }
  ]
}
2025-01-03T07:29:57.628Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "channelType": "GAA",
      "grantExpireTime": "2025-01-10T07:29:57Z",
      "grantId": "258725809",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-01-03T07:29:58.591Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "258725809",
      "operationState": "GRANTED"
    }
  ]
}
2025-01-03T07:29:58.599Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "258725809",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-03T07:33:18Z"
    }
  ]
}
2025-01-03T07:30:42.561Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "258725809",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "972496885",
      "operationState": "AUTHORIZED"
    }
  ]
}

```

```

    }
  ]
}
2025-01-03T07:30:42.563Z - INFO - Time interval between two heartbeat request messages is: 43.96959,
limit is: 65.0
2025-01-03T07:30:42.568Z - INFO - Time interval between two heartbeat request messages is: 44.981115,
limit is: 65.0
2025-01-03T07:30:42.572Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "258725809",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-03T07:34:02Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "972496885",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-03T07:34:02Z"
    }
  ]
}
2025-01-03T07:31:42.577Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "258725809",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "972496885",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-03T07:31:42.578Z - INFO - Time interval between two heartbeat request messages is: 60.015536,
limit is: 65.0
2025-01-03T07:31:42.583Z - INFO - Time interval between two heartbeat request messages is: 60.015536,
limit is: 65.0
2025-01-03T07:31:42.587Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "258725809",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-03T07:35:02Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "972496885",

```

```

        "response": {
            "responseCode": 0
        },
        "transmitExpireTime": "2025-01-03T07:35:02Z"
    }
}
2025-01-03T07:32:24.563Z - INFO - deregistration request from CBRS : {
    "deregistrationRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126"
        }
    ]
}
2025-01-03T07:32:24.567Z - INFO - engine sent successfully, the response to CBRS : {
    "deregistrationResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "response": {
                "responseCode": 0
            }
        }
    ]
}
2025-01-03T07:32:26.562Z - INFO - deregistration request from CBRS : {
    "deregistrationRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047"
        }
    ]
}
2025-01-03T07:32:26.566Z - INFO - engine sent successfully, the response to CBRS : {
    "deregistrationResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "response": {
                "responseCode": 0
            }
        }
    ]
}
2025-01-03T07:32:28.552Z - INFO - arrived to nstep starting question answer session with the technician
2025-01-03T07:32:28.552Z - INFO - the question is : Did CBSD2 cease RF transmission before receipt of
Relinquishment request (if sent) or Deregistration request at Test Harness? please choose one of the
answers :
2025-01-03T07:34:51.981Z - INFO - for the question : Did CBSD2 cease RF transmission before receipt of
Relinquishment request (if sent) or Deregistration request at Test Harness? , the user choose y
2025-01-03T07:34:51.982Z - INFO - the question is : Did CBSD1 cease RF transmission before receipt of
Relinquishment request (if sent) or Deregistration request at Test Harness? please choose one of the
answers :
2025-01-03T07:34:52.728Z - INFO - for the question : Did CBSD1 cease RF transmission before receipt of
Relinquishment request (if sent) or Deregistration request at Test Harness? , the user choose y
2025-01-03T07:34:53.077Z - INFO - The final result of the test : WINNF.FT.D.DRG.2 is - passed

```

6.2 WINNF.FT.D.DRG.4

2025-01-03T07:39:37.486Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2025-01-03T07:39:37.487Z - INFO - the selected test from the user : WINNF.FT.D.DRG.4 is starting now

2025-01-03T07:39:43.588Z - INFO - registration request from CBRS : {

```

    "registrationRequest": [
      {
        "airInterface": {
          "radioTechnology": "NR"
        },
        "callSign": "CB987",
        "cbsdCategory": "A",
        "cbsdInfo": {
          "firmwareVersion": "1.0.2.2p2",
          "hardwareVersion": "1.1",
          "model": "PR1450-48E",
          "softwareVersion": "2.1.0",
          "vendor": "Pegatron"
        },
        "cbsdSerialNumber": "D823634126",
        "fccId": "VUIPR1450-48",
        "groupingParam": [
          {
            "groupId": "group1",
            "groupType": "INTERFERENCE_COORDINATION"
          }
        ],
        "installationParam": {
          "antennaAzimuth": 240,
          "antennaBeamwidth": 30,
          "antennaDowntilt": 3,
          "antennaGain": 4,
          "antennaModel": "Wire_dipole",
          "eirpCapability": 30,
          "height": 12.0,
          "heightType": "AGL",
          "horizontalAccuracy": 45.0,
          "indoorDeployment": true,
          "latitude": 37.425056,
          "longitude": -22.084113,
          "verticalAccuracy": 2.0
        },
        "measCapability": [
          "RECEIVED_POWER_WITHOUT_GRANT"
        ],
        "userId": "PEGATRON"
      }
    ]
  }
}
2025-01-03T07:39:43.662Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "response": {
        "responseCode": 0
      }
    }
  ]
}

```

```

}
2025-01-03T07:39:44.588Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    }
  ]
}
}
2025-01-03T07:39:44.608Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
}
2025-01-03T07:39:44.615Z - INFO - registration request from CBRS : {
  "registrationRequest": [
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "CB987",
      "cbsdCategory": "A",
      "cbsdInfo": {
        "firmwareVersion": "1.0.2.2p2",
        "hardwareVersion": "1.1",
        "model": "PR1450-48I",
        "softwareVersion": "2.1.0",
        "vendor": "Pegatron"
      },
      "cbsdSerialNumber": "D823956047",
      "fcclId": "VUIPR1450-48",
      "groupingParam": [
        {
          "groupId": "group1",
          "groupType": "INTERFERENCE_COORDINATION"
        }
      ],
      "installationParam": {

```

```

      "antennaAzimuth": 240,
      "antennaBeamwidth": 30,
      "antennaDowntilt": 3,
      "antennaGain": 9,
      "antennaModel": "Wire_dipole",
      "eirpCapability": 30,
      "height": 12.0,
      "heightType": "AGL",
      "horizontalAccuracy": 45.0,
      "indoorDeployment": true,
      "latitude": 37.425056,
      "longitude": -22.084113,
      "verticalAccuracy": 2.0
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "PEGATRON"
  }
]
}
2025-01-03T07:39:44.715Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-01-03T07:39:45.612Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    }
  ]
}
2025-01-03T07:39:45.633Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ]
    },
    "cbsdId": "VUIPR1450-48Mock-SASD823956047",
  ]
}

```

```

        "response": {
            "responseCode": 0
        }
    ]
}
2025-01-03T07:39:45.639Z - INFO - grant request from CBRS : {
    "grantRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "operationParam": {
                "maxEirp": 10.0,
                "operationFrequencyRange": {
                    "highFrequency": 3640000000,
                    "lowFrequency": 3600000000
                }
            }
        }
    ]
}
2025-01-03T07:39:45.654Z - INFO - engine sent successfully, the response to CBRS : {
    "grantResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "channelType": "GAA",
            "grantExpireTime": "2025-01-10T07:39:45Z",
            "grantId": "304508297",
            "heartbeatInterval": 60,
            "response": {
                "responseCode": 0
            }
        }
    ]
}
2025-01-03T07:39:46.566Z - INFO - grant request from CBRS : {
    "grantRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "operationParam": {
                "maxEirp": 20.0,
                "operationFrequencyRange": {
                    "highFrequency": 3640000000,
                    "lowFrequency": 3600000000
                }
            }
        }
    ]
}
2025-01-03T07:39:46.589Z - INFO - engine sent successfully, the response to CBRS : {
    "grantResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "channelType": "GAA",
            "grantExpireTime": "2025-01-10T07:39:46Z",
            "grantId": "789236157",
            "heartbeatInterval": 60,
            "response": {
                "responseCode": 0
            }
        }
    ]
}

```

```

    }
  }
]
}
2025-01-03T07:39:46.595Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "304508297",
      "operationState": "GRANTED"
    }
  ]
}
2025-01-03T07:39:46.608Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "304508297",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-03T07:43:06Z"
    }
  ]
}
2025-01-03T07:39:47.564Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "789236157",
      "operationState": "GRANTED"
    }
  ]
}
2025-01-03T07:39:47.570Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "789236157",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-03T07:43:07Z"
    }
  ]
}
2025-01-03T07:40:42.564Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "789236157",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "304508297",
      "operationState": "AUTHORIZED"
    }
  ]
}

```

```

    ]
  }
  2025-01-03T07:40:42.566Z - INFO - Time interval between two heartbeat request messages is:
54.999778, limit is: 65.0
  2025-01-03T07:40:42.571Z - INFO - Time interval between two heartbeat request messages is:
55.968093, limit is: 65.0
  2025-01-03T07:40:42.575Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823956047",
        "grantId": "789236157",
        "response": {
          "responseCode": 0
        },
        "transmitExpireTime": "2025-01-03T07:44:02Z"
      },
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823634126",
        "grantId": "304508297",
        "response": {
          "responseCode": 0
        },
        "transmitExpireTime": "2025-01-03T07:44:02Z"
      }
    ]
  }
  2025-01-03T07:41:42.597Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823634126",
        "grantId": "304508297",
        "operationState": "AUTHORIZED"
      },
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823956047",
        "grantId": "789236157",
        "operationState": "AUTHORIZED"
      }
    ]
  }
  2025-01-03T07:41:42.599Z - INFO - Time interval between two heartbeat request messages is:
60.033065, limit is: 65.0
  2025-01-03T07:41:42.603Z - INFO - Time interval between two heartbeat request messages is:
60.033065, limit is: 65.0
  2025-01-03T07:41:42.608Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823634126",
        "grantId": "304508297",
        "response": {
          "responseCode": 0
        },
        "transmitExpireTime": "2025-01-03T07:45:02Z"
      },
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823956047",
        "grantId": "789236157",
        "response": {

```

```

    "responseCode": 0
  },
  "transmitExpireTime": "2025-01-03T07:45:02Z"
}
]
}
2025-01-03T07:41:48.565Z - INFO - deregistration request from CBRS : {
  "deregistrationRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126"
    }
  ]
}
2025-01-03T07:41:48.569Z - INFO - engine sent successfully, the response to CBRS : {
  "deregistrationResponse": [
    {
      "response": {
        "responseCode": 102
      }
    }
  ]
}
2025-01-03T07:41:49.604Z - INFO - deregistration request from CBRS : {
  "deregistrationRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047"
    }
  ]
}
2025-01-03T07:41:49.608Z - INFO - engine sent successfully, the response to CBRS : {
  "deregistrationResponse": [
    {
      "response": {
        "responseCode": 102
      }
    }
  ]
}
2025-01-03T07:41:50.627Z - INFO - arrived to nstep starting question answer session with the technician
2025-01-03T07:41:50.628Z - INFO - the question is : Did CBSD2 cease RF transmission before receipt
of Relinquishment request (if sent) or Deregistration request at Test Harness? please choose one of the
answers :
2025-01-03T07:44:39.537Z - INFO - for the question : Did CBSD2 cease RF transmission before receipt
of Relinquishment request (if sent) or Deregistration request at Test Harness? , the user choose y
2025-01-03T07:44:39.537Z - INFO - the question is : Did CBSD1 cease RF transmission before receipt
of Relinquishment request (if sent) or Deregistration request at Test Harness? please choose one of the
answers :
2025-01-03T07:44:40.227Z - INFO - for the question : Did CBSD1 cease RF transmission before receipt
of Relinquishment request (if sent) or Deregistration request at Test Harness? , the user choose y
2025-01-03T07:44:40.551Z - INFO - The final result of the test : WINNF.FT.D.DRG.4 is - passed

```

6.3 WINNF.FT.C.DRG.5

2025-01-03T07:45:31.883Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2025-01-03T07:45:31.883Z - INFO - the selected test from the user : WINNF.FT.C.DRG.5 is starting now

2025-01-03T07:45:42.575Z - INFO - registration request from CBRS : {

```

    "registrationRequest": [
      {
        "airInterface": {
          "radioTechnology": "NR"
        },
        "callSign": "CB987",
        "cbsdCategory": "A",
        "cbsdInfo": {
          "firmwareVersion": "1.0.2.2p2",
          "hardwareVersion": "1.1",
          "model": "PR1450-48I",
          "softwareVersion": "2.1.0",
          "vendor": "Pegatron"
        },
        "cbsdSerialNumber": "D823956047",
        "fccId": "VUIPR1450-48",
        "groupingParam": [
          {
            "groupId": "group1",
            "groupType": "INTERFERENCE_COORDINATION"
          }
        ],
        "installationParam": {
          "antennaAzimuth": 240,
          "antennaBeamwidth": 30,
          "antennaDowntilt": 3,
          "antennaGain": 9,
          "antennaModel": "Wire_dipole",
          "eirpCapability": 30,
          "height": 12.0,
          "heightType": "AGL",
          "horizontalAccuracy": 45.0,
          "indoorDeployment": true,
          "latitude": 37.425056,
          "longitude": -22.084113,
          "verticalAccuracy": 2.0
        },
        "measCapability": [
          "RECEIVED_POWER_WITHOUT_GRANT"
        ],
        "userId": "PEGATRON"
      }
    ]
  }
}
2025-01-03T07:45:42.651Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "response": {
        "responseCode": 0
      }
    }
  ]
}

```

```

}
2025-01-03T07:45:43.594Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    }
  ]
}
}
2025-01-03T07:45:43.602Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
}
2025-01-03T07:45:44.567Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "operationParam": {
        "maxEirp": 20.0,
        "operationFrequencyRange": {
          "highFrequency": 3640000000,
          "lowFrequency": 3600000000
        }
      }
    }
  ]
}
}
2025-01-03T07:45:44.573Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "channelType": "GAA",
      "grantExpireTime": "2025-01-10T07:45:44Z",
      "grantId": "410017281",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}

```

```

    }
  }
]
}
2025-01-03T07:45:45.587Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "410017281",
      "operationState": "GRANTED"
    }
  ]
}
2025-01-03T07:45:45.604Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "410017281",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-03T07:49:05Z"
    }
  ]
}
2025-01-03T07:46:42.566Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "410017281",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-03T07:46:42.567Z - INFO - Time interval between two heartbeat request messages is:
56.978649, limit is: 65.0
2025-01-03T07:46:42.572Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "410017281",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-03T07:50:02Z"
    }
  ]
}
2025-01-03T07:47:42.605Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "410017281",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-03T07:47:42.606Z - INFO - Time interval between two heartbeat request messages is:

```

60.038855, limit is: 65.0

2025-01-03T07:47:42.611Z - INFO - engine sent successfully, the response to CBRS : {

```
"heartbeatResponse": [
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823956047",
    "grantId": "410017281",
    "response": {
      "responseCode": 0
    },
    "transmitExpireTime": "2025-01-03T07:51:02Z"
  }
]
```

}
2025-01-03T07:48:02.566Z - INFO - deregistration request from CBRS : {
"deregistrationRequest": {

```
{
  "cbsdId": "VUIPR1450-48Mock-SASD823956047"
}
```

}
2025-01-03T07:48:02.570Z - INFO - engine sent successfully, the response to CBRS : {
"deregistrationResponse": {

```
{
  "response": {
    "responseCode": 103,
    "responseData": [
      "cbsdId"
    ]
  }
}
```

}
2025-01-03T07:48:04.039Z - INFO - arrived to nstep starting question answer session with the technician

2025-01-03T07:48:04.039Z - INFO - the question is : Did CBSD1 cease RF transmission before receipt of Relinquishment request (if sent) or Deregistration request at Test Harness? please choose one of the answers :

2025-01-03T07:50:07.573Z - INFO - for the question : Did CBSD1 cease RF transmission before receipt of Relinquishment request (if sent) or Deregistration request at Test Harness? , the user choose y

2025-01-03T07:50:08.327Z - INFO - The final result of the test : WINNF.FT.C.DRG.5 is - passed

7 CBSD Security Validation

7.1 WINNF.FT.C.SCS.1

2024-12-31T09:57:50.305Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2024-12-31T09:57:50.305Z - INFO - the selected test from the user : WINNF.FT.C.SCS.1 is starting now

2024-12-31T09:58:03.889Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "CB987",
    "cbsdCategory": "A",
    "cbsdInfo": {
      "firmwareVersion": "1.0.2.2p2",
      "hardwareVersion": "1.1",
      "model": "PR1450-48I",
      "softwareVersion": "2.1.0",
      "vendor": "Pegatron"
    },
    "cbsdSerialNumber": "D823956047",
    "fccId": "VUIPR1450-48",
    "groupingParam": [
      {
        "groupId": "group1",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 240,
      "antennaBeamwidth": 30,
      "antennaDowntilt": 3,
      "antennaGain": 9,
      "antennaModel": "Wire_dipole",
      "eirpCapability": 30,
      "height": 12.0,
      "heightType": "AGL",
      "horizontalAccuracy": 45.0,
      "indoorDeployment": true,
      "latitude": 37.425056,
      "longitude": -22.084113,
      "verticalAccuracy": 2.0
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "PEGATRON"
  }
]
```

2024-12-31T09:58:03.964Z - INFO - engine sent successfully, the response to CBRS : {

```
"registrationResponse": [
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823956047",
    "response": {
      "responseCode": 0
    }
  }
]
```

] }
}

2024-12-31T09:58:05.324Z - INFO - arrived to nstep starting question answer session with the technician

2024-12-31T09:58:05.324Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :

2024-12-31T09:58:25.324Z - INFO - for the question : Were there RF transmissions from the CBSD1 during the test? , the user choose n

2024-12-31T09:58:25.763Z - INFO - The final result of the test : WINNF.FT.C.SCS.1 is - passed

7.2 WINNF.FT.C.SCS.2

2025-01-07T03:21:08.066Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2025-01-07T03:21:08.067Z - INFO - the selected test from the user : WINNF.FT.C.SCS.2 is starting now

7.3 WINNF.FT.C.SCS.3

2025-01-09T05:20:01.030Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2025-01-09T05:20:01.031Z - INFO - the selected test from the user : WINNF.FT.C.SCS.3 is starting now

7.4 WINNF.FT.C.SCS.4

2025-01-09T05:35:41.379Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2025-01-09T05:35:41.379Z - INFO - the selected test from the user : WINNF.FT.C.SCS.4 is starting now

7.5 WINNF.FT.C.SCS.5

2025-01-09T05:40:14.772Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2025-01-09T05:40:14.773Z - INFO - the selected test from the user : WINNF.FT.C.SCS.5 is starting now

8 CBSD RF Power Measurement

8.1 WINNF.PT.C.HBT.1(Max Eirp = 12 dBm/MHz)

2025-01-02T07:16:15.821Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2025-01-02T07:16:15.822Z - INFO - Selected spectrum frequency is {'lowFrequency': 3600000000, 'highFrequency': 3640000000}

2025-01-02T07:16:15.822Z - INFO - Granted Spectrum Max Eirp = 12dBm/MHz

2025-01-02T07:16:15.822Z - INFO - the selected test from the user : PowerMeasTest is starting now

2025-01-02T07:17:25.847Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "CB987",
    "cbsdCategory": "A",
    "cbsdInfo": {
      "firmwareVersion": "1.0.2.2p2",
      "hardwareVersion": "1.1",
      "model": "PR1450-48E",
      "softwareVersion": "2.1.0",
      "vendor": "Pegatron"
    },
    "cbsdSerialNumber": "D823634126",
    "fccId": "VUIPR1450-48",
    "groupingParam": [
      {
        "groupId": "group1",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 240,
      "antennaBeamwidth": 30,
      "antennaDowntilt": 3,
      "antennaGain": 4,
      "antennaModel": "Wire_dipole",
      "eirpCapability": 30,
      "height": 12.0,
      "heightType": "AGL",
      "horizontalAccuracy": 45.0,
      "indoorDeployment": true,
      "latitude": 37.425056,
      "longitude": -22.084113,
      "verticalAccuracy": 2.0
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "PEGATRON"
  },
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "CB987",
    "cbsdCategory": "A",
    "cbsdInfo": {
```

```

        "firmwareVersion": "1.0.2.2p2",
        "hardwareVersion": "1.1",
        "model": "PR1450-48l",
        "softwareVersion": "2.1.0",
        "vendor": "Pegatron"
    },
    "cbsdSerialNumber": "D823956047",
    "fccId": "VUIPR1450-48",
    "groupingParam": [
        {
            "groupId": "group1",
            "groupType": "INTERFERENCE_COORDINATION"
        }
    ],
    "installationParam": {
        "antennaAzimuth": 240,
        "antennaBeamwidth": 30,
        "antennaDowntilt": 3,
        "antennaGain": 9,
        "antennaModel": "Wire_dipole",
        "eirpCapability": 30,
        "height": 12.0,
        "heightType": "AGL",
        "horizontalAccuracy": 45.0,
        "indoorDeployment": true,
        "latitude": 37.425056,
        "longitude": -22.084113,
        "verticalAccuracy": 2.0
    },
    "measCapability": [
        "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "PEGATRON"
    }
]
}
2025-01-02T07:17:26.000Z - INFO - engine sent successfully, the response to CBRS : {
    "registrationResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "response": {
                "responseCode": 0
            }
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "response": {
                "responseCode": 0
            }
        }
    ]
}
2025-01-02T07:17:26.881Z - INFO - spectrumInquiry request from CBRS : {
    "spectrumInquiryRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "inquiredSpectrum": [
                {

```

```

        "highFrequency": 3700000000,
        "lowFrequency": 3550000000
    }
}
},
{
    "cbsdId": "VUIPR1450-48Mock-SASD823956047",
    "inquiredSpectrum": [
        {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
        }
    ]
}
}
]
}
}
2025-01-02T07:17:26.889Z - INFO - The requested spectrum is out of the range, availableChannel is sent out
2025-01-02T07:17:26.907Z - INFO - The requested spectrum is out of the range, availableChannel is sent out
2025-01-02T07:17:26.907Z - INFO - engine sent successfully, the response to CBRS : {
    "spectrumInquiryResponse": [
        {
            "availableChannel": [
                {
                    "channelType": "GAA",
                    "frequencyRange": {
                        "highFrequency": 3640000000,
                        "lowFrequency": 3600000000
                    },
                    "maxEirp": 12,
                    "ruleApplied": "FCC_PART_96"
                }
            ],
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "response": {
                "responseCode": 0
            }
        },
        {
            "availableChannel": [
                {
                    "channelType": "GAA",
                    "frequencyRange": {
                        "highFrequency": 3640000000,
                        "lowFrequency": 3600000000
                    },
                    "maxEirp": 12,
                    "ruleApplied": "FCC_PART_96"
                }
            ],
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "response": {
                "responseCode": 0
            }
        }
    ]
}
}
2025-01-02T07:17:27.858Z - INFO - grant request from CBRS : {
    "grantRequest": [

```

```

    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "operationParam": {
        "maxEirp": 10.0,
        "operationFrequencyRange": {
          "highFrequency": 3640000000,
          "lowFrequency": 3600000000
        }
      }
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "operationParam": {
        "maxEirp": 11.0,
        "operationFrequencyRange": {
          "highFrequency": 3640000000,
          "lowFrequency": 3600000000
        }
      }
    }
  ]
}
2025-01-02T07:17:27.867Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "channelType": "GAA",
      "grantExpireTime": "2025-01-09T07:17:27Z",
      "grantId": "713013851",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "channelType": "GAA",
      "grantExpireTime": "2025-01-09T07:17:27Z",
      "grantId": "36243421",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-01-02T07:17:28.840Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "713013851",
      "operationState": "GRANTED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "36243421",
      "operationState": "GRANTED"
    }
  ]
}

```

```

    ]
  }
2025-01-02T07:17:28.859Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "713013851",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:20:48Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "36243421",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:20:48Z"
    }
  ]
}
2025-01-02T07:18:13.841Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "713013851",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "36243421",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-02T07:18:13.853Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "713013851",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:21:33Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "36243421",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:21:33Z"
    }
  ]
}
2025-01-02T07:19:13.851Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [

```

```

    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "36243421",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "713013851",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-02T07:19:13.874Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "36243421",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:22:33Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "713013851",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:22:33Z"
    }
  ]
}
2025-01-02T07:20:13.841Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "36243421",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "713013851",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-02T07:20:13.852Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "36243421",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:23:33Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",

```

```

        "grantId": "713013851",
        "response": {
            "responseCode": 0
        },
        "transmitExpireTime": "2025-01-02T07:23:33Z"
    }
}
2025-01-02T07:20:23.840Z - INFO - deregistration request from CBRS : {
    "deregistrationRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126"
        }
    ]
}
2025-01-02T07:20:23.843Z - INFO - engine sent successfully, the response to CBRS : {
    "deregistrationResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "response": {
                "responseCode": 0
            }
        }
    ]
}
2025-01-02T07:20:24.843Z - INFO - deregistration request from CBRS : {
    "deregistrationRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047"
        }
    ]
}
2025-01-02T07:20:24.846Z - INFO - engine sent successfully, the response to CBRS : {
    "deregistrationResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "response": {
                "responseCode": 0
            }
        }
    ]
}
2025-01-02T07:22:12.447Z - INFO - registration request from CBRS : {
    "registrationRequest": [
        {
            "airInterface": {
                "radioTechnology": "E_UTRA"
            },
            "callSign": "CB987",
            "cbsdCategory": "A",
            "cbsdInfo": {
                "firmwareVersion": "1.4.0",
                "hardwareVersion": "SGF",
                "model": "PR1450-48E",
                "softwareVersion": "2.0.8",
                "vendor": "Pegatron"
            },
            "cbsdSerialNumber": "D823634126",

```

```

    "fccId": "VUIPR1450-48",
    "groupingParam": [
      {
        "groupId": "group1",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 240,
      "antennaBeamwidth": 30,
      "antennaDowntilt": 3,
      "antennaGain": 4,
      "antennaModel": "Wire_dipole",
      "eirpCapability": 30,
      "height": 12.0,
      "heightType": "AGL",
      "horizontalAccuracy": 45.0,
      "indoorDeployment": true,
      "latitude": 37.425056,
      "longitude": -22.084113,
      "verticalAccuracy": 2.0
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "PEGATRON"
  }
]
}
2025-01-02T07:22:12.529Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-01-02T07:22:13.439Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    }
  ]
}
2025-01-02T07:22:13.457Z - INFO - The requested spectrum is out of the range, availableChannel is sent out
2025-01-02T07:22:13.457Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [

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        "channelType": "GAA",
        "frequencyRange": {
            "highFrequency": 3640000000,
            "lowFrequency": 3600000000
        },
        "maxEirp": 12,
        "ruleApplied": "FCC_PART_96"
    }
},
"cbstdId": "VUIPR1450-48Mock-SASD823634126",
"response": {
    "responseCode": 0
}
}
]
}
2025-01-02T07:22:13.464Z - INFO - registration request from CBRS : {
    "registrationRequest": [
        {
            "airInterface": {
                "radioTechnology": "E_UTRA"
            },
            "callSign": "CB987",
            "cbstdCategory": "A",
            "cbstdInfo": {
                "firmwareVersion": "1.4.0",
                "hardwareVersion": "SGF",
                "model": "PR1450-48I",
                "softwareVersion": "2.0.8",
                "vendor": "Pegatron"
            },
            "cbstdSerialNumber": "D823956047",
            "fccId": "VUIPR1450-48",
            "groupingParam": [
                {
                    "groupId": "group1",
                    "groupType": "INTERFERENCE_COORDINATION"
                }
            ],
            "installationParam": {
                "antennaAzimuth": 240,
                "antennaBeamwidth": 30,
                "antennaDowntilt": 3,
                "antennaGain": 9,
                "antennaModel": "Wire_dipole",
                "eirpCapability": 30,
                "height": 12.0,
                "heightType": "AGL",
                "horizontalAccuracy": 45.0,
                "indoorDeployment": true,
                "latitude": 37.425056,
                "longitude": -22.084113,
                "verticalAccuracy": 2.0
            },
            "measCapability": [
                "RECEIVED_POWER_WITHOUT_GRANT"
            ],
            "userId": "PEGATRON"
        }
    ]
}

```

```

    }
  ]
}
2025-01-02T07:22:13.540Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-01-02T07:22:14.440Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    }
  ]
}
2025-01-02T07:22:14.456Z - INFO - The requested spectrum is out of the range, availableChannel is sent out
2025-01-02T07:22:14.456Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3640000000,
            "lowFrequency": 3600000000
          },
          "maxEirp": 12,
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-01-02T07:22:14.466Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "operationParam": {
        "maxEirp": 10.0,
        "operationFrequencyRange": {
          "highFrequency": 3640000000,
          "lowFrequency": 3600000000
        }
      }
    }
  ]
}

```

```

    }
  }
]
}
2025-01-02T07:22:14.477Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "channelType": "GAA",
      "grantExpireTime": "2025-01-09T07:22:14Z",
      "grantId": "664066045",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-01-02T07:22:15.440Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "operationParam": {
        "maxEirp": 12.0,
        "operationFrequencyRange": {
          "highFrequency": 3640000000,
          "lowFrequency": 3600000000
        }
      }
    }
  ]
}
2025-01-02T07:22:15.448Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "channelType": "GAA",
      "grantExpireTime": "2025-01-09T07:22:15Z",
      "grantId": "261625908",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-01-02T07:22:15.459Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "664066045",
      "operationState": "GRANTED"
    }
  ]
}
2025-01-02T07:22:15.473Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {

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        "cbsdId": "VUIPR1450-48Mock-SASD823634126",
        "grantId": "664066045",
        "response": {
            "responseCode": 0
        },
        "transmitExpireTime": "2025-01-02T07:25:35Z"
    }
}
2025-01-02T07:22:16.437Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "261625908",
            "operationState": "GRANTED"
        }
    ]
}
2025-01-02T07:22:16.444Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "261625908",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T07:25:36Z"
        }
    ]
}
2025-01-02T07:23:04.439Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "664066045",
            "operationState": "AUTHORIZED"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "261625908",
            "operationState": "AUTHORIZED"
        }
    ]
}
2025-01-02T07:23:04.452Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "664066045",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T07:26:24Z"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "261625908",
            "response": {

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        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:26:24Z"
    }
  ]
}
2025-01-02T07:24:04.439Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "664066045",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "261625908",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-02T07:24:04.450Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "664066045",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:27:24Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "261625908",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:27:24Z"
    }
  ]
}
2025-01-02T07:25:04.460Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "261625908",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "664066045",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-02T07:25:04.483Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",

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        "grantId": "261625908",
        "response": {
            "responseCode": 0
        },
        "transmitExpireTime": "2025-01-02T07:28:24Z"
    },
    {
        "cbsdId": "VUIPR1450-48Mock-SASD823634126",
        "grantId": "664066045",
        "response": {
            "responseCode": 0
        },
        "transmitExpireTime": "2025-01-02T07:28:24Z"
    }
]
}
2025-01-02T07:26:04.439Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "261625908",
            "operationState": "AUTHORIZED"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "664066045",
            "operationState": "AUTHORIZED"
        }
    ]
}
2025-01-02T07:26:04.451Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "261625908",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T07:29:24Z"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "664066045",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T07:29:24Z"
        }
    ]
}
2025-01-02T07:27:04.441Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "261625908",
            "operationState": "AUTHORIZED"
        },
        {

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        "cbsdId": "VUIPR1450-48Mock-SASD823634126",
        "grantId": "664066045",
        "operationState": "AUTHORIZED"
      }
    ]
  }
}
2025-01-02T07:27:04.455Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "261625908",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:30:24Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "664066045",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:30:24Z"
    }
  ]
}
2025-01-02T07:28:04.439Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "261625908",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "664066045",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-02T07:28:04.451Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "261625908",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:31:24Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "664066045",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:31:24Z"
    }
  ]
}

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```
]
}
2025-01-02T07:29:04.449Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "664066045",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "261625908",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-02T07:29:04.462Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "664066045",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:32:24Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "261625908",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:32:24Z"
    }
  ]
}
2025-01-02T07:30:04.441Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "664066045",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "261625908",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-02T07:30:04.453Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "664066045",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:32:24Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "261625908",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:32:24Z"
    }
  ]
}
```

```
        "transmitExpireTime": "2025-01-02T07:33:24Z"
      },
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823956047",
        "grantId": "261625908",
        "response": {
          "responseCode": 0
        },
        "transmitExpireTime": "2025-01-02T07:33:24Z"
      }
    ]
  }
}
2025-01-02T07:31:04.439Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "664066045",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "261625908",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-02T07:31:04.453Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "664066045",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:34:24Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "261625908",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:34:24Z"
    }
  ]
}
2025-01-02T07:32:04.440Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "664066045",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "261625908",
      "operationState": "AUTHORIZED"
    }
  ]
}
```

```

    ]
  }
  2025-01-02T07:32:04.452Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823634126",
        "grantId": "664066045",
        "response": {
          "responseCode": 0
        },
        "transmitExpireTime": "2025-01-02T07:35:24Z"
      },
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823956047",
        "grantId": "261625908",
        "response": {
          "responseCode": 0
        },
        "transmitExpireTime": "2025-01-02T07:35:24Z"
      }
    ]
  }
  2025-01-02T07:33:04.451Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823634126",
        "grantId": "664066045",
        "operationState": "AUTHORIZED"
      },
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823956047",
        "grantId": "261625908",
        "operationState": "AUTHORIZED"
      }
    ]
  }
  2025-01-02T07:33:04.465Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823634126",
        "grantId": "664066045",
        "response": {
          "responseCode": 0
        },
        "transmitExpireTime": "2025-01-02T07:36:24Z"
      },
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823956047",
        "grantId": "261625908",
        "response": {
          "responseCode": 0
        },
        "transmitExpireTime": "2025-01-02T07:36:24Z"
      }
    ]
  }

```

8.2 WINNF.PT.C.HBT.1(Max Eirp = 16 dBm/MHz)

2025-01-02T06:50:46.393Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2025-01-02T06:50:46.394Z - INFO - Selected spectrum frequency is {'lowFrequency': 3600000000, 'highFrequency': 3640000000}

2025-01-02T06:50:46.394Z - INFO - Granted Spectrum Max Eirp = 16dBm/MHz

2025-01-02T06:50:46.394Z - INFO - the selected test from the user : PowerMeasTest is starting now

2025-01-02T06:51:25.236Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "CB987",
    "cbsdCategory": "A",
    "cbsdInfo": {
      "firmwareVersion": "1.0.2.2p2",
      "hardwareVersion": "1.1",
      "model": "PR1450-48E",
      "softwareVersion": "2.1.0",
      "vendor": "Pegatron"
    },
    "cbsdSerialNumber": "D823634126",
    "fccId": "VUIPR1450-48",
    "groupingParam": [
      {
        "groupId": "group1",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 240,
      "antennaBeamwidth": 30,
      "antennaDowntilt": 3,
      "antennaGain": 4,
      "antennaModel": "Wire_dipole",
      "eirpCapability": 30,
      "height": 12.0,
      "heightType": "AGL",
      "horizontalAccuracy": 45.0,
      "indoorDeployment": true,
      "latitude": 37.425056,
      "longitude": -22.084113,
      "verticalAccuracy": 2.0
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "PEGATRON"
  }
]
```

2025-01-02T06:51:25.332Z - INFO - engine sent successfully, the response to CBRS : {

```
"registrationResponse": [
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823634126",
    "response": {
      "responseCode": 0
    }
  }
]
```

```

    }
  }
]
}
2025-01-02T06:51:26.259Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    }
  ]
}
2025-01-02T06:51:26.267Z - INFO - The requested spectrum is out of the range, availableChannel is sent out
2025-01-02T06:51:26.268Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3640000000,
            "lowFrequency": 3600000000
          },
          "maxEirp": 16,
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-01-02T06:51:27.229Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "operationParam": {
        "maxEirp": 10.0,
        "operationFrequencyRange": {
          "highFrequency": 3640000000,
          "lowFrequency": 3600000000
        }
      }
    }
  ]
}
2025-01-02T06:51:27.240Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "channelType": "GAA",

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    "grantExpireTime": "2025-01-09T06:51:27Z",
    "grantId": "104675999",
    "heartbeatInterval": 60,
    "response": {
      "responseCode": 0
    }
  }
]
}
2025-01-02T06:51:27.252Z - INFO - registration request from CBRS : {
  "registrationRequest": [
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "CB987",
      "cbsdCategory": "A",
      "cbsdInfo": {
        "firmwareVersion": "1.0.2.2p2",
        "hardwareVersion": "1.1",
        "model": "PR1450-48I",
        "softwareVersion": "2.1.0",
        "vendor": "Pegatron"
      },
      "cbsdSerialNumber": "D823956047",
      "fccId": "VUIPR1450-48",
      "groupingParam": [
        {
          "groupId": "group1",
          "groupType": "INTERFERENCE_COORDINATION"
        }
      ],
      "installationParam": {
        "antennaAzimuth": 240,
        "antennaBeamwidth": 30,
        "antennaDowntilt": 3,
        "antennaGain": 9,
        "antennaModel": "Wire_dipole",
        "eirpCapability": 30,
        "height": 12.0,
        "heightType": "AGL",
        "horizontalAccuracy": 45.0,
        "indoorDeployment": true,
        "latitude": 37.425056,
        "longitude": -22.084113,
        "verticalAccuracy": 2.0
      },
      "measCapability": [
        "RECEIVED_POWER_WITHOUT_GRANT"
      ],
      "userId": "PEGATRON"
    }
  ]
}
2025-01-02T06:51:27.357Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",

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        "response": {
            "responseCode": 0
        }
    ]
}
2025-01-02T06:51:28.249Z - INFO - spectrumInquiry request from CBRS : {
    "spectrumInquiryRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "inquiredSpectrum": [
                {
                    "highFrequency": 3700000000,
                    "lowFrequency": 3550000000
                }
            ]
        }
    ]
}
2025-01-02T06:51:28.276Z - INFO - The requested spectrum is out of the range, availableChannel is sent out
2025-01-02T06:51:28.277Z - INFO - engine sent successfully, the response to CBRS : {
    "spectrumInquiryResponse": [
        {
            "availableChannel": [
                {
                    "channelType": "GAA",
                    "frequencyRange": {
                        "highFrequency": 3640000000,
                        "lowFrequency": 3600000000
                    },
                    "maxEirp": 16,
                    "ruleApplied": "FCC_PART_96"
                }
            ],
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "response": {
                "responseCode": 0
            }
        }
    ]
}
2025-01-02T06:51:28.279Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "104675999",
            "operationState": "GRANTED"
        }
    ]
}
2025-01-02T06:51:28.297Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "104675999",
            "response": {
                "responseCode": 0
            },
        }
    ]
}

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        "transmitExpireTime": "2025-01-02T06:54:48Z"
    }
}
2025-01-02T06:51:29.227Z - INFO - grant request from CBRS : {
    "grantRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "operationParam": {
                "maxEirp": 16.0,
                "operationFrequencyRange": {
                    "highFrequency": 3640000000,
                    "lowFrequency": 3600000000
                }
            }
        }
    ]
}
2025-01-02T06:51:29.234Z - INFO - engine sent successfully, the response to CBRS : {
    "grantResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "channelType": "GAA",
            "grantExpireTime": "2025-01-09T06:51:29Z",
            "grantId": "401652571",
            "heartbeatInterval": 60,
            "response": {
                "responseCode": 0
            }
        }
    ]
}
2025-01-02T06:51:30.242Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "401652571",
            "operationState": "GRANTED"
        }
    ]
}
2025-01-02T06:51:30.248Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "401652571",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T06:54:50Z"
        }
    ]
}
2025-01-02T06:52:20.228Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "401652571",

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        "operationState": "AUTHORIZED"
    },
    {
        "cbsdId": "VUIPR1450-48Mock-SASD823634126",
        "grantId": "104675999",
        "operationState": "AUTHORIZED"
    }
]
}
2025-01-02T06:52:20.241Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "401652571",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T06:55:40Z"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "104675999",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T06:55:40Z"
        }
    ]
}
2025-01-02T06:53:20.252Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "104675999",
            "operationState": "AUTHORIZED"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "401652571",
            "operationState": "AUTHORIZED"
        }
    ]
}
2025-01-02T06:53:20.264Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "104675999",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T06:56:40Z"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "401652571",
            "response": {
                "responseCode": 0
            }
        }
    ]
}

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    },
    "transmitExpireTime": "2025-01-02T06:56:40Z"
  }
]
}
2025-01-02T06:54:20.227Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "104675999",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "401652571",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-02T06:54:20.240Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "104675999",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T06:57:40Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "401652571",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T06:57:40Z"
    }
  ]
}
2025-01-02T06:55:20.256Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "104675999",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "401652571",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-02T06:55:20.271Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "104675999",

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        "response": {
            "responseCode": 0
        },
        "transmitExpireTime": "2025-01-02T06:58:40Z"
    },
    {
        "cbsdId": "VUIPR1450-48Mock-SASD823956047",
        "grantId": "401652571",
        "response": {
            "responseCode": 0
        },
        "transmitExpireTime": "2025-01-02T06:58:40Z"
    }
]
}
2025-01-02T06:56:20.228Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "401652571",
            "operationState": "AUTHORIZED"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "104675999",
            "operationState": "AUTHORIZED"
        }
    ]
}
2025-01-02T06:56:20.240Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "401652571",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T06:59:40Z"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "104675999",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T06:59:40Z"
        }
    ]
}
2025-01-02T06:57:20.255Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "104675999",
            "operationState": "AUTHORIZED"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",

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        "grantId": "401652571",
        "operationState": "AUTHORIZED"
    }
]
}
2025-01-02T06:57:20.269Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "104675999",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T07:00:40Z"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "401652571",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T07:00:40Z"
        }
    ]
}
2025-01-02T06:58:20.228Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "401652571",
            "operationState": "AUTHORIZED"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "104675999",
            "operationState": "AUTHORIZED"
        }
    ]
}
2025-01-02T06:58:20.241Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "401652571",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T07:01:40Z"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "104675999",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T07:01:40Z"
        }
    ]
}
```

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}
2025-01-02T06:59:20.256Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "401652571",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "104675999",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-02T06:59:20.269Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "401652571",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:02:40Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "104675999",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:02:40Z"
    }
  ]
}
2025-01-02T07:00:20.228Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "104675999",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "401652571",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-02T07:00:20.242Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "104675999",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:03:40Z"
    }
  ]
}
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    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "401652571",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:03:40Z"
    }
  ]
}
2025-01-02T07:01:20.254Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "401652571",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "104675999",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-02T07:01:20.267Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "401652571",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:04:40Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "104675999",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:04:40Z"
    }
  ]
}
2025-01-02T07:02:20.229Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "401652571",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "104675999",
      "operationState": "AUTHORIZED"
    }
  ]
}

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}
2025-01-02T07:02:20.241Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "401652571",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:05:40Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "104675999",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:05:40Z"
    }
  ]
}
2025-01-02T07:03:20.256Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "104675999",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "401652571",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-02T07:03:20.267Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "104675999",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:06:40Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "401652571",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:06:40Z"
    }
  ]
}
2025-01-02T07:04:20.229Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {

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        "cbsdId": "VUIPR1450-48Mock-SASD823956047",
        "grantId": "401652571",
        "operationState": "AUTHORIZED"
    },
    {
        "cbsdId": "VUIPR1450-48Mock-SASD823634126",
        "grantId": "104675999",
        "operationState": "AUTHORIZED"
    }
]
}
2025-01-02T07:04:20.245Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "401652571",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T07:07:40Z"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "104675999",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T07:07:40Z"
        }
    ]
}
2025-01-02T07:05:20.229Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "104675999",
            "operationState": "AUTHORIZED"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "401652571",
            "operationState": "AUTHORIZED"
        }
    ]
}
2025-01-02T07:05:20.244Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "104675999",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T07:08:40Z"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "401652571",

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        "response": {
            "responseCode": 0
        },
        "transmitExpireTime": "2025-01-02T07:08:40Z"
    }
]
}
2025-01-02T07:06:20.229Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "104675999",
            "operationState": "AUTHORIZED"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "401652571",
            "operationState": "AUTHORIZED"
        }
    ]
}
2025-01-02T07:06:20.240Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "104675999",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T07:09:40Z"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "401652571",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T07:09:40Z"
        }
    ]
}
2025-01-02T07:07:20.263Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "104675999",
            "operationState": "AUTHORIZED"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "401652571",
            "operationState": "AUTHORIZED"
        }
    ]
}
2025-01-02T07:07:20.276Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {

```

```

    "cbstdId": "VUIPR1450-48Mock-SASD823634126",
    "grantId": "104675999",
    "response": {
      "responseCode": 0
    },
    "transmitExpireTime": "2025-01-02T07:10:40Z"
  },
  {
    "cbstdId": "VUIPR1450-48Mock-SASD823956047",
    "grantId": "401652571",
    "response": {
      "responseCode": 0
    },
    "transmitExpireTime": "2025-01-02T07:10:40Z"
  }
]
}
2025-01-02T07:08:20.230Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbstdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "401652571",
      "operationState": "AUTHORIZED"
    },
    {
      "cbstdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "104675999",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-02T07:08:20.243Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbstdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "401652571",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:11:40Z"
    },
    {
      "cbstdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "104675999",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:11:40Z"
    }
  ]
}
2025-01-02T07:09:20.248Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbstdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "104675999",
      "operationState": "AUTHORIZED"
    },
  ],

```

```

        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "401652571",
            "operationState": "AUTHORIZED"
        }
    ]
}
2025-01-02T07:09:20.261Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "104675999",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T07:12:40Z"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "401652571",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T07:12:40Z"
        }
    ]
}
2025-01-02T07:10:20.229Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "401652571",
            "operationState": "AUTHORIZED"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "104675999",
            "operationState": "AUTHORIZED"
        }
    ]
}
2025-01-02T07:10:20.241Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "401652571",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T07:13:40Z"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "104675999",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T07:13:40Z"
        }
    ]
}

```

```

    }
  ]
}
2025-01-02T07:11:20.254Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "401652571",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "104675999",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-02T07:11:20.268Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "401652571",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:14:40Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "104675999",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:14:40Z"
    }
  ]
}
2025-01-02T07:12:20.229Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "104675999",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "401652571",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-02T07:12:20.241Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "104675999",
      "response": {
        "responseCode": 0
      }
    }
  ]
}

```

```

    },
    "transmitExpireTime": "2025-01-02T07:15:40Z"
  },
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823956047",
    "grantId": "401652571",
    "response": {
      "responseCode": 0
    },
    "transmitExpireTime": "2025-01-02T07:15:40Z"
  }
]
}
2025-01-02T07:13:20.231Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "401652571",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "104675999",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-02T07:13:20.245Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "401652571",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:16:40Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "104675999",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:16:40Z"
    }
  ]
}
2025-01-02T07:14:20.248Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "401652571",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "104675999",
      "operationState": "AUTHORIZED"
    }
  ]
}

```

```

    }
  ]
}
2025-01-02T07:14:20.260Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "401652571",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:17:40Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "104675999",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:17:40Z"
    }
  ]
}
2025-01-02T07:15:20.236Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "104675999",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "401652571",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-02T07:15:20.251Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "104675999",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:18:40Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "401652571",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T07:18:40Z"
    }
  ]
}

```

8.3 WINNF.PT.C.HBT.1(Max Eirp = 20 dBm/MHz)

2025-01-02T06:27:14.668Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2025-01-02T06:27:14.669Z - INFO - Selected spectrum frequency is {'lowFrequency': 3600000000, 'highFrequency': 3640000000}

2025-01-02T06:27:14.669Z - INFO - Granted Spectrum Max Eirp = 20dBm/MHz

2025-01-02T06:27:14.669Z - INFO - the selected test from the user : PowerMeasTest is starting now

2025-01-02T06:28:03.638Z - INFO - registration request from CBRS : {

```

  "registrationRequest": [
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "CB987",
      "cbsdCategory": "A",
      "cbsdInfo": {
        "firmwareVersion": "1.0.2.2p2",
        "hardwareVersion": "1.1",
        "model": "PR1450-48E",
        "softwareVersion": "2.1.0",
        "vendor": "Pegatron"
      },
      "cbsdSerialNumber": "D823634126",
      "fccId": "VUIPR1450-48",
      "groupingParam": [
        {
          "groupId": "group1",
          "groupType": "INTERFERENCE_COORDINATION"
        }
      ],
      "installationParam": {
        "antennaAzimuth": 240,
        "antennaBeamwidth": 30,
        "antennaDowntilt": 3,
        "antennaGain": 4,
        "antennaModel": "Wire_dipole",
        "eirpCapability": 30,
        "height": 12.0,
        "heightType": "AGL",
        "horizontalAccuracy": 45.0,
        "indoorDeployment": true,
        "latitude": 37.425056,
        "longitude": -22.084113,
        "verticalAccuracy": 2.0
      },
      "measCapability": [
        "RECEIVED_POWER_WITHOUT_GRANT"
      ],
      "userId": "PEGATRON"
    },
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "CB987",
      "cbsdCategory": "A",
      "cbsdInfo": {
        "firmwareVersion": "1.0.2.2p2",

```

```

    "hardwareVersion": "1.1",
    "model": "PR1450-48l",
    "softwareVersion": "2.1.0",
    "vendor": "Pegatron"
  },
  "cbsdSerialNumber": "D823956047",
  "fccId": "VUIPR1450-48",
  "groupingParam": [
    {
      "groupId": "group1",
      "groupType": "INTERFERENCE_COORDINATION"
    }
  ],
  "installationParam": {
    "antennaAzimuth": 240,
    "antennaBeamwidth": 30,
    "antennaDowntilt": 3,
    "antennaGain": 9,
    "antennaModel": "Wire_dipole",
    "eirpCapability": 30,
    "height": 12.0,
    "heightType": "AGL",
    "horizontalAccuracy": 45.0,
    "indoorDeployment": true,
    "latitude": 37.425056,
    "longitude": -22.084113,
    "verticalAccuracy": 2.0
  },
  "measCapability": [
    "RECEIVED_POWER_WITHOUT_GRANT"
  ],
  "userId": "PEGATRON"
}
]
}
2025-01-02T06:28:03.767Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "response": {
        "responseCode": 0
      }
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-01-02T06:28:04.632Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,

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    "lowFrequency": 3550000000
  }
]
},
{
  "cbsdId": "VUIPR1450-48Mock-SASD823956047",
  "inquiredSpectrum": [
    {
      "highFrequency": 3700000000,
      "lowFrequency": 3550000000
    }
  ]
}
]
}
}
2025-01-02T06:28:04.639Z - INFO - The requested spectrum is out of the range, availableChannel is sent out
2025-01-02T06:28:04.650Z - INFO - The requested spectrum is out of the range, availableChannel is sent out
2025-01-02T06:28:04.651Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3640000000,
            "lowFrequency": 3600000000
          },
          "maxEirp": 20,
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "response": {
        "responseCode": 0
      }
    },
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3640000000,
            "lowFrequency": 3600000000
          },
          "maxEirp": 20,
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
}
2025-01-02T06:28:05.635Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {

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    "cbsdId": "VUIPR1450-48Mock-SASD823634126",
    "operationParam": {
      "maxEirp": 10.0,
      "operationFrequencyRange": {
        "highFrequency": 3640000000,
        "lowFrequency": 3600000000
      }
    }
  },
  {
    "cbsdId": "VUIPR1450-48Mock-SASD823956047",
    "operationParam": {
      "maxEirp": 20.0,
      "operationFrequencyRange": {
        "highFrequency": 3640000000,
        "lowFrequency": 3600000000
      }
    }
  }
]
}
2025-01-02T06:28:05.647Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "channelType": "GAA",
      "grantExpireTime": "2025-01-09T06:28:05Z",
      "grantId": "773204935",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "channelType": "GAA",
      "grantExpireTime": "2025-01-09T06:28:05Z",
      "grantId": "56674961",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-01-02T06:28:06.632Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "773204935",
      "operationState": "GRANTED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "56674961",
      "operationState": "GRANTED"
    }
  ]
}

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}
2025-01-02T06:28:06.648Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "773204935",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T06:31:26Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "56674961",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T06:31:26Z"
    }
  ]
}
2025-01-02T06:28:55.643Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "773204935",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "56674961",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-02T06:28:55.656Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "773204935",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T06:32:15Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "56674961",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T06:32:15Z"
    }
  ]
}
2025-01-02T06:29:55.632Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
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        "cbsdId": "VUIPR1450-48Mock-SASD823634126",
        "grantId": "773204935",
        "operationState": "AUTHORIZED"
    },
    {
        "cbsdId": "VUIPR1450-48Mock-SASD823956047",
        "grantId": "56674961",
        "operationState": "AUTHORIZED"
    }
]
}
2025-01-02T06:29:55.647Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "773204935",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T06:33:15Z"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "56674961",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T06:33:15Z"
        }
    ]
}
2025-01-02T06:30:55.634Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "56674961",
            "operationState": "AUTHORIZED"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "773204935",
            "operationState": "AUTHORIZED"
        }
    ]
}
2025-01-02T06:30:55.647Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "56674961",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T06:34:15Z"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "773204935",

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        "response": {
            "responseCode": 0
        },
        "transmitExpireTime": "2025-01-02T06:34:15Z"
    }
]
}
2025-01-02T06:31:55.638Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "56674961",
            "operationState": "AUTHORIZED"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "773204935",
            "operationState": "AUTHORIZED"
        }
    ]
}
2025-01-02T06:31:55.651Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "56674961",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T06:35:15Z"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "773204935",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T06:35:15Z"
        }
    ]
}
2025-01-02T06:32:55.633Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "56674961",
            "operationState": "AUTHORIZED"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "773204935",
            "operationState": "AUTHORIZED"
        }
    ]
}
2025-01-02T06:32:55.647Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {

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        "cbstdId": "VUIPR1450-48Mock-SASD823956047",
        "grantId": "56674961",
        "response": {
            "responseCode": 0
        },
        "transmitExpireTime": "2025-01-02T06:36:15Z"
    },
    {
        "cbstdId": "VUIPR1450-48Mock-SASD823634126",
        "grantId": "773204935",
        "response": {
            "responseCode": 0
        },
        "transmitExpireTime": "2025-01-02T06:36:15Z"
    }
]
}
2025-01-02T06:33:55.636Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbstdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "773204935",
            "operationState": "AUTHORIZED"
        },
        {
            "cbstdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "56674961",
            "operationState": "AUTHORIZED"
        }
    ]
}
2025-01-02T06:33:55.649Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbstdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "773204935",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T06:37:15Z"
        },
        {
            "cbstdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "56674961",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T06:37:15Z"
        }
    ]
}
2025-01-02T06:34:55.643Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbstdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "56674961",
            "operationState": "AUTHORIZED"
        },
    ],

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    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "773204935",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-02T06:34:55.657Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "56674961",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T06:38:15Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "773204935",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T06:38:15Z"
    }
  ]
}
2025-01-02T06:35:55.647Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "773204935",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "56674961",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-02T06:35:55.660Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "773204935",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T06:39:15Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "56674961",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T06:39:15Z"
    }
  ]
}

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    }
  ]
}
2025-01-02T06:36:25.642Z - INFO - deregistration request from CBRS : {
  "deregistrationRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047"
    }
  ]
}
2025-01-02T06:36:25.647Z - INFO - engine sent successfully, the response to CBRS : {
  "deregistrationResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "response": {
        "responseCode": 0
      }
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-01-02T06:36:43.635Z - INFO - registration request from CBRS : {
  "registrationRequest": [
    {
      "airInterface": {
        "radioTechnology": "E_UTRA"
      },
      "callSign": "CB987",
      "cbsdCategory": "A",
      "cbsdInfo": {
        "firmwareVersion": "1.4.0",
        "hardwareVersion": "SGF",
        "model": "PR1450-48E",
        "softwareVersion": "2.0.8",
        "vendor": "Pegatron"
      },
      "cbsdSerialNumber": "D823634126",
      "fccId": "VUIPR1450-48",
      "groupingParam": [
        {
          "groupId": "group1",
          "groupType": "INTERFERENCE_COORDINATION"
        }
      ],
      "installationParam": {
        "antennaAzimuth": 240,
        "antennaBeamwidth": 30,
        "antennaDowntilt": 3,
        "antennaGain": 4,
        "antennaModel": "Wire_dipole",

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        "eirpCapability": 30,
        "height": 12.0,
        "heightType": "AGL",
        "horizontalAccuracy": 45.0,
        "indoorDeployment": true,
        "latitude": 37.425056,
        "longitude": -22.084113,
        "verticalAccuracy": 2.0
    },
    "measCapability": [
        "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "PEGATRON"
}
]
}
2025-01-02T06:36:43.713Z - INFO - engine sent successfully, the response to CBRS : {
    "registrationResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "response": {
                "responseCode": 0
            }
        }
    ]
}
2025-01-02T06:36:44.635Z - INFO - spectrumInquiry request from CBRS : {
    "spectrumInquiryRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "inquiredSpectrum": [
                {
                    "highFrequency": 3700000000,
                    "lowFrequency": 3550000000
                }
            ]
        }
    ]
}
2025-01-02T06:36:44.653Z - INFO - The requested spectrum is out of the range, availableChannel is sent out
2025-01-02T06:36:44.653Z - INFO - engine sent successfully, the response to CBRS : {
    "spectrumInquiryResponse": [
        {
            "availableChannel": [
                {
                    "channelType": "GAA",
                    "frequencyRange": {
                        "highFrequency": 3640000000,
                        "lowFrequency": 3600000000
                    },
                    "maxEirp": 20,
                    "ruleApplied": "FCC_PART_96"
                }
            ],
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "response": {
                "responseCode": 0
            }
        }
    ]
}

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    }
  ]
}
2025-01-02T06:36:44.664Z - INFO - registration request from CBRS : {
  "registrationRequest": [
    {
      "airInterface": {
        "radioTechnology": "E_UTRA"
      },
      "callSign": "CB987",
      "cbsdCategory": "A",
      "cbsdInfo": {
        "firmwareVersion": "1.4.0",
        "hardwareVersion": "SGF",
        "model": "PR1450-48I",
        "softwareVersion": "2.0.8",
        "vendor": "Pegatron"
      },
      "cbsdSerialNumber": "D823956047",
      "fccId": "VUIPR1450-48",
      "groupingParam": [
        {
          "groupId": "group1",
          "groupType": "INTERFERENCE_COORDINATION"
        }
      ],
      "installationParam": {
        "antennaAzimuth": 240,
        "antennaBeamwidth": 30,
        "antennaDowntilt": 3,
        "antennaGain": 9,
        "antennaModel": "Wire_dipole",
        "eirpCapability": 30,
        "height": 12.0,
        "heightType": "AGL",
        "horizontalAccuracy": 45.0,
        "indoorDeployment": true,
        "latitude": 37.425056,
        "longitude": -22.084113,
        "verticalAccuracy": 2.0
      },
      "measCapability": [
        "RECEIVED_POWER_WITHOUT_GRANT"
      ],
      "userId": "PEGATRON"
    }
  ]
}
2025-01-02T06:36:44.755Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "response": {
        "responseCode": 0
      }
    }
  ]
}

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2025-01-02T06:36:45.648Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "operationParam": {
        "maxEirp": 10.0,
        "operationFrequencyRange": {
          "highFrequency": 3640000000,
          "lowFrequency": 3600000000
        }
      }
    }
  ]
}
2025-01-02T06:36:45.655Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "channelType": "GAA",
      "grantExpireTime": "2025-01-09T06:36:45Z",
      "grantId": "109467983",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-01-02T06:36:45.667Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    }
  ]
}
2025-01-02T06:36:45.684Z - INFO - The requested spectrum is out of the range, availableChannel is sent out
2025-01-02T06:36:45.685Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3640000000,
            "lowFrequency": 3600000000
          },
          "maxEirp": 20,
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "response": {

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        "responseCode": 0
      }
    ]
  }
  2025-01-02T06:36:46.635Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823634126",
        "grantId": "109467983",
        "operationState": "GRANTED"
      }
    ]
  }
  2025-01-02T06:36:46.647Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823634126",
        "grantId": "109467983",
        "response": {
          "responseCode": 0
        },
        "transmitExpireTime": "2025-01-02T06:40:06Z"
      }
    ]
  }
  2025-01-02T06:36:46.657Z - INFO - grant request from CBRS : {
    "grantRequest": [
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823956047",
        "operationParam": {
          "maxEirp": 20.0,
          "operationFrequencyRange": {
            "highFrequency": 3640000000,
            "lowFrequency": 3600000000
          }
        }
      }
    ]
  }
  2025-01-02T06:36:46.668Z - INFO - engine sent successfully, the response to CBRS : {
    "grantResponse": [
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823956047",
        "channelType": "GAA",
        "grantExpireTime": "2025-01-09T06:36:46Z",
        "grantId": "837093046",
        "heartbeatInterval": 60,
        "response": {
          "responseCode": 0
        }
      }
    ]
  }
  2025-01-02T06:36:47.635Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823956047",

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        "grantId": "837093046",
        "operationState": "GRANTED"
    }
]
}
2025-01-02T06:36:47.641Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "837093046",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T06:40:07Z"
        }
    ]
}
2025-01-02T06:36:55.633Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "109467983",
            "operationState": "AUTHORIZED"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "837093046",
            "operationState": "AUTHORIZED"
        }
    ]
}
2025-01-02T06:36:55.651Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "109467983",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T06:40:15Z"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "837093046",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T06:40:15Z"
        }
    ]
}
2025-01-02T06:37:55.645Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "109467983",
            "operationState": "AUTHORIZED"
        }
    ]
}

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    ]
  }
  2025-01-02T06:37:55.651Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823634126",
        "grantId": "109467983",
        "response": {
          "responseCode": 0
        },
        "transmitExpireTime": "2025-01-02T06:41:15Z"
      }
    ]
  }
  2025-01-02T06:38:35.633Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823956047",
        "grantId": "837093046",
        "operationState": "AUTHORIZED"
      }
    ]
  }
  2025-01-02T06:38:35.639Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823956047",
        "grantId": "837093046",
        "response": {
          "responseCode": 0
        },
        "transmitExpireTime": "2025-01-02T06:41:55Z"
      }
    ]
  }
  2025-01-02T06:38:55.635Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823956047",
        "grantId": "837093046",
        "operationState": "AUTHORIZED"
      },
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823634126",
        "grantId": "109467983",
        "operationState": "AUTHORIZED"
      }
    ]
  }
  2025-01-02T06:38:55.650Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
      {
        "cbsdId": "VUIPR1450-48Mock-SASD823956047",
        "grantId": "837093046",
        "response": {
          "responseCode": 0
        },
        "transmitExpireTime": "2025-01-02T06:42:15Z"
      }
    ]
  }

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    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "109467983",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T06:42:15Z"
    }
  ]
}
2025-01-02T06:39:55.633Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "109467983",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "837093046",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-02T06:39:55.646Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "109467983",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T06:43:15Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "837093046",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T06:43:15Z"
    }
  ]
}
2025-01-02T06:40:55.659Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "109467983",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "837093046",
      "operationState": "AUTHORIZED"
    }
  ]
}

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}
2025-01-02T06:40:55.675Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "109467983",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T06:44:15Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "837093046",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T06:44:15Z"
    }
  ]
}
2025-01-02T06:41:55.636Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "109467983",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "837093046",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-02T06:41:55.651Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "109467983",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T06:45:15Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "837093046",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T06:45:15Z"
    }
  ]
}
2025-01-02T06:42:55.648Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {

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        "cbsdId": "VUIPR1450-48Mock-SASD823956047",
        "grantId": "837093046",
        "operationState": "AUTHORIZED"
    },
    {
        "cbsdId": "VUIPR1450-48Mock-SASD823634126",
        "grantId": "109467983",
        "operationState": "AUTHORIZED"
    }
]
}
2025-01-02T06:42:55.661Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "837093046",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T06:46:15Z"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "109467983",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T06:46:15Z"
        }
    ]
}
2025-01-02T06:43:55.635Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "109467983",
            "operationState": "AUTHORIZED"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "837093046",
            "operationState": "AUTHORIZED"
        }
    ]
}
2025-01-02T06:43:55.648Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "109467983",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T06:47:15Z"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "837093046",

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        "response": {
            "responseCode": 0
        },
        "transmitExpireTime": "2025-01-02T06:47:15Z"
    }
]
}
2025-01-02T06:44:55.633Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "837093046",
            "operationState": "AUTHORIZED"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "109467983",
            "operationState": "AUTHORIZED"
        }
    ]
}
2025-01-02T06:44:55.647Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "837093046",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T06:48:15Z"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "109467983",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T06:48:15Z"
        }
    ]
}
2025-01-02T06:45:55.655Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "837093046",
            "operationState": "AUTHORIZED"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "109467983",
            "operationState": "AUTHORIZED"
        }
    ]
}
2025-01-02T06:45:55.668Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {

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        "cbsdId": "VUIPR1450-48Mock-SASD823956047",
        "grantId": "837093046",
        "response": {
            "responseCode": 0
        },
        "transmitExpireTime": "2025-01-02T06:49:15Z"
    },
    {
        "cbsdId": "VUIPR1450-48Mock-SASD823634126",
        "grantId": "109467983",
        "response": {
            "responseCode": 0
        },
        "transmitExpireTime": "2025-01-02T06:49:15Z"
    }
]
}
2025-01-02T06:46:55.642Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "109467983",
            "operationState": "AUTHORIZED"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "837093046",
            "operationState": "AUTHORIZED"
        }
    ]
}
2025-01-02T06:46:55.658Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823634126",
            "grantId": "109467983",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T06:50:15Z"
        },
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "837093046",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-01-02T06:50:15Z"
        }
    ]
}
2025-01-02T06:47:55.637Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "VUIPR1450-48Mock-SASD823956047",
            "grantId": "837093046",
            "operationState": "AUTHORIZED"
        },
    ],

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    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "109467983",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-02T06:47:55.652Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "837093046",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T06:51:15Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "109467983",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T06:51:15Z"
    }
  ]
}
2025-01-02T06:48:55.634Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "109467983",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "837093046",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-02T06:48:55.648Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "109467983",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T06:52:15Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "837093046",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T06:52:15Z"
    }
  ]
}

```

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    }
  ]
}
2025-01-02T06:49:55.642Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "837093046",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "109467983",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-01-02T06:49:55.654Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823956047",
      "grantId": "837093046",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T06:53:15Z"
    },
    {
      "cbsdId": "VUIPR1450-48Mock-SASD823634126",
      "grantId": "109467983",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-01-02T06:53:15Z"
    }
  ]
}
```