



Jammertest 2024 Transmission Plan

Jammertest Consortium

2024-08-30
21:54:10

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Monday

Location 1 Bleik

Monday morning before lunch will be used for setting up equipment and checking that all systems are operational. After lunch the testing will start with high power jamming.

Table 1.1: Monday

Monday 2024-09-09	Bleik(1)	Grunnvatn(2)	Motorcade(3)
Start time:	11:00	11:00	11:00
08:00			
09:00			
10:00			
11:00	11:00-13:00 - 0.0.1 Mandatory morning briefing Comment: MANDATORY Contact: Christian Skjetne (NPRA)	11:00-13:00 - 0.0.1 Mandatory morning briefing Comment: MANDATORY attendance at Bleik (Site 1) Contact: Christian Skjetne (NPRA)	11:00-13:00 - 0.0.1 Mandatory morning briefing Comment: MANDATORY attendance at Bleik (Site 1) Contact: Christian Skjetne (NPRA)
12:00			
13:00	13:00-14:00 - 0.1.1 Grace period Comment: Lunch Contact: Christian Skjetne (NPRA)	13:00-14:00 - 0.1.1 Grace period Comment: Lunch @ Bleik (Site 1) Contact: Christian Skjetne (NPRA)	13:00-14:00 - 0.1.1 Grace period Comment: Lunch @ Bleik (Site 1) Contact: Christian Skjetne (NPRA)
14:00	14:00-14:10 - 1.2.1 50 W CW: L1 Power: 50W Contact: Nicolai Gerrard (NKOM) <hr/> 14:20-14:30 - 1.2.4 50 W CW: L1, G1, L2, L5 Power: 50W Contact: Nicolai Gerrard (NKOM) <hr/> 14:40-14:50 - 1.3.5 50 W sweep: L1, 1 kHz Power: 50W Contact: Nicolai Gerrard (NKOM)	14:00-14:12 - 1.1.1 Jammer S1.1 Power: 0.0316W Contact: Øystein Karlsen (NKOM) <hr/> 14:16-14:28 - 1.1.4 Jammer S2.1 Power: 0.1W Contact: Øystein Karlsen (NKOM) <hr/> 14:32-14:44 - 1.1.8 Jammer U1.1 Contact: Øystein Karlsen (NKOM) <hr/> 14:48-15:00 - 1.1.12 Jammer H1.1 Power: 0.1W Contact: Øystein Karlsen (NKOM)	

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Table 1.1: Monday (Continued)

Monday 2024-09-09	Bleik(1)	Grunnvatn(2)	Motorcade(3)
15:00	15:00-15:10 - 1.3.8 50 W sweep: L1, G1, L2, L5, 1 kHz Power: 50W Contact: Nicolai Gerrard (NKOM)	15:04-15:16 - 1.1.13 Jammer H1.2 Power: 0.0631W Contact: Øystein Karlsen (NKOM)	15:00-16:15 - 1.11.7 Driving with multi-band jammer in vehicle in front of the test vehicle Power: 1.58W Contact: Jahn Erik Røhme (NPRA)
	15:20-15:30 - 1.4.1 50 W PRN: L1 Power: 50W Contact: Nicolai Gerrard (NKOM)	15:20-15:32 - 1.1.16 Jammer H3.1 Power: 0.1W Contact: Øystein Karlsen (NKOM)	
	15:40-15:50 - 1.4.4 50 W PRN: L1, G1, L2, L5 Power: 50W Contact: Nicolai Gerrard (NKOM)	15:36-15:48 - 1.1.18 Jammer H3.3 Power: 1W Contact: Øystein Karlsen (NKOM)	
		15:52-16:04 - 1.1.19 Jammer H4.1 Power: 0.631W Contact: Øystein Karlsen (NKOM)	
16:00	16:00-16:14 - 1.6.1 0.2 µW (-37dBm) to 50 W (47dBm) at 2 dB increments PRN: L1 Power: 50W Contact: Nicolai Gerrard (NKOM)	16:08-16:20 - 1.1.20 Jammer H6.1 Power: 0.631W Contact: Øystein Karlsen (NKOM)	16:30-17:45 - 1.11.8 Driving with multi-band jammer in vehicle behind the test vehicle Power: 1.58W Contact: Jahn Erik Røhme (NPRA)
	16:25-16:39 - 1.6.4 0.2 µW (-37dBm) to 50 W (47dBm) at 2 dB increments PRN: L1, G1, L2, L5 Power: 50W Contact: Nicolai Gerrard (NKOM)	16:24-16:36 - 1.1.21 Jammer H6.2 Power: 1W Contact: Øystein Karlsen (NKOM)	
	16:50-18:05 - 1.8.1 50 W PRN pyramid: E6, E5b, L5, G2, L2, B1I, G1, L1 Power: 50W Contact: Nicolai Gerrard (NKOM)	16:40-16:52 - 1.1.22 Jammer H6.3 Power: 1W Contact: Øystein Karlsen (NKOM)	
		16:56-17:08 - 1.1.23 Jammer H6.4 Power: 1W Contact: Øystein Karlsen (NKOM)	

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Table 1.1: Monday (Continued)

Monday 2024-09-09	Bleik(1)	Grunnvatn(2)	Motorcade(3)
17:00		<div>17:12-17:24 - 1.1.26</div> <div>Jammer H8.1</div> <div>Power: 0.631W</div> <div>Contact: Øystein Karlsen (NKOM)</div> <div>17:28-17:40 - 1.1.27</div> <div>Jammer F6.1</div> <div>Power: 6.31W</div> <div>Contact: Øystein Karlsen (NKOM)</div> <div>17:44-17:56 - 1.1.29</div> <div>Jammer H2.1</div> <div>Contact: Øystein Karlsen (NKOM)</div>	
18:00	<div>18:30-19:00 - 0.0.2</div> <div>Mandatory afternoon (de)briefing</div> <div>Contact: Christian Skjetne (NPRA)</div>	<div>18:30-19:00 - 0.0.2</div> <div>Mandatory afternoon (de)briefing</div> <div>Comment: MANDATORY attendance at Bleik (Site 1)</div> <div>Contact: Christian Skjetne (NPRA)</div>	<div>18:30-19:00 - 0.0.2</div> <div>Mandatory afternoon (de)briefing</div> <div>Comment: MANDATORY attendance at Bleik (Site 1)</div> <div>Contact: Christian Skjetne (NPRA)</div>
19:00			
20:00			
21:00			
22:00			

Tuesday

Location 1 Bleik

Tuesday will be used for meaoning and unintentional RFI test. During the evening there will be very high power jamming running untill 22:00.

Table 2.1: Tuesday

Tuesday 2024-09-10	Bleik(1)	Grunnvatn(2)	Motorcade(3)
Start time:	08:00	08:00	08:00
08:00	08:00-08:30 - 0.0.1 Mandatory morning briefing Comment: MANDATORY Contact: Christian Skjetne (NPRA)	08:00-08:30 - 0.0.1 Mandatory morning briefing Comment: MANDATORY attendance at Bleik (Site 1) Contact: Christian Skjetne (NPRA)	08:00-08:30 - 0.0.1 Mandatory morning briefing Comment: MANDATORY attendance at Bleik (Site 1) Contact: Christian Skjetne (NPRA)
09:00	09:00-09:05 - 3.1.1 RX1 at 1 W Power: 1W Contact: Nicolai Gerrard (NKOM) <hr/> 09:15-09:25 - 3.1.2 RX1 at 1 W with initial jamming Power: 1W Contact: Nicolai Gerrard (NKOM) <hr/> 09:35-09:40 - 3.1.3 RX1 at 10 W Power: 10W Contact: Nicolai Gerrard (NKOM) <hr/> 09:50-10:00 - 3.1.4 RX1 at 10 W with initial jamming Power: 10W Contact: Nicolai Gerrard (NKOM)	09:00-09:10 - 1.19.1 3 jammers at 50 meters from center S1.1, S1.2 and S1.3 Power: 0.171W Contact: Øystein Karlsen (NKOM) <hr/> 09:16-09:26 - 1.19.2 3 jammers at 100 meters from center S1.1, S1.2 and S1.3 Power: 0.171W Contact: Øystein Karlsen (NKOM) <hr/> 09:32-09:42 - 1.19.3 3 jammers at 150 meters from center S1.1, S1.2 and S1.3 Power: 0.171W Contact: Øystein Karlsen (NKOM) <hr/> 09:48-09:58 - 1.19.4 3 jammers at 50 meters from center S2.1, S2.2 and S2.3 Power: 1.26W Contact: Øystein Karlsen (NKOM)	

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Table 2.1: Tuesday (Continued)

Tuesday 2024-09-10	Bleik(1)	Grunnvatn(2)	Motorcade(3)
10:00	10:10-10:15 - 3.1.5 RX2 at 10 W Power: 10W Contact: Nicolai Gerrard (NKOM)	10:04-10:14 - 1.19.5 3 jammers at 100 meters from center S2.1, S2.2 and S2.3 Power: 1.26W Contact: Øystein Karlsen (NKOM)	10:00-11:00 - 1.11.12 Driving while passing three consecutive parked cars with multi-band jammer Power: 1W Contact: Jahn Erik Røhme (NPRA)
	10:25-10:35 - 3.2.1 RX1 and RX2 at 10 W Power: 10W Contact: Nicolai Gerrard (NKOM)	10:20-10:30 - 1.19.6 3 jammers at 150 meters from center S2.1, S2.2 and S2.3 Power: 1.26W Contact: Øystein Karlsen (NKOM)	
	10:45-11:00 - 3.2.2 RX1 and RX2 at 10 W with initial jamming Power: 10W Contact: Nicolai Gerrard (NKOM)	10:36-10:46 - 1.19.7 3 jammers at 50 meters from center U1.1, U1.2 and U1.3 Contact: Øystein Karlsen (NKOM)	
		10:52-11:02 - 1.19.8 3 jammers at 100 meters from center U1.1, U1.2 and U1.3 Contact: Øystein Karlsen (NKOM)	

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Table 2.1: Tuesday (Continued)

Tuesday 2024-09-10	Bleik(1)	Grunnvatn(2)	Motorcade(3)
11:00	11:10-11:30 - 3.2.3 RX1 and RX2 at 10 W turned on and off at different times Power: 10W Contact: Nicolai Gerrard (NKOM)	11:08-11:18 - 1.19.9 3 jammers at 150 meters from center U1.1, U1.2 and U1.3 Contact: Øystein Karlsen (NKOM)	11:00-12:00 - 1.11.12 Driving while passing three consecutive parked cars with multi-band jammer Power: 1W Contact: Jahn Erik Røhme (NPRA)
	11:35-11:45 - 3.2.4 RX1 and RX2 at 10 W alternating Power: 10W Contact: Nicolai Gerrard (NKOM)	11:24-11:34 - 1.19.10 3 jammers at 50 meters from center H6.4, H6.5 and H6.6 Power: 1.58W Contact: Øystein Karlsen (NKOM)	
	11:55-12:15 - 3.2.5 RX1 and RX2 at 10 W alternating with breaks Power: 10W Contact: Nicolai Gerrard (NKOM)	11:40-11:50 - 1.19.11 3 jammers at 100 meters from center H6.4, H6.5 and H6.6 Power: 1.58W Contact: Øystein Karlsen (NKOM)	
12:00	12:25-12:59 - 3.3.1 RX1 with ramping power Power: 10W Contact: Nicolai Gerrard (NKOM)	11:56-12:06 - 1.19.12 3 jammers at 150 meters from center H6.4, H6.5 and H6.6 Power: 1.58W Contact: Øystein Karlsen (NKOM)	12:00-13:00 - 1.11.12 Driving while passing three consecutive parked cars with multi-band jammer Power: 1W Contact: Jahn Erik Røhme (NPRA)
		12:12-12:22 - 1.19.13 3 jammers, H1.1, H1.4 and H1.5 LOW PWR, L1 sweep, L2 L1 sweep Power: 0.1W Contact: Øystein Karlsen (NKOM)	
		12:28-12:38 - 1.19.14 3 jammers at 100 meters from center H1.1, H1.4 and H1.5 Power: 0.1W Contact: Øystein Karlsen (NKOM)	
		12:44-12:54 - 1.19.15 3 jammers at 150 meters from center H1.1, H1.4 and H1.5 Power: 0.1W Contact: Øystein Karlsen (NKOM)	

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Table 2.1: Tuesday (Continued)

Tuesday 2024-09-10	Bleik(1)	Grunnvatn(2)	Motorcade(3)
13:00	13:00-14:00 - 0.1.1 Grace period Comment: Lunch Contact: Christian Skjetne (NPRA)	13:00-14:00 - 0.1.1 Grace period Comment: Lunch @ Stave (Site 3) Contact: Christian Skjetne (NPRA)	13:00-14:00 - 0.1.1 Grace period Comment: Lunch @ Stave (Site 3) Contact: Christian Skjetne (NPRA)
14:00	14:00-14:20 - 3.3.3 RX1 at less than 1 W, adding RX2 at 10 W after 5 minutes Power: 10W Contact: Nicolai Gerrard (NKOM) <hr/> 14:35-14:55 - 3.2.3 RX1 and RX2 at 10 W turned on and off at different times Power: 10W Contact: Nicolai Gerrard (NKOM)	14:00-14:45 - 1.20.13 3 jammers at 150 meters from center H1.1, H1.4 and H1.5 turned on sequentially Power: 0.0592W Comment: Requires booking for drones Contact: Øystein Karlsen (NKOM)	14:00-14:30 - 1.10.3 Vehicle starting in dual-band denied environment Power: 0.1W Contact: Jahn Erik Røhme (NPRA) <hr/> 14:30-15:00 - 1.10.4 Vehicle starting in multi-band denied environment Power: 1.58W Contact: Jahn Erik Røhme (NPRA)
15:00	15:00-15:10 - 3.2.4 RX1 and RX2 at 10 W alternating Power: 10W Contact: Nicolai Gerrard (NKOM) <hr/> 15:15-15:35 - 3.2.5 RX1 and RX2 at 10 W alternating with breaks Power: 10W Contact: Nicolai Gerrard (NKOM)	15:05-15:50 - 1.20.14 3 jammers at 150 meters from center H1.1, H1.4 and H1.5 turned on sequentially Power: 0.0592W Comment: Requires booking for drones Contact: Øystein Karlsen (NKOM)	15:00-15:30 - 1.10.3 Vehicle starting in dual-band denied environment Power: 0.1W Contact: Jahn Erik Røhme (NPRA) <hr/> 15:30-16:00 - 1.10.4 Vehicle starting in multi-band denied environment Power: 1.58W Contact: Jahn Erik Røhme (NPRA)

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Table 2.1: Tuesday (Continued)

Tuesday 2024-09-10	Bleik(1)	Grunnvatn(2)	Motorcade(3)
16:00	<div><div>16:00-16:01 - 1.18.4 50 W drift: 1545 to 1620 MHz, with CW and sweep time of 1 minute Power: 50W Contact: Nicolai Gerrard (NKOM)</div><div>16:10-16:25 - 1.18.5 50 W drift: 1545 to 1620 MHz, with CW and sweep time of 15 minutes Power: 50W Contact: Nicolai Gerrard (NKOM)</div><div>16:35-16:50 - 1.18.7 50 W drift: 1620 to 1545 MHz, with CW and sweep time of 15 minutes Power: 50W Contact: Nicolai Gerrard (NKOM)</div></div>	<div>16:10-16:55 - 1.20.15 3 jammers at 150 meters from center H1.1, H1.4 and H1.5 turned on sequentially Power: 0.0592W Comment: Requires booking for drones Contact: Øystein Karlsen (NKOM)</div>	<div>16:00-16:30 - 1.10.3 Vehicle starting in dual-band denied environment Power: 0.1W Contact: Jahn Erik Røhme (NPRA)</div> <div>16:30-17:00 - 1.10.4 Vehicle starting in multi-band denied environment Power: 1.58W Contact: Jahn Erik Røhme (NPRA)</div>

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Table 2.1: Tuesday (Continued)

Tuesday 2024-09-10	Bleik(1)	Grunnvatn(2)	Motorcade(3)
17:00	<div><div>17:00-17:01 - 1.18.8 50 W drift: 1545 to 1620 MHz, with BW of 500 kHz and sweep time of 1 minute Power: 50W Contact: Nicolai Gerrard (NKOM)</div><div>17:10-17:25 - 1.18.13 50 W drift: 1150 to 1300 MHz, with CW and sweep time of 15 minutes Power: 50W Contact: Nicolai Gerrard (NKOM)</div><div>17:35-17:50 - 1.18.15 50 W drift: 1300 to 1150 MHz, with CW and sweep time of 15 minutes Power: 50W Contact: Nicolai Gerrard (NKOM)</div><div>17:59-18:00 - 1.18.16 50 W drift: 1150 to 1300 MHz, with BW of 500 kHz and sweep time of 1 minute Power: 50W Contact: Nicolai Gerrard (NKOM)</div></div>	<div><div>17:15-18:00 - 1.20.16 3 jammers at 150 meters from center H1.1, H1.4 and H1.5 turned on sequentially Power: 0.0592W Comment: Requires booking for drones Contact: Øystein Karlsen (NKOM)</div></div>	
18:00	<div><div>18:30-19:00 - 0.0.2 Mandatory afternoon (de)briefing Contact: Christian Skjetne (NPRA)</div></div>	<div><div>18:30-19:00 - 0.0.2 Mandatory afternoon (de)briefing Comment: MANDATORY attendance at Bleik (Site 1) Contact: Christian Skjetne (NPRA)</div></div>	<div><div>18:30-19:00 - 0.0.2 Mandatory afternoon (de)briefing Comment: MANDATORY attendance at Bleik (Site 1) Contact: Christian Skjetne (NPRA)</div></div>
19:00	<div><div>19:15-22:00 - 1.16.4 High Power PRN jamming: L1, G1, L2, L5 Power: 100W Contact: Nicolai Gerrard (NKOM)</div></div>		
20:00			
21:00			

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Table 2.1: Tuesday (Continued)

Tuesday			
2024-09-10	Bleik(1)	Grunnvatn(2)	Motorcade(3)
22:00			

Wednesday

Location 1 Bleik

Wednesday will be used for position and SBAS spoofing.

Table 3.1: Wednesday

Wednesday 2024-09-11	Bleik(1)	Grunnvatn(2)	Motorcade(3)
Start time:	08:00	08:00	08:00
08:00	08:00-08:30 - 0.0.1 Mandatory morning briefing Comment: MANDATORY Contact: Christian Skjetne (NPRA)	08:00-08:30 - 0.0.1 Mandatory morning briefing Comment: MANDATORY attendance at Bleik (Site 1) Contact: Christian Skjetne (NPRA)	08:00-08:30 - 0.0.1 Mandatory morning briefing Comment: MANDATORY attendance at Bleik (Site 1) Contact: Christian Skjetne (NPRA)
09:00	09:00-09:40 - 2.1.1 Large position and time jump, with power ramp Power: 0.316W Contact: Nicolai Gerrard (NKOM)	09:00-10:00 - 0.2.1 Jamming booking slot Comment: Pre-booking required. Inform staff of required jammer equipment (see Appendix G of test catalog) Contact: Øystein Karlsen (NKOM)	
10:00	10:00-10:15 - 2.1.3 Large position and time jump. Galileo E1 only Power: 0.316W Contact: Nicolai Gerrard (NKOM) <hr/> 10:20-10:35 - 2.1.2 Large position and time jump. GPS L1 C/A only Power: 0.316W Contact: Nicolai Gerrard (NKOM) <hr/> 10:40-10:55 - 2.1.4 Large position and time jump. GPS L1 and Galileo E1 only Power: 0.316W Contact: Nicolai Gerrard (NKOM)	10:00-11:00 - 0.2.1 Jamming booking slot Comment: Pre-booking required. Inform staff of required jammer equipment (see Appendix G of test catalog) Contact: Øystein Karlsen (NKOM)	10:00-11:00 - 0.2.1 Jamming booking slot Comment: Pre-booking required. Inform staff of required jammer equipment (see Appendix G of test catalog) Contact: Jahn Erik Røhme (NPRA)

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Table 3.1: Wednesday (Continued)

Wednesday 2024-09-11	Bleik(1)	Grunnvatn(2)	Motorcade(3)
11:00	<p>11:25-11:40 - 2.1.9 Simulated driving (route 1). GPS L1 C/A and Galileo E1, with initial jamming Power: 0.316W Contact: Nicolai Gerrard (NKOM)</p> <hr/> <p>11:45-12:00 - 2.1.10 Simulated driving (route 1), with initial jamming Power: 0.316W Contact: Nicolai Gerrard (NKOM)</p>	<p>11:00-12:00 - 0.2.1 Jamming booking slot Comment: Pre-booking required. Inform staff of required jammer equipment (see Appendix G of test catalog) Contact: Øystein Karlsen (NKOM)</p>	<p>11:00-12:00 - 0.2.1 Jamming booking slot Comment: Pre-booking required. Inform staff of required jammer equipment (see Appendix G of test catalog) Contact: Jahn Erik Røhme (NPRA)</p>
12:00	<p>12:30-12:40 - 2.8.1 EGNOS with "Do Not Use GPS" commands Power: 1W Contact: Nicolai Gerrard (NKOM)</p> <hr/> <p>12:45-13:00 - 2.8.1 EGNOS with "Do Not Use GPS" commands Power: 1W Contact: Nicolai Gerrard (NKOM)</p>	<p>12:00-13:00 - 0.2.1 Jamming booking slot Comment: Pre-booking required. Inform staff of required jammer equipment (see Appendix G of test catalog) Contact: Øystein Karlsen (NKOM)</p>	<p>12:00-13:00 - 0.2.1 Jamming booking slot Comment: Pre-booking required. Inform staff of required jammer equipment (see Appendix G of test catalog) Contact: Jahn Erik Røhme (NPRA)</p>
13:00	<p>13:00-14:00 - 0.1.1 Grace period Comment: Lunch Contact: Christian Skjetne (NPRA)</p>	<p>13:00-14:00 - 0.1.1 Grace period Comment: Lunch @ Stave (Site 3) Contact: Christian Skjetne (NPRA)</p>	<p>13:00-14:00 - 0.1.1 Grace period Comment: Lunch @ Stave (Site 3) Contact: Christian Skjetne (NPRA)</p>

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Table 3.1: Wednesday (Continued)

Wednesday 2024-09-11	Bleik(1)	Grunnvatn(2)	Motorcade(3)
14:00	<div><div>14:00-14:15 - 2.2.3 Position jump Power: 0.316W Contact: Nicolai Gerrard (NKOM)</div><div>14:20-14:35 - 2.3.3 Small position jump Power: 0.316W Contact: Nicolai Gerrard (NKOM)</div><div>14:40-14:55 - 2.3.2 Small position jump with initial and continuous jamming Power: 0.316W Contact: Nicolai Gerrard (NKOM)</div></div>	<div><div>14:00-15:00 - 0.2.1 Jamming booking slot Comment: Pre-booking required. Inform staff of required jammer equipment (see Appendix G of test catalog) Contact: Øystein Karlsen (NKOM)</div></div>	<div><div>14:00-15:00 - 0.2.1 Jamming booking slot Comment: Pre-booking required. Inform staff of required jammer equipment (see Appendix G of test catalog) Contact: Jahn Erik Røhme (NPRA)</div></div>
15:00	<div><div>15:25-15:35 - 2.3.8 Simulated driving (route 1). Galileo only Power: 0.316W Contact: Nicolai Gerrard (NKOM)</div><div>15:40-15:50 - 2.3.5 Simulated driving (route 1). GPS only Power: 0.316W Contact: Nicolai Gerrard (NKOM)</div><div>15:55-16:05 - 2.3.9 Simulated driving (route 1). Galileo only, with initial and continuous jamming. Power: 0.316W Contact: Nicolai Gerrard (NKOM)</div></div>	<div><div>15:00-16:00 - 0.2.1 Jamming booking slot Comment: Pre-booking required. Inform staff of required jammer equipment (see Appendix G of test catalog) Contact: Øystein Karlsen (NKOM)</div></div>	<div><div>15:00-16:00 - 0.2.1 Jamming booking slot Comment: Pre-booking required. Inform staff of required jammer equipment (see Appendix G of test catalog) Contact: Jahn Erik Røhme (NPRA)</div></div>

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Table 3.1: Wednesday (Continued)

Wednesday 2024-09-11	Bleik(1)	Grunnvatn(2)	Motorcade(3)
16:00	<div>16:10-16:25 - 2.3.11 Simulated driving (route 1) with initial and continuous jamming. Power: 0.316W Contact: Nicolai Gerrard (NKOM)</div> <div>16:55-17:05 - 2.3.12 Flying (route 4) - "drone scenario" GPS L1 C/A only Power: 0.316W Contact: Nicolai Gerrard (NKOM)</div>	<div>16:00-17:00 - 0.2.1 Jamming booking slot Comment: Pre-booking required. Inform staff of required jammer equipment (see Appendix G of test catalog) Contact: Øystein Karlsen (NKOM)</div>	<div>16:00-17:00 - 0.2.1 Jamming booking slot Comment: Pre-booking required. Inform staff of required jammer equipment (see Appendix G of test catalog) Contact: Jahn Erik Røhme (NPRA)</div>
17:00	<div>17:10-17:20 - 2.3.13 Flying (route 4) - "drone scenario" Power: 0.316W Contact: Nicolai Gerrard (NKOM)</div> <div>17:30-17:40 - 2.3.15 Flying (route 2) - "helicopter scenario" Power: 0.316W Contact: Nicolai Gerrard (NKOM)</div> <div>17:45-18:00 - 2.3.15 Flying (route 2) - "helicopter scenario" Power: 0.316W Contact: Nicolai Gerrard (NKOM)</div>	<div>17:00-18:00 - 0.2.1 Jamming booking slot Comment: Pre-booking required. Inform staff of required jammer equipment (see Appendix G of test catalog) Contact: Øystein Karlsen (NKOM)</div>	
18:00	<div>18:30-19:00 - 0.0.2 Mandatory afternoon (de)briefing Comment: MANDATORY Contact: Christian Skjetne (NPRA)</div>	<div>18:30-19:00 - 0.0.2 Mandatory afternoon (de)briefing Comment: MANDATORY attendance at Bleik (Site 1) Contact: Christian Skjetne (NPRA)</div>	<div>18:30-19:00 - 0.0.2 Mandatory afternoon (de)briefing Comment: MANDATORY attendance at Bleik (Site 1) Contact: Christian Skjetne (NPRA)</div>
19:00			
20:00			
21:00			
22:00			

Thursday

Location 1 Bleik

Thursday will be used for time spoofing. During the evening there will be long time meaoning running untill 22:00.

Table 4.1: Thursday

Thursday 2024-09-12	Bleik(1)	Grunnvatn(2)	Motorcade(3)
Start time:	08:00	08:00	08:00
08:00	08:00-08:30 - 0.0.1 Mandatory morning briefing Comment: MANDATORY Contact: Christian Skjetne (NPRA)	08:00-08:30 - 0.0.1 Mandatory morning briefing Comment: MANDATORY attendance at Bleik (Site 1) Contact: Christian Skjetne (NPRA)	08:00-08:30 - 0.0.1 Mandatory morning briefing Comment: MANDATORY attendance at Bleik (Site 1) Contact: Christian Skjetne (NPRA)
09:00	09:00-09:25 - 2.4.2 Time offset 15 minutes from real time, with power ramp Power: 0.0316W Contact: Nicolai Gerrard (NKOM) <hr/> 09:40-09:55 - 2.4.3 Time offset -3 minutes from real time, with power jump Power: 0.0316W Contact: Nicolai Gerrard (NKOM)	09:00-10:00 - 1.20.10 3 jammers at 50 meters from center H1.1, H1.4 and H1.5 Power: 0.0592W Comment: Requires booking for drones Contact: Øystein Karlsen (NKOM)	
10:00	10:10-10:25 - 2.4.12 Static + Pseudorange error Power: 0.0316W Contact: Nicolai Gerrard (NKOM) <hr/> 10:40-10:55 - 2.4.13 Static + Pseudorange error, with initial and continous jamming Power: 0.001W Contact: Nicolai Gerrard (NKOM)	10:30-11:30 - 1.20.11 3 jammers at 100 meters from center H1.1, H1.4 and H1.5 Power: 0.0592W Comment: Requires booking for drones Contact: Øystein Karlsen (NKOM)	10:00-10:20 - 2.6.1 Spoofers (in vehicle with roof mounted antenna) stationary with dynamic spoofed position. Power: 0.01W Contact: Anders Rødningsby (FFI) <hr/> 10:30-10:50 - 2.6.2 Spoofers (in vehicle with roof mounted antenna) stationary and then moving with fixed spoofed position. Power: 0.01W Contact: Anders Rødningsby (FFI)

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Table 4.1: Thursday (Continued)

Thursday 2024-09-12	Bleik(1)	Grunnvatn(2)	Motorcade(3)
11:00	<div><div>11:25-11:40 - 2.5.6 Time offset 15 minutes from real time Power: 0.001W Contact: Nicolai Gerrard (NKOM)</div><div>11:55-12:10 - 2.5.3 Time offset -3 minutes from real time, with power jump Power: 0.001W Contact: Nicolai Gerrard (NKOM)</div></div>		<div><div>11:00-11:20 - 2.6.3 Spoofers (in vehicle with roof mounted antenna) moving with fixed spoofed position. Power: 0.01W Contact: Anders Rødningsby (FFI)</div><div>11:35-11:55 - 2.6.3 Spoofers (in vehicle with roof mounted antenna) moving with fixed spoofed position. Power: 0.01W Contact: Anders Rødningsby (FFI)</div></div>
12:00	<div>12:25-13:00 - 2.5.25 Static + UTC-parameter nav. data manipulation (adding leap seconds), with initial and continuous jamming Power: 0.001W Contact: Nicolai Gerrard (NKOM)</div>	<div>12:00-13:00 - 1.20.12 3 jammers at 150 meters from center H1.1, H1.4 and H1.5 Power: 0.0592W Comment: Requires booking for drones Contact: Øystein Karlsen (NKOM)</div>	<div><div>12:10-12:30 - 2.6.4 Spoofers (in vehicle with roof mounted antenna) stationary and then moving with first fixed and then dynamic spoofed position. Power: 0.01W Contact: Anders Rødningsby (FFI)</div><div>12:45-13:05 - 2.6.4 Spoofers (in vehicle with roof mounted antenna) stationary and then moving with first fixed and then dynamic spoofed position. Power: 0.01W Contact: Anders Rødningsby (FFI)</div></div>
13:00	<div>13:00-14:00 - 0.1.1 Grace period Comment: Lunch Contact: Christian Skjetne (NPRA)</div>	<div>13:00-14:00 - 0.1.1 Grace period Comment: Lunch @ Stave (Site 3) Contact: Christian Skjetne (NPRA)</div>	<div>13:05-14:00 - 0.1.1 Grace period Comment: Lunch @ Stave (Site 3) Contact: Christian Skjetne (NPRA)</div>

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Table 4.1: Thursday (Continued)

Thursday			
2024-09-12	Bleik(1)	Grunnvatn(2)	Motorcade(3)
14:00	14:00-14:15 - 2.5.5 Time offset 15 minutes from real time. Galileo E1 Power: 0.0316W Contact: Nicolai Gerrard (NKOM)	14:00-14:10 - 1.19.1 3 jammers at 50 meters from center S1.1, S1.2 and S1.3 Power: 0.171W Contact: Øystein Karlsen (NKOM)	
	14:20-14:35 - 2.5.4 Time offset 15 minutes from real time. GPS L1 C/A Power: 0.0316W Contact: Nicolai Gerrard (NKOM)	14:16-14:26 - 1.19.2 3 jammers at 100 meters from center S1.1, S1.2 and S1.3 Power: 0.171W Contact: Øystein Karlsen (NKOM)	
	14:40-14:55 - 2.5.6 Time offset 15 minutes from real time Power: 1e-05W Contact: Nicolai Gerrard (NKOM)	14:32-14:42 - 1.19.3 3 jammers at 150 meters from center S1.1, S1.2 and S1.3 Power: 0.171W Contact: Øystein Karlsen (NKOM)	
		14:48-14:58 - 1.19.4 3 jammers at 50 meters from center S2.1, S2.2 and S2.3 Power: 1.26W Contact: Øystein Karlsen (NKOM)	

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Table 4.1: Thursday (Continued)

Thursday 2024-09-12	Bleik(1)	Grunnvatn(2)	Motorcade(3)
15:00	15:25-15:40 - 2.5.13 Static + Pseudorange error. GPS L1 and Galileo E1 only Power: 0.001W Contact: Nicolai Gerrard (NKOM)	15:04-15:14 - 1.19.5 3 jammers at 100 meters from center S2.1, S2.2 and S2.3 Power: 1.26W Contact: Øystein Karlsen (NKOM)	
	15:45-16:00 - 2.5.15 Static + Pseudorange error Power: 1e-05W Contact: Nicolai Gerrard (NKOM)	15:20-15:30 - 1.19.6 3 jammers at 150 meters from center S2.1, S2.2 and S2.3 Power: 1.26W Contact: Øystein Karlsen (NKOM)	
		15:36-15:46 - 1.19.7 3 jammers at 50 meters from center U1.1, U1.2 and U1.3 Contact: Øystein Karlsen (NKOM)	
		15:52-16:02 - 1.19.8 3 jammers at 100 meters from center U1.1, U1.2 and U1.3 Contact: Øystein Karlsen (NKOM)	

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Table 4.1: Thursday (Continued)

Thursday 2024-09-12	Bleik(1)	Grunnvatn(2)	Motorcade(3)
16:00	16:15-16:40 - 2.5.16 Static + Pseudorange error, with initial and continuous jamming Power: 1e-05W Contact: Nicolai Gerrard (NKOM)	16:08-16:18 - 1.19.9 3 jammers at 150 meters from center U1.1, U1.2 and U1.3 Contact: Øystein Karlsen (NKOM)	
	16:55-17:20 - 2.5.26 Static + UTC-parameter nav. data manipulation (removing leap seconds). GPS L1 C/A Power: 1e-05W Contact: Nicolai Gerrard (NKOM)	16:24-16:34 - 1.19.10 3 jammers at 50 meters from center H6.4, H6.5 and H6.6 Power: 1.58W Contact: Øystein Karlsen (NKOM)	
		16:40-16:50 - 1.19.11 3 jammers at 100 meters from center H6.4, H6.5 and H6.6 Power: 1.58W Contact: Øystein Karlsen (NKOM)	
		16:56-17:06 - 1.19.12 3 jammers at 150 meters from center H6.4, H6.5 and H6.6 Power: 1.58W Contact: Øystein Karlsen (NKOM)	
17:00	17:30-18:00 - 2.5.27 Static + UTC-parameter nav. data manipulation (removing leap seconds) Power: 1e-05W Contact: Nicolai Gerrard (NKOM)	17:12-17:22 - 1.19.13 3 jammers, H1.1, H1.4 and H1.5 LOW PWR, L1 sweep, L2 L1 sweep Power: 0.1W Contact: Øystein Karlsen (NKOM)	
		17:28-17:38 - 1.19.14 3 jammers at 100 meters from center H1.1, H1.4 and H1.5 Power: 0.1W Contact: Øystein Karlsen (NKOM)	
		17:44-17:54 - 1.19.15 3 jammers at 150 meters from center H1.1, H1.4 and H1.5 Power: 0.1W Contact: Øystein Karlsen (NKOM)	

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Table 4.1: Thursday (Continued)

Thursday 2024-09-12	Bleik(1)	Grunnvatn(2)	Motorcade(3)
18:00	18:30-19:00 - 0.0.2 Mandatory afternoon (de)briefing Comment: MANDATORY Contact: Christian Skjetne (NPRA)	18:30-19:00 - 0.0.2 Mandatory afternoon (de)briefing Comment: MANDATORY attendance at Bleik (Site 1) Contact: Christian Skjetne (NPRA)	18:30-19:00 - 0.0.2 Mandatory afternoon (de)briefing Comment: MANDATORY attendance at Bleik (Site 1) Contact: Christian Skjetne (NPRA)
19:00	19:00-22:00 - 3.1.3 RX1 at 10 W Power: 10W Contact: Nicolai Gerrard (NKOM)		
20:00			
21:00			
22:00			

Friday

Location 1 Bleik

Friday will be used for time spoofing and testing with invalid ephemerides. Time after lunch will be used for tearing down and packing up equipment.

Table 5.1: Friday

Friday 2024-09-13	Bleik(1)	Grunnvatn(2)	Motorcade(3)
Start time:	08:00	08:00	08:00
08:00	08:00-08:30 - 0.0.1 Mandatory morning briefing Comment: MANDATORY Contact: Christian Skjetne (NPRA)	08:00-08:30 - 0.0.1 Mandatory morning briefing Comment: MANDATORY attendance at Bleik (Site 1) Contact: Christian Skjetne (NPRA)	08:00-08:30 - 0.0.1 Mandatory morning briefing Comment: MANDATORY attendance at Bleik (Site 1) Contact: Christian Skjetne (NPRA)
09:00	09:00-09:25 - 2.7.12 Static + Time manipulation (2 years forwards), with power ramp Power: 0.0316W Contact: Nicolai Gerrard (NKOM) <hr/> 09:55-10:25 - 2.7.16 Static + Time manipulation (April 2019), with initial and continuous jamming Power: 0.0316W Contact: Nicolai Gerrard (NKOM)	09:00-09:12 - 1.1.1 Jammer S1.1 Power: 0.0316W Contact: Øystein Karlsen (NKOM) <hr/> 09:16-09:28 - 1.1.4 Jammer S2.1 Power: 0.1W Contact: Øystein Karlsen (NKOM) <hr/> 09:32-09:44 - 1.1.8 Jammer U1.1 Contact: Øystein Karlsen (NKOM) <hr/> 09:48-10:00 - 1.1.12 Jammer H1.1 Power: 0.1W Contact: Øystein Karlsen (NKOM)	

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Table 5.1: Friday (Continued)

Friday 2024-09-13	Bleik(1)	Grunnvatn(2)	Motorcade(3)
10:00	10:30-13:00 - 0.1.1 Grace period Comment: Adhoc tests and repeat of previous tests Contact: Nicolai Gerrard (NKOM)	10:04-10:16 - 1.1.13 Jammer H1.2 Power: 0.0631W Contact: Øystein Karlsen (NKOM) <hr/> 10:20-10:32 - 1.1.16 Jammer H3.1 Power: 0.1W Contact: Øystein Karlsen (NKOM) <hr/> 10:36-10:48 - 1.1.18 Jammer H3.3 Power: 1W Contact: Øystein Karlsen (NKOM) <hr/> 10:52-11:04 - 1.1.19 Jammer H4.1 Power: 0.631W Contact: Øystein Karlsen (NKOM)	10:00-11:00 - 0.2.1 Jamming booking slot Comment: Pre-booking required. Inform staff of required jammer equipment (see Appendix G of test catalog) Contact: Jahn Erik Røhme (NPRA)
11:00		11:08-11:20 - 1.1.20 Jammer H6.1 Power: 0.631W Contact: Øystein Karlsen (NKOM) <hr/> 11:24-11:36 - 1.1.21 Jammer H6.2 Power: 1W Contact: Øystein Karlsen (NKOM) <hr/> 11:40-11:52 - 1.1.22 Jammer H6.3 Power: 1W Contact: Øystein Karlsen (NKOM) <hr/> 11:56-12:08 - 1.1.23 Jammer H6.4 Power: 1W Contact: Øystein Karlsen (NKOM)	11:00-12:00 - 0.2.1 Jamming booking slot Comment: Pre-booking required. Inform staff of required jammer equipment (see Appendix G of test catalog) Contact: Jahn Erik Røhme (NPRA)

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Table 5.1: Friday (Continued)

Friday 2024-09-13	Bleik(1)	Grunnvatn(2)	Motorcade(3)
12:00		<div>12:12-12:24 - 1.1.26 Jammer H8.1 Power: 0.631W Contact: Øystein Karlsen (NKOM)</div> <div>12:28-12:40 - 1.1.27 Jammer F6.1 Power: 6.31W Contact: Øystein Karlsen (NKOM)</div> <div>12:44-12:56 - 1.1.29 Jammer H2.1 Contact: Øystein Karlsen (NKOM)</div>	<div>12:00-13:00 - 0.2.1 Jamming booking slot Comment: Pre-booking required. Inform staff of required jammer equipment (see Appendix G of test catalog) Contact: Jahn Erik Røhme (NPRA)</div>
13:00	<div>13:00-14:00 - 0.1.1 Grace period Comment: Lunch Contact: Christian Skjetne (NPRA)</div>	<div>13:00-14:00 - 0.1.1 Grace period Comment: Lunch @ Bleik (Site1) Contact: Christian Skjetne (NPRA)</div>	<div>13:00-14:00 - 0.1.1 Grace period Comment: Lunch @ Bleik (Site1) Contact: Christian Skjetne (NPRA)</div>
14:00	<div>14:00-14:30 - 0.0.2 Mandatory afternoon (de)briefing Comment: Summary briefing and closing of event Contact: Christian Skjetne (NPRA)</div>	<div>14:00-14:30 - 0.0.2 Mandatory afternoon (de)briefing Comment: Summary briefing and closing of event @ Bleik (Site1) Contact: Christian Skjetne (NPRA)</div>	
15:00			
16:00			
17:00			
18:00			
19:00			
20:00			
21:00			
22:00			