The Royal Institute of Navigation

PNT RESILIENCE CHECKLIST

Loss of PNT Services is a National Critical Risk

Positioning, Navigation and Timing (PNT) services are a vital component of the UK's Critical National Infrastructure (CNI), facilitating a diverse range of essential safety, security, and economic functions across an increasingly interconnected society. PNT services are essential for telecommunications, transport, emergency services, energy, water and many other services. A loss of PNT due to technological failures, naturally occurring events, or malicious activity would have catastrophic and cascading effects across the UK, and the globe.

10 Questions to Gauge Your Organisation's Preparedness

All CNI organisations should assess their preparedness for PNT disruptions. The checklist below will help you to gauge your level of resilience and start to identify gaps to address:

1	Does your organisation maintain a list of all systems (including suppliers) that are connected to, or rely upon, PNT information?	Yes / No
2	Does your organisation maintain a record of why each connected/reliant system needs a source of PNT and what effect the degradation or loss of PNT would have on it?	Yes / No
3	Is the degradation or loss of PNT services (e.g. GNSS) captured on your risk register?	Yes / No
4	Is there a designated person or team within your organisation who is responsible for ensuring the availability and quality of PNT information to all of the systems that require it?	Yes / No
5	Do your critical systems all use multiple independent sources of PNT to remove the risks of single points of failure?	Yes / No
6	Do you have a detailed and documented understanding of how your systems respond to the degradation or loss of PNT information for extended periods of time? *e.g. for 1 minute, 1 hour, 1 day, 1 week, 1 month*	Yes / No
7	Do you have mitigation plans in place for what to do if these systems lose access to PNT for extended periods of time? *e.g. for 1 minute, 1 hour, 1 day, 1 week, 1 month*	Yes / No
8	Do you conduct regular testing on your systems to validate the PNT risks that you have identified and assess the effectiveness of the mitigations you have put in place?	Yes / No
9	Do you have internal roadmaps in place that address improving your resilience to PNT outages as new threats evolve?	Yes / No
10	Does your organisation monitor PNT technology trends and assess when to upgrade its systems as more resilient technologies become available?	Yes / No

More information: www.rin.org.uk/resilient_pnt

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