NEW ZEALAND SPACE AGENCY

Orbital Debris Mitigation Plan Checklist

Before submitting an application, please ensure your application and orbital debris mitigation plan (ODMP) address the following. Refer to the operational policy for detailed guidelines on preparing an ODMP (Orbital Debris Mitigation - Operational Policy)

☐ **Applicable standards and tools**

Specify any standards and/or guidelines selected and the tools used for verification, including their version.

☐ **System and mission description**

Provide drawings and overall dimensions of the spacecraft in each configuration (e.g. stowed, deployed).
Include the estimate of the area-to-mass ratio and explain how it is calculated.
Provide a high-level mass budget breakdown of the main components (e.g. structure, solar panels, propulsion, batteries, and sensors).
Describe the mission profile, including the operational orbit(s) and expected mission duration.
If the system is maneuverable, specify the orbit control strategy (e.g. station-keeping).

☐ **Assessment of debris release during normal operations**

Identify any deployment mechanisms or movable parts and briefly describe their function and potential debris generation.
Also include details on sensor covers, protective caps, or other components that might separate in orbit.

☐ **Assessment of risk of breakup in orbit**

List all sources of stored energy (e.g. pressurized tanks, batteries, reaction wheels).
Describe management measures to avoid breakup during the operational lifetime (e.g. failure mode and effect analysis, health monitoring, and contingency plans) and after end-of-life (e.g. passivation procedures).

☐ **Assessment of risk of collision**

Provide an assessment of collision risk in orbit and describe any mitigation measures implemented (e.g. collision avoidance, tracking aids). State any key assumptions used in the assessment.

☐ **Assessment of disposal**

Describe the planned disposal strategy and assess the orbital lifetime. If applicable, include the probability of successful disposal. State any key assumptions used in the assessment.

☐ **Assessment of re-entry risk**

Provide an analysis of re-entry risk, detailing the modelling approach and choices. Include any approximations or simplifications and justify their use.