

4.3 How Carried out Testing Compares with Target Levels Identified

Functional Requirements Coverage:

Each functional requirement was covered at least once, with each movement requirement being validated in its respective unit test and then again during the 2D path integration test. This integration test also tests validity 2D paths, covering that requirement. The JSON requirement was covered in its respective system level test.

Measurable Requirement (Performance) Target:

The performance target was met, with each task tested running within the 30-second time frame. The task tested was the calcDeliveryPath endpoint, which combined all movement and path generation units. This passed for all points given, ensuring all individual units also ran in under 30 seconds.

Path Validation Coverage:

Each path generated matched all movement requirements. This was tested in an integration test, where a full path was generated and tested for move size, angle and no-fly zone avoidance. This ensure each path generated was valid

Integration reliability:

Data retrieved from the ILP REST service was tested to be valid in its respective integration test. Each time the test was run the data was complete and consistent, ensuring reliability of integration with external services.