AtoN Maintenance Lantern and Lamp Components and what to check?

- Ensure solar modules are not covered and are in clear view of the sun with no shadows
- Visually inspect lantern lens and base for cracks, grazing, holes
- Inspect bird deterrent spike
- Battery check- inspection performed routinely to ensure the charger, battery and ancillary electronics are functioning correctly
- Use voltage meter to check the battery voltage in both on-load and off-load conditions and ensure all terminals are clear of foreign matter
- Inspect battery boxes for damaged flanges, covers, gaskets, vent valves, and securing hardware
- Check for degradation of sector colours, and replace or adjust to the correct charted position if necessary
- Solar panels – tilt angle, framework and mounting hardware, corrosion and tension, broken glass, water intrusion around the edges. Inspect wiring for cuts, abrasion and UV degradation. Where plugs and sockets are used, check for water ingress of corrosion. Test power output including the solar regulator.
- A review of spares holding

Lanterns and Lamps checklist

- Light intensity, range
- Battery voltage, resistance, current and electrolyte levels
- Cracks or signs of water ingress
- Earthing and power output
- Colour degradation
- Sun switch glazing and lantern glazing
- Bird spikes, Guano and dirt
- Obstruction around lights, solar modules etc
- Level and focus
- Flash character
- Signal output
- Solar Panels

Performance measurement by CA or AtoN managers for Availability, Reliability, Continuity, Redundancy and Integrity