# Street lighting SOPs — South Asia

Standard operating procedures from OpenSLMS Learn, with references for this region. Use them as templates. Add your company rules and the maker's instructions.

## SOP: Safe isolation before electrical work

Make it dead, keep it dead, prove it dead.

Who: qualified electrician Rules: CEA (Measures relating to Safety and Electric Supply) Regulations

| | | |
|---|---|---|
| 1 | Disconnect completely. Open the switch or remove the fuse for the circuit. | [ ] |
| 2 | Secure against reconnection. Lock off the device. Attach a tag with your name and the date. | [ ] |
| 3 | Verify that the installation is dead. Prove your tester on a known live source, test all conductors, then prove the tester again. | [ ] |
| 4 | Earth and short-circuit where your rules require it. | [ ] |
| 5 | Cover or barrier nearby live parts. | [ ] |

A circuit can have more than one supply, and a controller can switch it on remotely. Isolate at the source, not at the contactor. Set the circuit to maintenance mode in the platform.

## SOP: Traffic management at a work site

Protect the crew and the public.

Rules: IRC:SP:55 guidelines for traffic management in work zones, and local permission

| | | |
|---|---|---|
| 1 | Get the road permit or approval before the work. | [ ] |
| 2 | Choose the layout for the road speed and type from your rules. | [ ] |
| 3 | Place signs and cones in the direction of traffic, starting with the advance warning. | [ ] |
| 4 | Park the vehicle to protect the work area, with beacons on. | [ ] |
| 5 | Wear high-visibility clothing. | [ ] |
| 6 | Remove signs in the reverse order when the work is done. | [ ] |

## SOP: Work at height from a MEWP

Bucket truck work at the top of a pole.

Who: trained operator and a ground person Rules: project HSE plan, maker's instructions

| | | |
|---|---|---|
| 1 | Check the location for overhead lines, trees, and traffic. | [ ] |
| 2 | Set up traffic management. Mark an exclusion zone under the platform. | [ ] |
| 3 | Do the daily machine check. Make sure the periodic inspection is in date. | [ ] |
| 4 | Set up on firm, level ground with outriggers on pads. | [ ] |
| 5 | Check the wind speed. Stop above the maker's limit. | [ ] |
| 6 | Clip the harness lanyard to the basket anchor point before you lift. | [ ] |
| 7 | Secure tools and parts in the basket. | [ ] |
| 8 | The ground person stays at the ground controls. | [ ] |

Do not work at height in rain, lightning, or strong monsoon winds. Plan for heat stress in summer.

## SOP: Replace a luminaire, driver, or node

The most common corrective job.

Who: lamp crew Before: safe isolation, traffic management, and work at height SOPs

| | | |
|---|---|---|
| 1 | Open the work order. Check the asset, model, and history. | [ ] |
| 2 | Take the correct spare from the store and issue it to the job. | [ ] |
| 3 | Isolate the pole at the pole fuse or circuit. | [ ] |
| 4 | Photograph the luminaire label before you remove anything. | [ ] |
| 5 | Replace the part. For a driver, use the same programme. For a node, record the new serial number. | [ ] |
| 6 | Check the gasket and cable gland. Close the luminaire. | [ ] |
| 7 | Restore power. Check the light, and that the node reports. | [ ] |
| 8 | Label the failed part with asset and job numbers for warranty. | [ ] |
| 9 | Resolve the job: cause, part used, and a photo. | [ ] |

Dispose of failed electronics as e-waste (E-Waste Management Rules in India). Old discharge lamps contain mercury: treat them as hazardous waste.

## SOP: Night patrol

Find dark lights before residents do.

Who: driver and observer, or one person on foot When: fixed cycle, for example every 2 weeks

| | | |
|---|---|---|
| 1 | Start at least 30 minutes after switch-on. | [ ] |
| 2 | Open the patrol in the app. Follow one circuit at a time. | [ ] |
| 3 | Mark each light: working, not working, or damaged. | [ ] |
| 4 | Also look for cycling lights, damaged poles, and open doors. | [ ] |
| 5 | For damage that is a danger, follow the damaged pole SOP. | [ ] |
| 6 | Close the patrol. Jobs are raised for each light not working or damaged. | [ ] |

The driver must not mark lights while driving. Use an observer, or stop safely. A printable patrol sheet is available as a backup.

## SOP: Cabinet inspection

The preventive visit to a cabinet or feeder pillar.

Who: electrician When: by the preventive plan

| | | |
|---|---|---|
| 1 | Check the outside: door, lock, base, damage, labels, and access. | [ ] |
| 2 | Check inside for water, insects, heat damage, and missing covers. | [ ] |
| 3 | Read the meter and controller display. Compare with the platform. | [ ] |
| 4 | Test each earth leakage device with its test button. Record the result. | [ ] |
| 5 | Check the SPD status windows. | [ ] |
| 6 | With covers in place, take a thermal image of terminals and contactors. | [ ] |
| 7 | Isolate. Tighten terminals to the maker's torque. Clean the photocell. | [ ] |
| 8 | Restore. Switch each circuit on and off from the platform. | [ ] |
| 9 | Complete the checklist and photos in the job. | [ ] |

## SOP: Make a damaged pole safe

After a vehicle hit, a fall, or a report of a shock.

Priority: Critical Who: emergency crew with an electrician

| | | |
|---|---|---|
| 1 | Keep people away. Do not touch the pole, door, or cables. | [ ] |
| 2 | Set up traffic management and a barrier. | [ ] |
| 3 | Isolate the circuit at the source. Follow the safe isolation SOP. | [ ] |
| 4 | Test the pole and the area for voltage. | [ ] |
| 5 | Make cable ends safe and insulated. | [ ] |
| 6 | Remove or secure the pole and luminaire. | [ ] |
| 7 | Restore other poles if you can isolate the damaged section. | [ ] |
| 8 | Photograph the scene. Record vehicle details or a police reference for cost recovery. | [ ] |
| 9 | Raise a follow-up job for the new pole and foundation. | [ ] |

## SOP: Mass outage after a storm

Restore in the right order.

| | | |
|---|---|---|
| 1 | Wait until the storm passes and it is safe to go out. | [ ] |
| 2 | Collect reports and controller alarms. Group them by area and circuit. | [ ] |
| 3 | Send make-safe crews to fallen poles and exposed cables first. | [ ] |
| 4 | Patrol priority routes: hospitals, emergency services, main roads. | [ ] |
| 5 | Restore circuits at cabinets before single lights. | [ ] |
| 6 | Raise one job for each asset that needs repair. Link them to the storm event. | [ ] |
| 7 | Photograph all damage for insurance and cost claims. | [ ] |
| 8 | Report progress to the city or road owner each day. | [ ] |

## SOP: Clean and check a solar street light

The routine visit that keeps solar lights working.

| | | |
|---|---|---|
| 1 | Read battery state and charge history from the platform before the visit. | [ ] |
| 2 | Check for shade from new trees or buildings. | [ ] |
| 3 | Clean the panel with clean water and a soft brush. Do not use high pressure or detergents unless the maker permits. | [ ] |
| 4 | Check the panel bracket, bolts, and angle. | [ ] |
| 5 | Check cables and connectors for damage and water. | [ ] |
| 6 | Check the battery box for heat damage, swelling, or water. | [ ] |
| 7 | Test the light with the controller's test mode. | [ ] |
| 8 | Record the result and photos in the job. | [ ] |

## SOP: Commission a controller or node

Checks to do before you trust the data.

| | | |
|---|---|---|
| 1 | Map it to the correct asset in the register. | [ ] |
| 2 | Set location and clock: latitude, longitude, time zone. | [ ] |
| 3 | Check readings against a clamp meter. Check each phase is on the correct input. | [ ] |
| 4 | Test switching and dimming from the platform. Confirm on site. | [ ] |
| 5 | Test one alarm, for example open a breaker. | [ ] |
| 6 | Record it: date, person, results. | [ ] |

A reversed current transformer gives negative power or a wrong power factor. It is the most common error after installation.

## SOP: Resolve and close a work order

The record that makes every report useful.

| | | |
|---|---|---|
| 1 | Select the cause from the list. Use "other" only if no cause fits. | [ ] |
| 2 | Record each part used. | [ ] |
| 3 | Add a photo of the finished work. | [ ] |
| 4 | Raise a new job for any follow-up work. | [ ] |
| 5 | Resolve the job. | [ ] |
| 6 | The supervisor checks the record and photo, then closes it or returns it. | [ ] |

A job without a cause is a lost lesson. Repeat-failure and warranty reports depend on this step.