

Clarifications Note 1 – ITB GP 600409

Q 1. According to 3.b.2.3 Technical requirements – Lot 3:

The ESS in Lot 3 should ensure the lifetime energy throughput of: 10,000 cycles in 10 years with the following conditions: Temperature 25°C, 3 daily cycles at 90% DoD in 4 hours). This condition is too tough to guarantee ESS lifetime, especially under 0.5~2C discharging operation. Is it possible to submit deviation of lifetime for Lot 3 or not?

Answer:

No deviation of lifetime is acceptable for any lot.

However, please refer to section 3.b.2.3 Technical requirements – Lot 3 of the amended ToR (See Addendum 2 for amended ToRs where changes to no of cycles have been made):

For this ITB, the applications for Lot 3 considered are ESS that will cover the loads during long periods of blackouts or when the gensets are turned off (at night). Therefore, the ESS in Lot 3 should ensure the lifetime energy throughput of: 3,000 full cycles in 10 years with the following conditions: Temperature 25°C, 1 daily cycle at 80% DoD in 12 hours:

In brief:

- ENERGY THROUGHPUT (ETP) (in kWh): Energy through put during life ownership, equivalent to the practical capacity x usable cycles in 10 years:
 - o Lot 2: Practical capacity x 1,500 cycles
 - o **Lot 3: Practical capacity x 3,000 cycles**

In the case when more cyclability or higher requirements are identified for any particular site, these will be indicated in the secondary bidding process for the specific project.

Q 2. LOT 1 (Solar Kits)

a. Does the kit needs to be delivered in a special box/package: if yes, preference for material of the box?

Answer: Referring to packaging of all components (for shipment), we would suggest using any material which will ensure easy & safe transportation.

b. The PV generator is crystalline silicon: any preference for mono or poly?

Answer: Crystalline silicon PV modules are required. Thus, both mono or poly are acceptable if they fulfill the output requirements.

c. As for batteries, would UNDP consider gel batteries instead of Li-Ion (cheaper, eco-friendlier, safer, very suitable for deep charge, low discharge losses).

Answer: No, only Li-Ion technology for the batteries is accepted.

Q 3. LOTS 2 and 3:

The PV generator (power plant) is not included here. Will there be separate rounds for LTA's for the actual PV and/or Hybrid plants in the nearby future (when) or have LTA's for these plants already be signed and if yes for what period?

Answer: LTAs are already in place for Solar PV plants, expected duration is currently until April 2018. Further LTAs may be created for similar systems.

Q 4. Forecasted Volume:

Many potential bidders have requested information on forecasted volume, the site locations/details of actual requests, as well as the duration of the Long Term Agreements.

This serves as a *general answer to these (and related) questions:*

UNDP plans to develop multiple Long Term Agreements (estimated 2-5 LTAs) for an expected duration of 3 years (subject to performance).

Volume is not yet known since the procurement process is not based on an actual field or project request, but instead on forecasted needs of our programs and offices during the upcoming 2 to 3 years, and beyond.

It should be noted that UNDP serves the procurement needs of over 170 Country Offices, numerous Programs and Third Party entities, such as Governments and other UN and non-UN Organizations. We have seen a major increase in procurement volume within the sector of Renewable Energy within the recent 2 to 3 years. Current forecasting is based on a significant increase in requests for Energy Storage Solution *alternatives* to, for example, the more traditional Lead Acid based battery systems.