



Standard Operating Procedure

Development of Energy Infrastructure Management Plans for UN Field Missions

Approved by: USG DOS
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**STANDARD OPERATING PROCEDURE FOR
DEVELOPMENT OF ENERGY INFRASTRUCTURE MANAGEMENT PLANS FOR UN FIELD MISSIONS**

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A. PURPOSE

1. This document sets out the global standard operating procedures for mission level infrastructure energy management, which is a requirement of the DPKO/DFS Environmental Policy for UN Field Missions (2009.6). It sets out the required process for developing a mission energy profile and energy management plan and implementation of the plan via a series of activities and projects. Annexed templates are offered as practical tools and may be adjusted to meet the specific needs of different contexts. The development and implementation of those documents should help missions achieve the objectives of the United Nations Secretariat Climate Action Plan (UNSCAP) and the Environment Strategy for Peace Operations.
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B. SCOPE

2. This SOP applies to all UN ongoing and planned peace operations and special political missions that manage their facilities and infrastructure, and carries an expectation of compliance. The technical scope of infrastructure energy covers all equipment (UN Owned and Contingent Owned) and process for the generation, storage, distribution, optimization and efficient use of energy and hot water. Productive use includes lighting, cooling, space and water heating, office and workshop electrical and IT equipment, water supply and wastewater treatment. It should be noted this SOP does not cover ground transportation or aviation topics.

3. All central support staff and mission staff involved in infrastructure energy planning, installation and operation must be aware of this SOP.
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C. RATIONALE

4. The cost of provision of electricity to peacekeeping facilities in the field is estimated to be between 2 - 3% of whole of mission costs based on assessments of energy capital and operating budgets and practices in missions.
 5. Practical examples from mission projects, applied research by the UN and industry experience, all indicate that annual cost savings of up to 50% of this figure may be achievable through the right investments in equipment and processes. These financial benefits will be accompanied by a range of non-financial but important co-benefits including reduced local air pollution from diesel generators, reduced greenhouse gas emissions, reduced risk of ground pollution from fuel spillage, and increased mission autonomy and security due to a reduced reliance on fuel supply convoys which are targets of asymmetric attacks.
 6. Each mission has a unique geographic, social and political setting. Nonetheless, the technology and processes used in modern energy infrastructure management are relatively universal. The economic models behind rational energy infrastructure investment are also relatively universal. There are major benefits to be realized through standardization and securing economies of scale across all missions, and proposed mission investments need to be technically and financially comparable.
 7. Given the above, this SOP establishes a relatively standard and cost-effective process for developing and implementing mission level energy infrastructure management and project plans, which will inform the Mission-wide Environmental Action Plan (MEAP) that generates the DFS Environmental Management Scorecard to be reported in the mission's performance report on the Results-Based Budget (RBB).
 8. The Mission energy infrastructure management documents may also act as key review and reference documents for any environmental or energy audits that may be conducted over the lifecycle of the Mission, including the annual audits by the Board of Auditors (BoA) and the periodic audits by the Office of Internal Oversight Services (OIOS).
 9. In September 2019, the United Nations Secretariat Climate Action Plan (UNSCAP) was promulgated setting out eight targets, including the following:
 - Carbon emissions: Absolute and per capita reductions of 25% by 2025 and 45% by 2030.
 - Electricity consumption: Per capita reductions of 20% by 2025 and 35% by 2030.
 - Renewable energy: 40% by 2025 and 80% by 2030 of consumed electricity.In developing their Energy Infrastructure Management Plan, each mission shall clearly identify its contribution to the UNSCAP targets as a result of the planned activities and present the required timeframe for implementation. Details are expected for Track 1 and 2 separately, wherever possible.
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D. PROCEDURES

9. **The energy infrastructure management planning process for existing missions** is based on a standard set of processes and associated key documents. The key documents, for which templates are provided in annexes, are:
 - Energy Management Plans
 - Energy Project Plans

10. **Energy Infrastructure Management Plans (EIMPs)** are working documents designed to coordinate and progress medium- to long-term programmes to upgrade the energy performance of missions and indicate the mission contribution to the targets of the United Nations Secretariat Climate Action Plan (UNSCAP). They shall also inform the development of Memoranda of Understanding and Statement of Unit Requirements with Troop Contributing Countries in relation to power generation capacities. EIMPs shall be reviewed for relevance and updated as necessary on an annual basis.
11. **Energy Project Plans (EPPs)** translate the EIMPs into practical projects. They start in outline form to support the annual budgeting process and are then expanded upon confirmation of funding. The level of required detail in the plans is linked to the scale and complexity of the projects and a three-level classification as below can support the planning process:
 - Activity – plans need only to refer to standard documentation
 - Small project – plans require more details but can make use of reference business cases
 - Large project – requires bespoke detailed plans and specific business cases
12. The scale of effort to be invested in energy management planning and the associated key documents will vary according to the size of the mission.
 - **Existing missions with more** than 500 personnel shall undertake a comprehensive energy profile development and planning process and generate a full-scale Energy Infrastructure Management Plan (EIMP) and linked projects.
 - **Existing missions** with less than 500 personnel shall undertake a limited scope planning process and generate an abridged Energy Infrastructure Management Plan (EIMP) and linked projects.

All missions shall develop their plans using the templates provided in the Annexes to this SOP.

13. **Energy management planning for existing missions**

The energy management planning process for existing missions has a standardized structure and logical sequence, resulting in the sequential development of the following mission and project level working documents:

- Energy Infrastructure Management Plan, containing the following:
 - Energy profile
 - Strategy including energy projects and activity list
- Multiple outline project plans
- Annual budget submissions
- Funded project plans

Activities should also include awareness campaigns, provision of training and other supporting actions for behavioral change.

14. **Energy management planning for new missions**

New missions, of all sizes, that manage their facilities and infrastructure, shall undertake a rapid and strategic level planning process to develop an initial energy strategy, plan and linked projects to support mobilization. All such planning needs to be integrated into the procedures set out in the Mission Start up Field Guide v 2010.1 and aligned with any other relevant start-up guidelines.

The initial energy strategy, plan and linked projects shall be documented in rapid mission planning notes which are developed in the absence of a detailed baseline assessment. These planning notes usually have a lifespan of about two years and shall be superseded by a full Energy Management Plan as soon as possible. Planning teams in HQ and personnel in new missions can use the template provided in Annex A as guidance for developing the planning notes, with the exception that the section on the

mission's energy profile can be replaced by a forecast for the new mission's energy demand, production and costs.

The planning process aims to provide timely and reliable provision of energy solutions to support mission mobilization while integrating cost-efficient and sustainable solutions for the mission's operational phase. Key activities should also include awareness campaigns, provision of training and other supporting actions for behavioral change.

E. ROLES AND RESPONSIBILITIES

15. For existing missions:

15.1 **The C/DMS** shall ensure awareness of and compliance with the SOP. He/she shall ensure that sufficient in-house or externally contracted human resources are in place to meet the requirements of the SOP, including the delegation of the energy management planning process to the Chief Engineer, and regularly chair progress meetings on the mission's EIMP, while participating in major energy investment decisions.

15.2 **The Chief Engineer** shall oversee the development and implementation of the Energy Infrastructure Management Plan (EIMP) and Energy Project Plans (EPP) as per this SOP. He/she shall designate and supervise the energy task team, assign a task team leader and support the DMS/CMS in decision-making on major investments. He/she shall ensure that the EIMP and EPPs inform the development and/or amendment of Memoranda of Understanding and Statement of Unit Requirements with Troop Contributing Countries as relevant. He/she shall also ensure integration of energy performance data and actions into the Mission Environmental Action Plan (MEAP) which is updated every six months.

15.3 **The Energy task team leader** shall manage the EIMP process in detail, report progress and issues to the Chief Engineer on a regular basis, and request adequate resource allocation, including expertise and staff time, for project development and management. He/she shall coordinate the energy task team in the development of energy project concept notes for approval and, if approved for funding by Member States, the development of detailed Energy Project Plans for implementation.

16. **For new missions in the start-up phase**, the planning teams in HQ and personnel in new missions shall develop, refine and implement the initial energy strategy, plan and linked projects to support mobilization. They shall also ensure these are integrated into the overall mission start-up plan and any other relevant procedures set out in the Mission Start up Field Guide v 2010. The C/DMS shall oversee the implementation of the strategy, plan and projects and he/she shall periodically convene an oversight meeting with the Chief Engineer and other relevant personnel.

17. Technical assistance for this process may be provided by GSC/ETSU and/or REACT as required, including technical guidance documents. This technical assistance may be particularly needed during the first development phase of the Energy Management Plan and associated Energy Project Plans given the broad span of required skills in both engineering and project management.

F. TERMS AND ABBREVIATIONS

18. For the purposes of this SOP, the following terms and abbreviations shall apply:

Abbreviations:

CMS: Chief of Mission Support
CE: Mission Chief Engineer
DMS: Director of Mission Support
DPO: Department of Peace Operations
DOS: Department of Operational Support
ESP: Mission Infrastructure Energy Strategy Paper
EIMP: Mission Infrastructure Energy Management Plan
EPP: Mission Infrastructure Energy Project Plan
GSC: Global Service Centre
ETSU: Environmental Technical Support Unit
HQ: Headquarters
LD: Logistics Division
MEAP: Mission-wide Environmental Action Plan
RBB: Results-Based Budget
SOP: Standard Operating Procedure

G. REFERENCES

19. Normative or superior references

- a) DPKO/DFS Environmental Policy for UN Field Missions (2009.6)
- b) DPKO/DFS Governance of Major Construction projects in Field Missions (2014.7)
- c) Draft DPKO/DFS Environmental Guidelines DFS Mission Start-up Field Guide 2010.1

20. Related guidance

- a) DFS Environment Strategy, January 2017 to June 2023
 - b) Enterprise Risk Management and Internal Control Methodology, November, 2016
 - c) DFS Standard Costs and Ratios Manual v2019
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H. MONITORING AND COMPLIANCE

21. This SOP will be monitored for compliance and implementation, at least annually, by the relevant Director/Chief, Mission Support
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I. CONTACT

22. The Director, GSC is the primary contact for this SOP.
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J. HISTORY

23. This is the second version of this SOP.
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APPROVAL SIGNATURE:

A handwritten signature in black ink, appearing to be "L. ...", written over a horizontal line.

DATE OF APPROVAL:

4/31/2020

Annex A Template Energy Infrastructure Management Plan

Annex B Template Energy Infrastructure Project Plan