



Final Report

(July 2021 – February 2023)



Donor	The Netherlands
Reference	Arrangement between the Ministry of Defence of the Netherlands and United Nations Development Programme (UNDP)
Location	Hawija District, Ninewa Governorate
Budget	US\$1,757,546.19
Project Dates	15 July 2021 – 28 February 2023

Introduction

This final report provides an overview of activities generously funded by the Government of the Netherlands under the Arrangement signed on 15 July 2021. The United Nations Development Programme (UNDP) implemented these activities through the Funding Facility for Stabilization (FFS). The following sections detail achievements, challenges and lessons learned as well as provide a financial summary.

The funding of US\$ 1,757,546.19 received under the Arrangement contributed to support re-establishing of economic activities in the Hawija Industrial Area. They are integral interventions that create an enabling environment for greater returns by providing a much-needed source of local employment. To date since inception, the project has contributed to the return of i) approximately 137,000 (98 per cent) of Internally Displaced Persons (IDPs) to their areas of origin in Hawija, and ii) 72,000 IDPs to the surrounding villages by the end of 28 February.¹

The report includes a progress update on the activities undertaken during the reporting period (15 July 2021 to 28 February 2023) and a financial overview.

Programme Context

The reporting period coincided with the **coronavirus disease (COVID-19) global pandemic**, resulting in a series of unprecedented measures taken by national and local authorities to prevent its spread in Iraq. Even though cases had reached record levels in late July and early August of 2021, infection rates continued to decline until the end of September 2021. While UNDP field operations fully resumed, the speed of implementation continued to be affected by preventive measures and persisting logistical bottlenecks until December 2021. While these impacts of the coronavirus disease (**COVID-19**) are gradually diffusing across the globe, long-term public health and socio-economic challenges continued during the reporting period. By 17 February 2023, a total of 2,465, 545 COVID-19 infections, resulting in the death of 25,375 people, had been confirmed by the Iraqi authorities. Iraq had received over six million vaccination doses through the COVID-19 Vaccines Global Access (COVAX) Facility since 2021. While vaccination services have been significantly expanded since late 2021, the uptake of the vaccination remains relatively low. As of 28 February 2023, a total of 19,557, 364 people had been fully vaccinated – about 19.5% of the Iraqi population.

Throughout the reporting period, the pandemic compounded the various geopolitical, security, economic and social challenges Iraq continues to face.

Parliamentary elections were held in Iraq on 10 October 2021 with a voter turnout of 43%. The Independent High Electoral Commission announced partial preliminary results for all governorates the following day with the Sadrist political bloc receiving the most seats after the initial count with 73 seats. Initial political reactions to the announcement of preliminary election results varied across the country. Several political parties and actors rejected the partial and complete preliminary election results, while others expressed concern about perceived election irregularities and called for a manual recount. As outlined in the legal framework, manual recounts of contested ballots were carried out by the Electoral Commission following the submission of appeals. Results were announced on 30 November 2021. On 27 December 2021, the Iraqi judiciary officially rejected final appeals and complaints thereby giving way to the ratification of the election results.² Following the ratification of the election results at the end of December 2021,² the newly elected parliament met for the first time in the Green Zone on 09 January 2022, to elect the parliament and speaker and the two deputies. The stagnant government formation process following Iraq's largely peaceful elections last October highlight the crucial need for reforms, such as the implementation of the White Paper for Economic

¹ Total population in Hawija was 140,000 persons. Out of that 80,000 were living inside Hawija District. There are 138 villages across 3 sub districts in Hawija.

² S/2022/103

Reform. However, the Prime Minister further emphasized the government's commitment to creating a suitable environment for the implementation of the White Paper.³

The security situation in Iraq remained volatile. On 7 November 2021, explosive-laden drones attacked the Baghdad residence of Prime Minister Al-Khadimi. Considering the conclusion of US-led coalition's combat mission on 9 December 2021, the security situation in Iraq is likely to remain volatile. On 28 January 2022, rockets attacked Baghdad International Airport damaging one disused civilian airplane and on 12 March 2022 and on 12 March 2022 several missiles landed near the U.S. Consulate in Erbil. Attacks against diplomatic missions and convoys in Iraq and against the civilian population continued, especially in Anbar, Baghdad, Diyala, Kirkuk, Ninewa and Salah-Al-Din Governorates, and remained a serious concern.⁴ In response, Iraqi security forces continued their counterterrorism operations.

Since the beginning of April 2022, Iraq has been severely affected by unusually frequent **dust storms** grounding flights and hospitalizing thousands of people.

According to the latest available data from the International Organization for Migration (IOM), 4,952,232 displaced Iraqis had returned to their area of origin by the end of February 2023. Iraq's 1.18 million IDPs are hosted predominantly in Ninewa, Dohuk and Erbil and mainly reside in out-of-camp settings (85%), while the rest remain displaced in camps (15%). They continue to face challenges to return to their places of origin and have limited to access to safe water, electricity and educational services while simultaneously facing discrimination due to their IDP status.⁵

Overview of Achievements

The overarching objective of the Funding Facility for Stabilization (FFS) is to improve conditions for the safe return of IDPs to their area of origin. The funds are allocated towards Output 1 of the results matrix of the FFS project document: Iraqi Government in newly liberated areas is supported to address immediate challenges for return of internally displaced persons.

At the request of the Government of the Netherlands to support concrete rehabilitation projects in Hawija complemented by longer-term investments in the area, UNDP implemented this project from July 2021 to February 2023 as part of the FFS integrated interventions. FFS prioritized support to Hawija in 2018 as one of the "red box" areas of intervention. In doing so, FFS acknowledged the need to consolidate stabilization gains and ensure long term stability in Hawija. To date, UNDP has completed 205 projects across multiple sectors in Hawija, including sectors is education (78), healthcare (53), water (8), municipality (42), electricity (17), Roads and Bridges (1) Housing (2) and livelihood (5).

In line with the policy priorities of the Netherlands and with a focus to promote sustaining stabilization, the funding contributed to activities in Hawija District. Returns to Hawija District have been slow due to heavily damaged infrastructure, which has limited the accessibility of essential services and economic opportunities. The Netherlands contribution aimed supporting the return of vibrant economic activity in Hawija, thereby encouraging returns, and providing a much-needed local source of employment.

Focusing on the electricity sector, the Netherlands has made a pivotal contribution to re-establishing the economic activities in Hawija District. Funding with an overall budget of US\$ 1,757,546.19 contributed to two activities that directly benefited 260 municipal employees (40 women), 1,650 technicians and workers employed in the workshops, and 700 individuals living in the catchment area. Furthermore, the project indirectly benefits 140,000 residents (72,000 women) of Hawija and 205,000 persons (123,000 women) living in the surrounding area through reinvigorated economic activities. The funding supported the re-establishment of 400 shops and workshops and 15 factories. Since a stable

³ <https://gds.gov.iq/the-prime-minister-we-are-working-to-create-a-suitable-atmosphere-for-the-implementation-of-the-white-paper/>

⁴ S/2022/103bid.

⁵ IOM, "Protracted Displacement in Iraq: Revisiting Categories of Return Barriers", February 2022.

https://iraqdtm.iom.int/files/DurableSolutions/20222793631_iom_DTM_District_of_Displacement_Profiles.pdf

supply of electricity is especially crucial for the kind of high voltage equipment often used to repair agricultural machinery, the project ensures the full functioning of the electrical distribution network within the catchment area and enable the workshops to operate throughout the day.

Rehabilitation of the electricity distribution network

Located just south of the Industrial Zone, the Hawija Substation serves southern Hawija and the Industrial Zone with electricity. However, this structure was heavily damaged that required extensive rehabilitation work. While some works were undertaken by a contractor funded through the Government of Iraq (GOI), this provided insufficient electricity to the surrounding industrial and residential area. Hence, the Netherlands' Ministry of Defence (MoD) generously provided support for the installation of a 25 MVA, 33/11 kV mobile substation on an adjacent land plot, as well as additional rehabilitation works on the electrical distribution network in and around the Industrial Zone to boost the supply of electricity.

During the first quarter of the project (July-September 2021), the FFS focused on laying the groundwork for the main interventions to begin immediately upon the receipt of funds. This included expediting the procurement process and the tendering of the two main interventions, review of submitted bids and selection of the contractor.

Receiving the first tranche of funds in October 2021, UNDP was able to award and sign the contracts with the selected bidder, allowing works to commence and to progress from preparatory activities to implementation. Activities to rehabilitate the electrical network began in mid-October 2021, with the contractor supplying samples of each product, lattice, and tubular poles. This allowed UNDP and the end user to check the quality and ensuring compliance to Iraqi standards. Once the samples were approved, the contractor then supplied the items to Hawija, as well as starting excavation and foundation works required for the installation of the tubular steel poles and the lattice poles. The end user along with the Municipality selected the route and locations of every pole and transformer, depending on the area within the Industrial Zone, such that the transformer would suit the electricity requirements in that specific area.

Rehabilitation of the electricity distribution network was completed on 19 February 2022 with the remaining electricity poles as well as all associated transformers, wires and conductors installed. In summary, the rehabilitation works entailed the following activities:

- Installation of 325 electricity poles (150 eleven-meter high-tension tubular steel poles, 50 eleven-meter high-tension lattice steel poles, 100 nine-meter low-tension tubular steel poles, and 25 nine-meter low-tension lattice steel poles),
- Installation of 20 associated transformers, and
- Installation of around 25,000 meters of aluminum-conductor steel-reinforced (ACSR) cables, 12,000 meters of aerial bundle cables (ABC), stay wires as well as other accessories required to make the network functional.

The end user has been heavily involved in the project activity and the selection of pole and transformer positions. Following the finalization of activities, the network was successfully tested and handed over to the end user, who will oversee maintenance as well as any further network extension as required.



Parts of the electricity distribution network prior to rehabilitation and after the completion of works.



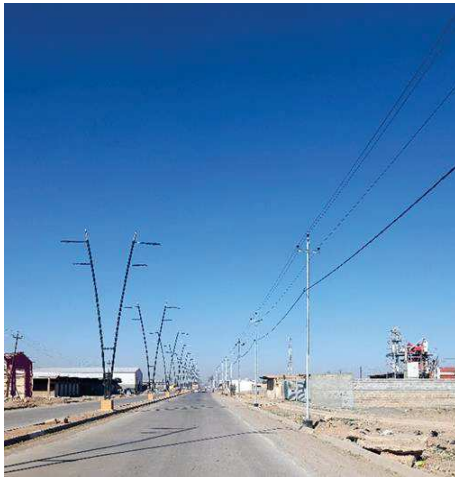
Excavation works for tubular poles are carried out (left) and lattice poles are installed (right).



Transformers are installed and connected to the poles.



The fully rehabilitated electricity distribution network in Hawija.



The electricity distribution network is operational (left). Transformers were fitted with donor branding (right).



Map of final layout of electrical network in the Industrial zone

The supply and installation of the mobile substation

Manufacturing of the various components of the mobile substation began in mid-December 2021. The manufacturing of the 25 MVA transformer, the largest component of the substation, was completed on 1 June 2022. Between 4 to 11 June 2022, the Factory Acceptance Tests (FAT) were carried out by a Third-Party, BUREAU VERITAS, an international company. UNDP engineers were present to witness to the process.

On 24 June 2022, the 25MVA transformer and other equipment were transferred to the mobile substation assembly factory, where all the assembly works were completed, and the mobile substation was tested. Key activities carried out included:

- preparation of trailers to install equipment,
- mounting of switchgears, and other equipment inside the trailers,
- mounting of transformers on the trailers,
- conducting visual checks, and
- conducting operational tests for equipment.

While the substation was in its final test phase, UNDP carried out preparatory civil works to receive it in Hawija. This civil works included the installation of a concrete earthed pad for the two trailers to be parked on, living cabins for an operator to be able to live on site and a fence around the site for security. These works were completed before the arrival of the trailers.

As a critical measure at the stage of design, the testing of the site soil was completed. The testing measures the resistivity of the soil in which the earth grid is to be buried. Soil resistivity, along with soil layering, has a direct connection to the resistance of the earth grid. Subsequently, the earthing network was inspected and tested, resulting in a reading below 1 ohm which indicates an acceptable resistance value. This earthing ensures a) the safety of electrical appliances and devices from any excessive amount of electric current, b) helps in the flow of electric current directly inside the ground, c) keeps the electric appliance safe from the damage, d) protects equipment and structures from lightning surges, and e) protects operators against electrical shocks.

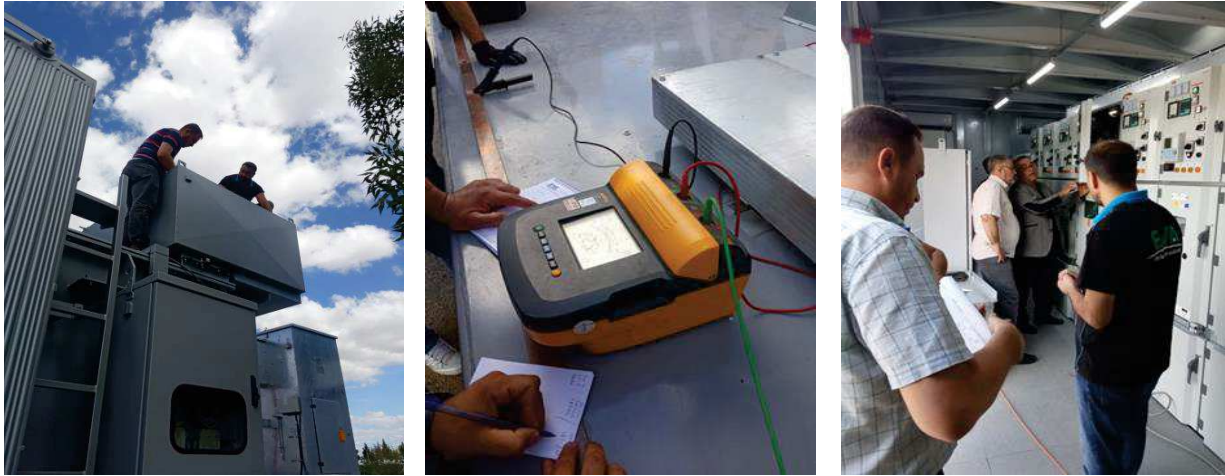
The final factory test of the mobile substation was successfully completed in early September 2022 in Turkey. The test was carried out by an independent third-party company in the presence of end user engineers. Following the results of the factory test, the substation was then packaged and prepared for shipment.

Following the completion of the final factory test, the mobile substation arrived in Hawija on 18 October 2022. The mobile substation consists of two trailers, the first has the main 25MVA transformer, which converts the power supply coming from the Iraqi grid from 33KV to 11KV along with the auxiliary transformer which supplies power to the mobile substation itself, along with lighting. The second trailer houses the switchgears for the incoming and outgoing feeders, batteries, and battery charger.

Finally, the mobile substation in Hawija was successfully commissioned and energized on 26 January 2023. The substation commissioning process involved turning on the facility operations, checking that all procedures are operational, testing the parameters, identifying any issues, and then fixing problems prior to the substation being connected to the grid. The substation was operated under a test load for 24 hours before connecting onto the grid.



The factory test of the transformer was successfully completed.



The factory test included, among others, testing the megger (left and centre) and the switchgear (right).



Engineers are testing the tap changer tests (left) and are verifying the specifications and name plate of the substation (right).



Visual inspections of the switchgear cabinet (left) and tap changer (right) were carried out.



11Kva switch gear



33Kva switch gear



Operator cabins and 11Kva feeder waiting for connection to grid



View showing the mobile substation in Hawija, installed.

Challenges and Lessons Learned

Due to the challenges faced, the project duration was extended twice.

The original end date of the project was 31 May 2022. Due to a lengthy end user selection and clearance processes to nominate staff who would attend the factory test of the substation in Turkey⁸, which was further exacerbated by the political vacuum following last year's election, the visa process for the end user engineers was delayed. Consequently, the end user staff were unable to travel for the originally scheduled date and the date for the FAT had to be rescheduled. As the factory had unfortunately prior commitments for August 2022, the earliest slot available was in September, which affected subsequent activities such as shipment, installation, and timelines for implementation. On 22 August 2022, UNDP submitted a request to extend the agreement until 31 December 2022. The approval for a no-additional funding extension was received on 10 October 2022.

After the substation arrived in Hawija on October 2022, the supervision committee from Directorate of Electricity (DoE) Kirkuk highlighted concerns regarding the transformer's insulation oil which was raised to the level of The State Company of Electricity Distribution North (SCEDN). The type of oil was upgraded as the brand recommended at the time of BoQ was no longer manufactured. Subsequently, UNDP submitted a request to MoE to endorse the use of an upgraded type of oil. By the end of December 2022, the mobile substation in Hawija was ready to be connected to the national grid and was awaiting the final Government approval through MoE to endorse the use of oil for the substation. While making the best efforts to expedite the above process, UNDP recognized the risk that the issuance of letter and transmission of the paperwork through the respective government channels to the end user in Kirkuk may go beyond 31 December 2022. In this context, as a cautionary measure and to be prudent, on 14 December, UNDP submitted a request to extend the agreement until 28 February 2023. A no additional funding request was approved in December extending the project until 28 February 2023.

CROSS-CUTTING THEMES

Gender Mainstreaming

The shop owners and employees of the industrial area are predominantly men. However, women provide support in the shops owned by their families, although often unseen but playing a crucial role.

Conflict Sensitivity

Lack of access to income increases vulnerability of the communities to be potential targets of violent extremist groups. Re-establishing employment and enabling access to income for those who had lost their livelihoods, particularly the youth and unemployed, due to the damage of shops, mitigates this risk.

Partnerships and Coordination

UNDP worked in close collaboration with the Department of Electricity (DoE) from the inception of the project at the BoQ preparation stage to the project end and handover back to the end-user.

Further, UNDP closely worked with the Municipality Department. UNDP consulted the Municipality Department to identify the requirements including the size of the transformers and positioning of poles to ensure power delivery to the right area.

Furthermore, during the installation of the system, UNDP worked in collaboration with the shop keepers supported by IOM, and other landowners in the Industrial Zone to avoid any disruption to their ongoing activities or traffic obstructions.

Responsible Expenditure

UNDP applied due diligence measures in the implementation of this project, to ensure the expenditures were properly dispersed to appropriate and vetted vendors, through:

- Rehabilitation of the electricity distribution network:
UNDP carried out the design and development of BoQ in consultation and collaboration with the Hawija Electrical Department. The Hawija Electrical Department had already been vetted by the local security forces, allowing them to return to Hawija after the town had been secured following liberation.
- The supply and installation of the mobile substation:
UNDP carried out the design and the development of BoQ with Hawija Department of Electricity, The State Company of Electricity Distribution North (SCEDN) which had already been vetted by local security forces.
- UNDP's tendering system vets all companies to avoid awarding tenders to any party listed in the List of Vendors Suspended or Removed from the UN Secret or Procurement Division Vendor Roster. UNDP's Procurement Manual includes the following Clause:

Screening against UN Sanctions and Eligibility
UN Security Council

The vendor is neither in the Consolidated List of Individuals and Entities with Association to Terrorist Organizations nor in the List of Vendors Suspended or Removed from the UN Secret or Procurement Division Vendor Roster.

- Another layer to prevent terrorism risks are the layers of security check points to enter Hawija. Each person entering Hawija must pass through three security forces' check points. This has contributed to prevent any ISIL affiliated persons entering Hawija since liberation.
- Annex I refers to a letter from the Contractor confirming they have not employed any workforce/laborers affiliated with ISIL during the implementation of the Contract.

Financial Summary (in US\$)

Funds were fully utilized as per the financial overview below.

Activity	Utilisation (US\$)
Supply and install transformers and electrical materials for Hawija	482,485
Supply and Install Mobile SS 25 MVA for Hawija	958,440
Sub-Total: Outputs	1,535,243
Programme Management Expenses (travel)	92,115
Sub-Total: Direct Costs	1,627,358
GMS 8%	130,189
Grand Total	1,757,546

Num: Ma-23-046

Date: 07-February-2023

To/ UNDP

Subject/ Confirmation Letter for CON-294/21 & CON-239-21

We as Mado company the applier of Projects (**33/11.5kV25 MVA Hawija Mobile SS-CON 294/21 & CON-239-21- Supply and Installation of Transformers and Electrical Materials for Hawija -Industrial Area- Kirkuk Governorate**), We are confirming that we have not Hired any workforce or anyone affiliated with ISIL During Implementing our two projects in Hawija District Kirkuk Governorate or in any other project that has been implemented by our company.

Thanks....

