



Gulf of Suez Petroleum Company (GUPCO) Uses Expandable, Secure Broadband Coverage in Remote Offshore Areas



“Cambium Networks’ wireless solution is secure, powerful and able to meet the new video surveillance needs of offshore platforms, along with efficient videoconferencing. All unsupported wireless and wired links have been replaced with a cost-effective, reliable Cambium wireless solution. The new network deployment was installed within our schedule while achieving all project objectives.”

Abu elftouh Shahin, Telecom Team Leader, GUPCO

GULF OF SUEZ PETROLEUM COMPANY (GUPCO) is one of the oil and gas industry pioneers in Egypt. GUPCO, a joint venture owned by EGPC and Dragon Oil, is responsible for oil and gas production in the Gulf of Suez.

ENERGY PRODUCERS HAVE NO MARGIN OF ERROR.

Reliability, efficiency, and Health, Safety and Environment (HSE) are vital in oil and gas fields. Losing communications in unmanned platforms or remote areas is not an option. High maintenance costs, shortages of spare parts, and increased malfunctions have the potential to increase the risk of downed communications.

GUPCO was intended to establish a resilient onshore and offshore network to communicate three remote processing areas, nine production platforms and offshore rigs, and 80 unmanned production platforms. This network accommodates various applications, including data services, SCADA connectivity, remote monitoring of operations, weather stations, vessel tracking systems, voice and video calls, and CCTV systems.

GUPCO needed to replace the old broadband network to improve the reliability and security of the network, meet the National Telecommunications Regulatory Authority (NTRA) regulations and use a new frequency band. This led GUPCO to partner with Systel, a prominent telecommunications leader in Egypt, which has been instrumental in making GUPCO's safety and efficiency objectives a reality. The company built a network that provides blanket wireless coverage for GUPCO's concession area in the Gulf of Suez, which extends more than 150 kilometers. This network operates in the three remote areas, eight platforms and offshore rigs connected and covers future extensions of GUPCO explorations.

"The project achieved the designed capacity with the expected reliability and within the provided time plan. This was all achieved safely using a cost-effective budget and without incident or down-time during the COVID pandemic."

Ahmed, Saad Abdelhamid Senior Telecom Engineer, GUPCO



Objectives

GUPCO needed to connect platforms and rigs to remote areas, increase network capacity to enable CCTV surveillance capabilities, facilitate efficient videoconferencing and provide expandable coverage to meet future demands using secure equipment approved for oil and gas environments.

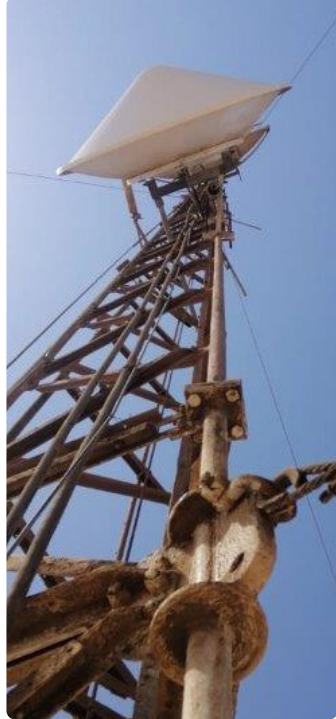
TO MEET GUPCO'S REQUIREMENTS, Systel's IT team has been key in choosing safety systems and solutions comprised of fixed wireless equipment from Cambium Networks.

The network deployment includes a combination of point-to point (PTP) and point-to-multipoint (PMP) radios. The equipment is all managed and controlled by the cnMaestro™ software platform, which offers secure and comprehensive network control.

The wireless solution is robust, secure and capable of meeting the increased video surveillance demands of offshore platforms while facilitating efficient videoconferencing.

By replacing numerous existing unsupported wireless devices and repairing poor links, the new deployment achieved a cost-effective and reliable solution, all completed within the specified timeframe. In addition, the system adheres to specific technical and legal prerequisites, including:

- Providing higher capacity and improved stability
- Establishing a unified communication system
- Ensuring system upgradability
- Operating within the 5.8 GHz frequency band
- Excellent monitoring and reporting capabilities through cnMaestro



SOLUTION TECHNOLOGY

14 PTP 670 ATEX/HAZLOC

22 PMP 450i ATEX/HAZLOC Access Points

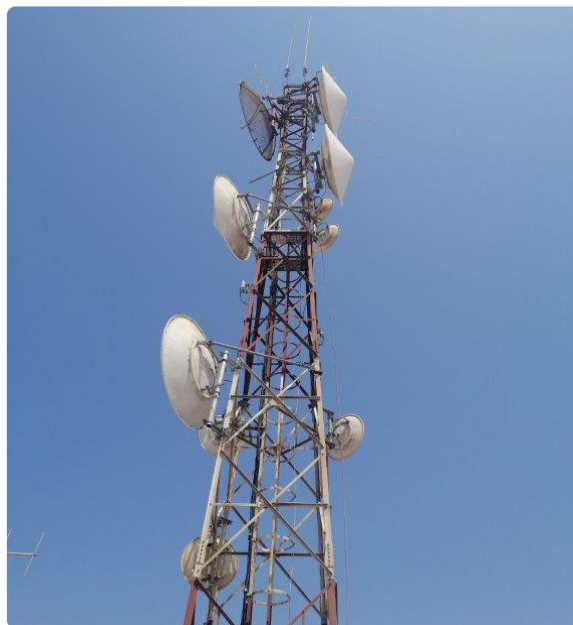
10 PMP 450i ATEX/HAZLOC Subscriber Modules

cnMaestro™, Cambium Networks' wireless software platform, with full network visibility and zero-touch provisioning

Oil exploration in the Gulf of Suez dates to the early 20th century when the first successful oil wells were drilled in the area, leading to the discovery of substantial oil reserves. The region quickly became a vital hub for the Egyptian oil industry. Today, the Gulf of Suez remains a significant oil-producing region in Egypt, and it contributes to the country's energy needs. The group produces oil under a Production Sharing Agreement (PSA).

And Now...

WITH THE GROWING IMPORTANCE video surveillance for safety and security purposes, GUPCO intends to evaluate and potentially upgrade the link capacity to support high-quality video streaming and monitoring. This will enable effective real-time surveillance, enhancing situational awareness and facilitating a prompt response to any potential incidents or emergencies.



ABOUT CAMBIUM NETWORKS

[Cambium Networks](https://www.cambiumnetworks.com) enables service providers, enterprises, industrial organizations, and governments to deliver exceptional digital experiences and device connectivity with compelling economics. Our ONE Network platform simplifies management of Cambium Networks' wired and wireless broadband and network edge technologies. Our customers can focus more resources on managing their business rather than the network. We deliver connectivity that just works.

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