Date: 13/1/2022

Subject: 99a. ICF Application / Mada Al Arab's FTTH Project / Final Recommendation

Dear Mazen,

Established in 2010, Mada Al Arab provides internet services and, in response to the increasing demand for better and affordable internet connectivity to sustain economic growth, intends to develop a Fiber Optic Infrastructure across Palestine to ease the access to internet, increase the quality (stability and speed) and the affordability of Internet services. The project sponsor is requesting support to proceed with phase I (Ramallah & Bethlehem), which consist of installing around 700 km length of fiber optics with an estimated cost of approximately USD 8,000,000.

Upon the completion of the technical assistance, please note that the team believes that there is a case for public intervention in financing this project. Public finance would allow MADA to mitigate the impact of the absence of a well fundamental regulatory scheme; market asymmetries cause by Paltel's monopoly; and, limited experienced workforce. In addition to the below:

MADA will recruit and empower around 300 employees with required experience, skills and technical
qualifications to deliver fiber-optic communications to homes. The following table summarizes
potential job titles and required number.

Title	# Jobs
Network setup technician	56
Buildings' setup technician	32
Network planning (GIS, deployment, mapping)	15
Network engineer	3
System engineer	2
IT support	3
Civil Engineers	6
Construction workers	30
Traffic operators	30
Drivers	12
Coordinators	5
Electricians	25
Fiber cable welders	20
Sales	3
Field sales agent	20
Field support	7
Support center	12
Customer service center	8
HR and admin	2
Procurement & warehousing	2
Marketing	2
TOTAL	295

- FO Infrastructure investment requires a substantial time period to realize any Return on Investment (ROI), and this risk is quite significant to MADA. Estimated profitability is low with an IRR of 12.2%. Hurdle rate of the Palestinian Telecommunication sector is above 20%.
- There are a unique set of skills and competencies required when installing and operating FTTH/B, that are limited in the Palestine.
- There has been a major weakness affecting the Palestinian internet sector which is the lack or absence of the necessary regulations. That absence has distorted the shape of competition and strengthened the monopoly of Paltel.
- There is a substantial demand in Palestine for high-speed internet access, and the lack of mobile network carriers offering 4G or 5G services, is a factor that favors adoption rates of FTTH/B.
- MADA's masterplan is to update the telecommunication infrastructure across Palestine and to connect cities and villages in one long term strong network. This comes as a different approach from other ISPs who tackles the issues as density hub driven infrastructure rather than a network masterplan.
- Mada's approach will provide economic scale-up and offer the potential for growth, resilience, and livelihood for new businesses/startups and entrepreneurs targeting the whole general public. In additional that it is essential for e-Governance infrastructure and Digital Finance.
- The project will tackle the following problems:
 - Internet cuts during the peak times.
 - Fair internet access to all customers.
 - Add new internet-based services for customers.
 - Enhance the current internet-based services for customers.

Sincerely,

Nasser Al Amuri, F4|-Project Finance and Investment Officer