

PHD House, 4th Floor, Ramakrishna Dalmia Wing 4/2, Siri Institutional Area, August Kranti Marg, New Delhi – 110016, Tel# 9355144223 E-mail: dg@mait.com □ Website: http://www.mait.com

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September 01, 2023

Shri SCL Das, IAS Secretary Ministry of MSME

Subject: - Promotion of Domestic Manufacturing of Optical Line Terminal (OLT) and Optical Network Unit (ONU) for GPON Deployment

Respected Sir,

## **Greetings from MAIT!**

Further to our meeting on 2<sup>nd</sup> August 2023, I am writing to draw your kind attention to a significant opportunity in the field of telecommunication equipment manufacturing by Indian MSMEs, particularly focusing on the Optical Line Terminal (OLT) and Optical Network Unit (ONU) used in Gigabit Passive Optical Network (GPON) deployments.

In recent years, the Telecommunication landscape in India has witnessed rapid growth, especially with the widespread deployment of GPON technology by Internet Service Providers (ISPs). GPON offers a cost-effective solution for delivering high-speed internet and other broadband services to both urban and rural areas. The demand for these services has surged, highlighting the need for a reliable and self-sufficient supply chain of OLTs and ONUs, which are integral components of GPON networks.

Encouraging indigenous manufacturing of OLTs and ONUs offers several compelling benefits:

- 1. **Self-Reliance**: By manufacturing these critical components domestically, we can reduce dependence on foreign imports, bolstering our self-reliance and reducing vulnerability to global supply chain disruptions.
- 2. **Job Creation**: The establishment of domestic manufacturing facilities will lead to the creation of employment opportunities across various skill levels, contributing to economic growth and social development.
- 3. **Technological Advancement**: Domestic manufacturing would encourage research and development in the field, driving innovation and technological advancements that cater specifically to India's requirements.
- 4. **Security**: Ensuring the integrity and security of the telecommunication infrastructure is of paramount importance. Domestic manufacturing provides better control over the supply chain and reduces the risk of potential security breaches.
- Trade Balance: By manufacturing locally, we can address the trade imbalance caused by substantial imports and potentially generate revenue through exports of high-quality equipment.

The main items in GPON are Optical Line Terminal (OLT) and Optical Network Unit (ONU). With the widespread deployment of GPON by ISPs, these items have enormous scope in India. Currently, they are being imported in SKD & CKD mainly from other countries.

The Government is rightly concerned about overseas manufacturers, exerting control over the hardware and software design of products used in India's telecom network. This control is then leveraged by these manufacturers to control the supply of components.

As a result, the manufacturers in India (MSME and some non-MSME) are performing the role of labour contractors, only assembling SKD/CKD kits in India. Apart from lack of control, simple assembly contributes barely 10% to the value addition.

To develop trusted suppliers in the telecom sector - a key objective of the Govt. - the Govt. must encourage the development of hardware and software design of these products in India. Since design is a high investment exercise, it is beyond the reach of the MSME sector.

These items have standard specifications, as approved by DOT. Rather than each unit investing in product design, it will be better for the development to be undertaken by a design center and licensed out to the manufacturers. As discussed with you, the design center could be a govt institution like CDOT or any educational institute like IITs, IISC or NITs.

It shall not only contribute towards securing our telecom networks but also create a large number of manufacturing jobs in the MSME sector.

We also request you for an **appointment on a day & time convenient to you** to personally apprise you of the matter and we would greatly appreciate your kind confirmation.

Warm regards,

Col Suhail Zaidi (Retd)

**Director General** 

CC: Dr Rajneesh, IAS, Addl. Secretary & Development Commissioner, Ministry of MSME

CC: Shri Ateesh Kumar Singh, IRTS, Jt. Secretary, Ministry of MSME

CC: Dr Ishita Ganguli Tripathy, IES, Addl. Development Commissioner, Ministry of MSME