

Ringling in local sourcing

While PLI is a signal boost for telecom, industry stress, value-additions and 5G auctions are monitorables

August, 2021

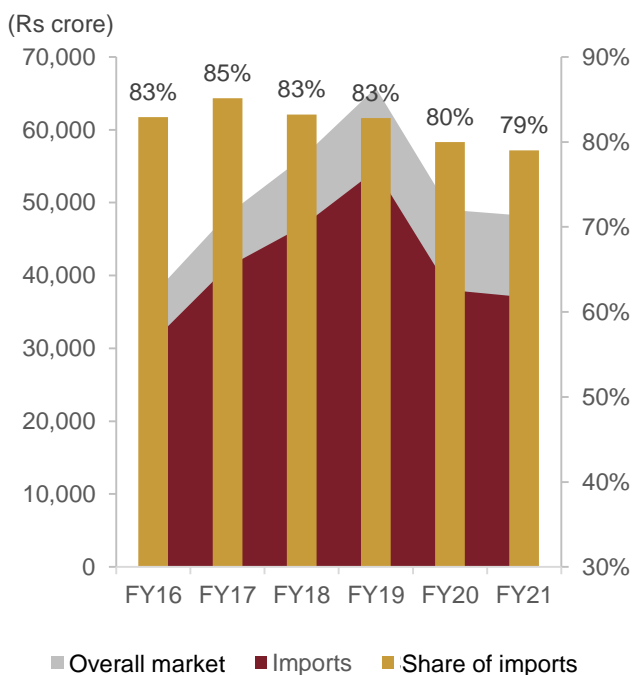


Dialling up growth

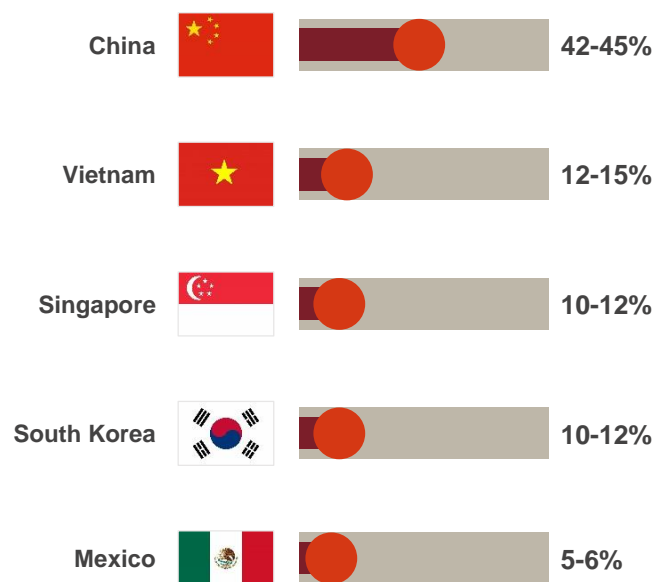
Introduction of the production-linked incentive (PLI) scheme, together with enhanced technology support led by the adoption of open radio access network (RAN) and investments in 5G telephony, is expected to ring in a course reversal for Indian telecom companies (telcos), which have been largely import-dependent and reliant on global vendors for their network roll-outs.

So far, imports have accounted for 75-85% of the total telecom equipment market. While some global vendors have their manufacturing bases in India, majority of equipment has been imported from East-Asian countries such as China, Malaysia, South Korea, and Vietnam.

East Asia dominates telecom gear imports



Cumulative import share of telecom gear (FY16-FY21)



Source: DGFT, company reports, CRISIL Research





The nascent domestic equipment industry, on its part, has been catering mainly to public sector undertakings (PSUs).

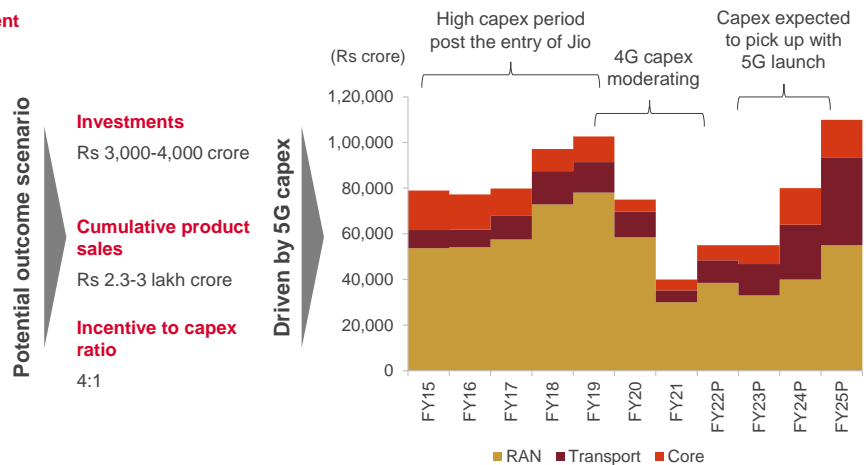
All that is expected to change now, with the government extending the PLI scheme to the telecom equipment sector to boost domestic manufacturing and attract investments in the target segments of telecom and networking products.

Under the scheme, 10 MSMEs and 10 non-MSMEs (of which at least three are domestic companies) will be shortlisted on the basis of their investment commitment. The shortlisted companies will then receive incentives for incremental sales generated over the base year, fiscal 2020.

The government has earmarked ~Rs 12,200 crore for the scheme, and expects investments of ~Rs 3,000 crore, with an incentive to capex ratio of 4:1, which is the highest among all PLI schemes.

PLI and 5G to boost the telecom equipment industry

 <p>Scheme outlay Rs 12,196 crore</p> <ul style="list-style-type: none"> Incentive rollout to be based on achievement of incremental target sales Maximum outlay for MSMEs capped at Rs 1,000 crore 	 <p>Minimum investment Rs 100 crore</p> <ul style="list-style-type: none"> For non-MSMEs: Rs 100 crore For MSMEs: Rs 10 crore R&D investment capped at 15% of total investment
 <p>Yearly target sales Multiple of investment</p> <ul style="list-style-type: none"> Incremental target sales is over the base year FY20 	 <p>Incentive Percentage of target sales</p> <ul style="list-style-type: none"> Non-MSMEs: 4 to 6%, up to 5 years MSMEs: 4 to 7%, up to 5 years



Source: DOT, CRISIL Research

The fledgling domestic equipment industry missed the last wireless capex boom over fiscals 2016-2021, which saw telcos pump Rs 3 lakh crore to strengthen their 4G networks, as they were largely dependent on global vendors for their core, radio and transport network rollouts.

5G networks, however, are expected to see significantly higher investments as they entail at least 70% tower fiberisation levels (30-35% presently) and 4-20 times higher radio site deployments compared with 4G. This would lead to higher investments in optical and radio networks, respectively. With PLIs covering major telecom equipment, except optical fibers, domestic gear manufacturers can leverage a Rs 50,000 crore market opportunity, which is expected to double by fiscal 2025.










Additionally, the advent of open RAN, which seeks to end the proprietary RAN set-up, will result in the disaggregation of hardware and software at radio sites, allowing domestic gear makers to manufacture and innovate in individual modules, such as antennas and remote radio heads, or more contemporary forms of radio nodes, such as small cells.

The PLI scheme has been timed well ahead of the 5G launch, and provides the much-needed policy boost to the domestic telecom manufacturing ecosystem. It has the potential to reduce the share of telecom imports in overall demand to under 50% (from 75-85%).

However, it can be constrained by low cap on R&D investments, pricing pressure in the telecom industry and delay in 5G auctions.



Cap on R&D investments to result in lower value-add

Type	Components covered under PLI	Domestic design presence	Domestic manufacturing presence	Drivers/opportunity	Companies likely to participate
 Core and access networks	Radio access components such as baseband units, remote radio heads, antennas and small cells; 4G core components such as gateway servers and MME; and 5G core			<ul style="list-style-type: none"> Open RAN adoption 5G densification requirements Edge computing 	<ul style="list-style-type: none"> Global companies Domestic companies (leveraging Open RAN)
 Transport networks	Transport network elements such as DWDM, optical transport network (OTN), GPON, NG-PON and OLT			<ul style="list-style-type: none"> Low fiberisation Proliferation of FTTH and increased fixed broadband penetration 	<ul style="list-style-type: none"> Global companies Large domestic companies
 Customer premise equipment	Optical network terminals (ONTs), wi-fi access points, wireless CPE, terminal equipment in FTTH, switches, routers, etc.			<ul style="list-style-type: none"> Increased FTTH penetration Smart homes and appliances 	<ul style="list-style-type: none"> Large domestic companies MSMEs

Source: DOT, CRISIL Research

In our view, the scheme is a good starting point for providing the much-needed uptake for the domestic equipment industry. The need of the hour is to provide a phased manufacturing policy support over an extended period of at least 10 years incentivising high value-adds to create domestic champions in telecom gear manufacturing and make Indian telcos self-reliant.

Key monitorables for the success of PLI scheme

Cap on R&D investments	<ul style="list-style-type: none"> Core, access and transport networks, which form the bulk of network capex, require a majority of investment in R&D by domestic companies in the initial phase, especially in the Open RAN era. Thus, a cap on R&D at 15% of total investment in the PLI scheme will result in significantly lower share of value-adds.
Pricing pressure in the telecom industry	<ul style="list-style-type: none"> Currently, 85-90% of domestic telecom gear demand is driven by wireless network investments by telcos. Despite a consolidation in the industry over the last three years and one round of tariff hikes in December 2020, telecom ARPUs remain far below sustainable levels as competitive pressures continue to delay tariff hikes. Thus, steep tariff hikes remain crucial to telcos having sustainable ARPUs, raising additional funds and making timely investments.
5G spectrum auctions	<ul style="list-style-type: none"> 5G auctions in India have been delayed due to unfavourable industry conditions, with telcos having faced severe hurdles over the last four years, including intense competition, pricing pressure, AGR order, etc. A further delay in auctions can lead to India falling behind in technology. Also, the telecom industry has raised issues such as high reserve prices, low mid-band spectrum availability and inclusion of mmWave to be considered before the next auctions, which can help them plan their 5G investments optimally.

Source: DOT, CRISIL Research

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