



WHITE PAPER

India as a Strategic Manufacturing and Sales Location for European Hardware Developers

*Opportunities, Regulatory Frameworks, and Strategic Guidelines for Manufacturing via
an Indian EMS Partner*

Dirk Kaussen | EMS Strategy Group | Rev.: 1.1 | 6. September 2026

Translation Notice:

This document has been translated from the original German version using machine translation systems. Although the content has been carefully reviewed, discrepancies or translation errors cannot be entirely ruled out. In the event of any ambiguity or conflict, the original German text shall remain solely authoritative

1. Introduction and Dynamic Market Growth

India has rapidly emerged as one of the world's most dynamic electronics manufacturing locations. Over the last decade, domestic electronics production saw an almost six-fold increase—rising from approximately INR 1.9 Lakh Crore in FY 2014/15 to INR 11.3 Lakh Crore in FY 2024/25 [1]. Driven by the expansion of digital infrastructure and an active domestic mobile subscriber base of more than one billion users, the Indian federal government is pursuing the ambitious policy target to expand domestic electronics manufacturing to approximately USD 500 billion by FY 2030/31 [1].

For European hardware developers, two strategic approaches emerge from this development:

- **India as a Sales Market:** Local manufacturing can facilitate access to the Indian B2B and B2G markets and reduce the customs tariff burden compared to importing finished products.
 - **India as a Manufacturing and Export Hub:** The Indian EMS ecosystem can be integrated as an additional manufacturing location into a global China+1 or second-sourcing strategy.
-

2. Decision Criteria for the Suitability of Manufacturing in India

While collaboration with an Indian EMS partner offers substantial potential, it is not equally suited for every product category. The following criteria are particularly decisive:

- **Target Market:** For the Indian domestic market, local manufacturing can offer significant advantages due to customs tariff structures and requirements for local value addition [3]. For pure export products, additional logistics lead times and inventory requirements must be weighed against potential cost benefits.
- **Product Complexity and Quantities:** Standardized assemblies and medium-to-high volumes can be competitively manufactured in suitable Indian manufacturing structures. High-mix/low-volume products, on the other hand, require a targeted selection of EMS partners with appropriate NPI, engineering, and manufacturing capabilities [3].
- **Bill of Materials (BOM) Structure:** India remains dependent on imports for certain semiconductors, displays, and other high-end components [4]. The share of imported components therefore influences both the costs as well as the logistical and customs advantages of local manufacturing.

Strategic Decision Matrix

India as a Strategic Electronics Manufacturing Location for European Developers

Govt. Funding	PLI with an overall outlay of INR 1.97 Lakh Crore across 14 sectors [3]; ECMS increased to INR 40,000 Crore [4]	Incentive conditions differ depending on the program and product segment	Consider relevant funding benefits when evaluating the EMS cost calculation
Customs & Logistics	Product-specific customs structures can favor local manufacturing over finished product imports [7]	Imported components and longer transport routes impact overall costs	Evaluate total costs and supply chain dynamics on a product-by-product basis
Public Tenders	Class-I Local Supplier status generally starting at 50% local content, unless another threshold applies [8]	Local value addition and specific tender conditions determine actual preference	Consider product architecture and local sourcing strategies early on
IP & Know-how	India offers established legal frameworks for intellectual property [9][10]	Data access, tooling ownership, and change control must be clearly regulated	Secure IP and product-specific know-how contractually and organizationally
EMS Partner Selection	Expanding local and international EMS base [1]	Differences in NPI, engineering, quality, and traceability	Audit partners based on technical, commercial, and strategic criteria
Regulatory	BIS CRS applies to defined electronic and IT product categories [11]	Requirements depend on product category and the applicable standard	Incorporate regulatory compliance early into the market introduction planning

Source / Created by: EMS Strategy Group

3. Government Incentives and the Cost Argument

The Indian government supports the expansion of electronics manufacturing through various incentive programs:

- **Production Linked Incentive (PLI):** The multi-sector PLI program, spanning 14 sectors, features a total outlay of INR 1.97 Lakh Crore [3]. The concrete funding conditions and subsidy rates differ by program and product segment [3].
- **Electronics Components Manufacturing Scheme (ECMS):** The program to deepen localized component manufacturing was increased to INR 40,000 Crore in the Union Budget 2026/27 [4]. This scheme funds electronic components and other areas of the electronics supply chain [4].
- **Modified Electronics Manufacturing Clusters (EMC 2.0):** This program supports the establishment of manufacturing clusters and the corresponding shared industrial infrastructure [5].

European companies typically benefit from these programs indirectly when manufacturing through an EMS partner. Subsidies are generally granted to the eligible manufacturing entity or project and are not automatically passed down to its customers. Their economic significance should therefore be taken into account when evaluating an EMS quote and, where relevant, transparently mapped within the commercial agreement structure.

4. Customs Tariff Structures and the Phased Manufacturing Programme (PMP)

India utilizes targeted customs tariff structures to encourage domestic assembly. The **Phased Manufacturing Programme (PMP)** has historically played an important role, particularly in the mobile communications sector, by gradually increasing the required local value addition for specific products and components [7].

For industrial B2B electronics, however, the situation is product-specific. Customs tariffs depend on the concrete customs classification, origin, and the applicable customs regulations. Local final assembly does therefore not automatically lead to an exemption from customs duties on imported components. For European companies, it is therefore crucial to assess the actual cost structure, including imported components, customs duties, and logistics, for each individual product scenario.

5. Access to Public Tenders – Preference to Make in India

In public tenders, the Indian **Public Procurement (Preference to Make in India)** regulation can take local value addition into account. A company can generally be classified as a **Class-I Local Supplier** if it achieves at least 50% Local Content, unless a different threshold has been specified for the respective procurement [8].

This classification is purely based on the local value-added share and not on the nationality or ownership structure of the company. Thus, foreign-controlled companies can also fulfill the requirements if the corresponding value-added shares are created within India [8].

Local Content is calculated in accordance with the applicable official rules [8]. For complex electronic products, the continued high import dependency on certain semiconductors and other components can make it mathematically challenging to achieve a high local value-added share. Product architecture and the availability of local components can therefore play a strategic role as early as the market introduction phase.

6. Foreign Direct Investment and Local Presence

In the electronics manufacturing sector, India generally permits up to 100% Foreign Direct Investment (FDI) via the so-called **Automatic Route**, subject to the applicable sectoral and regulatory requirements [9].

For European hardware developers who initially manufacture exclusively through an Indian EMS partner, a separate Indian entity is not mandatory [9]. However, during a subsequent expansion of market and manufacturing activities, a dedicated local company can create additional opportunities for procurement, sales, engineering, and manufacturing.

7. Regulatory Hurdles and BIS CRS

For certain electronics and IT products, additional requirements of the **Bureau of Indian Standards (BIS)** apply in India. The **Compulsory Registration Scheme (CRS)** is relevant for the covered product categories [11].

The BIS CRS is an independent Indian conformity assessment system. European CE conformity does not replace a required BIS registration [11].

The concrete testing and registration requirements depend on the product category and the applicable Indian standard [11]. BIS works with accredited laboratories and, depending on the procedure, also allows the use of appropriately recognized testing bodies and test documentation [11].

For European companies, BIS regulations should therefore be taken into account as early as the planning phase of an India project, especially if the product falls under mandatory registration [11].

8. Guidelines for EMS Partner Selection and Risk Mitigation

The quality and capabilities of the local EMS partner represent a critical success factor. During selection, the following capabilities should be evaluated in particular:

- **NPI and Engineering Capabilities:** Does the partner possess an experienced New Product Introduction (NPI) team and the ability to transfer European designs into stable manufacturing processes?
 - **Traceability and Quality Assurance:** Are appropriate quality management systems and comprehensive component and production traceability established?
 - **Manufacturing Scope:** Does the service spectrum extend beyond printed circuit board assembly (PCBA) to include system testing, mechanical integration, and complete box build?
 - **Procurement Competence:** Does the partner possess resilient global procurement structures and appropriate processes to prevent counterfeit components?
-

9. Protection of Intellectual Property and Know-How

The protection of development data, manufacturing knowledge, and product-specific know-how should remain an essential component of the supplier strategy, even when manufacturing in India. In addition to the legal framework, clear contractual, organizational, and technical protective mechanisms are decisive. These include in particular:

- Clearly defined ownership rights to development data, tooling, and test equipment.
- Contractually regulated confidentiality and usage rights.
- Controlled access to development and manufacturing data.

- Defined change-control processes.
- And clear provisions for the use and return of product-specific assets.

10. Strategic Risk Assessment – Supply Chain and Logistics

An India strategy should consider not only costs and market potential but also the implications for the global supply chain.

- **Logistics Lead Times:** Ocean freight to Europe results in longer replenishment times compared to European sourcing. Inventory levels, lead times, and safety buffers must be evaluated accordingly.
- **Currency Fluctuations:** Fluctuations between the Indian Rupee (INR) and the Euro (EUR) can influence actual procurement costs and should be accounted for in longer-term EMS contracts.
- **Local Supplier Structures:** India possesses a growing industrial supplier base. For specific mechanical components, plastic parts, or metalworking, the qualification of local suppliers may nevertheless require additional effort.

11. Conclusion

For European hardware companies, India is no longer exclusively a growing sales market. The combination of the substantial growth in electronics production, a growing domestic market, government incentives, and increasing local value addition makes the country a relevant element of global production strategies.

The strategic question is therefore not only whether India produces more cost-effectively than Europe, but what role the location can assume within the entire production and supply chain architecture. For some companies, access to the Indian market is the primary focus; for others, it is the diversification of manufacturing and the reduction of dependency on individual manufacturing regions.

Decisive factors include the concrete product structure, the ratio of local and imported value addition, the capabilities of the EMS partner, regulatory requirements, and the integration of India into the existing global supply chain.

Official Sources and References

[1] **Press Information Bureau (PIB), Government of India** – *India's Electronics Leap – Production soars to INR 11.3 lakh crore in 2024–25, six-fold over the decade*. Official disclosures regarding electronics production development and the goal of an electronics ecosystem of approx. USD 500 billion by 2030/31.

[2] **DD News / Prasar Bharati** – *India cruising towards \$300 billion electronics production by 2026*. State broadcaster report on the growth of Indian electronics production and medium-term production targets.

[3] Press Information Bureau (PIB), Government of India – Production Linked Incentive (PLI) Scheme. Official data on the total outlay of INR 1.97 Lakh Crore across 14 sectors and sector-specific funding conditions.

[4] Press Information Bureau (PIB), Government of India – Electronics Components Manufacturing Scheme – Union Budget 2026–27. Official data on the increase of the ECMS outlay to INR 40,000 Crore and the expansion of local component manufacturing.

[5] Press Information Bureau (PIB), Government of India – Modified Electronics Manufacturing Clusters (EMC 2.0). Information on funding for electronics manufacturing clusters and shared industrial infrastructure.

[6] Department of Expenditure, Ministry of Finance, Government of India – Manual for Procurement of Goods 2024. Official procurement regulations and definitions regarding Local Content and Make in India.

[7] Ministry of Electronics & Information Technology (MeitY), Government of India – Phased Manufacturing Programme (PMP). Information on the step-by-step increase in local value addition, especially in mobile communications and electronics.

[8] Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce & Industry, Government of India – Public Procurement (Preference to Make in India) Order. Legal basis for local value addition in public procurement and classification as Class-I Local Supplier.

[9] DPIIT / Invest India, Government of India – Foreign Direct Investment Policy in the Electronics System Design & Manufacturing (ESDM) Sector. Details on the fundamental allowance of up to 100% FDI via the Automatic Route.

[10] Invest India – Government of India – Investor's Guide 2025–26. Official guide for foreign investors in the Indian electronics manufacturing sector.

[11] Bureau of Indian Standards (BIS), Government of India – Compulsory Registration Scheme (CRS). Official details on the product categories and compliance requirements of the BIS registration system.

About the Author

Dirk Kaussen is Founder and Managing Director of EMS Strategy Group. With around 40 years of experience in the electronics industry — including founding and managing his own electronics manufacturing company in Germany — he brings deep expertise in manufacturing processes, EMS partner selection, supply chain stability, relocation projects, and risk management. His approach combines practical solutions with a direct connection to industrial reality.

About the EMS Strategy Group

EMS Strategy Group supports industrial enterprises in the strategic and operational advancement of their electronics manufacturing. Our core expertise lies in the strategic relocation of manufacturing volumes, the selection of qualified EMS partners, the establishment of new production capacities, and the expansion of existing manufacturing structures.

Furthermore, we design resilient supply chain frameworks, conduct comprehensive risk assessments, and guide dual-sourcing strategies, with operational support through to a successful series production ramp-up.

www.emssg.com | [LinkedIn: Dirk Kaussen](#)

Legal Notice / Disclaimer

The information, assessments, and recommendations contained in this Document have been prepared with the utmost care and to the best of our knowledge. They are provided solely for general informational purposes in a B2B context and do not constitute legal, tax, technical, or business advice tailored to any specific situation. The content of this document does not replace, and is not intended to replace, individual qualified professional counsel or economic feasibility studies.

Regulatory Proviso: As legal requirements, directives, standards, and their official application guidelines (particularly at the EU and international levels) evolve continuously, all information reflects the status at the time of preparation. It is strictly subject to later official publications or regulatory changes. Only the official legal texts and governmental publications remain legally binding.

Translation Notice: This document was translated from the original German version using machine translation systems. Although the translation has been reviewed, discrepancies, inaccuracies, or translation errors cannot be entirely ruled out. In the event of any ambiguity, conflict, or contradiction, the original German text shall remain solely authoritative.

Limitation of Warranty and Liability: While every reasonable effort has been made to ensure the accuracy of the information provided, EMS Strategy Group makes no representations or warranties, express or implied, regarding the accuracy, completeness, or timeliness of the content contained herein.

To the fullest extent permitted by applicable law, EMS Strategy Group shall not be liable for any direct, indirect, incidental, consequential, or other damages arising from the use of, reliance on, or practical implementation of any information, strategies, recommendations, or evaluation criteria contained in this Document.

Copyright and Distribution: This Document may be distributed and shared in its original, unmodified form, provided that full attribution and copyright ownership of EMS Strategy Group is maintained at all times.



www.emssg.com | [LinkedIn: Dirk Kaussen](#)

© 2026 EMS Strategy Group. All rights reserved. This white paper may be freely quoted, provided the source is acknowledged.