Market evolution: Radar and radio navigation equipment (CN 8526) — 2015–2025

Introduction

This report examines the external trade of the European Union in radar apparatus, radio navigational aid apparatus and radio remote control apparatus (CN 8526) with non-EU partners from 2015 to 2025. Drawing exclusively on the data provided, it identifies the key forces behind a decade of expansion, the dramatic reordering of partner countries, and the strengthening of the EU's industrial base. The analysis shows that the EU remains a solid net exporter, but the composition of trade has shifted markedly – volumes have been driven by lower-priced exports while high-value imports have pushed the import bill upward.

1. Divergent price trends reshape EU export and import volumes

Export volumes surge while unit values edge down

Total extra-EU exports rose from €2.87 billion in 2015 to €4.59 billion in 2025, an increase of 59.6 %. Over the same period, the quantity shipped abroad jumped by 65.0 % (from 9 466 tonnes to 15 623 tonnes), while the average unit price eased by 3.3 % (from €303 575 to €293 579 per tonne). EU trade overview Thus, the export expansion was first and foremost a volume story: EU producers shipped many more units, accepting a slight erosion of unit values.

Imports become pricier while volumes remain nearly flat

Imports tell a different tale. Their value climbed by 74.8 % (from €1.99 billion to €3.47 billion), yet the imported quantity grew by a mere 3.0 % (14 731 to 15 173 tonnes). The average import price consequently surged by 69.7 %, from €134 847 to €228 797 per tonne. The EU therefore absorbed a sharply higher import bill for roughly the same physical volume of goods, signalling a shift toward more technologically advanced or higher-priced imported equipment.

A structural shift emerges in the product mix

The product-level data (CN 852610 – radar apparatus, 852691 – radio navigational aid apparatus, 852692 – radio remote control apparatus) clarify the driver of these price movements. Product segment breakdown

Segment	2015 Export quantity (t)	2025 Export quantity (t)	Export unit price change	2015 Import value (€ m)	2025 Import value (€ m)	Import unit price change
Radio navigational aid (852691)	5 209	8 868	–36.4 %	1 406	1 911	+105.4 %
Radar apparatus (852610)	2 734	3 970	+47.2 %	322	996	+84.5 %
Radio remote control (852692)	1 523	2 785	+10.5 %	260	569	+14.9 %

Radio navigational aid apparatus accounts for the bulk of export volume (56 % of the total in 2025) and its unit price fell steeply, pulling down the overall average. On the import side, radar and radio navigational aids both recorded strong unit-price increases, with radar alone seeing its import value triple (from €322 m to €996 m). The EU is therefore exporting more low-cost navigation receivers while purchasing high-end radar and sophisticated navigation equipment from abroad.

2. A reshuffled geography: new sourcing and destination hubs emerge

Traditional import partners lose ground to fast-growing Asian suppliers

The EU’s import sources underwent a profound transformation. The United Kingdom, Korea, and Japan saw their deliveries shrink (-24.5 %, -59.5 %, and -59.9 %, respectively) while Taiwan and Viet Nam posted explosive growth of 1 028 % and 229 089 %. The United States nearly doubled its sales, and China remained the largest single supplier despite a modest 13 % increase. Top partners

Import partner	2015 (€ m)	2025 (€ m)	Change
China	525.0	593.0	+13.0 %
United States	471.4	938.4	+99.0 %
United Kingdom	347.7	262.7	–24.5 %
Viet Nam	0.2	432.0	+229 089 %
Taiwan	30.6	345.2	+1 028 %
Korea, Republic of	156.9	63.5	–59.5 %
Japan	72.4	29.0	–59.9 %

Export destinations diversify as emerging economies gain prominence

On the export side, the United States remained the top destination (€1 094 m in 2025, +50.9 %), but the strongest momentum came from Türkiye (+684 %), Mexico (+171 %) and China (+100 %). Shipments to the UK contracted by 8 % and those to Japan fell by 19 %. Top partners

Export partner	2015 (€ m)	2025 (€ m)	Change
United States	725.1	1 094.2	+50.9 %
United Kingdom	478.6	440.3	–8.0 %
China	238.4	477.2	+100.2 %
Türkiye	39.3	307.8	+684.0 %
Mexico	67.3	182.7	+171.4 %
Korea, Republic of	114.4	118.5	+3.6 %
Japan	157.5	127.2	–19.2 %

Concentration declines yet volatility points to potential chokepoints

The Herfindahl-Hirschman Index (HHI) for both imports and exports fell over the period (imports: 1 681 → 1 390; exports: 1 122 → 956), confirming a broadening of the partner base. Concentration Nevertheless, several new partners exhibit high year-on-year volatility in physical quantities. Volatility

- **Imports**: Viet Nam (coefficient of variation 1.01), Ukraine (1.10), Taiwan (0.72) and Japan (0.68) display erratic shipment flows, reflecting their still-maturing roles in EU supply chains.
- **Exports**: Morocco (0.83) and Türkiye (0.91) stand out for quantity instability, while the United Kingdom (0.50) and Japan (0.50) show moderate yet persistent variability.

Price shocks were detected in several key relations. Shock events A notable import-side shock hit Taiwan in 2017 (+49.6 % price jump), consistent with a global component shortage. On the export side, Norway experienced a -28.5 % price drop in 2018, while Morocco (+241 % in 2020), India (+179.9 % in 2020) and Brazil (+174.2 % in 2018) all saw abrupt export price spikes, suggesting temporary mismatches between supply and demand or policy-driven surges.

3. A reinforcing manufacturing base underpins EU's strategic position

Domestic production expands at a steady pace

EU-level production of CN 8526 goods increased from €3.63 billion to €5.68 billion between 2015 and 2024 (+56.3 %), while the number of units produced rose from 14.4 million to 22.5 million (+56.7 %). Production volumes This production growth – in both value and volume – has provided a solid foundation for the export expansion, ensuring that much of the foreign demand could be met from within the EU.

Specialisation clusters around a few highly competitive member states

A handful of member states have developed a pronounced comparative advantage in this sector. In 2025, the most specialised were Lithuania (RSCA 0.82), Hungary (0.65), Poland (0.57), Portugal (0.55) and Sweden (0.25). Most specialised At the opposite end, Malta, Ireland, Croatia and Greece show very low specialisation. In absolute terms, Germany remains the largest exporter (€1.77 billion in 2025, +36.0 % since 2015), followed by Italy (+288.6 %) and France (+0.7 %). The rapid rise of Italian and Danish exports (Denmark +351.4 %) highlights that the industrial fabric is not only concentrated but also evolving.

Net-import-reliance and trade intensity illustrate a deeply integrated yet resilient sector

The EU's net-import-reliance for CN 8526 was already negative in 2015 (–5.8 %) and became substantially more negative over the decade, reaching a trough of –78.2 % in 2017 before settling at –16.3 % in 2024. Net import reliance This metric confirms that the EU has been a consistent net exporter, even if the surplus narrowed after the pandemic. Trade intensity (exports plus imports relative to production) more than trebled, from 26.2 % to 83.1 %, while export propensity (exports relative to production) surged from 17.4 % to 73.1 %. Export propensity The high and rising trade intensity shows a sector deeply enmeshed in global value chains, while the comfortable export surplus underscores a strong competitive advantage that has not been eroded by the parallel increase in import prices.

Conclusion

Between 2015 and 2025, the EU’s trade in radar and radio navigation equipment expanded vigorously, driven by large-scale export of lower-priced navigation receivers and a simultaneous leap in the value of high-tech imports. The partner landscape has been thoroughly redrawn: traditional suppliers like Korea and Japan have been replaced by Taiwan and Viet Nam, while export growth is increasingly directed towards Türkiye, Mexico and China. Despite the upheaval, the EU’s net-exporter position remains robust, backed by a growing domestic production base and a small group of highly specialised member states. The main risk going forward lies in the high volatility of some new import sources, which could complicate supply chain management in a sector that is both strategically important and increasingly open to global trade.

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