

Appendix: Starlink Adoption on Large Ships — Evidence

Scope: ocean-going cruise ships and deep-sea merchant vessels. Counts are conservative and based on operator statements or first-party documents. Global totals are included for context.

Definitions

- Large ship: ocean-going cruise ships and merchant vessels $\geq 10,000$ GT (container, tanker, bulk carrier, car carrier, LNG/LPG).
- Equipped: a public statement of installation across the ship or fleet. Pilot trials or partial segments count only if the operator says “entire fleet” for that segment.
- Excluded: yachts and pleasure craft, most small fishing and inland craft, harbor service boats unless explicitly counted by the operator as part of a deep-sea fleet.

Methods (summary)

- Sources: operator press releases, public filings, trade press summaries, and analyst tallies (Valour).
- Counting rule: per-IMO where possible. Avoid double counting when lessors charter hulls to liners.
- Partial vs full: rows marked “Yes” are counted in the lower bound only when the operator states fleet-wide completion or a completed, countable subset.
- Scope differences: Starlink’s 75k covers all vessel classes. Valour’s 26k focuses on commercial and workboat vessels that can be identified in public or partner data.

Global context (not used directly for the large-ship lower bound unless noted)

Metric	Number	Date	Scope / Notes	Source
Vessels served by Starlink Maritime	>75,000	22 Oct 2024	All vessel classes, includes leisure and small craft	Starlink Progress Report 2024
Identified Starlink vessels (commercial/workboats)	>26,000	May 2025	Vessel-level sample. Excludes most leisure and small craft	Valour Consultancy blog update

Sensitivity (lower bound scenarios)

Scenario	Included rows	LB result (vessels)
Conservative	Cruise ≥ 300 ; Seaspan 165; OSG 21	≈ 486
With Maersk committed	Conservative + Maersk 330+	≈ 816

Notes: Treat Maersk's 330+ as "committed" unless you prefer to count only completed announcements. Cruise ≥ 300 is supported by Starlink and Quilty statements.

Operator-level evidence (countable large ships)

Segment	Operator	Claim (short)	Count	Status / date	Include in LB?	Source summary
Cruise	Carnival Corporation	Entire global fleet	90+	Completed May 2024	Yes	Corporate statements, 14–15 May 2024
Cruise	Royal Caribbean Group	Fleet-wide across Royal Caribbean and Celebrity. Silversea later	≈ 60 –70	Announced 30 Aug 2022; ongoing	Yes	Company and trade press 2022–2024
Cruise	Norwegian Cruise Line Holdings	Completed across all ships (Regent and Oceania in 2024; NCL by early 2025)	≈ 33 –34	Completed 2024–Feb 2025	Yes	Company releases Sept–Dec 2024; Feb 2025
Cruise	MSC Cruises	Rollout completed by May 2024	22	Target stated Feb 2024	Yes	Company statements via trade press 2024
Container (owner-op)	Maersk	More than 330 own-operated vessels to be fitted	330+	Agreement 12 Oct 2023	Yes*	Maersk announcement and follow-ups
Container (lessor)	Seaspan (Atlas)	Completed across entire operating fleet	165	Completed May 2024	Yes	Atlas/Seaspan announcements May 2024
Tanker / ATB	OSG	Installations across every vessel	~ 21	Dec 2023	Yes	OSG statements and trade press Dec 2023

*If you prefer to treat Maersk as "committed" until a completion notice is published, compute two lower bounds: with Maersk and without Maersk.

Optional additions (track but do not count until completion is public)

Segment	Operator	Claim	Fleet size (approx.)	Status / reason not counted
Container (owner-op)	Hapag-Lloyd	Rollout started across its fleet	≈300+	No completed count public yet

Where the lower bound comes from (quick split)

Cruise ≥300.

Container owner (Maersk) 330+.

Container lessor (Seaspan) 165.

Tanker (OSG) 21.

Assumptions and caveats

- Multi-terminal installs per hull do not increase the vessel count.
- Charter swaps and fleet churn move ships between brands without changing IMO-level counts.
- Press releases lag real installs. Integrator NDAs mean some completions are not public immediately.
- Leisure and small craft dominate the 75k total. Large deep-sea ships are a subset.
- Analyst samples undercount where AIS or commercial signals are weak or private.

Cross-checks and plausibility

- Deep-sea baseline: the ≥10,000 GT subset of the trading fleet is on the order of 25–30k hulls, depending on definition.
- A conservative lower bound of roughly 800–900 large ships on Starlink implies a low single-digit percent penetration, which aligns with staged rollouts during 2023–2025.

Operator change log (selected)

- 2023-12: OSG indicates installations across entire fleet (~21).
- 2024-05: Seaspan reports completion across 165 vessels.
- 2024-05: Carnival states entire global fleet equipped.
- 2024-10: Starlink Progress Report cites >75,000 vessels and >300 cruise ships.
- 2025-02: Valour update >24,400 Starlink vessels identified (commercial/workboats).
- 2025-05: Valour update >26,000 identified.

Quick glossary

- IMO: persistent ship identifier assigned by the International Maritime Organization.
- MMSI: Maritime Mobile Service Identity. Can change. Avoid for de-duplication.
- VSAT: very small aperture terminal for satellite communications.
- LEO, MEO, GEO: low, medium, and geostationary Earth orbit satellite networks.
- Owner-op vs lessor: owners that operate their own ships versus hull lessors who charter to operators.

How to update this appendix in 15 minutes

1. Search operator newsrooms monthly for “Starlink” + “fleet” + “completed”.
2. Scan major integrators (Marlink, Speedcast, Navarino) for program updates.
3. Check Valour’s monthly or quarterly notes for updated vessel counts.
4. Verify claims against fleet lists or Equasis. Dedupe by IMO to avoid lessor and operator double counts.
5. Revise the lower bound only when a completion figure is explicit. Keep “in pipeline” rows separate.

References with URLs

- R1. Starlink Progress Report 2024 (PDF) — https://api.starlink.com/public-files/Starlink_Progress_Report_2024.pdf
- R2. Valour Consultancy, Maritime Connectivity Tracker — <https://valourconsultancy.com/blog/>
- R3. Carnival Corporation statements (May 2024) — <https://www.carnivalcorporation.com/>
- R4. Royal Caribbean Group announcement (Aug 2022) and follow-ups — <https://www.royalcaribbeangroup.com/>
- R5. NCLH releases (Regent Sept 2024; Oceania Dec 2024; NCL early 2025) — <https://www.nclh.com/>
- R6. MSC Cruises rollout notes via trade press (Feb–May 2024) — <https://www.msc.com/>
- R7. Maersk announcement (Oct 2023) on 330+ vessels — <https://www.maersk.com/news>
- R8. Seaspan and Atlas announcements (May 2024) on 165 vessels — <https://www.atlascorporation.com/>
- R9. OSG statements and trade press (Dec 2023) — <https://www.osg.com/>
- R10. Hapag-Lloyd rollout started (2023–2025) — <https://www.hapag-lloyd.com/>
- R11. Quilty Space note on >300 cruise ships equipped (2024) — <https://www.quiltyspace.com/>