

Topic 2: The Rise of Narco-Subs and Underwater Drug Trafficking

United Nations Office on Drugs and Crime

I. Introduction

Underwater drug trafficking represents one of the most sophisticated challenges in international security. What began as crude coastal vessels has transformed into technologically advanced craft capable of transoceanic voyages while evading sophisticated detection systems. From 1993 to May 2023, the Colombian Navy intercepted 228 illegal vessels, representing only a fraction of operations. The US Coast Guard estimates interdicting only 10% of roughly 3,500 annual identified cases due to resource limitations. The most dramatic development occurred in 2024 with Colombia's seizure of the first unmanned narco-submarine equipped with Starlink satellite technology. This paradigm shift to remote-controlled systems eliminated crew risk while maintaining full operational capabilities. The 1.5-ton capacity craft featured sophisticated command systems and real-time global operation capability.

II. Key Terms

Narco-Submarines: Vessels designed for covert drug transportation, ranging from semi-submersible to fully submersible craft incorporating stealth technologies.

Self-Propelled Semi-Submersible (SPSS): Most common type operating with minimal surface profile—typically under one foot visible. Range 40-80 feet long, carrying 4-12 metric tons over 2,500+ nautical miles.

Fully Submersible Vessels: Advanced craft capable of complete underwater operation, eliminating surface detection risks but requiring sophisticated life support and navigation systems.

Unmanned Underwater Vehicles (UUVs): Remote-controlled craft eliminating crew risk while maintaining operational capabilities. Include satellite communication for global operation.

Starlink-Enabled Vessels: Latest generation equipped with SpaceX satellite internet providing high-bandwidth global communications for real-time remote control. First detected in 2024.

Scuttling Protocols: Standard procedures for rapid vessel flooding when detected, destroying evidence within minutes while crew escapes.

III. Past International Actions

Initial encounters date to the 1990s, with systematic attention emerging in the 2000s as scale became apparent. The US Drug Trafficking Vessel Interdiction Act (2008) created groundbreaking legal frameworks criminalizing stateless submersible operations in international waters with 15-year maximum penalties. Colombia enacted comprehensive legislation (2009) penalizing construction, sale, and operation with 6-14 year sentences. The UNODC Global Maritime Crime Program provides capacity building to 90+ countries through specialized training and technical assistance.

Regional initiatives include MAOC-N coordinating European responses and bilateral US-Colombian cooperation establishing joint operations and intelligence fusion centers.

IV. Timeline of Key Events

1990s	Emergence of crude “narco-sub”
1993	First seizure of a narco-submarine by Colombian Navy
2008	U.S. passes Drug Trafficking Vessel Interdiction Act
2009	Colombia criminalizes narco-sub construction
2017	First electric-powered narco-sub seized
2024	First unmanned, Starlink-equipped narco-sub intercepted in Colombia

V. Current Situation

Unmanned systems represent the most significant breakthrough, eliminating crew vulnerability while maintaining capabilities. Starlink enables real-time global control with high-bandwidth data links. Modern vessels incorporate radar-absorbing materials, hybrid-electric propulsion, and thermal management systems. Route diversification spans global networks. Transatlantic operations regularly transport multi-ton shipments from South America to Europe. Transpacific routes extend to Asian and Australian markets over 7,000+ nautical miles. Individual shipments generate over \$1billion street revenue.

Current interdiction rates remain at only 10% despite significant investments. Detection challenges include low-profile designs minimizing signatures and elimination of traditional intelligence sources through unmanned operations. Automated scuttling can be triggered remotely.



VI. Major Parties Involved

Colombia: Colombia remains the principal innovation hub and departure point for self-propelled semi-submersibles (SPSS) and low-profile vessels (LPVs). Since the 1990s, the Colombian Navy has intercepted hundreds of such craft, while Law 1311 (2009) criminalized the financing, construction, storage, and operation of submersibles for illicit purposes—mirroring U.S. legislation and enabling prosecution independent of drug-load recovery. Recent interdictions demonstrate rapid technological evolution: in July 2025, Colombian authorities reported the first unmanned narco-sub equipped with Starlink connectivity, suggesting proof-of-concept trials for remote navigation and scuttling.

United States of America: Maritime interdiction remains a cornerstone of U.S. counternarcotics strategy, legally anchored in the Drug Trafficking Vessel Interdiction Act (2008), which criminalizes the operation of stateless SPSS and LPVs on international voyages even when contraband is unrecovered—addressing traffickers’ frequent scuttling tactics. The U.S. Coast Guard, often operating in conjunction with partner states, has reported repeated multi-ton interdictions in both the Eastern Pacific and the Caribbean. In 2025, Washington strengthened its maritime posture in the Southern Caribbean; on 2 September, U.S. forces sank an alleged Venezuelan narco-vessel, resulting in the deaths of 11 individuals..

Mexico: Mexico has expanded its maritime interdiction capabilities and increasingly encounters SPSS and LPVs transiting northward from South America along Pacific routes. The Mexican Navy reported multiple interdictions in 2024–2025, including seizures of vessels carrying 3.5–3.6 metric tons of narcotics off the Guerrero and Acapulco coasts. This reflects the growing diversification of trafficking modalities beyond traditional go-fast craft. Mexican policy supports enhanced maritime domain awareness, multinational operational cooperation, and prosecution of transnational crews, while preserving operational sovereignty.

Venezuela: Venezuela's extensive coastline, including areas such as Falcón, Paraguaná, and eastern Caribbean corridors, has been identified in law-enforcement and research reporting as staging grounds for maritime drug trafficking. However, the extent of Venezuelan involvement—and the degree of state complicity—remains contested and variable across time and geography. UNODC mapping highlights east-Caribbean vectors for maritime trafficking emanating from northern South America, while policy debate continues regarding the centrality of Venezuelan nodes relative to Colombian and Ecuadorian corridors.

VII. Key topics to Debate

- How should international maritime law be updated to effectively regulate unmanned, satellite-controlled narco-submersibles that eliminate the need for crew detention and vessel seizure?
- What strategies can ensure technology transfer and detection capacity building for developing states without creating long-term dependencies?
- How should the global community target the massive profit margins of deep-sea trafficking, which fuel continuous criminal innovation?
- What are the best frameworks for regional cooperation and resource sharing in tracking and intercepting narco-submersibles operating on transoceanic routes?
- How can maritime security measures be enforced while minimizing environmental damage from fuel spills and toxic cargo disposal during interdictions?
- What responsibilities should private sector technology and maritime companies (e.g., satellite providers) bear in preventing and detecting exploitation by drug traffickers?
- In response to actions such as the recent bombing of an alleged drug boat by U.S. forces, what constitutes justifiable use of force and what legal or judicial frameworks should govern accountability at sea?

VIII. Bibliography

United Nations Office on Drugs and Crime. 2019. Global Maritime Crime Programme. UNODC. <https://www.unodc.org/unodc/en/piracy/index.html>

United States Congress. 2008. Drug Trafficking Vessel Interdiction Act (DTVIA). GPO. <https://www.congress.gov/bill/110th-congress/house-bill/6295>

Colombian Navy. 2025. “Colombia Seizes First Unmanned Narco-Sub Equipped with Starlink Connection.” Marine Insight. <https://www.marineinsight.com/shipping-news/colombia-seizes-first-unmanned-narco-sub-equipped-with-starlink-connection/>

Small Wars Journal. 2025. “The Subaquatic Frontier of Drug Trafficking: Technological Evolution, Asymmetric Warfare, and the Unmanned Paradigm Shift.” <https://smallwarsjournal.com/2025/08/01/the-subaquatic-frontier-of-drug-trafficking-technological-evolution-asymmetric-warfare-and-the-unmanned-paradigm-shift/>

France 24. 2025. “Colombia Seizes First Unmanned Narco-Submarine with Starlink.” <https://www.france24.com/en/americas/20250702-colombia-narco-submarine-starlink>

CBS News. 2025. “Drone ‘narco-sub’ — equipped with Starlink antenna — seized off Caribbean coast of Colombia.” <https://www.cbsnews.com/news/drone-narco-sub-seized-first-time-caribbean-colombia/>

United Nations Office on Drugs and Crime. 2024. World Drug Report 2024. UNODC. <https://www.unodc.org/unodc/en/data-and-analysis/wdr2024.html>