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Shipbuilding Procurement: International Analysis of Source Selection Processes

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- Naval warships and support vessels are indispensable to the United States' ability to project power, maintain freedom of navigation, deter adversaries, and respond to crises worldwide. The U.S. Navy's maritime mission depends on a capable, ready, and technologically advanced fleet.
- Congress has highlighted that while the U.S. Navy's shipbuilding budget has increased substantially over the past two decades, systemic acquisition challenges continue to result in cost growth, schedule delays, and performance shortfalls.



- Congressional oversight findings indicate recurring weaknesses throughout the contracting life cycle. Such systemic acquisition challenges elevate the importance of rigorous and effective contracting processes.
- These challenges underscore the strategic importance of improving shipbuilding procurement, specifically source selection processes, to ensure that delivered ships meet operational requirements.



Research Purpose

- Examine the shipbuilding procurement source selection approaches of the United States, Egypt, Japan, and Taiwan, comparing these countries' source selection strategy, source selection team composition, and proposal evaluation criteria.

Research Questions

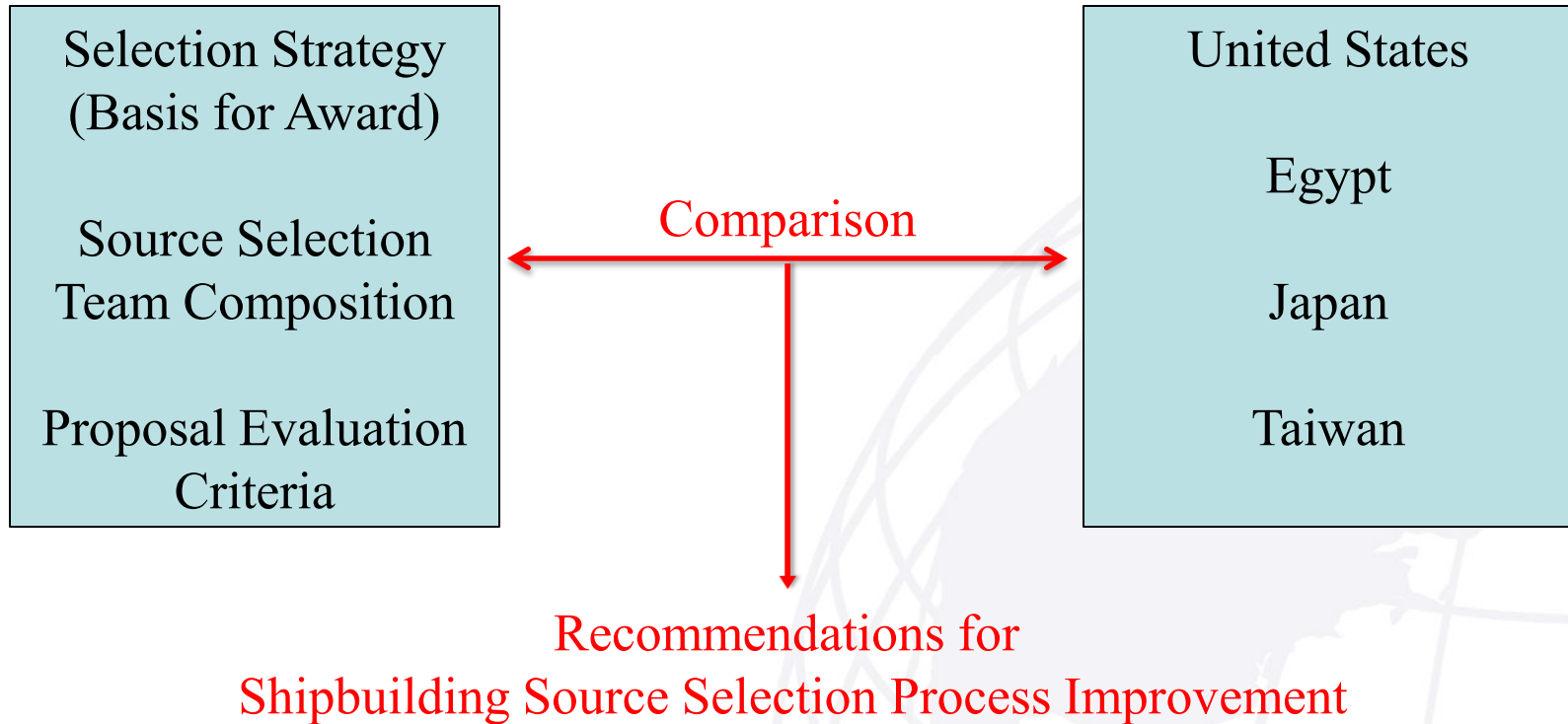
1. How does the source selection approach for shipbuilding procurement compare across the United States, Egypt, Japan, and Taiwan?
2. Based on the analysis, what source selection process improvement recommendations are identified for the U.S. Navy?



- **Auditability Theory**
 - Organizations need to have an established and effective knowledge management system supporting its governance processes and practices (Power, 1996).
 - A knowledge management system includes competent people, capable processes, and effective internal controls (Rendon & Rendon, 2015).
 - Capable source selection processes are critical for successful shipbuilding procurements.
 - An analysis of other countries' shipbuilding procurement source selection processes may reveal improvement opportunities for the U.S. Navy.



Conceptual Framework





- The methodology approach used in this research consists of:
 - Review of publicly accessible government procurement websites to access solicitation documents.
 - Review of countries' ministries of defense procurement laws, policies, and regulations.
 - Analysis of countries' solicitation documents (RFPs and RFTs) focusing on specific research areas.
 - Qualitative comparison of each countries' approach to shipbuilding source selection strategy, source selection team composition, and proposal evaluation criteria.

Country	Source Selection Approach (Basis for Award)	Source Selection Team Composition	Proposal Evaluation Factors
United States	Negotiated Procurement: Trade-Off (17) LPTA (13)	SST not specified in RFP. Assumed SST structure IAW DFARS policy. Committees include SSA, SSAC, SSEB. Govt personnel only	Trade Off: 1. Detail design and engineering approach=2. Production Approach >3. Management Approach > 4. Past Performance>5. Price LPTA: Technical Approach, Past Performance, Price
Egypt	Sealed Bidding Procurement: Point-Based System (1) (Evaluation of price and non-price factors to determine best value)	Solicitation details not accessible to the public. SST composition not specified in RFP, but IAW with EMOD policy. Committees include Tech Spec; Market Research; Tech Eval . Govt personnel only	Price Factors: 1.Total cost of acq.>2.Life cycle cost >3. Payment structure. Non-Price Factors: 1.Technical Specs>2. Operational support & maintenance>3.Technology transfer and local manufacturing
Japan	Proposal-Based Competition (3) (Evaluation of price and non-price factors using a scoring system to determine best value) Open Solicitation (1) (Using price and non-price factors to determine lowest priced technically acceptable offer)	Not published in RFP IAW ATLA; Available to interested parties upon request Note: SST Includes non-govt personnel (e.g., industry and academia representatives)	Mandatory Items: Not available. Additional Items: Price items: Shipbuilding total price Non-Price items: Facilities, quality control systems, past performance
Taiwan	Most Advantageous Tender (4); (Evaluation of price and non-price factors using a scoring system to determine best value) Note: Budget included in RFP	Published on public website. Note: SST Includes non-govt personnel (e.g., industry and academia representatives)	Price Factors: Shipbuilding total price Non-Price Factors: Technical capability, Price, Organizational structure, Financial condition, Mgt and execution of project plan, Past performance.



1. All analyzed country shipbuilding solicitations used either a priced-based source selection strategy (e.g., lowest priced, technically acceptable) or a trade-off source selection strategy to obtain best value in shipbuilding contracts.
2. All analyzed country shipbuilding procurements used a tiered source selection team structure to evaluate proposals and determine the award decision.
3. Japan and Taiwan include nongovernment personnel (e.g., representatives from industry and academia) in their source selection teams. In addition, Taiwan publishes the SST member names on its procurement website.
4. All analyzed country shipbuilding solicitations used similar proposal evaluation criteria (e.g. price and non-price factors) for trade-off source selections.



1. Consider including the procurement budget within the solicitation to increase the accountability, integrity, and transparency of the shipbuilding procurement and result in more responsive offeror proposals.
2. Explore the benefits of including nongovernment personnel, such as industry and academia representatives with the needed expertise, as member of the source selection team, in either a voting or non-voting capacity.
3. Determine if there is any benefit in making the names of the SST members publicly accessible for interested parties. This approach may also add to the accountability, integrity, and transparency of our shipbuilding procurements.
4. Explore the benefit of using the Highest Technically Rated Offer (HTRO) source selection approach for our most technically advanced and complex ships.



- Matsuda, S., Peters, A., & Aboutaleb, A. (2025). *Comparison of Source Selection Approach Between US, Egyptian, and Japanese Shipbuilding Procurement* (Naval Postgraduate School, Acquisition Research Program).
- Rendon, R.G. and Rendon, J.M. (2015) 'Auditability in public procurement: an analysis of internal controls and fraud vulnerability', *Int. J. Procurement Management*, Vol. 8, No. 6, pp.710–730.
- Yang, S. Y. (2023). *Comparison of Source Selection Strategies Between the United States' and Taiwan's Shipbuilding Procurement* (Naval Postgraduate School, Acquisition Research Program).



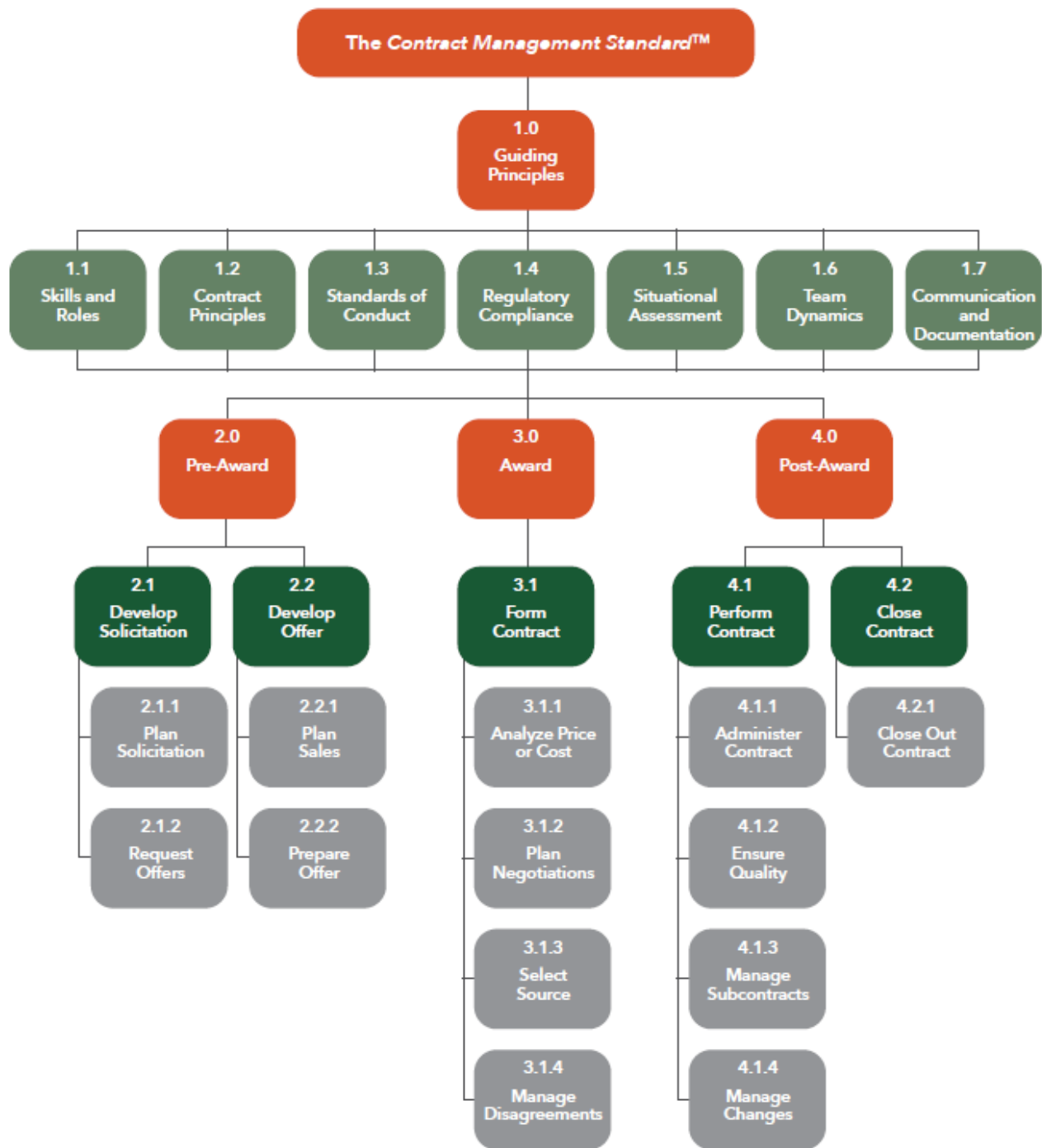
Questions/Comments

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Back-Up Slides



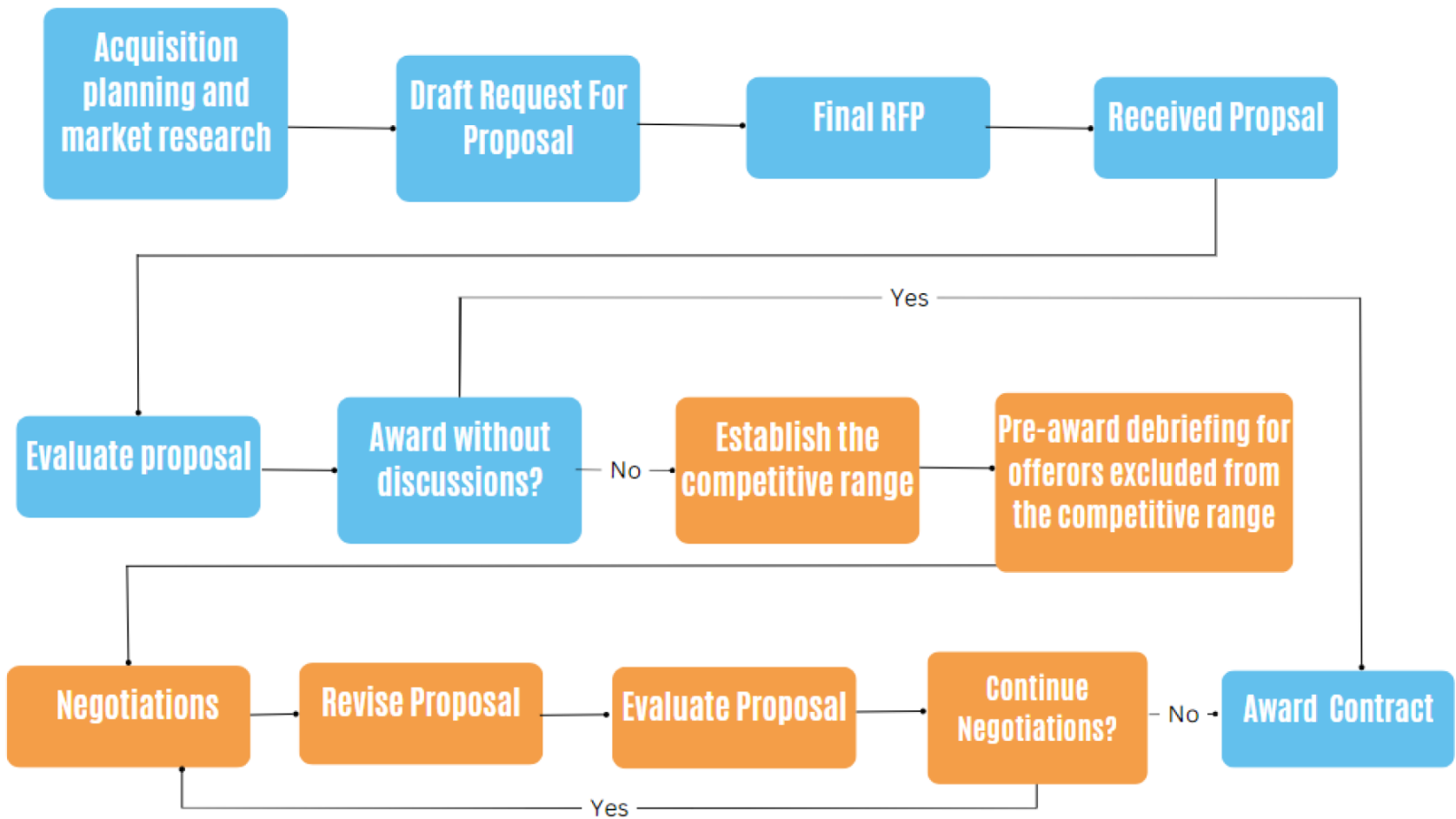


Figure 3. The Competitive Source Selection Process. Adapted from Rumbaugh (2010).

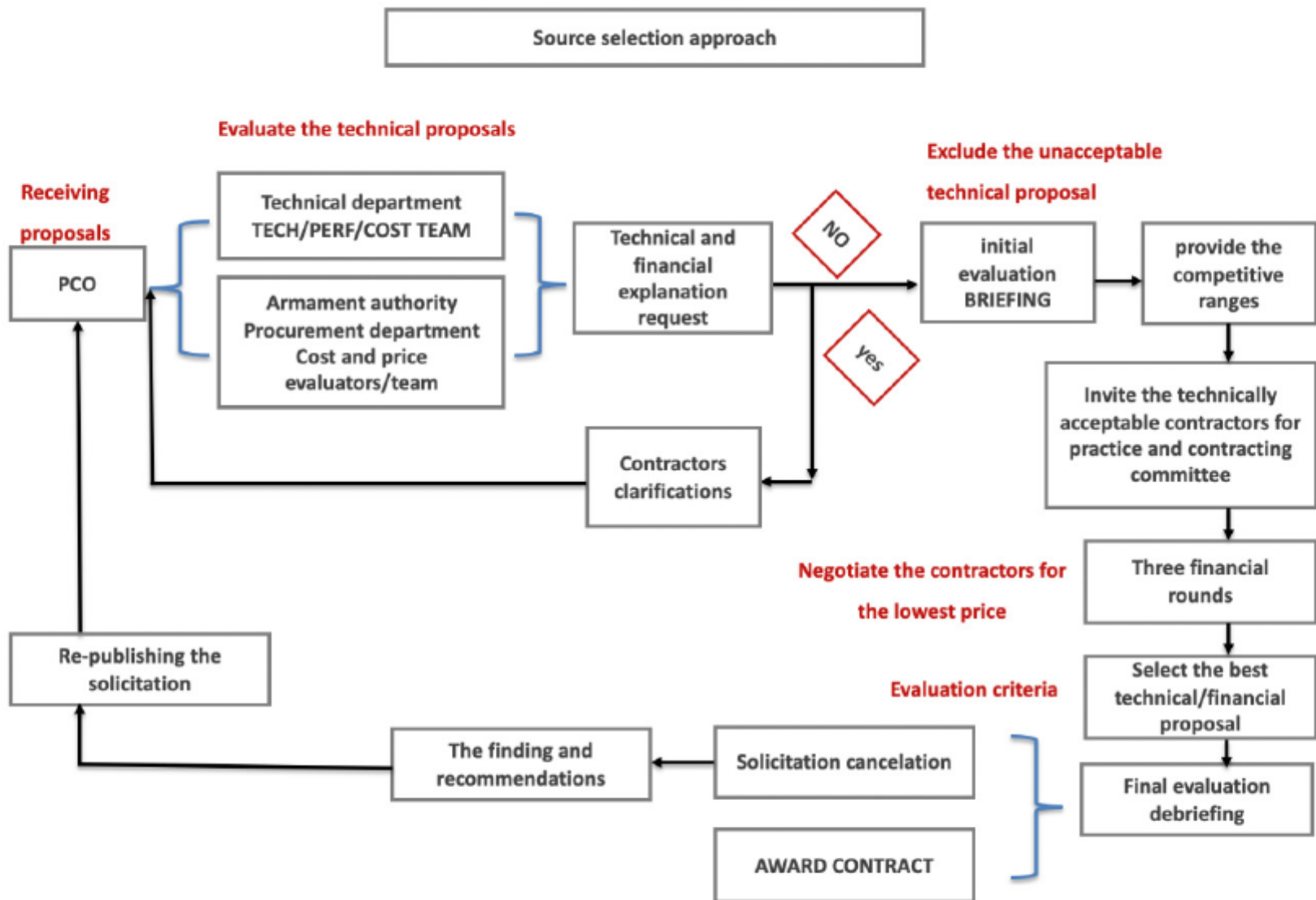


Figure 5. Source selection approach. Adapted from EMOD (2018).

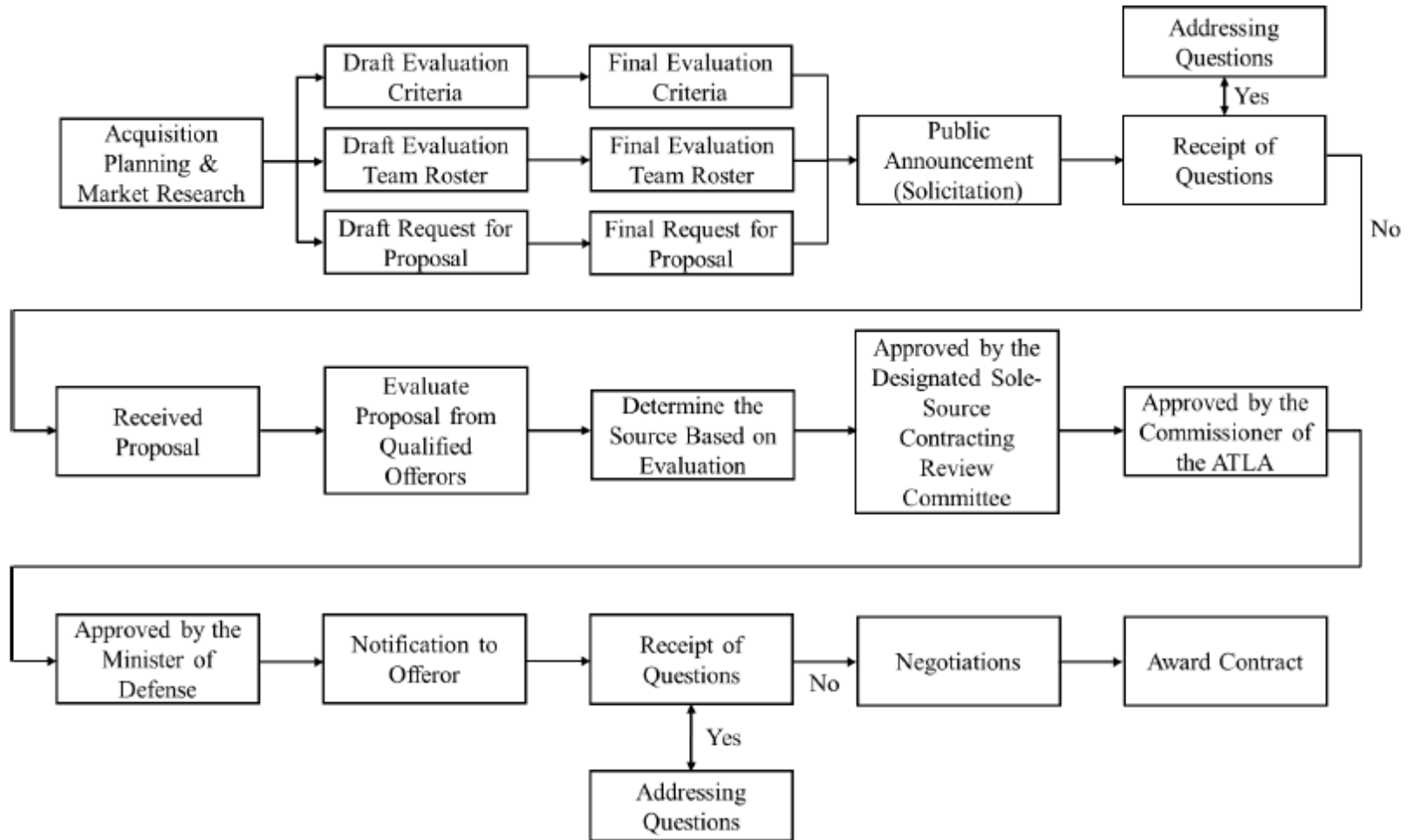


Figure 6. Process for negotiated contracts based on proposal-based competition. Adapted from ATLA (2023b).

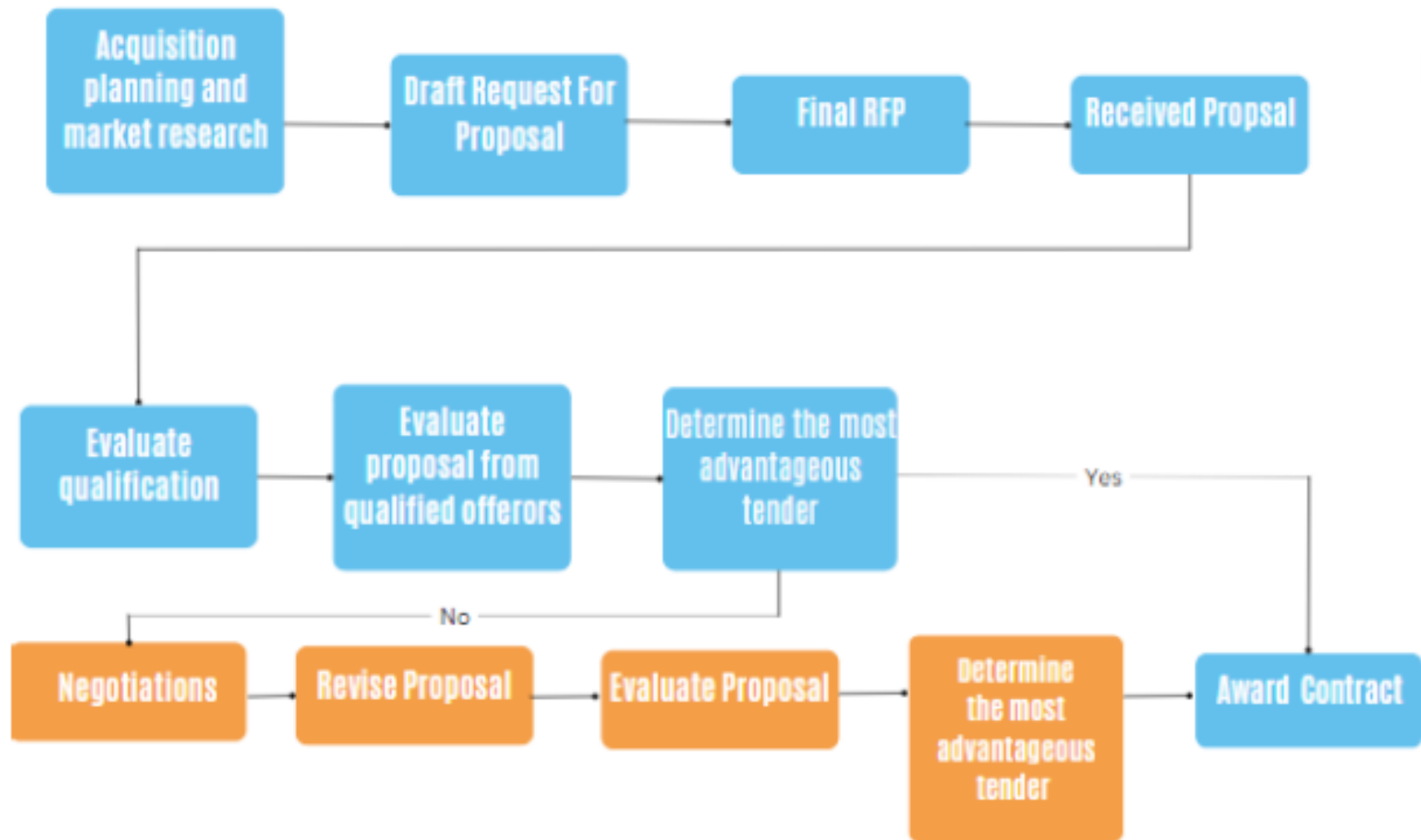


Figure 4. The Most Advantageous Award Process. Adapted from GPA (2019).

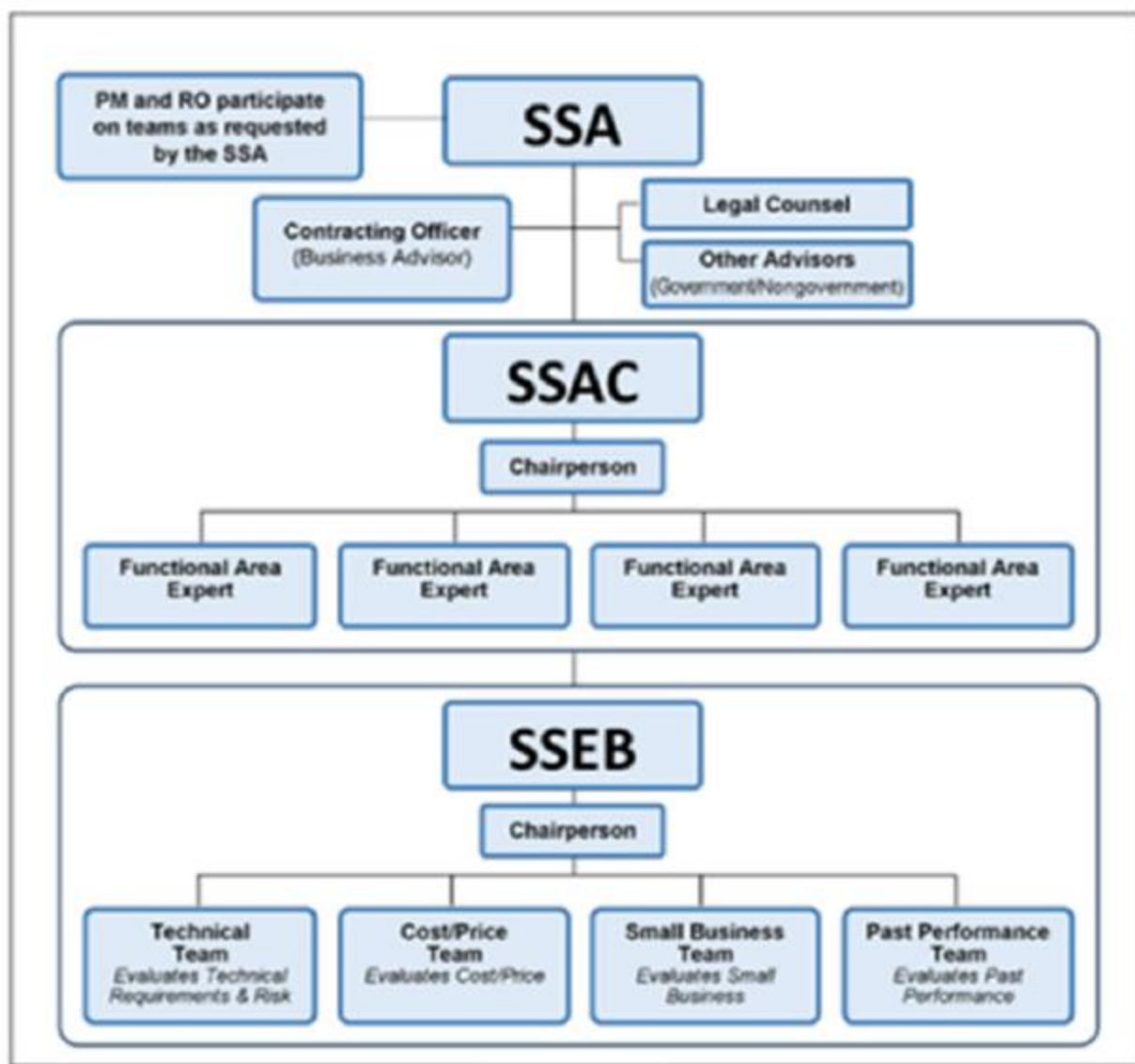


Figure 7. Typical SST structure for solicitations greater than \$100 million.
Source: Tenaglia (2022).

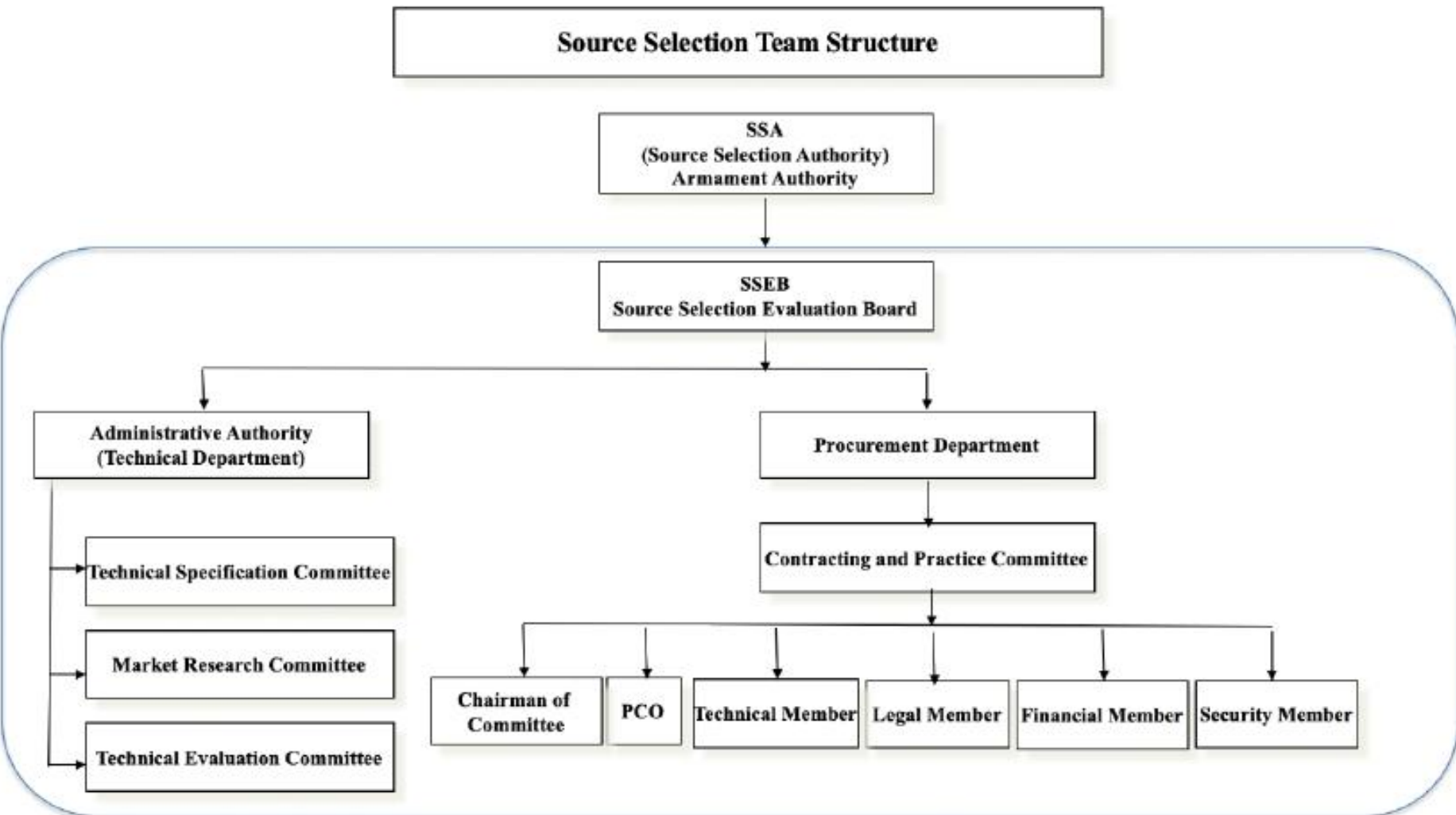


Figure 8. Structure of source selection team. Adapted from EMOD (2018).

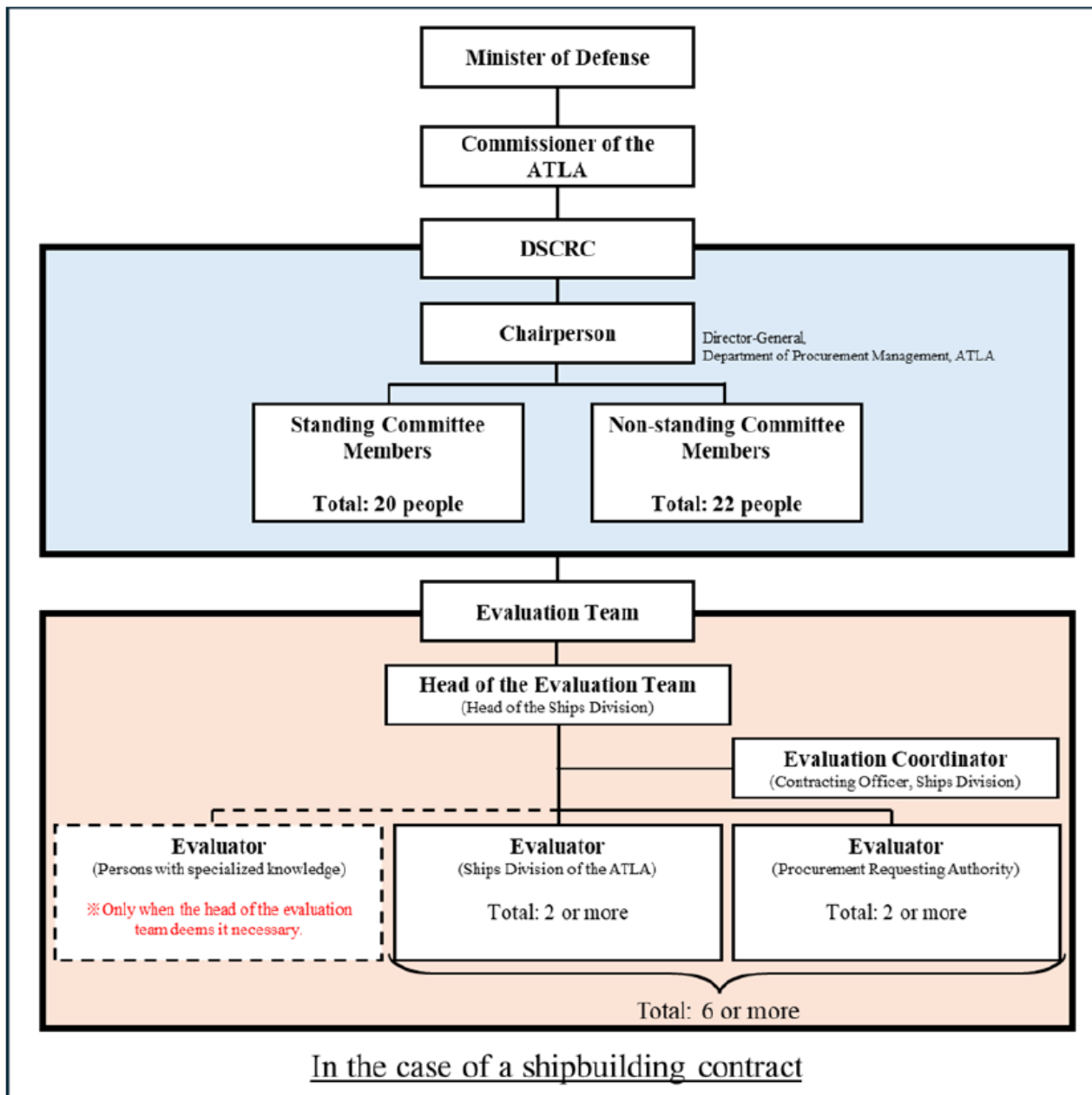


Figure 9. Japanese evaluation team composition and the Designated Sole-Source Contract Review Committee. Adapted from ATLA (2023b) and ATLA (2015f).

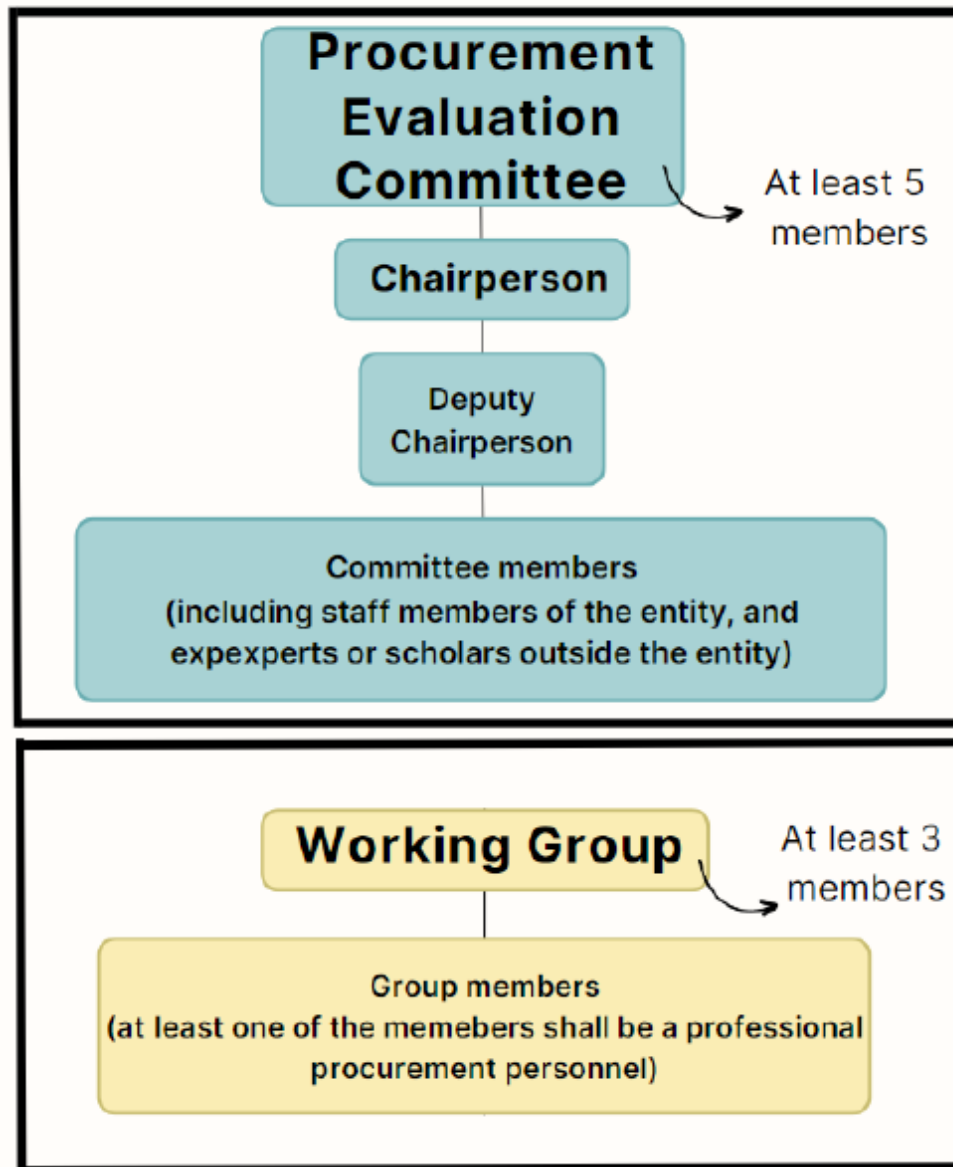


Figure 6. Procurement Evaluation Committee and Working Group. Adapted from Regulations Governing the Organization of Procurement Evaluation Committee (2021).