

Implementation Readiness Assessment

Provides a country readiness self-assessment framework for launching or scaling ocean accounts.

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Status Draft

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Last updated September 2026 **Responsible officer** Dr Jordan Gacutan

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OUTCOME

This Circular provides a country readiness self-assessment framework for launching or scaling ocean accounts. It guides countries through evaluating their institutional, data, and human capacity prerequisites, and outlines phased implementation pathways appropriate to different starting conditions. After reading this Circular, national statistical offices, ocean agencies, and inter-ministerial coordination bodies will be able to diagnose their current readiness level, identify priority gaps, design a sequenced implementation plan, and mobilise the institutional arrangements necessary to sustain ocean accounting as a regular statistical programme.

The Circular covers four further aspects of standing up and sustaining a programme. Section 3.5 is normative for the publication on coordination arrangements: where the mandate sits, what instrument carries it, how the arrangement is reviewed, and how political, technical and institutional champions are cultivated and sustained. Section 3.7 sets out the scoping phase that precedes Phase 1, drawing on the ESCAP pilot programme, and how to prioritise account types when capacity allows only one or two. Section 3.8 consolidates investment readiness for ocean finance – the minimum evidence a proposal needs, a scoring rubric, shared investment criteria, and the institutional and data requirements behind them. Section 3.9 covers regional platforms, peer exchange and South-South cooperation.

How account outputs then reach the planning cycle is [TG-1.10 OA and National Planning Integration](#); the operational design of data-coordination committees is [TG-4.7 National Data Coordination Architectures](#).

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ABOUT THIS CIRCULAR**RECOMMENDED CITATION**

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DRAFT

1. Outcome

¶1 This Circular provides a country readiness self-assessment framework for launching or scaling ocean accounts. It guides countries through evaluating their institutional, data, and human capacity prerequisites, and outlines phased implementation pathways appropriate to different starting conditions. After reading this Circular, national statistical offices, ocean agencies, and inter-ministerial coordination bodies will be able to diagnose their current readiness level, identify priority gaps, design a sequenced implementation plan, and mobilise the institutional arrangements necessary to sustain ocean accounting as a regular statistical programme.

¶2 The Circular covers four further aspects of standing up and sustaining a programme. **Section 3.5 is normative for the publication on coordination arrangements:** where the mandate sits, what instrument carries it, how the arrangement is reviewed, and how political, technical and institutional champions are cultivated and sustained. **Section 3.7** sets out the scoping phase that precedes Phase 1, drawing on the ESCAP pilot programme, and how to prioritise account types when capacity allows only one or two. **Section 3.8** consolidates investment readiness for ocean finance – the minimum evidence a proposal needs, a scoring rubric, shared investment criteria, and the institutional and data requirements behind them. **Section 3.9** covers regional platforms, peer exchange and South-South cooperation.

¶3 How account outputs then reach the planning cycle is **TG-1.10 OA and National Planning Integration**; the operational design of data-coordination committees is **TG-4.7 National Data Coordination Architectures**.

2. Requirements

¶1 **Essential prerequisites:**

- ¶2 **TG-0.1 General Introduction to Ocean Accounts** – for the conceptual framework and the nested superset structure of economy, society, and environment

¶3 **Helpful background:**

- ¶4 **TG-0.4 Structure and Focus** – for the overall structure of the Technical Guidance and dependency relationships between circulars
- ¶5 **TG-0.5 Navigating the Technical Guidance** – for audience pathways that help prioritise which accounts to compile first

¶6 ⓘ Framework Position

¶7 This Circular sits at the start of any country's implementation. It evaluates readiness across institutional capacity, data infrastructure, human skills, and policy demand: the four pillars that determine whether a country can sustain ocean accounting as a regular statistical programme. The assessment informs the choice of implementation pathway and connects to **TG-4.7 Data Coordination** for institutional architecture and **TG-3.11 Sub-National Ocean Accounts** for multi-level implementation.

3. Guidance Material

3.1 Country Readiness Self-Assessment Framework

3.1.1 Assessment dimensions

¶1 The readiness assessment covers four dimensions. Legal and regulatory environment is embedded as a sub-dimension of institutional capacity, because legal barriers to data sharing operate differently from coordination weakness and must be diagnosed separately:

Dimension	Description	Key questions
Institutional capacity	<i>Legal and regulatory environment</i> (statutes governing data sharing, statistics-act provisions, agency-specific data-access laws); inter-agency coordination mechanisms; political commitment; and resource allocation	Is there a lead agency with a clear legal mandate? Do statistics-act or agency-specific laws permit the necessary data sharing? Are ocean accounting data-sharing agreements in place? Is ocean accounting embedded in national statistical plans?
Data infrastructure	Availability, accessibility, and quality of environmental, economic, and social data relevant to ocean accounting	What ocean-related data exist? Are they accessible in machine-readable formats? Do spatial and temporal coverages meet minimum requirements?
Human skills and knowledge	Technical expertise in statistical compilation, environmental science, economic accounting, and geospatial analysis	Are there staff with SEEA compilation experience? Is there familiarity with ecosystem classification and condition assessment? Are GIS capabilities available?
Policy demand and use	Existence of policy frameworks, planning processes, and reporting commitments that create demand for ocean account outputs	Are there national ocean or blue economy strategies? Does the country report on SDG 14? Are there active marine spatial planning processes?

3.1.2 Readiness scoring rubric

¶1 Each dimension is scored on a four-level maturity scale aligned to SEEA implementation progression. The levels are cumulative: achieving a higher level implies that the requirements of lower levels have also been met. Where sub-element profiles are mixed, score to the highest level for which all criteria are met and record partial achievement of higher-level criteria as evidence for gap analysis in Section 3.1.3 Step 3.¹

Level	Label	General description
1	Pre-pilot	Ad hoc or absent. No SEEA accounts compiled. Activities depend on individual initiative or project-based funding.
2	Pilot compilation	At least one account type has been trialed. Some foundational elements in place. Formal arrangements are emerging but not yet institutionalised.
3	Regular compilation	Regular compilation of at least one account type is integrated into national reporting. Systematic arrangements are operational, though coverage or quality may be incomplete.
4	Multi-account with iterative improvement	Multi-account compilation is underway with continuous improvement processes embedded. Outputs are integrated into decision-making.

¶2 Institutional capacity scoring:

Level	Criteria
1 – Pre-pilot	No designated lead agency. Ocean accounting is not referenced in national statistical plans. Inter-agency coordination for ocean data is informal or absent. No data-sharing legal basis identified.
2 – Pilot compilation	A lead agency has been identified (NSO, ocean ministry, or environment agency). Initial discussions on inter-agency coordination have occurred. Ocean accounting is referenced in at least one national strategy or plan. Legal basis for key data-sharing steps has been assessed.
3 – Regular compilation	A formal inter-agency coordination mechanism (committee, working group, or MoU network) is operational. The lead agency has allocated recurrent budget for ocean accounting. Data-sharing agreements cover at least the core data providers. Statistics-act provisions and inter-agency legal authority for data access are documented.

Level	Criteria
4 – Multi-account with iterative improvement	Ocean accounting is embedded in the National Strategy for the Development of Statistics (NSDS) or equivalent. The coordination mechanism has a formal mandate and meets regularly. Production is funded through recurrent budget lines. Quality assurance procedures are documented and applied.

¶3 Data infrastructure scoring:

Level	Criteria
1 – Pre-pilot	Key datasets (marine area delineation, fisheries production, coastal land use) are unavailable or inaccessible. No data inventory for ocean-relevant holdings has been conducted.
2 – Pilot compilation	A data inventory has been completed identifying available ocean-relevant datasets. Some key datasets are accessible but may lack spatial referencing, consistent time series, or documentation. Global or regional datasets are used to fill gaps.
3 – Regular compilation	Core datasets for at least one account type (e.g., extent, economic flows) are available with adequate spatial and temporal coverage. A common spatial framework (e.g., ecosystem accounting areas, statistical geography) is defined. Metadata standards are applied.
4 – Multi-account with iterative improvement	Comprehensive data holdings support multiple account types. Data pipelines are automated or semi-automated. Data quality is regularly assessed against documented standards. New data sources (remote sensing, citizen science, administrative records) are actively integrated.

¶4 Human skills scoring:

Level	Criteria
1 – Pre-pilot	No staff have received training in environmental-economic accounting or SEEA methods. Relevant expertise (ecology, marine science, economic statistics, GIS) exists in separate agencies but has not been mobilised for ocean accounting.
2 – Pilot compilation	At least one staff member has received SEEA or ocean accounting training. A skills gap analysis has been conducted. Expertise in relevant disciplines has been identified across agencies.
3 – Regular compilation	A core team (3–5 staff) has practical experience in compiling at least one type of ocean account. The team includes or has access to expertise in ecological classification, economic accounting, and geospatial analysis. Training plans are in place.
4 – Multi-account with iterative improvement	A multi-disciplinary team is in place with documented skills across all required domains. Staff participate in international peer networks. Knowledge management systems (documentation, handover procedures, training curricula) ensure institutional memory.

¶5 Policy demand scoring:

Level	Criteria
1 – Pre-pilot	No explicit policy demand for ocean accounts. Ocean governance relies on sector-specific data without integration across domains.
2 – Pilot compilation	At least one policy process (national ocean strategy, marine spatial plan, SDG reporting) has identified ocean accounts as a potential input. Initial engagement with policy users has occurred.
3 – Regular compilation	Ocean account outputs are referenced in at least one active policy process. Regular dialogue between account compilers and policy users is established. Indicator needs have been specified.

Level	Criteria
4 – Multi-account with iterative improvement	Ocean accounts are routinely used in multiple policy processes (budgeting, spatial planning, international reporting). Feedback loops between users and producers are formalised. Account outputs are cited in policy documents.

3.1.3 Conducting the assessment

¶1 The self-assessment should be conducted by a small team that includes representatives from the national statistical office, the lead ocean or environment agency, at least one major data provider, and where possible a policy user from a planning or finance ministry. The assessment can be completed in a structured workshop of one to two days, following these steps:

1. ¶2 **Preparation:** Assemble background documentation including the national statistical plan, any existing data inventories, relevant policy documents, and organisational charts showing institutional responsibilities for ocean-related data.
 2. ¶3 **Scoring:** Work through each dimension and score against the rubric. Document the evidence supporting each score and note any uncertainties.
 3. ¶4 **Gap identification:** For each dimension where the score falls below the target level for the intended implementation pathway (Section 3.2), identify specific gaps and their causes. Where sub-element profiles are mixed, record the partial achievement as evidence for the gap analysis.
 4. ¶5 **Priority setting:** Rank gaps by their impact on the chosen pathway and the feasibility of addressing them. Use the requirements matrix in Section 3.3 to map gaps to specific account types.
 5. ¶6 **Action planning:** Develop a time-bound action plan to address priority gaps, assigning responsibilities and identifying resource requirements.
 6. ¶7 **External review (Recommended):** Share the completed assessment with a peer country, regional statistical body, or GOAP technical assistance team. External review is particularly valuable where self-assessment scores fall at level boundaries or where institutional capacity constraints make objective scoring difficult.
- ¶8 Countries are encouraged to share their assessments through the GOAP network to support peer learning.

3.2 Phased Implementation Pathway

3.2.1 Three-phase pathway

¶1 The following three-phase pathway is recommended as a general model. Countries should adapt it to their specific circumstances. The phases are not rigidly sequential, and countries may pursue elements of later phases in parallel where capacity permits. Figure 0.8.1 illustrates how a country's SNA and spatial capacity profile routes it to an entry point, and how the phase at which it starts the Foundation–Expansion–Integration pathway is set separately by its overall readiness level.

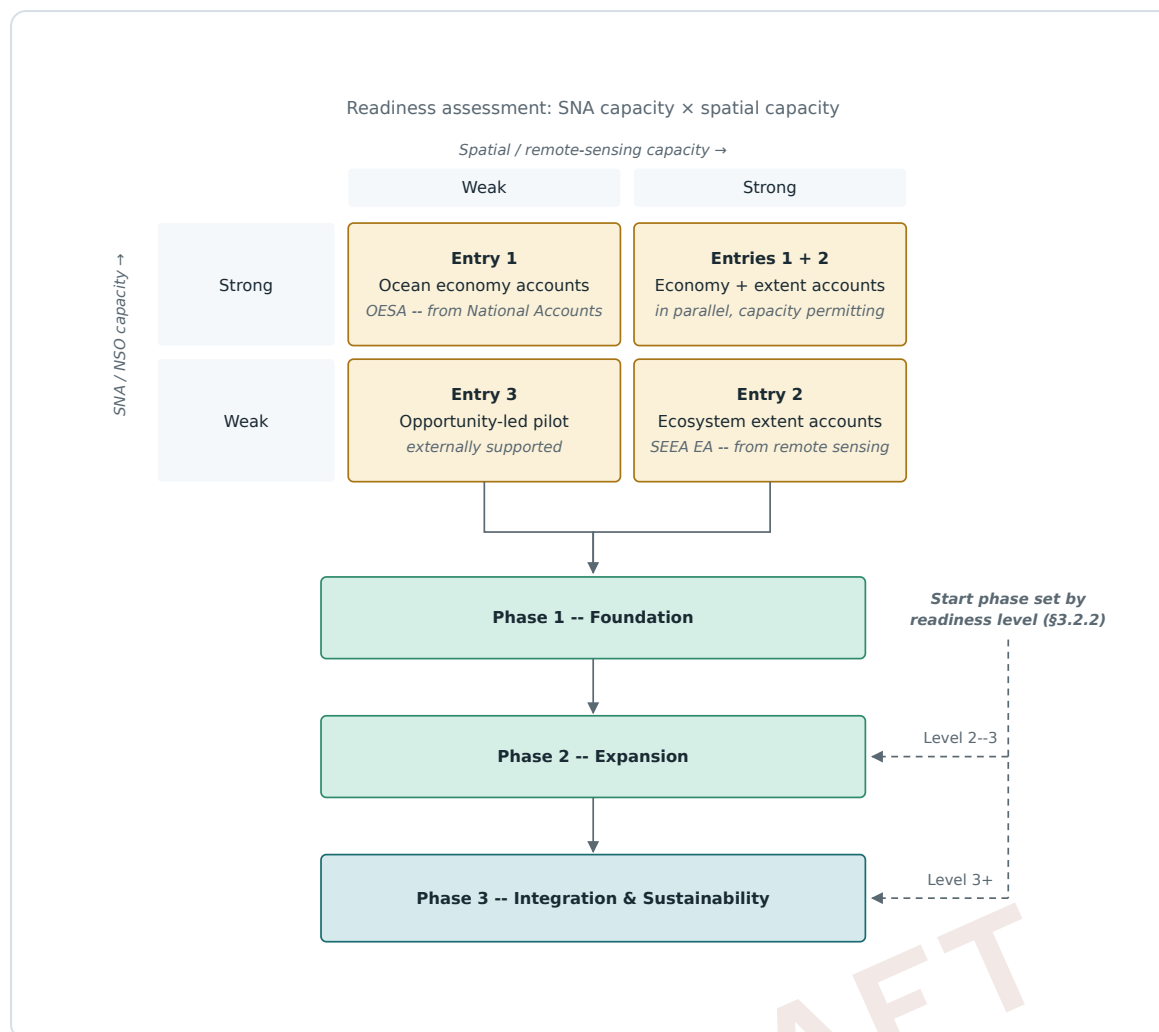


Figure 0.8.1 A 2×2 of SNA/NSO against spatial capacity routes each profile to an entry point, not a pathway phase. [a] High SNA/NSO capacity favours ocean economy accounts first. [b] High spatial capacity favours ecosystem extent. All entry points begin in Phase 1.

Source: TG-0.8 §3.1 (Readiness self-assessment), §3.2 (Phased implementation pathway, Table 3.2.1 entry-point matrix).

Adapted from: SEEA EA 2024 Quality Assurance Framework Annex A (capacity diagnostics); TG-0.7 §4 (QA principles for staged adoption).

¶2 Phase 1: Foundation

¶3 Key activities:

- ¶4
Institutional setup: Identify and formalise the lead agency. Establish an inter-agency coordination mechanism (see Section 3.5). Secure initial funding, which may combine government budget with international technical assistance.
- ¶5
Data inventory and gap analysis: Conduct a full inventory of ocean-relevant data holdings across government agencies, research institutions, and international sources. Assess data quality, spatial coverage, temporal frequency, and accessibility.
- ¶6
Spatial framework: Define the ecosystem accounting area(s) and establish a common spatial framework aligned with the GSGF principles on common geographies and geocoding.²
- ¶7
Initial accounts – three entry-point pathways: Compile at least one type of account to demonstrate feasibility and generate initial policy-relevant outputs:

Entry point 1 – SEEA CF / Ocean Economy Satellite Accounting (OESA): Recommended where a country has strong SNA infrastructure and an active NSO. OESA, which disaggregates ocean-related components from the National Accounts, is typically the first deliverable. Fisheries, maritime transport, and coastal tourism accounts are typical starting products.

Entry point 2 – SEEA EA extent accounts: Recommended where a country has strong spatial data infrastructure (remote sensing, marine surveys, habitat mapping programmes) but weaker SNA capacity. Ecosystem extent accounts for one or two marine or coastal ecosystem types can be compiled largely from remote sensing data and can be led by an environment agency without full SNA alignment.

Entry point 3 – Opportunity-led pilot (externally supported): Recommended where both SNA and spatial capacity are limited. Start with whichever account type has the strongest existing data champion and the clearest near-term policy use. Externally led pilots are a recognised entry pathway, often preceding government internalisation of the programme (Trueb et al., 2024).³

SNA / NSO strong?	Spatial / RS strong?	Recommended entry point
Yes	Yes	Entry points 1 and 2, in parallel or in close sequence subject to team capacity (see Section 3.4.1)
Yes	No	Entry point 1 (SEEA CF / OESA)
No	Yes	Entry point 2 (SEEA EA extent)
No	No	Entry point 3 (Opportunity-led pilot)

¶8

Stakeholder engagement: Present initial results to policy users to test relevance, build demand, and refine the work programme for Phase 2.

¶9 Phase 2: Expansion

¶10 Phase 2 begins at Phase 1 completion, with elements that may be initiated in parallel where capacity permits. Key activities:

- ¶11 **Additional account types:** Extend to ecosystem condition accounts, physical ecosystem service flow accounts, and asset accounts. The sequence should be guided by policy demand and data availability, drawing on the requirements matrix in Section 3.3.
- ¶12 **Monetary valuation:** Initiate monetary valuation of ecosystem services where appropriate, beginning with services where market-based methods can be applied.
- ¶13 **Indicator derivation:** Develop indicators from the accounts in consultation with policy users.
- ¶14 **Institutional consolidation:** Formalise data-sharing agreements. Integrate ocean accounting into the NSDS or equivalent. Establish quality assurance procedures aligned with TG-0.7.

¶15 Phase 3: Integration and sustainability (ongoing)

¶16 Key activities:

- ¶17 **Regular production:** Establish a regular production cycle for priority accounts, typically aligned with national accounts periodicity. Develop standard operating procedures, compilation guides, and automated data pipelines.
- ¶18 **Full account suite:** Work toward complete coverage of the Ocean Accounts Framework, including combined presentations (see TG-3.8) and sub-national accounts where policy demand exists (see TG-3.11).
- ¶19 **Policy integration:** Embed account outputs in budget processes (TG-1.1), marine spatial planning, environmental impact assessment (TG-1.6), national development plans (TG-1.10), and international reporting commitments.

- ¶20 **Continuous improvement:** Conduct regular readiness reassessments. Participate in international technical networks and contribute to global standards development.

3.2.2 Aligning the pathway with readiness levels

Overall readiness profile	Recommended entry point
Predominantly Pre-pilot (Level 1) across dimensions	Begin with Phase 1 institutional setup and data inventory. Focus on a single pilot account.
Mixed Pre-pilot / Pilot compilation (Levels 1–2) with at least one dimension at Pilot compilation	Enter Phase 1, building on existing strengths as the starting point for initial account compilation.
Predominantly Pilot compilation (Level 2) with some Regular compilation (Level 3)	Begin Phase 2 activities in areas of strength whilst completing Phase 1 requirements in others.
Predominantly Regular compilation (Level 3) or higher	Focus on Phase 3 integration and sustainability. Expand account coverage and deepen policy use.

¶1 Countries with existing SEEA implementation experience for land, water, energy, or forest accounts will often find that their readiness levels are higher across multiple dimensions. Institutional arrangements, data infrastructure, and human skills developed for those accounts are substantially transferable to ocean accounting.

3.3 Implementation Requirements Matrix

¶1 The matrix below maps institutional capacity, data infrastructure, and human skills needed across major ocean account types. Reading down a column identifies the full set of prerequisites for a particular account type. Reading across a row indicates how requirements scale across types for planning purposes.

3.3.1 Institutional capacity requirements

¶1 Lead-agency entries in the first row are illustrative, whilst country governance choices in Section 3.5.2 take precedence.

Requirement	Ocean economic accounts	Ecosystem extent accounts	Ecosystem condition accounts	Ecosystem service flow accounts	Ecosystem set accounts
Lead agency identified	Illustrative: NSO national accounts division	Illustrative: environment or geospatial agency	Illustrative: environment agency with research-institution support	Illustrative: NSO with environment agency	Illustrative: NSO with environment agency
Inter-agency coordination	NSO + fisheries/maritime agencies (pilot-compilation level coordination)	Environment agency + geospatial agency + marine research (pilot-compilation level)	Environment agency + multiple research institutions + monitoring agencies (regular-compilation level)	NSO + environment + sectoral agencies (fisheries, tourism, water) (regular-compilation level)	All of the above (regular-compilation level)

Requirement	Ocean economic accounts	Ecosystem extent accounts	Ecosystem condition accounts	Ecosystem service flow accounts	Ecosystem asset accounts
Data-sharing agreements	Standard statistical data sharing	Geospatial data licensing + research data access	Research data sharing + monitoring network agreements	Cross-domain agreements spanning environment and economic agencies	Comprehensive agreements covering all data sources
Budget commitment	Low (marginal if SNA infrastructure exists; moderate otherwise)	Moderate: geospatial data acquisition, mapping	Moderate to high: field monitoring, laboratory analysis	Moderate: modelling, valuation expertise	Moderate: builds on service flow and condition accounts
Legal/mandate basis	Statistics Act (typically sufficient)	Environmental legislation + statistics mandate	Environmental monitoring legislation	Cross-cutting mandate desirable	Cross-cutting mandate desirable

¶12 The lead agency should have both the institutional authority to convene data-contributing agencies and a clear mandate to manage or report on the relevant resource or ecosystem. Where no single agency holds both, a joint coordination mechanism is appropriate (see Section 3.5.2).

3.3.2 Data infrastructure requirements

Requirement	Ocean economic accounts	Ecosystem extent accounts	Ecosystem condition accounts	Ecosystem service flow accounts	Ecosystem asset accounts	Sociogovernance accounts
Spatial framework	Administrative boundaries; port/coastal zone delineation	Ecosystem type map aligned with IUCN GET level 3 (Ecosystem Functional Group) or equivalent national typology ⁴	Same as extent + monitoring site locations	Same as extent + user locations (households, industries)	Same as extent, condition, and services	Administrative + core boundaries
Core datasets	National accounts (Supply-Use Tables (SUT), GDP by industry); business register; trade statistics; fisheries production	Satellite imagery (Landsat, Sentinel); habitat maps; bathymetry; land cover	Water quality; biodiversity surveys; physical oceanography; benthic monitoring	Fisheries catch; coastal protection models; recreation surveys; carbon flux data	Service projections; discount rates; NPV inputs ⁵	Governance indicators; compliance; surveillance; records
Temporal requirements	Annual (aligned with national accounts cycle)	Multi-year baseline + periodic update (3–5 years)	Annual or sub-annual for key indicators	Annual (aligned with national accounts)	Annual or aligned with condition assessment cycle	Periodic or annual, typical

Requirement	Ocean economic accounts	Ecosystem extent accounts	Ecosystem condition accounts	Ecosystem service flow accounts	Ecosystem asset accounts	Societal governance accounts
Quality standards	SNA compilation standards; UN-NQAF	Accuracy assessment of classification; positional accuracy of maps	Measurement uncertainty quantification; inter-calibration of monitoring networks	Model validation; sensitivity analysis	Propagation of uncertainty from underlying accounts (see SEEA EA paras. 11.116–11.135 and TG-1.9 for Monte Carlo and sensitivity-analysis approaches)	Survey methods standards thresholds
Metadata requirements	SDMX-compliant metadata	ISO 19115 geospatial metadata; lineage documentation	Measurement protocols; QA/QC records	Model documentation; assumption registers	Valuation methodology documentation	Survey method sampling design

3.3.3 Human skills requirements

Skill domain	Ocean economic accounts	Ecosystem extent accounts	Ecosystem condition accounts	Ecosystem service flow accounts	Ecosystem asset accounts	Social and governance accounts
National accounting	Essential: SNA compilation, industry classification (ISIC)	Useful for integration with economic data	Useful for integration with economic data	Essential: supply-use framework, linking ecosystem services to industries	Essential: asset valuation, NPV methods, balance sheets	Useful for linking social data to SNA framework
Environmental science	Useful for defining ocean economy boundaries	Essential: ecology, remote sensing, ecosystem classification (IUCN GET)	Essential: marine ecology, water chemistry, biodiversity assessment	Essential: ecosystem service modelling, biophysical quantification	Essential: understanding ecosystem dynamics and sustainability thresholds	Useful for understanding environmental context
Geospatial analysis	Moderate: spatial delineation of coastal zones	Essential: GIS, remote sensing, spatial analysis	Essential: spatial interpolation, monitoring network design	Essential: spatial modelling of service flows and use	Essential: spatially explicit valuation	Moderate: mapping governance jurisdictions
Statistical methods	Essential: sampling, estimation, seasonal adjustment	Moderate: accuracy assessment, area estimation	Moderate to high: index construction, composite indicators	High: modelling, uncertainty analysis	High: discounting, time series, sensitivity analysis	Essential: survey design, social statistics

Skill domain	Ocean eco-economic accounts	Ecosystem extent accounts	Ecosystem condition accounts	Ecosystem service flow accounts	Ecosystem asset accounts	Social and governance accounts
Monetary valuation	Not required (market data used directly)	Not required for physical accounts; useful for downstream monetary integration	Not required for physical accounts; useful for downstream monetary integration	Required for monetary accounts: market price methods, replacement cost, avoided damage cost	Essential: NPV, discount rate selection, welfare economics	Not typically required
Data management	Essential: database management, data integration	Essential: geospatial databases, raster/vector data management	Essential: time series databases, monitoring data management	Essential: multi-source data integration	Essential: all of the above	Essential: survey data management, confidentiality

3.3.4 Using the requirements matrix

1. ¶1 **Identify target accounts:** Based on the implementation pathway (Section 3.2) and policy priorities, identify which account types will be compiled in each phase.
2. ¶2 **Read requirements:** For each target account type, read down the relevant column across all three requirement tables to identify the full set of prerequisites.
3. ¶3 **Compare to readiness assessment:** Map identified requirements against the country's current readiness levels. Where requirements exceed current capacity, these represent gaps to be addressed.
4. ¶4 **Sequence investment:** Prioritise requirements shared across multiple account types (e.g., spatial framework, inter-agency coordination) as foundational investments that enable multiple downstream products.

¶5 Requirements become progressively more demanding moving left to right across the matrix. Ocean economic accounts build substantially on existing SNA infrastructure. Ecosystem accounts require environmental science and geospatial capabilities. Social and governance accounts add survey and community engagement capabilities.

3.4 Human Capacity Requirements and Team Composition

3.4.1 Core team structure

¶1 Sustained ocean accounting requires a dedicated core team combining expertise across multiple disciplines. The following structure provides a general model for countries at Phase 2 or later:

Role	Key responsibilities	Typical background	FTE allocation
Programme coordinator	Overall management; inter-agency liaison; stakeholder engagement; quality assurance	Senior statistician or environmental economist with management experience	0.5–1.0 (the 0.5 lower bound applies only where the coordinator has dedicated administrative support; otherwise 0.75 minimum for Phase 1)

Role	Key responsibilities	Typical background	FTE allocation
Economic accountant	Ocean economy satellite accounts; SNA-SEEA linkages; monetary ecosystem service accounts	National accounts compilation; economic statistics	0.5–1.0
Environmental scientist	Ecosystem classification; condition assessment; ecosystem service quantification	Marine ecology, environmental science, or conservation biology	0.5–1.0
Geospatial analyst	Spatial framework management; remote sensing; map production; spatial data integration	GIS, remote sensing, cartography	0.5–1.0
Data manager	Data acquisition; quality control; database management; metadata documentation	Information technology, data science, statistics	0.5–1.0

¶2 ⓘ **SIDS and sub-1 FTE contexts**

¶3 For small island developing states and other contexts where a sub-1 FTE programme is the norm, the full core team structure above is aspirational. Countries in this context should prioritise a single programme coordinator role and access specialist functions through regional technical assistance platforms such as the Pacific Community (SPC), the CARICOM Regional Statistics Programme, the African Centre for Statistics (UNECA), or the Indian Ocean Commission (IOC), or through GOAP technical assistance missions. Externally led implementation corresponds to Entry point 3 (Opportunity-led pilot) in Section 3.2.1 and is a recognised entry pathway for capacity-constrained countries (Trueb et al., 2024).³

¶4 During Phase 1, a smaller team of two to three staff may be sufficient, provided they have access to specialist advice from other agencies or international partners. The programme coordinator role matters from the outset, as the primary challenge in Phase 1 is institutional coordination rather than technical compilation.

3.4.2 Extended expertise network

¶1 Beyond the core team, ocean accounting requires access to specialised expertise distributed across multiple agencies and institutions:

Specialist role	Contribution
Fisheries scientists	Biomass estimation, stock assessments, and catch data validation.
Oceanographers	Physical and chemical condition data (temperature, salinity, pH, dissolved oxygen).
Biodiversity specialists	Species-level assessments, habitat classification, and ecological integrity indicators.
Economists	Non-market valuation, cost-benefit analysis, and economic impact modelling.
Social scientists	Community surveys, governance assessments, and distributional analysis.
Indigenous knowledge holders	Traditional ecological knowledge, customary use patterns, and cultural value assessment.
IT specialists	Database architecture, web platforms, and data visualisation tools.

¶2 Countries should map existing expertise early in the implementation process and develop formal or informal mechanisms (secondments, advisory panels, memoranda of understanding) to access it on a sustained basis.

3.4.3 Capacity building strategy

¶1 A systematic approach to building and sustaining human capacity should address three time horizons:

¶2 **Short-term:** Targeted training for the core team in SEEA concepts, ocean accounting methods, and relevant tools, combined where possible with practical application to real data through mentored pilot compilation exercises.

¶3 **Medium-term:** Deepening expertise through peer exchanges with more experienced countries and participation in international expert networks. Formal recognition of ocean accounting competencies within institutional human resource frameworks helps retain skilled staff.

¶4 **Long-term:** Embedding ocean accounting in university curricula and national training institutions ensures a pipeline of qualified graduates. Documentation of institutional knowledge (compilation manuals, standard operating procedures, and lesson-learned reports) protects against capacity loss through staff turnover.

3.5 Institutional Arrangements for Implementation

3.5.1 Coordination models

¶1 The coordination arrangement is the first structural decision a country makes when standing up an ocean accounting programme, and it is expensive to reverse. This subsection is normative for the publication. **TG-4.7 National Data Coordination Architectures** Section 3.1 covers the operational design of the resulting committee – mandate content, membership seniority, relationship to existing statistics committees – and **TG-1.10 OA and National Planning Integration** covers how its outputs reach the planning cycle.

¶2 Arrangements observed in environmental-economic accounting programmes vary on two independent axes, and presenting them as a single list of models obscures that the two can be combined:

- ¶3 **Where the mandate sits** – which body holds authority to direct the compilation programme and to request data from contributing agencies.
- ¶4 **What instrument carries it** – the legal or administrative form through which that authority is exercised and sustained.

¶5 Figure 0.8.2 illustrates the contextual considerations that lean toward – but do not determine – each arrangement.

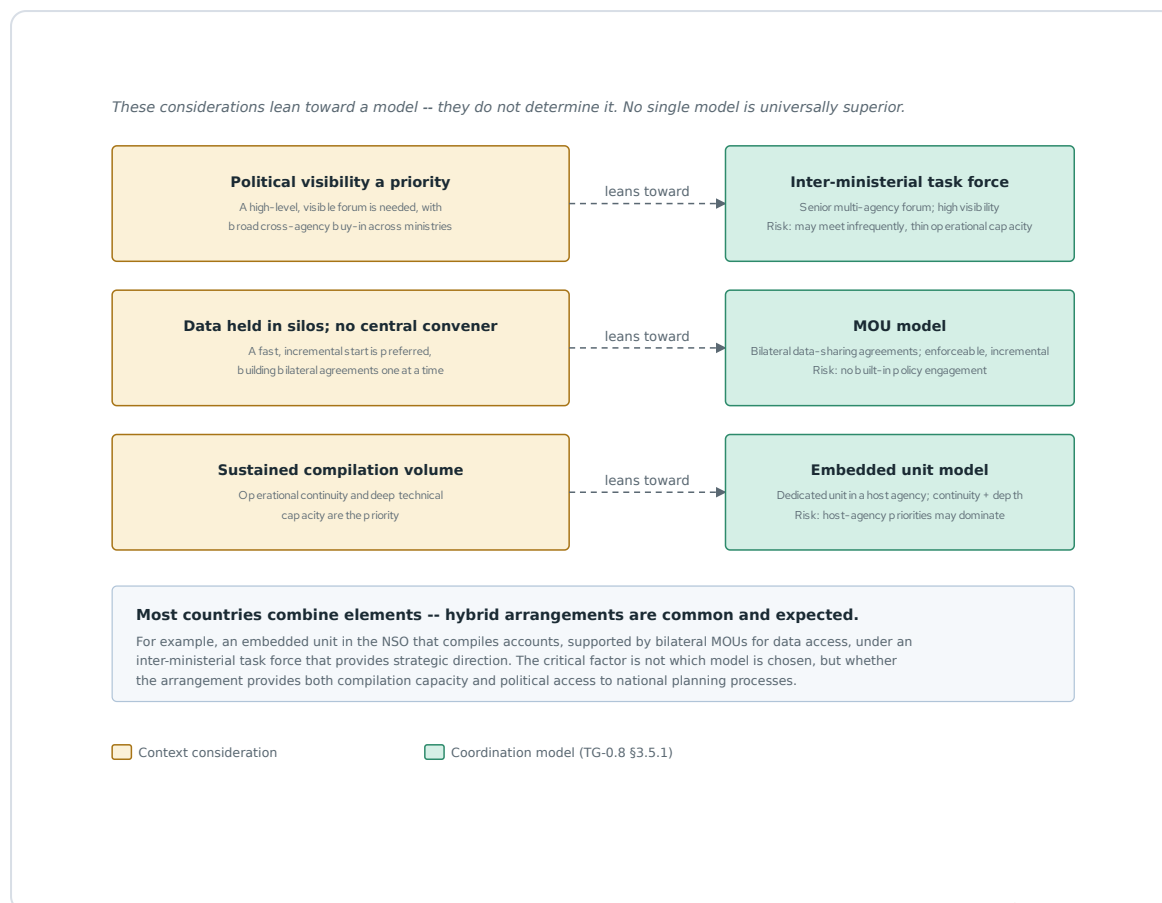


Figure 0.8.2 Three contextual considerations lean toward -- but do not determine -- the task-force, MOU, or embedded-unit coordination model. Dashed "leans toward" links signal non-determinative guidance; hybrid arrangements are common.

Source: TG-0.8 §3.5.1 (coordination models: mandate holders and the instruments that carry the mandate).

Adapted from: UN Fundamental Principles of Official Statistics (Principle 8, coordination of statistical systems); synthesis of WAVES programme country experiences (2012--2021).

¶6 **Table 3.5.1: Coordination arrangements by mandate holder**

Mandate holder	Description	Strengths	Limitations
NSO-led	The national statistical office convenes and chairs, drawing authority from its statistics legislation	Statistical independence; established relationships with data-providing agencies; direct access to national accounts	Lower buy-in from agencies that see themselves as data suppliers rather than partners; may underweight environmental domain expertise
Ocean or environment agency-led	The lead ocean, fisheries or environment agency convenes, drawing authority from its sectoral mandate	Domain expertise; closer to the policy questions the accounts must answer	Weaker statistical authority; risk that outputs are not recognised as official statistics
Joint or multi-agency	Co-chaired or rotating leadership between the NSO and a lead ocean agency	Distributes authority; strongest cross-agency buy-in	Requires explicit terms of reference to resolve methodological disputes; slower decisions
Dedicated unit	A permanent unit with recurrent budget, hosted within an existing agency	Strongest operational continuity, technical depth and institutional memory	Programme priorities shaped by the host agency; other agencies may treat it as not theirs

Mandate holder	Description	Strengths	Limitations
Nested	An overarching body with domain sub-committees (fisheries data, ecosystem condition, marine economic data)	Scales to large statistical systems with many custodians	Coordination overhead; slowest to decide

¶7 *Table 3.5.2: Instruments that carry the mandate*

Instrument	Description	Strengths	Limitations
Cabinet decision, ministerial order or decree	Establishes an inter-ministerial task force, steering committee or commission	High political visibility; authority to request data across government	Can become a forum that meets rarely and lacks capacity between meetings; senior members may delegate to staff without authority to commit
Bilateral or multilateral MOUs	Agency-to-agency agreements specifying data, format, frequency, quality and contact points	Fast to establish; enforceable commitments that survive personnel change; can be built incrementally	Governs data flow but not policy engagement; needs a separate route to the planning forums
Budget line and establishment	A staffed unit with recurrent funding and an explicit compilation mandate	Continuity independent of individual advocacy	Slow to establish; requires budget allocation and recruitment
Framework legislation	Statutory basis for ocean accounting and its data access	Most durable	Rarely available within the timeframe of a first compilation

¶8 Most working arrangements combine both axes. A common and effective configuration is a dedicated unit in the NSO for compilation, bilateral MOUs for data access, and a cabinet-mandated inter-ministerial committee for strategic direction and policy engagement. Countries also migrate between configurations: beginning with MOUs and adding a unit once compilation volume justifies permanent staffing, or adding a committee layer when political visibility becomes the constraint. Such transitions should be anticipated in the founding terms of reference.

¶9 The determinant of success is not which configuration is chosen but whether the arrangement supplies **both** technical capacity to compile and political access to the forums where decisions are made. An arrangement with one and not the other fails predictably: a well-staffed unit whose outputs never reach cabinet, or a high-level committee with nothing to present.

¶10 **Indicative fit.** NSO-led suits systems with few data custodians and strong NSO environmental capacity. Joint arrangements suit a moderate number of custodians and existing inter-agency mechanisms. Nested arrangements suit large systems with many custodians. These are starting points; where a country falls near a boundary, the qualitative factors above should outweigh the count of agencies.

¶11 **Federal and shared-jurisdiction contexts.** In federal systems – Australia, India, Canada – the arrangement must operate at both sub-national and national level, with an additional inter-governmental layer to harmonise methods and consolidate data flows between jurisdictions. In Pacific island states with shared or delegated ocean data access, such as the Federated States of Micronesia, the Marshall Islands and Palau, relevant data may be reached through regional bodies or bilateral arrangements rather than domestic agency networks; countries in this position should consult the GOAP Secretariat for tailored guidance.

¶12 **Country examples.** Australia's Australian Bureau of Statistics leads environmental-economic account compilation under its national statistics mandate, coordinating inputs from the

Department of Climate Change, Energy, the Environment and Water – an NSO-led arrangement. Canada pairs Statistics Canada with Environment and Climate Change Canada under a co-led technical arrangement – a joint arrangement. Indonesia’s inter-ministerial working group on other effective area-based conservation measures convenes the fisheries, environment and planning agencies through a ministerial instrument, with sector sub-groups feeding a central body – a nested arrangement carried by a cabinet-level mandate. Further country evidence is in the Section 5 case studies, including **TG-5.1 Australia**, **TG-5.4 India** and **TG-5.5 Indonesia**. Where a case study and this section describe the same country differently, the case study is the record of what that country did.

3.5.1.1 Reviewing and adapting the arrangement

¶1 Establishing an arrangement is not a one-time decision. Three diagnostics indicate whether it is still working:

- ¶2 **Meeting regularity and seniority.** A declining meeting rate, or persistent delegation to staff without authority to commit, signals attrition.
- ¶3 **Data-delivery compliance against agreed schedules**, as recorded in MOU delivery logs or data-sharing registers. Missed or delayed deliveries indicate a commitment that needs renewal or renegotiation.
- ¶4 **Proportion of planning-cycle entry points met on time.** Systematic lateness points to a compilation-cycle misalignment rather than a coordination failure, and is addressed through the scheduling in TG-1.10 Section 3.2.

¶5 Review at the close of each national planning cycle – typically every three to five years – or when a major funding or personnel disruption occurs, such as a budget cut to the compilation agency or the departure of a key champion. A significant change in the scope of the accounting programme, such as adding new account types, should also trigger a review of whether the existing arrangement can carry it.

3.5.1.2 Champions and their sustainability

Why champions matter

¶1 Institutional arrangements alone do not sustain ocean accounting programmes. Formal mandates, coordination bodies, and data-sharing agreements provide the structural scaffolding, but programmes depend on individuals who advocate for the accounting programme, defend its budget allocation during fiscal contractions, explain its value to sceptical colleagues, and connect technical outputs to policy debates. These individuals are champions, and their role is particularly important for ocean accounting because the field is relatively new, the outputs are unfamiliar to many planning officials, and the benefits of accounting may take several compilation cycles to become apparent.

¶2 Countries that have successfully sustained environmental-economic accounting programmes over multiple years consistently identify the presence of senior advocates – in the NSO, in the finance ministry, or in the head of government’s office – as a critical success factor. The WAVES programme emphasised that “high-level political commitment” and “champions at senior levels of government” are among the most important prerequisites for successful natural capital accounting implementation. Champions serve three distinct functions that correspond to three types of champion: political, technical, and institutional. Effective ocean accounting programmes cultivate all three types, recognising that each serves a different purpose and operates in a different institutional space.

Political champions

¶3 Political champions are elected officials or senior political appointees who use their public platform and decision-making authority to advocate for ocean accounting. A minister of finance who cites ocean accounting data in budget speeches, a president or prime minister who references natural capital depletion in state-of-the-nation addresses, or a parliamentarian who calls for ocean

economy reporting in legislative oversight hearings – these are political champions. Their advocacy creates the political demand signal that justifies budget allocations for compilation work and motivates agency heads to prioritise data contributions.

¶4 Identifying potential political champions requires understanding which political leaders have both an interest in ocean issues and the institutional position to influence planning processes. In many countries, the minister of finance or the head of the planning ministry is the most influential political champion because they control resource allocation decisions. In small island developing States, where the ocean economy may constitute a large share of national GDP, the head of government may take a personal interest in ocean accounting as a tool for demonstrating the country's marine resource endowment in international forums.

¶5 Engaging political champions requires translating accounting outputs into the language of political priorities. Politicians are interested in answers to questions such as: How much does the ocean contribute to our economy? Are our fish stocks growing or declining? Will our grandchildren inherit the same marine resources we have today? What return does the public get from investing in fisheries management or marine protected areas? Ocean accounting provides rigorous, internationally standardised answers to these questions. The budget presentation table format described in **TG-1.1** Section 3.3 provides one such format. The depletion-adjusted GVA narrative in **TG-1.1** Section 3.4 and the MTEF integration approach in **TG-1.1** Section 3.6 provide the political-economy arguments most likely to resonate with finance and planning champions.

¶6 This category of champion is inherently transient. Elections, cabinet reshuffles, and changes of government disrupt political advocacy. The governance design should therefore aim to build support across political parties and across multiple levels of government, so that ocean accounting survives changes in political leadership.

Technical champions

¶7 In statistical, scientific, and analytical agencies, technical champions are the senior professionals who drive the methodological development and compilation quality of ocean accounts. The chief national accountant at the NSO, the chief scientist at the fisheries research institute, or the head of the marine environment division at the environment ministry – these individuals provide the technical credibility that underpins the programme's outputs and advocate for methodological investment within their agencies.

¶8 Technical champions are essential because ocean accounting requires sustained investment in statistical infrastructure, data systems, and human capital. When the NSO faces competing demands for limited compilation resources, a chief national accountant who understands the value of environmental-economic accounting will protect the ocean accounts compilation programme from being crowded out by other priorities. When the fisheries research institute is asked to provide stock assessment data in formats compatible with asset account requirements, a chief scientist who appreciates the planning applications of the data will ensure that staff time is allocated to the task.

¶9 Engagement strategies for technical champions should emphasise professional recognition and methodological advancement. Countries should support technical champions by funding participation in international meetings of the UN Committee of Experts on Environmental-Economic Accounting (UNCEEAA), the Global Ocean Accounts Partnership, and relevant regional statistical bodies. These forums provide both professional development and peer recognition that strengthen the champion's commitment and institutional standing.

¶10 Structured peer networks also benefit technical champions. The 2025 SNA Implementation Strategy identifies a "Compilers Hub" as a "digital global collaboration platform" for sharing knowledge and facilitating collaboration. Ocean accounting programmes should connect their technical champions to such platforms, enabling them to learn from the experiences of peers in other countries.

Institutional champions

¶11 Agencies become institutional champions when they adopt ocean accounting as a core part of their mandate and allocate recurrent budget and staff to compilation and policy communication. An NSO that lists ocean accounts in its multi-year statistical work programme, a planning ministry that requires ocean economy data in its development plan templates, or a fisheries ministry that uses asset account data as a standard input to stock management decisions – these agencies are institutional champions. Their commitment outlasts individual personnel changes because the accounting function is embedded in organisational structures, job descriptions, and budget lines.

¶12 Building institutional champions requires demonstrating that ocean accounting serves the agency's existing mandate rather than imposing additional work with unclear returns. For the NSO, ocean accounts extend the thematic and extended accounts portfolio that the 2025 SNA identifies as a priority, and this contributes to the agency's core mission of measuring economic performance and well-being. For the fisheries ministry, asset accounts provide the biomass trajectory data needed for stock management decisions that the ministry is already mandated to make. For the planning ministry, ocean economy data fill an information gap in development diagnostics that the ministry recognises but currently lacks the data to address.

¶13 The most effective approach to building institutional champions is to co-design the accounting programme with potential champion agencies. This co-design should ensure that the compilation outputs address questions the agency already faces. The coordination model chosen (Section 3.5.1) should be designed to facilitate this co-design process, bringing potential institutional champions into the programme design phase rather than presenting them with a completed plan.

Champion sustainability strategies

¶14 Sustaining champions over time requires deliberate investment in four areas:

¶15 **Succession planning.** When a champion retires, transfers, or is promoted, the programme loses advocacy capacity. Coordination bodies should identify and cultivate successor champions before transitions occur, ensuring that at least two individuals in each key agency understand and can advocate for the programme.

¶16 **Regular demonstration of value.** Champions can only sustain their advocacy if the programme produces outputs that demonstrably inform policy decisions. The coordination body should maintain a register of policy applications – instances where ocean accounting data influenced a budget allocation, a planning target, or a policy evaluation – and communicate these applications to champions and their superiors. The register should be owned by the coordination-body secretariat and maintained as a standing log recording, for each entry: the date, the decision context, the specific account data used, and the decision outcome. The budget use cases described in **TG-1.1** Section 3.5 provide templates for documenting such applications. The log should be updated quarterly or at the close of each planning cycle, and an annual synthesis should be presented to champion agencies. Entries involving budget decisions or cabinet processes should be reviewed by the coordination-body secretariat before inclusion in the annual public synthesis, and sensitive entries may be retained in an internal-only log until the relevant decision is publicly available.

¶17 **International recognition.** Champions' domestic standing is strengthened when their country's ocean accounting programme receives international recognition. Presenting results at UN Statistical Commission sessions, contributing to GOAP technical publications, or hosting study visits from other countries all enhance the programme's reputation and the champion's standing within their agency.

¶18 **Embedding in institutional processes.** The most durable form of champion support is to embed ocean accounting in the routine institutional processes of champion agencies – statistical work programmes, budget templates, planning guidelines, and performance indicators. Once ocean accounting data are required inputs to processes that agencies must complete regardless of individual preferences, the programme acquires institutional momentum that does not depend on any single champion's continued advocacy.

3.5.2 Implementation readiness checklist for institutional arrangements

¶1 Countries should aim to address all items by the end of Phase 1, though items 7 and 8 may extend into Phase 2:

1. ¶2 **Lead agency designated:** A single agency has been identified as the lead for ocean accounting, with endorsement from relevant senior officials.
 2. ¶3 **Coordination mechanism established:** An inter-agency coordination mechanism has been formed with representation from the NSO, environment/ocean agency, and at least two major data providers.
 3. ¶4 **Terms of reference agreed:** The coordination mechanism has documented terms of reference specifying its mandate, membership, meeting frequency, and decision-making procedures.
 4. ¶5 **Work programme adopted:** A time-bound work programme has been adopted, specifying which accounts will be compiled, by whom, and on what timeline.
 5. ¶6 **Data-sharing agreements executed:** Formal or semi-formal data-sharing agreements are in place with at least the core data providers identified in the data inventory.
 6. ¶7 **Core team assembled:** A core team of at least two to three staff has been identified or recruited, with dedicated time allocated to ocean accounting.
 7. ¶8 **Budget secured:** Multi-year funding (covering Phase 1 in full, with a credible plan for transition to recurrent budget support) has been secured.
 8. ¶9 **Quality assurance framework adopted:** Quality assurance procedures consistent with [TG-0.7](#) have been documented and endorsed by the lead agency.
 9. ¶10 **Stakeholder engagement plan developed:** Key policy users have been identified, their information needs assessed, and a plan for regular engagement adopted.
 10. ¶11 **International linkages established:** The country has connected with the GOAP network, relevant UN regional commissions, and other international or regional support mechanisms.
- ¶12 For how account outputs reach the planning cycle once an arrangement is in place, see [TG-1.10 OA and National Planning Integration](#). For data coordination architectures, see [TG-4.7 National Data Coordination Architectures](#).

3.6 Country Commitment Framework

¶1 This section provides a commitment checklist for use at the readiness assessment stage, before implementation begins. It records political endorsement, resource commitment, and accountability mechanisms as preconditions for programme launch. For guidance on embedding ocean accounts in national planning frameworks and integrating accounts into budget cycles, see [TG-1.10 OA and National Planning Integration](#).

¶2 A country commitment framework for ocean accounting should address the following elements:

- ¶3 **Political endorsement:** A statement of commitment from an appropriate authority (minister, chief statistician, or inter-ministerial body) establishing ocean accounting as a national priority. The statement should reference the policy objectives ocean accounting will support and the institutional arrangements to be put in place.
- ¶4 **Strategic plan integration:** Inclusion of ocean accounting in the NSDS or equivalent national statistical plan. For countries without an NSDS, ocean accounting can be included in the strategic plan of the lead agency.
- ¶5 **Resource commitment:** An explicit commitment to allocate financial, human, and infrastructure resources. The commitment should distinguish between initial investment (which may draw on international technical assistance) and recurrent production costs (which should transition to domestic funding). A realistic budget estimate, benchmarked against GOAP partner country experience, should accompany the resource commitment.

¶6 **Timeline and milestones:** A time-bound implementation plan with clear milestones aligned to the phased pathway in Section 3.2 (e.g., “Complete data inventory by month 6 of Phase 1; publish first ecosystem extent account by end of Phase 1”).

¶7 **Accountability mechanism:** A designated person or body responsible for monitoring implementation progress and reporting to the coordination mechanism and senior leadership at least annually.

¶8 Countries should plan early wins: policy-relevant outputs deliverable in the early stages of the programme. Phase 1 account types (see Section 3.2.1) serve well as early wins because they are feasible with existing data and are directly relevant to common policy processes.

3.7 Scoping and Pilot Implementation: Experience from the ESCAP Programme

3.7.1 The Diagnostic Tool as a scoping instrument

¶1 The ESCAP Ocean Accounts Pilot Programme (2019) demonstrated a structured implementation methodology across five countries: China, Malaysia, Samoa, Thailand, and Vietnam, each of which established a national inter-agency working group. ESCAP also supported pilot studies in Indonesia and Vanuatu. The approach used the Diagnostic Tool for Environment Statistics as a framework for guiding a structured conversation among stakeholders to determine which accounts should be prioritised⁶.

¶2 The Diagnostic Tool addresses two core components:

¶3 *Table 3.7.1: Diagnostic Tool components for ocean accounts scoping*

Diagnostic component	Practical actions
Statement of strategy and policy priorities	Document national visions and priorities related to the environment, biodiversity, sustainable development, and the ocean economy. Link priorities to environmental concerns such as pollution, overfishing, or habitat loss.
Institutional mapping	Identify producers and users of related information (government agencies, academia, NGOs, international agencies), as well as civil society stakeholders who can benefit from improved information. Identify relevant institutional mechanisms currently in place.

¶4 Pilots to date have addressed topics including the value of the ocean economy and sustainability of food supply, physical measures of regulating and maintenance services (coastal protection, carbon sequestration, water purification), ecosystem extent and change (e.g., decline in mangrove area, increase in marine protected area coverage), land-based sources of marine pollution, and resource requirements of coastal tourism. The following table illustrates the types of pilot topics selected across the ESCAP programme:

¶5 *Table 3.7.2: ESCAP pilot topics and associated policy concerns*

Topic	Policy concern
Value of the ocean economy	Sustainability of ocean economy, equitable distribution of benefits, sustainability of food supply
Non-market ocean services	Physical measures of regulating and maintenance services (coastal protection, flood mitigation, carbon sequestration, water purification)
Ecosystem extent and/or designated use	Area of ecosystem types and uses of concern; change in area
Land-based sources of marine pollution	Reducing habitat degradation and biodiversity loss
Resource requirements of coastal tourism	Sustainability of tourism economy

¶6 The scoping phase typically involved an independent consultant, the National Statistical Office, or a responsible government agency coordinating a detailed scoping report. Most pilots identified data availability and access as major constraints and addressed these by using publicly available data, establishing data sharing arrangements with relevant institutions, or conducting original field-work and socio-economic surveys. A second national workshop reviewed preliminary results, benefited from additional technical guidance, and developed messaging for a release document. The process was followed in all five ESCAP pilots, which demonstrated substantial results within an approximately six-month timeframe⁷.

Case illustration: Vietnam ESCAP Pilot (Quang Ninh Province, 2019)

The 2019 ESCAP ocean accounts pilot for Vietnam integrated UNEP-WCMC global data on coral reefs and seagrasses with local data on mangroves, ports, and marine protected areas to assess ecosystem extent changes in Quang Ninh Province. The pilot overlaid multiple spatial datasets from different institutions within a common spatial framework to produce an initial physical ecosystem extent account. The combined datasets revealed relationships between port development, shipping routes, protected area coverage, and changes in mangrove, coral, and seagrass extent⁸.

¶7 The Vietnam pilot illustrates a broader finding from the ESCAP programme: initial ocean accounts can be compiled by integrating existing data from multiple sources within a common spatial and classificatory framework, rather than requiring substantial new data collection. The scoping reports produced by each pilot country have been published by ESCAP and provide detailed documentation of the diagnostic process, data sources used, and accounts compiled⁹.

3.7.2 Prioritising account types

¶1 When capacity allows only one or two pilot topics, countries can use the following decision matrix to align account type selection with the policy context driving demand. The matrix is a starting point rather than a decision rule; the Diagnostic Tool above and TG-1.4 Table 3.2.2 provide complementary views.

¶2 *Table 3.7.3: Policy context and recommended first-priority account types*

Policy context	Recommended first-priority account type	Rationale
Fisheries crisis or stock collapse	Asset accounts – fish stocks (TG-3.1)	Directly informs stock recovery targets and sustainable yield; links to SDG 14.4
SDG Voluntary National Review (VNR)	Extent accounts + condition accounts	Low data threshold; maps to SDG 14.5.1 (MPA coverage) and 14.2 targets
Blue economy strategy	Economic activity accounts (TG-2.5)	Quantifies current ocean economy contribution; baseline for growth target-setting
Pollution emergency	Residual flow accounts (TG-3.4)	Traces land-based pollution sources; supports intervention targeting

¶3 Countries with limited capacity should consider extent accounts as the lowest-cost, highest-data-availability starting point: area data for major ecosystem types can typically be compiled from existing remote sensing products and protected area registries without primary data collection. The planning-use-case view of the same question is **TG-1.4 OA and Sustainable Ocean Planning Table 3.2.2**.

¶4 This scoping phase precedes Phase 1 of the pathway in Section 3.2 and produces the account priorities the Phase 1 work programme implements.

3.8 Investment Readiness for Ocean Finance

¶1 Readiness for ocean finance is a specific case of the country readiness this Circular addresses. A proposal fails to attract finance for much the same reasons a national accounting programme stalls: an inadequate evidence base, no counterfactual, targets that cannot be measured against a compiled account, and no commitment to compile it again. The instruments themselves are treated in **TG-1.8 OA and Project-Level Finance** and the multilateral project cycle in **TG-1.7 OA and Multilateral Development Finance**.

3.8.1 Nature-based solutions: minimum evidence

¶1 Nature-based solutions (NBS) for ocean and coastal environments represent a growing category of investable projects, but many promising NBS proposals fail to attract finance because they lack the structured evidence base that investors require. The minimum information requirements are set out below.

¶2 **NBS typology for ocean contexts.** Ocean-related NBS can be categorised into three broad types, each with distinct accounting requirements:

NBS Type	Examples	Key Account Types	Primary Service Flows
Restoration	Mangrove replanting, coral reef rehabilitation, seagrass bed recovery	Extent accounts (area change), condition accounts (recovery trajectory)	Coastal protection, carbon sequestration, fisheries habitat
Protection	Marine protected areas, no-take zones, coastal setback areas	Extent accounts (area maintained), condition accounts (baseline preservation)	Biodiversity maintenance, tourism amenity, coastal protection
Sustainable management	Sustainable fisheries, integrated coastal zone management, sustainable aquaculture	Physical supply and use tables (extraction rates), asset accounts (stock levels)	Provisioning services, waste assimilation, cultural services

¶3 **Minimum evidence requirements.** For any NBS proposal to be considered investment-ready, the information summarised in Table 3.8.1 below should be available from Ocean Accounts or compilable from existing account data.

¶4 *Table 3.8.1: Minimum evidence requirements for NBS investment readiness*

Requirement	Description
Baseline ecosystem extent	Current area of the target ecosystem type, compiled from ecosystem extent accounts using the IUCN Global Ecosystem Typology classifications described in TG-3.1 Asset Accounts .
Baseline ecosystem condition	Current condition of the target ecosystem relative to reference condition, using the condition indicators and reference frameworks described in TG-2.1 Aggregate Biophysical Indicators of Environmental State .
Service flow quantification	Estimated annual flow of ecosystem services from the target ecosystem, in both physical and monetary terms.
Counterfactual scenario	Projected ecosystem trajectory in the absence of NBS intervention, based on historical trends in extent and condition accounts.
Outcome targets	Quantified targets for extent, condition, and service flow improvements over the investment horizon.
Monitoring plan	Schedule and methodology for ongoing account compilation to track outcomes against targets.

¶5 **Connecting NBS to finance instruments.** Different NBS types align with different financial instruments. Restoration projects typically suit results-based payment mechanisms (including blue carbon credits and performance-based grants) because outcomes can be measured through extent and condition account changes. Protection projects align with sovereign commitments (including debt-for-nature swaps) where the maintenance of ecosystem condition is the deliverable. Sustainable management projects can support blue bonds and sustainability-linked loans where KPIs are derived from supply and use table metrics such as extraction rates relative to maximum sustainable yield. For detailed guidance on these instrument types, see **TG-1.8 OA and Project-Level Finance**.

3.8.2 Investment-readiness scoring

¶1 **Scoring rubric.** The investment-readiness score is based on six dimensions, each scored from 0 (not addressed) to 4 (fully developed):

Dimension	Score 0	Score 1	Score 2	Score 3	Score 4
Baseline data	No base-line	Ad hoc data, no accounting framework	Partial accounts compiled (extent only)	Extent and condition accounts compiled	Full suite: extent, condition, service flow, and monetary accounts
Counterfactual	No counterfactual	Qualitative narrative only	Trend extrapolation from limited data	Time-series accounts with trend analysis	BACI design with control sites and multi-period accounts
Impact targets	No targets	Aspirational targets, no metrics	Targets with metrics but no account linkage	Targets linked to specific account indicators	Targets with account-derived metrics, thresholds, and adaptive triggers
Monitoring plan	No plan	Plan without data sources	Plan with data sources but no schedule	Scheduled plan aligned with financial reporting	Fully specified plan with BACI design, quality assurance, and feedback loops
Financial structure	No structure	Concept-stage instrument design	Instrument identified with preliminary terms	Terms negotiated, accounts integrated into covenants	Instrument structured, accounts embedded in legal documentation
Disclosure alignment	No disclosure plan	Awareness of frameworks	Partial alignment with one framework	Aligned with TNFD or IFRS	Aligned with multiple frameworks (TNFD, IFRS, CBD Target 15)

¶2 **Threshold scores.** Based on the scoring rubric, projects can be classified into readiness categories:

- ¶3 **Score 0-8:** Not investment-ready. Substantial gaps in evidence base and financial structuring. Requires further account compilation and capacity building before approaching investors.
- ¶4 **Score 9-14:** Emerging readiness. Core elements are in place but important gaps remain. Targeted technical assistance can address specific weaknesses.
- ¶5 **Score 15-19:** Investment-ready with conditions. Evidence base is substantially complete. Financial structuring may require refinement. Suitable for engagement with concessional finance providers and blended finance structures.
- ¶6 **Score 20-24:** Fully investment-ready. Complete evidence base from Ocean Accounts, sound financial structuring, and full disclosure alignment. Suitable for engagement with commercial investors and capital markets.

¶7 **Application of the scoring methodology.** Project developers can use this methodology as a self-assessment tool to identify gaps in their evidence base. MDBs and development finance institutions can use it as a screening tool to prioritise technical assistance. Financial institutions can use it as part of their due diligence process to evaluate the quality of environmental evidence underpinning project proposals. Sections 3.1 and 3.3 of this Circular set the wider readiness and quality assurance context this rubric sits within.

3.8.3 Shared investment criteria

¶1 To facilitate comparability and reduce transaction costs across the GOAP network, this section sets out shared investment criteria that participating countries can adopt when preparing ocean finance proposals. These criteria are grounded in Ocean Account data and designed to be applicable across different financial instrument types and country contexts.

¶2 Common criteria.

Criterion	Description	Account Evidence Required
Ecosystem baseline	The proposal documents the current state of the target marine or coastal ecosystem	Ecosystem extent accounts and condition accounts for the project area
Service flow quantification	The proposal quantifies the ecosystem services that the project will maintain, restore, or enhance	Physical supply and use tables for relevant ecosystem services
Monetary valuation	The proposal includes monetary estimates of ecosystem service values and/or asset values	Monetary supply and use tables or monetary asset accounts
Additionality	The proposal demonstrates that the project will deliver environmental outcomes beyond what would occur without the intervention	Time-series accounts establishing the counterfactual trajectory
Monitoring commitment	The proposal includes a plan for ongoing account compilation to track project outcomes	Account compilation schedule with specified account types and data sources
Disclosure alignment	The proposal specifies which international disclosure frameworks the project will report against	Mapping of account-derived indicators to TNFD, IFRS, and/or CBD requirements

¶3 **Quality assurance.** Shared investment criteria are only effective if the underlying data meet quality standards. The GOAP framework recommends that all account data used in finance proposals be compiled in accordance with the quality assurance principles described in the relevant TG circulars: adherence to official statistics principles (relevance, accuracy, timeliness, accessibility, coherence), use of internationally agreed classifications, and transparent documentation of data sources and methods.

¶4 **Applying common criteria across instrument types.** The shared criteria are designed to be applicable regardless of the specific financial instrument being used. For blue bonds, the criteria ensure that use-of-proceeds frameworks are grounded in account data. For debt-for-nature swaps, the criteria provide the monitoring framework for conservation commitments. For results-based payment mechanisms, the criteria establish the measurement basis for performance verification. For blended finance structures, the criteria provide the common evidence base that aligns public and private investors around shared environmental objectives.

¶5 **Iterative improvement.** The shared investment criteria should be treated as a living framework that evolves as implementation experience accumulates across GOAP partner countries. Countries are encouraged to share lessons through the peer exchange mechanisms in Section 3.9 below.

3.8.4 Institutional and data requirements

¶1 *Table 3.8.2: Roles in account-finance integration*

Actor	Role
National Statistical Offices	Responsible for compiling accounts according to official statistics principles.
Environmental Agencies	Providing biophysical data on ecosystem extent, condition, and services.
Finance Ministries	Integrating account data into sovereign debt management and public finance.
Project Developers	Using account frameworks for project design and impact assessment.
Financial Institutions	Incorporating account data into due diligence and monitoring.

¶2 Data Requirements

¶3 Effective use of Ocean Accounts for finance requires:

1. ¶4 **Baseline Data:** Pre-project extent, condition, and service flow data against which changes can be measured
2. ¶5 **Monitoring Frequency:** Account compilation schedules aligned with financial reporting cycles
3. ¶6 **Spatial Resolution:** Data at scales relevant to project boundaries and impacts
4. ¶7 **Uncertainty Documentation:** Clear communication of data quality and limitations

¶8 Capacity Building

¶9 Many countries require capacity building to compile and use Ocean Accounts for finance, including:

- ¶10 Training for account compilers on finance-relevant account applications
- ¶11 Guidance for financial institutions on interpreting and using account data
- ¶12 Development of standardised indicators linking accounts to financial instrument requirements
- ¶13 Establishment of institutional arrangements for ongoing account compilation and dissemination

¶14 SDG 14 Indicator Linkages

¶15 In the Ocean Accounts Framework (TG-0.1), socio-economic outcomes of ocean finance projects correspond to Edge E5 (economic contributions to social conditions), whilst ecosystem service returns correspond to Edge E9 (ecosystem services to economy). SDG indicator 14.7.1 (sustainable fisheries as a proportion of GDP) can be derived from the economic activity accounts by identifying the value added of sustainably managed fisheries relative to total GDP. SDG indicator 14.a.1 (the proportion of total research budget allocated to marine research) can be compiled from government expenditure accounts classified by function. These indicators, when compiled through Ocean Accounts, provide standardised metrics that project-level finance instruments can reference in their impact reporting frameworks. For example, a blue bond whose proceeds support sustainable fisheries management can report on its contribution to SDG 14.7.1 using data compiled within the same accounting framework that underpins the bond's KPI monitoring.

3.9 Peer Exchange, Regional Platforms and South-South Cooperation

3.9.1 Regional platforms as enablers

¶1 Regional platforms and organisations enable national ocean accounting programmes by providing technical support, facilitating peer learning, and creating political demand for comparable cross-country ocean data. The Global Ocean Accounts Partnership (GOAP) and regional statistical bodies such as the Economic and Social Commission for Asia and the Pacific (ESCAP) have developed regional ocean accounting platforms that support country-level implementation. Whilst SEEA EA paras. 13.90-13.92 describe regional implementation arrangements in general terms, specific guidance for the ESCAP region is provided in the *ESCAP Ocean Accounts Framework* (UN ESCAP, 2021). Countries outside the ESCAP region – including those in the Atlantic, Caribbean, West Africa,

and Latin America sub-regions – should engage directly with the GOAP Secretariat for region-specific technical support. GOAP maintains a register of regional support contacts and can connect countries with relevant peer networks and technical assistance where no dedicated regional platform yet exists.

¶2 These platforms support national programmes in three ways. First, countries should use regional technical assistance to build initial compilation capacity. Regional bodies often have access to technical expertise and compilation tools that individual countries – particularly small island developing States with limited statistical capacity – cannot develop independently. Second, participate in regional peer-learning networks that enable countries at different stages of implementation to share experiences, methodological innovations, and lessons from coordination challenges. Third, use regional forums to build political support for ocean accounting by presenting national results in contexts where comparison with neighbouring countries creates incentives for continued investment.

3.9.2 Regional fisheries and ocean governance bodies

¶1 Regional fisheries management organisations (RFMOs), large marine ecosystem programmes, and regional seas conventions provide governance platforms where ocean accounting data have direct policy applications. RFMOs require stock assessment data that physical fish stock asset accounts (**TG-3.1 Asset Accounts**) can provide. Large marine ecosystem programmes (such as those supported by the Global Environment Facility) require integrated environmental-economic assessments that ocean accounts are designed to produce. Regional seas conventions (such as the Nairobi Convention, the Barcelona Convention, and the Noumea Convention) increasingly call for integrated marine and coastal area assessments that draw on the kinds of data ocean accounts compile.

¶2 The coordination body should identify the regional ocean governance bodies relevant to the country and establish channels through which ocean accounting outputs reach these forums. This serves the dual purpose of demonstrating international applications that strengthen the domestic case for continued compilation and contributing to the evidence base for regional ocean management decisions.

3.9.3 South-South cooperation

¶1 Countries that have established ocean accounting programmes can support neighbouring countries through South-South cooperation arrangements. These arrangements – which may include secondment of technical staff, joint training programmes, and shared compilation tools – accelerate implementation in receiving countries whilst deepening the expertise of contributing countries. The coordination body should explore South-South cooperation opportunities with countries in the same region or with similar ocean economies, building networks that sustain implementation beyond the initial establishment phase.

3.9.4 Peer exchange for account-finance integration

¶1 Many countries implementing Ocean Accounts face similar challenges in mobilising finance for ocean sustainability. South-South exchange mechanisms enable countries to share experiences, transfer practical knowledge, and develop common approaches to account-based finance mobilisation.

¶2 **Peer learning for account-finance integration.** Countries that have successfully used Ocean Accounts to support finance mobilisation can share their experience with countries at earlier stages of implementation. Effective peer learning involves structured exchanges focused on specific aspects of the account-finance pipeline: how accounts were compiled, how they were presented to financial institutions, what investor feedback was received, and how account products were refined in response. The GOAP network provides a platform for such exchanges, and participating countries

are encouraged to document their experiences in standardised formats that facilitate cross-country learning.

¶3 **Standardised templates for finance proposals.** One practical output of South-South exchange is the development of standardised templates for finance proposals that incorporate Ocean Account data. These templates reduce the transaction costs of preparing finance documentation and ensure that account data are presented in formats that investors and MDBs recognise. Key template elements include:

Template Component	Content	Account Source
Natural capital baseline	Summary of ecosystem extent, condition, and monetary value	Extent, condition, and monetary asset accounts
Risk narrative	Nature-related risks to economic sectors	Supply and use tables, condition trend data
Impact targets	Quantified targets for ecosystem outcomes	Derived from condition and extent account projections
Monitoring framework	Schedule and methods for ongoing account compilation	Account compilation plan
Results indicators	Standardised metrics for reporting	Account-derived indicators mapped to disclosure frameworks: TG-1.11 Section 3.3

¶4 **Regional cooperation on account compilation.** For transboundary marine ecosystems (shared fisheries, migratory species corridors, large marine ecosystems), coordinated account compilation across countries strengthens the collective evidence base for regional finance proposals. Regional development banks and multilateral funds favour programmatic approaches that address transboundary challenges, and harmonised Ocean Accounts across participating countries provide the coordinated data infrastructure that such programmes require.

¶5 **Knowledge exchange formats.** Effective South-South exchange can take several forms:

- ¶6 **Technical workshops:** Hands-on training in account compilation and finance application, typically hosted by a country with implementation experience
- ¶7 **Study tours:** Visits to countries that have successfully used accounts to mobilise finance, allowing direct observation of institutional arrangements and data systems
- ¶8 **Twinning arrangements:** Long-term partnerships between countries at different stages of implementation, with regular exchange of staff and knowledge
- ¶9 **Online communities of practice:** Ongoing platforms for sharing templates, methodologies, and lessons learned across the GOAP network

4. Limitations and Considerations

4.1 Context sensitivity

¶1 The readiness assessment framework and phased pathway provide a general model that must be adapted to country-specific circumstances. Small island developing states may face distinctive challenges related to limited institutional capacity and data infrastructure but may also benefit from relatively simpler ocean geographies and strong policy demand. Large maritime nations may have abundant data and institutional resources but face coordination challenges across multiple agencies and levels of government.

4.2 Assessment subjectivity

¶1 Self-assessment inherently involves subjective judgement. Countries can mitigate that subjectivity by including diverse perspectives in the assessment team, requiring evidence to support

scores, and inviting external review through GOAP peer review or technical assistance missions (see Section 3.1.3 Step 6).

4.3 Dynamic nature of readiness

¶1 Readiness is not a fixed state. Changes in government priorities, staffing, funding, or data availability can shift readiness levels in either direction. The assessment should be treated as a living instrument updated regularly and used to inform adaptive management of the implementation programme.

5. Acknowledgements

¶1 **Authors:** [To be confirmed]

¶2 **Reviewers:** [To be confirmed]

¶3 This Circular draws on the methodological frameworks established by the System of Environmental-Economic Accounting – Ecosystem Accounting (SEEA EA), the Strategy for Implementing 2025 SNA and BPM7, the UN National Quality Assurance Frameworks Manual, the Global Statistical Geospatial Framework (2nd edition), and NSDS guidelines.¹⁰ The guidance also benefits from the practical experience of GOAP partner countries in implementing ocean accounts across diverse institutional contexts.

6. References and Notes

1. ¶1 Levels reflect the progressive implementation model described in Chapter 1 of the SEEA EA Implementation Guide (UN, 2021). Consistency with SEEA EA Chapters 14–15 and the 2025 SNA implementation strategy's staged approach (scoping, adaptation, estimation, follow-up) informs both the rubric design and the phased pathway in Section 3.2.
2. ¶2 United Nations. (2025). *The Global Statistical Geospatial Framework*, 2nd edition. UN Committee of Experts on Global Geospatial Information Management (UN-GGIM).
3. ¶3 Trueb, L., Gacutan, J., Praphotjanaporn, T., Alarcon Blazquez, M., and Milligan, B. (2024). 'Identifying the institutional modalities for commencing Environmental-Economic Accounting for the ocean'. *Marine Policy* 106410. doi:10.1016/j.marpol.2024.106410.
4. ¶4 SEEA EA recommends IUCN GET level 3 as the default spatial reference framework (SEEA EA paras. 3.27–3.34). Finer resolution (level 4, regional ecotype) may be required for sub-national or thematic accounts. Coarser resolution is insufficient for SEEA-compliant extent accounts. See [TG-2.1 Aggregate Biophysical Indicators of Environmental State](#) for ecosystem extent account compilation guidance.
5. ¶5 Asset accounts valued by net present value require a discount rate. The Technical Guidance does not prescribe one. See [TG-1.9 Safe Usage of Monetary Valuation](#) for discount-rate selection and sensitivity testing, and [TG-0.2 Overview of Relevant Statistical Standards](#) for the SEEA EA treatment of discount rates.
6. ¶6 United Nations Economic and Social Commission for Asia and the Pacific. (2021). *Ocean Accounts: Piloting the SEEA EEA for the Ocean*, Chapter 3.
7. ¶7 United Nations Economic and Social Commission for Asia and the Pacific. (2021). *Ocean Accounts: Piloting the SEEA EEA for the Ocean*, Chapter 4.
8. ¶8 United Nations Economic and Social Commission for Asia and the Pacific. (2021). *Ocean Accounts: Piloting the SEEA EEA for the Ocean*, Vietnam case study.
9. ¶9 United Nations Economic and Social Commission for Asia and the Pacific. (2021). *Ocean Accounts: Piloting the SEEA EEA for the Ocean*, country scoping reports.
10. ¶10 Full references: Inter-secretariat Working Group on National Accounts (2025), *Strategy for Implementing 2025 SNA and BPM7*; PARIS21 (2018), *Guidelines for NSDS preparation*; United Nations (2019), *UN National Quality Assurance Frameworks Manual*, Studies in Methods Series M No. 100; United Nations (2021), *SEEA EA*; United Nations (2021), *SEEA EA Implementation Guide*; United Nations (2025), *GSGF* 2nd edition.