

Ocean Risk Intelligence

Professional Services Portfolio

A structured, repeatable consulting practice for governing the world's largest critical infrastructure system

Portfolio Overview

Ocean Risk Intelligence (ORI) is built as a professional services practice, not a collection of one-off environmental studies. The portfolio below follows the model used by the major governance, risk, and compliance (GRC) and cybersecurity consultancies — Deloitte, PwC, EY, KPMG, and Accenture chief among them — where clients buy defined, repeatable service offerings rather than open-ended consulting hours. Each engagement in the Ocean Risk Intelligence Professional Services Portfolio™ has its own scope, methodology, and set of deliverables, and each is designed to lead naturally into the next, building toward a long-term advisory relationship rather than a single transaction.

This structure is deliberate. Environmental consulting has traditionally sold studies, permits, and restoration projects — discrete, project-based work with a defined end date. ORI instead sells governance capability: the ability of an organization to identify, measure, monitor, and reduce ocean-related risk on an ongoing basis. That distinction is what separates a services portfolio from a services list, and it is what gives ORI a path toward recurring revenue, software subscriptions, certification programs, and managed services alongside its advisory work.

The Portfolio at a Glance

Service	Purpose
Ocean Risk Register™ Development	Builds an organization's enterprise ocean risk register from the ground up.
Ocean Risk Register™ Audit	Independently verifies the completeness and effectiveness of an existing register.
Ocean Risk Register™ Maturity Assessment	Scores organizational capability against the ORI Maturity Model™ and benchmarks it against peers.
Ocean Risk Register™ Certification	Provides independent, levels-based assurance that a register meets ORI standards.
Ocean Governance Review™	Evaluates whether an organization is structured to govern ocean risk effectively, not just identify it.
Ocean Risk Identification Workshop™	A one- or two-day facilitated session that produces an initial register — the usual entry point into the practice.
Executive Ocean Risk Briefings™	A recurring intelligence service that keeps boards and executives current on emerging risk.
Ocean Risk Register Software Implementation	Configures an enterprise GRC platform to operate the register day to day.
Ocean Risk Dashboard Development™	Designs the executive and operational dashboard suite that visualizes the register.
Ocean FAIR™ Analysis	Quantifies ocean risk in financial terms using Factor Analysis of Information Risk principles.
Ocean Digital Twin™ Integration	Builds a predictive, scenario-modeling environment on top of the register and its data feeds.

Service	Purpose
Continuous Ocean Monitoring Program™	A managed service, run through the Ocean Operations Center™, that monitors risk around the clock.

How the Services Fit Together

The portfolio has a natural progression. The Ocean Risk Register™ answers the first question every organization has to answer: what are the risks? Ocean Risk Dashboards make that register visible to decision-makers in something close to real time. Ocean FAIR™ converts qualitative risk ratings into dollar figures executives and insurers can act on. The Ocean Digital Twin™ goes a step further, simulating how those risks might evolve under different future scenarios. And the Continuous Ocean Monitoring Program™ keeps the entire system running, updating exposure estimates as conditions change rather than waiting for the next engagement to catch up.

Running alongside that technical progression is a governance and assurance track: the Ocean Governance Review™ asks whether the organization is structured to act on what the register tells it; the Maturity Assessment measures how well it is doing that today; the Audit independently verifies the register itself; and Certification puts an external stamp on the result. The Identification Workshop and the Executive Briefings sit at the two ends of the client relationship — the workshop as the low-cost, low-risk way in, and the briefings as the ongoing, high-touch way ORI stays connected to leadership once the deeper work is underway.

Typical clients recur across nearly every service in the portfolio: national, state, and municipal governments; port and harbor authorities; tourism boards; marine protected areas; energy, fisheries, and aquaculture operators; water utilities; insurers; universities and research institutes; defense organizations; and international development agencies. Where a particular service draws a narrower or different audience, that is called out in the relevant section below.

Ocean Risk Register™ Development

Professional Service Offering — Flagship Engagement

Overview

The Ocean Risk Register™ Development engagement is ORI's flagship service. It applies internationally recognized Enterprise Risk Management (ERM) principles to ocean systems, giving governments, businesses, ports, coastal communities, insurers, conservation organizations, and infrastructure operators a structured, repeatable way to identify, assess, prioritize, and govern ocean-related risk.

Unlike a traditional environmental assessment — which typically evaluates a single project or an isolated hazard — this engagement establishes a governance framework that becomes the organization's authoritative source for ocean risk management: a living system that supports strategic planning, operational decisions, resilience, compliance, investment prioritization, and continuous monitoring going forward.

Objectives

- Identify critical ocean assets and understand the threats affecting them.
- Assess vulnerabilities and likely consequences, and prioritize risks using a standardized methodology.
- Assign ownership and accountability, and identify and evaluate existing controls.
- Develop measurable Key Risk Indicators (KRIs) and build executive reporting capability.
- Establish governance structures and a roadmap for improving resilience.

Engagement Methodology

Phase 1 — Executive Discovery

The engagement opens with executive interviews and leadership workshops to understand the client's mission, strategic objectives, and current governance and risk management practices, and to define the scope of the work ahead. Outputs: a project charter, stakeholder map, governance assessment, and engagement plan.

Phase 2 — Ocean Asset Inventory

Risk cannot be managed until the assets at stake are identified. ORI works with client subject matter experts to build a comprehensive inventory spanning natural assets (coral reefs, mangroves, seagrass, wetlands, fisheries, marine biodiversity), infrastructure (ports, harbors, shipping channels, offshore platforms, wind farms, subsea cables, pipelines, desalination plants), economic assets (tourism, commercial fisheries, aquaculture, coastal businesses), and strategic assets (military facilities, research stations, marine protected areas, emergency infrastructure). Deliverables: an Ocean Asset Register, an asset criticality assessment, and a GIS asset map.

Phase 3 — Ocean Risk Identification

With assets identified, ORI facilitates structured workshops — drawing on executive leadership, scientists, engineers, operations staff, emergency managers, environmental specialists, and community representatives — to identify the threats affecting each one, classified using the Ocean Risk Taxonomy™ across environmental, infrastructure, economic, governance, climate, technology, security, and social categories. Deliverables: an initial Ocean Risk Register, risk and threat inventories, and a vulnerability assessment.

Phase 4 — Ocean Risk Assessment

Each identified risk is analyzed using ORI's multi-dimensional scoring methodology — likelihood, impact, velocity, persistence, recoverability, interconnectivity, cascade potential, and impact across economic, environmental, social, health and safety, national security, reputational, and legal dimensions — producing an inherent risk score, a residual risk score, an overall priority, and a confidence rating for each entry. Deliverables: a risk assessment report, risk heat maps, and top-risk rankings.

Phase 5 — Control Assessment

Every identified risk is evaluated against the preventive, detective, corrective, compensating, and recovery controls already in place, with control effectiveness assessed alongside completeness. Deliverables: an Ocean Control Register, a control gap analysis, and a control effectiveness assessment.

Phase 6 — Governance Development

Risk management only succeeds where accountability exists, so ORI helps the organization establish executive oversight, risk owners, governance committees, reporting structures, review schedules, decision authorities, and a defined risk appetite and tolerance. Deliverables: an Ocean Governance Framework, a governance charter, a RACI matrix, and a governance roadmap.

Phase 7 — Key Risk Indicator Development

Each significant risk is linked to measurable indicators — sea surface temperature, coral bleaching, dissolved oxygen, fish biomass, mangrove coverage, tourism occupancy, shipping delays, insurance claims, water quality, sargassum density, storm frequency, wave energy — each with defined thresholds, alert levels, data sources, update frequency, and a responsible owner. Deliverables: a KRI catalog, monitoring matrix, and threshold definitions.

Phase 8 — Executive Reporting

The register becomes a decision-support system through tailored executive reporting: dashboards, heat maps, a top-ten risks view, critical asset status, risk trends, residual risk summaries, control effectiveness, governance performance, and investment priorities. Deliverables: an executive dashboard design, a reporting package, and a board presentation.

Phase 9 — Risk Treatment Planning

High-priority risks receive structured treatment plans identifying a mitigation strategy, responsible owner, required budget, implementation timeline, performance measures, success criteria, and residual risk target. Deliverables: a risk treatment roadmap, a mitigation portfolio, and an investment prioritization matrix.

Final Deliverables

At the conclusion of the engagement, the client receives a complete Ocean Risk Intelligence package: the Ocean Risk Register™ itself; the Ocean Asset Register™; the Ocean Risk Taxonomy™ as applied to the organization; a detailed risk assessment report; risk heat maps; an executive dashboard; a top-risks report; a control assessment; a governance framework; a Key Risk Indicator catalog; a risk treatment roadmap; and a board-ready executive presentation.

Benefits

Organizations that complete this engagement gain a comprehensive, single source of truth for ocean governance; sharper executive decision-making and investment prioritization; greater organizational

resilience and regulatory readiness; stronger stakeholder confidence; and a foundation for continuous monitoring and long-term resilience planning.

Strategic Value

The Ocean Risk Register™ Development engagement is more than a consulting project — it establishes an enterprise governance capability: a structured, repeatable system for identifying what an organization depends on, understanding what threatens it, measuring exposure, assigning accountability, implementing effective controls, and continuously monitoring performance. Just as Enterprise Risk Management transformed governance in finance, healthcare, energy, and cybersecurity, the Ocean Risk Register™ provides the foundation for governing the ocean as critical infrastructure, and it is the natural entry point to every other service in the portfolio.

Ocean Risk Register™ Audit

Professional Service Offering — Independent Assurance

Overview

Most organizations do not need a new Ocean Risk Register every year, but nearly all of them need an annual check on the one they have. The Ocean Risk Register™ Audit is an independent assurance engagement, modeled on SOC 2 audits, ISO audits, financial audits, and cybersecurity assessments, that evaluates the effectiveness, completeness, accuracy, and maturity of an organization's Ocean Risk Register and its supporting governance.

Rather than testing regulatory compliance or environmental performance in isolation, the audit asks a more direct question: is the organization actually identifying, governing, monitoring, and reducing its ocean-related risk? The engagement applies the Ocean Risk Intelligence Audit Framework™ and the ORI Maturity Model™ (described in full under Ocean Risk Register™ Maturity Assessment) to give executives, boards, regulators, investors, and insurers objective assurance about the organization's Ocean Risk Intelligence capability.

Objectives

- Verify the completeness of the Ocean Risk Register and validate its risk scoring methodology.
- Evaluate governance maturity, control effectiveness, and monitoring capability.
- Identify governance and control gaps, and benchmark performance against peers.
- Deliver prioritized, actionable recommendations to support continuous improvement.

Audit Methodology

Phase 1 — Audit Planning

ORI defines the audit scope, reviews governance structure and organizational objectives, and develops an audit plan and schedule, including a formal request for information. Deliverables: an audit charter, audit plan, RFI, and schedule.

Phase 2 — Documentation Review

ORI reviews the Ocean Risk Register, asset register, governance charter, policies, risk methodology and taxonomy, control register, monitoring procedures, dashboard and executive reports, prior audits, and treatment plans, producing a documentation assessment and initial findings.

Phase 3 — Governance Assessment

This phase examines executive oversight, risk ownership, governance committees, decision authority, risk appetite and tolerance, accountability, and reporting structure — asking, in effect, whether oversight is clearly defined, whether owners are assigned, whether governance meetings actually happen, and whether responsibilities are understood. Deliverables: a governance assessment and governance maturity score.

Phase 4 — Risk Register Review

Auditors evaluate the register itself for completeness, asset coverage, taxonomy consistency, quality of risk descriptions and scoring, residual risk calculations, linked risks, supporting evidence, and status tracking of treatment plans. Deliverables: a risk register quality assessment and completeness score.

Phase 5 — Control Assessment

Preventive, detective, corrective, recovery, and compensating controls are tested through documentation review, evidence review, testing, interviews, and gap analysis. Deliverables: a control assessment, control effectiveness score, and gap analysis.

Phase 6 — Continuous Monitoring Assessment

This phase evaluates the organization's Key Risk Indicators, satellite and weather integration, AIS, IoT, research sensor and citizen science feeds, dashboards, alerts, AI, and digital twin capability. Deliverables: a monitoring assessment, KRI assessment, and dashboard review.

Phase 7 — Risk Treatment Assessment

Mitigation plans, ownership, budgets, timelines, milestones, and demonstrated residual risk reduction are reviewed for effectiveness. Deliverables: a treatment assessment and implementation score.

Phase 8 — Executive Reporting Assessment

Auditors evaluate the organization's decision-support capability: executive dashboards, board reporting, trend analysis, and strategic recommendations. Deliverable: an executive reporting assessment.

Phase 9 — Maturity Assessment

Using the ORI Maturity Model™, each domain — governance, risk identification, risk analysis, controls, monitoring, treatment, and reporting — receives a score from 1 (Initial) to 5 (Optimized), rolling up to an overall Ocean Risk Register Maturity Rating™. Organizations may optionally benchmark themselves against similar ports, municipalities, coastal regions, marine protected areas, tourism destinations, utilities, energy companies, international averages, or their own prior audit cycles, enabling year-over-year improvement tracking.

Final Deliverables

The completed audit package includes an executive summary; the Ocean Risk Register Audit Report™; a Risk Register Quality Assessment™; a Maturity Assessment™ with domain scores and benchmark comparisons; a governance assessment; a control effectiveness review; a monitoring assessment; risk heat maps; an executive dashboard; a findings register (each finding rated critical, high, moderate, low, or informational, with recommended corrective actions); a gap analysis against the Ocean Risk Intelligence Framework™; prioritized recommendations; and a 12-month improvement roadmap.

Strategic Value

The Ocean Risk Register™ Audit is the independent assurance service within the portfolio — analogous to a financial audit, a cybersecurity assessment, or an ISO management-system audit, but applied to ocean governance and resilience. It is designed to establish recurring client relationships through annual or biennial assessments, giving organizations measurable evidence of governance maturity and a credible basis for demonstrating accountability to boards, regulators, investors, insurers, and the public. As ORI's methodology gains adoption, the audit becomes a natural gateway to certification, benchmarking, managed services, and longer-term advisory work, making it one of the cornerstone offerings in the practice.

Ocean Risk Register™ Maturity Assessment

Professional Service Offering — Strategic Advisory

Overview

The Ocean Risk Register™ Maturity Assessment is a strategic advisory engagement that evaluates an organization's overall capability to identify, govern, monitor, analyze, and reduce ocean-related risk. Where an audit verifies compliance and control effectiveness, the Maturity Assessment steps back and asks a broader question: how capable is this organization, as an enterprise, of managing ocean risk? It is the engagement built to answer the question every CEO, minister, port director, and board eventually asks — how mature are we compared with leading organizations, and what do we need to do next?

The assessment is built on internationally recognized principles from Enterprise Risk Management, ISO 31000, the NIST Risk Management Framework, COSO ERM, FAIR, and governance maturity models already used across other critical infrastructure sectors — the same lineage that produced CMMI for software process improvement and COBIT for IT governance, adapted here for ocean governance.

Objectives

- Measure the maturity of the organization's Ocean Risk Management capability and benchmark it against leading practice.
- Identify governance strengths and weaknesses and evaluate organizational readiness.
- Prioritize improvement initiatives and support executive decision-making.
- Develop a multi-year transformation roadmap that improves resilience across ocean-dependent operations.

Assessment Methodology

Phase 1 — Executive Discovery

Executive interviews, leadership workshops, and a review of current governance and strategic objectives establish the baseline for the engagement. Deliverables: an executive assessment summary, engagement plan, and organizational profile.

Phase 2 — Capability Assessment

ORI evaluates capability across twelve domains: governance, risk identification, risk analysis, risk scoring, controls, monitoring, risk treatment, reporting, technology, organizational culture, leadership, and continuous improvement.

Phase 3 — Evidence Review and Phase 4 — Stakeholder Interviews

Supporting documentation — the risk register, asset register, governance charter, policies, dashboards, control register, KRI catalog, monitoring reports, board reports, treatment plans, and prior audits — is reviewed alongside interviews with executive leadership, operations, environmental management, engineering, emergency management, risk management, IT, GIS, scientific staff, and infrastructure management.

Phase 5 — Capability Scoring

Each domain receives a maturity score using the ORI Maturity Model™, described below.

The Ocean Risk Intelligence Maturity Domains™

Ten domains anchor the model: governance (executive sponsorship, risk ownership, accountability, decision authority); risk identification (asset inventory, taxonomy, threat and vulnerability identification, geographic coverage); risk analysis (scoring consistency, residual risk, FAIR analysis, cascade and scenario analysis); controls (preventive, detective, corrective, recovery, and their documented effectiveness); continuous monitoring (KRIs, satellite, weather, AIS, IoT, AI, digital twin integration); risk treatment (plans, budgets, timelines, measured residual risk reduction); reporting (dashboards, board reporting, trend analysis, decision support); technology (platform, automation, GIS, AI, analytics, data quality); organizational capability (training, skills, resources, collaboration, change management); and continuous improvement (lessons learned, metrics, innovation, audit follow-up).

The Maturity Model™

Level	Description
1 — Initial	Activities are informal, reactive, and inconsistent.
2 — Developing	Basic processes exist but are not standardized across the organization.
3 — Defined	Governance, methodologies, and responsibilities are documented and consistently applied.
4 — Managed	Performance is measured, monitored, and actively managed using dashboards and key metrics.
5 — Optimized	Predictive, continuously improving, technology-enabled, and recognized as leading practice.

Organizations may benchmark themselves against similar ports, municipalities, coastal regions, marine protected areas, tourism destinations, utilities, energy companies, fisheries, national or regional averages, and their own previous assessments — turning a single snapshot into a measure of progress over time.

Final Deliverables

At completion, ORI delivers an executive summary; the full Maturity Assessment Report; a maturity scorecard with overall rating and domain-level scores; an executive dashboard; governance heat maps; a capability spider chart; a gap analysis against the ORI leading-practice model; prioritized strategic recommendations; an Ocean Risk Transformation Roadmap™ spanning 90-day quick wins, a 12-month plan, a three-year strategic transformation, and a five-year vision; and a board-ready executive presentation.

Strategic Value

The Maturity Assessment is the strategic planning engagement within the portfolio. Rather than testing the completeness of a single register, it evaluates the organization's overall capability to govern ocean risk as an enterprise function, and it gives executives a defensible, benchmarked path toward stronger governance and better-informed investment. Over time, it has the potential to become the de facto maturity standard for Ocean Risk Intelligence — much as CMMI did for software and the NIST Cybersecurity Framework did for cyber resilience — positioning ORI not just as a consultancy but as the organization that defines the maturity model for an emerging discipline.

Ocean Risk Register™ Certification

Professional Certification and Assurance Program

Overview

The Ocean Risk Register™ Certification Program is an independent assurance and recognition program verifying that an organization's Ocean Risk Register has been developed, implemented, governed, and maintained in line with the Ocean Risk Intelligence Framework™. Where an audit is a point-in-time evaluation, certification is an assessment against a published standard — closer in spirit to ISO 27001, ISO 9001, SOC 2, PCI DSS, CMMC, or LEED than to a conventional consulting deliverable.

Certification gives boards, regulators, investors, insurers, customers, and the public confidence that an organization follows recognized leading practice for identifying, assessing, governing, monitoring, and reducing ocean-related risk. It is, in a real sense, the service that moves ORI from being simply a consulting firm to being a standards body: the organization that defines what “good” ocean governance looks like.

Objectives

- Validate the quality of an organization's Ocean Risk Register and confirm its governance maturity.
- Provide independent assurance and demonstrate executive commitment to continuous improvement.
- Establish a globally recognized benchmark for Ocean Risk Intelligence.
- Differentiate organizations that demonstrate leadership in ocean governance.

Certification Methodology

Certification follows a structured, independent assessment process: application review and scoping; a documentation assessment covering the register, asset register, taxonomy, governance charter, policies, control register, KRI catalog, monitoring procedures, and treatment plans; an on-site or virtual assessment including executive and risk-owner interviews, evidence review, control validation, dashboard demonstrations, and operational walkthroughs; a maturity assessment against the ORI Maturity Model™; and a final certification decision made by an independent Certification Review Board.

Certification Levels

Level	Characteristics
Bronze	A formal Ocean Risk Register and basic governance are in place: asset inventory complete, initial governance established, risk owners assigned.
Silver	The ORI Framework is applied consistently: standardized taxonomy, documented controls, risk scoring, executive reporting, and governance committees.
Gold	Risk is actively managed: continuous monitoring, Key Risk Indicators, executive dashboards, control effectiveness reviews, and mature governance.
Platinum	Leading practice is demonstrated: predictive analytics, AI, digital twin integration, quantitative risk analysis, and benchmark leadership.

Level	Characteristics
Enterprise Excellence	Reserved for organizations demonstrating global leadership: enterprise integration, international collaboration, advanced analytics, and demonstrated resilience outcomes across multiple jurisdictions.

Organizations are evaluated across the same eight domains used in the Maturity Assessment — governance, risk identification, risk analysis, controls, monitoring, treatment, reporting, and continuous improvement — with a recommended certification cycle of an initial certification, annual surveillance reviews, annual progress assessments, and full recertification every three years, encouraging continuous improvement rather than one-time compliance.

Final Deliverables

Certified organizations receive an official Ocean Risk Register™ Certificate; a full certification report covering scope, methodology, findings, maturity, and recommendations; an executive summary and maturity scorecard; domain scorecards; an improvement roadmap toward the next certification level; a digital certification badge for websites, ESG reports, and investor materials; and an executive presentation summarizing the outcome and next steps.

Strategic Value

The Certification Program is the cornerstone of ORI's emerging standards ecosystem. By establishing an independent certification process, ORI moves beyond project-based consulting to become the custodian of a recognized professional standard for ocean governance, giving investors, regulators, insurers, and the public confidence that certified organizations manage ocean risk through a rigorous, transparent, and continuously improving framework. Over time, the certification has the potential to become for ocean governance what ISO 27001 is for information security and LEED is for sustainable buildings — and it opens the door to an ecosystem of accredited assessors, certified practitioners, training programs, and benchmarking services built around the ORI standard.

Ocean Governance Review™

Executive Advisory Service

Overview

Where the Ocean Risk Register™ identifies risk, the Ocean Governance Review™ evaluates whether the organization is actually structured to manage it. The engagement examines governance structure, leadership, decision-making, accountability, policy, operating model, and organizational capability, asking a question that is deliberately different from the register's: not “what are the risks?” but “does this organization have the leadership, structure, authority, and governance needed to manage those risks effectively?”

This is the kind of work McKinsey, Deloitte, EY, PwC, and Accenture perform routinely for corporate clients, applied here to the ocean as critical infrastructure — a strategic advisory engagement rather than a technical assessment.

Objectives

- Evaluate governance effectiveness, clarify accountability, and improve executive oversight.
- Strengthen decision-making and cross-functional coordination, and close governance gaps.
- Align strategy with operational execution and prepare the organization for future risk.
- Build long-term governance capability.

Review Methodology

Phase 1 — Executive Discovery

Executive interviews, leadership workshops, and a review of strategic planning and existing governance establish a governance profile, executive assessment, and engagement plan.

Phase 2 — Governance Structure Assessment

ORI reviews organizational structure, governance committees, decision authority, reporting relationships, escalation procedures, and executive sponsorship — asking directly who owns ocean risk, who makes investment decisions, who approves risk acceptance, and who is accountable for resilience.

Phase 3 — Policy and Governance Review

This phase examines policies, standards, procedures, governance charters, strategic plans, ocean strategies, climate adaptation plans, and risk management policies already in place.

Phase 4 — Leadership Assessment

Executive sponsorship, leadership engagement, risk culture, strategic planning, cross-functional collaboration, decision-making, communication, and performance oversight are all evaluated directly with leadership.

Phase 5 — Risk Governance Assessment

ORI traces how risk actually moves through the organization: ownership, committees, reporting, escalation, acceptance, residual risk review, and board oversight.

Phase 6 — Organizational Capability Assessment

Skills, resources, funding, technology, training, and scientific and risk management capability are reviewed to gauge organizational readiness.

Phase 7 — External Governance Review

Finally, ORI evaluates how well governance extends beyond the organization's own boundaries — coordination with government agencies, port authorities, utilities, military, universities, NGOs, emergency management, international organizations, and community stakeholders.

The Ocean Governance Assessment Domains™

Eight domains structure the review: strategic leadership (vision, sponsorship, decision-making); governance structure (organizational design, committees, accountability); policies and standards; accountability (ownership, responsibilities, executive oversight); collaboration (cross-functional and stakeholder coordination); decision support (executive reporting, dashboards, analytics); investment governance (budget prioritization, capital planning, portfolio management); and performance management (KPIs, KRIs, governance reviews, continuous improvement). Each domain is scored using the same five-level Governance Maturity Model™ used elsewhere in the portfolio — Initial, Developing, Defined, Managed, and Optimized — applied specifically to governance rather than technical capability.

Final Deliverables

The completed engagement includes an Executive Governance Review; a full Ocean Governance Assessment Report covering structure, leadership, decision-making, accountability, and organizational capability; a governance maturity scorecard; governance heat maps; an executive dashboard; a governance gap analysis; an organizational RACI matrix clarifying who is responsible, accountable, consulted, and informed for key ocean governance activities; a governance transformation roadmap spanning 90-day, 12-month, and three-year horizons; and a board-level executive presentation.

Strategic Value

The Ocean Governance Review™ is the executive strategy engagement within the portfolio. For many organizations, the harder problem is not identifying risk but coordinating the many agencies, departments, and stakeholders that share responsibility for it, and this review addresses that directly — turning fragmented oversight into an integrated governance capability. Over time, it has the potential to become the defining governance assessment for ocean-dependent organizations, positioning Ocean Risk Intelligence as a trusted executive advisor rather than only a technical consultancy.

Ocean Risk Identification Workshop™

Executive Strategy Workshop

Overview

Most organizations are not ready to commission a full Ocean Risk Register Development engagement on day one, but almost any organization can justify a one- or two-day facilitated workshop — which is exactly how Deloitte, PwC, EY, and KPMG typically begin Enterprise Risk Management engagements of their own. The Ocean Risk Identification Workshop™ is a facilitated executive session that helps organizations systematically identify, categorize, prioritize, and document the ocean-related risks affecting their mission, operations, infrastructure, assets, and stakeholders.

Using the Ocean Risk Intelligence Framework™, participants work collaboratively to produce an initial Ocean Risk Register™, build a shared understanding of organizational exposure, and reach consensus on priorities for governance and investment. Unlike an open brainstorming session, the workshop follows a structured methodology drawn from ERM, ISO 31000, the NIST Risk Management Framework, COSO ERM, and FAIR, adapted specifically for ocean systems — and it functions, in practice, as the front door into the entire ORI consulting practice.

Objectives

- Identify critical ocean-related risks and build a shared understanding of organizational exposure.
- Develop an initial Ocean Risk Register and identify critical assets and dependencies.
- Prioritize risks using a standardized methodology and identify existing controls and governance gaps.
- Strengthen cross-departmental collaboration and create executive alignment around priorities.

Workshop Formats

- Executive Briefing (half day) — a high-level strategic overview for executive leadership.
- Standard Workshop (one day) — facilitated identification and prioritization of organizational risks.
- Comprehensive Workshop (two days) — full asset inventory, risk identification, prioritization, governance discussion, and action planning.
- Enterprise Workshop Series — multiple workshops run across departments, business units, agencies, or geographic regions.

Workshop Agenda

The workshop moves through nine modules in a single structured flow: understanding Ocean Risk Intelligence and the frameworks behind it; clarifying organizational objectives and what the organization is trying to protect; identifying ocean assets across natural, infrastructure, economic, and strategic categories; identifying risks against those assets using the Ocean Risk Taxonomy™; prioritizing risks using ORI's structured scoring methodology; assigning governance and ownership; cataloging existing controls; identifying candidate Key Risk Indicators; and, finally, working with participants to set executive priorities — a top-ten risk list, immediate concerns, and quick wins.

Participants are intentionally multidisciplinary: executive leadership, risk management, operations, engineering, environmental management, emergency management, planning, infrastructure, legal, finance, insurance, scientists, GIS specialists, IT and cybersecurity staff, communications, community representatives,

regulators, NGOs, and academic partners. That range of perspectives is what produces a more complete and more resilient risk register than any single department could build alone.

Final Deliverables

At the close of the workshop, ORI delivers an executive summary; an initial Ocean Risk Register and Ocean Asset Register; a categorized Ocean Risk Taxonomy inventory; a Top Ocean Risks Report and risk heat map; initial governance recommendations; a preliminary control register; a draft Key Risk Indicator catalog; and an executive presentation summarizing outcomes, key risks, and recommended next steps.

Strategic Value

The workshop is the discovery-and-alignment engagement in the portfolio, bringing together executives, operational leaders, scientists, engineers, and other stakeholders around a shared understanding of risk. Its outputs are useful in their own right, but its bigger contribution is consensus: it turns fragmented perspectives into a unified view of risk and builds the executive momentum that makes deeper engagements — register development, governance review, dashboarding, continuous monitoring — an easier next step rather than a cold start.

Executive Ocean Risk Briefings™

Executive Intelligence and Strategic Advisory Service

Overview

Executive Ocean Risk Briefings™ give senior leaders timely, evidence-based intelligence on emerging ocean-related risks, trends, vulnerabilities, and strategic opportunities. Designed for boards, ministers, mayors, port authorities, investors, and other senior decision-makers, the briefings translate complex scientific, environmental, operational, economic, and geopolitical information into concise business intelligence — in the spirit of how Gartner, McKinsey, RAND, and the World Economic Forum brief executives: not with technical reports, but with answers to what happened, why it matters, what's coming next, and what decisions leadership should make.

Briefings draw on the Ocean Risk Register™, Key Risk Indicators, satellite observations, climate intelligence, operational data, economic indicators, and the Ocean Risk Intelligence Platform™ to support strategic governance and timely decision-making.

Delivery Options

- Executive Snapshot (15–30 minutes) — top risks, significant changes, and immediate actions for a leadership meeting.
- Quarterly Executive Briefing (60–90 minutes) — trend analysis, a dashboard review, and executive recommendations.
- Annual Ocean Risk Outlook (half-day session) — an annual risk review, strategic forecasting, investment priorities, and a multi-year outlook.
- Crisis Briefing (as needed) — delivered during significant events such as marine heat waves, hurricanes, harmful algal blooms, sargassum events, major spills, infrastructure failures, or maritime security incidents.

Briefing Structure

Each briefing follows a consistent framework: an executive summary of current risk posture and strategic implications; a review of the Ocean Risk Dashboard™ covering overall risk index, highest and emerging risks, and residual exposure; a look at the organization's top ocean risks and their status, trend, and recommended action; a review of developing threats — climate projections, new regulations, geopolitical shifts, invasive species, technology and supply-chain risk, and insurance market changes; a Key Risk Indicator review with trend analysis; an assessment of critical infrastructure status; economic and climate intelligence relevant to the period; a governance review; and, finally, strategic recommendations covering immediate actions, 90-day priorities, strategic investments, and governance or policy changes.

Final Deliverables

Each briefing includes an executive summary; the Executive Ocean Risk Briefing Report™; an interactive executive dashboard; risk heat maps; a Key Risk Indicator report; a forward-looking Strategic Outlook covering the next 90 days, 12 months, and three years; a board-ready presentation; and an Action Register™ of prioritized recommendations with suggested owners, timelines, and expected outcomes.

Subscription Options

Briefings can be delivered as an ongoing advisory relationship — monthly, quarterly, or annual programs, crisis response briefings, board strategy sessions, investor briefings, and government executive updates — rather than as isolated engagements.

Strategic Value

Executive Ocean Risk Briefings™ are the executive intelligence service within the portfolio, converting large volumes of scientific, operational, environmental, and financial data into the handful of decisions that actually matter to leadership. Delivered on a recurring basis, they establish ORI as a trusted strategic advisor rather than a project-based consultant, and over time they become the executive interface to the broader Ocean Risk Intelligence ecosystem — linking the register, continuous monitoring, predictive analytics, and the Digital Twin into a single, ongoing decision-support relationship.

Ocean Risk Register™ Software Implementation

Enterprise Technology Implementation Service

Overview

The Ocean Risk Register™ Software Implementation service turns an organization's register from a document or spreadsheet into a fully operational enterprise governance platform. Using proven GRC implementation methodology, ORI designs, configures, integrates, and deploys software that supports the complete Ocean Risk Intelligence Framework™ — risk identification, assessment, controls, governance, continuous monitoring, executive dashboards, reporting, and workflow automation.

This is the service where decades of enterprise GRC implementation experience — across organizations such as the U.S. Department of Defense, the Department of Energy, PwC, Wells Fargo, Charles Schwab, and Truist — becomes a genuine competitive advantage: very few environmental consulting firms know how to configure enterprise governance platforms, and very few GRC firms understand ocean systems. ORI sits at the intersection of both, which means it can operationalize the frameworks it designs rather than simply hand them off.

Objectives

- Digitize the register and standardize ocean risk management processes across the organization.
- Automate workflows and approvals, and integrate monitoring data directly into the platform.
- Enhance executive reporting and support regulatory compliance.
- Enable continuous risk monitoring and establish the foundation for predictive Ocean Risk Intelligence.

Supported Technology Platforms

The implementation methodology is platform-independent. ORI can configure and implement using enterprise GRC platforms (RSA Archer, ServiceNow IRM, MetricStream, Diligent HighBond, IBM OpenPages, OneTrust GRC), the Microsoft ecosystem (Power Platform, Dynamics, Fabric, SharePoint, Power BI, Azure), GIS platforms (Esri ArcGIS, ArcGIS Online and Enterprise, QGIS), and major cloud platforms (Azure, AWS, Google Cloud). As the native Ocean Risk Intelligence Platform™ matures, clients will have a path to migrate onto it while preserving their existing data and governance processes.

Implementation Methodology

The engagement follows a nine-phase lifecycle: strategy and requirements (executive interviews, current-state assessment, functional and technical requirements, architecture planning); solution design (register, asset register, taxonomy, scoring models, control library, workflows, KRI catalog, dashboard and reporting architecture, security model); configuration (workflow automation, approvals, notifications, escalation, roles, permissions, audit trails); data migration (risk registers, asset inventories, GIS data, control libraries, historical incidents, treatment plans); system integration (GIS, satellite services, IoT, weather feeds, AIS, environmental databases, document management, ERP, financial systems, identity management); dashboard development; testing (functional, user acceptance, workflow, security, performance, data quality); training (executives, risk managers, scientists, operations, administrators); and production deployment, including go-live support and a hypercare period.

Final Deliverables

On completion, ORI delivers the fully configured Ocean Risk Intelligence Platform™; the configured Ocean Risk Register and Asset Register; an implemented Ocean Risk Taxonomy; configured workflow automation; executive dashboards; a standard reporting library for executives, regulators, auditors, and operational teams; an integration framework connecting external data sources; role-based security configuration; administrator and user documentation; a training package; and a production deployment report.

Post-Implementation Services

ORI can continue to support the platform after go-live through administration, continuous monitoring, dashboard enhancements, workflow optimization, quarterly health checks, annual upgrades, user support, governance advisory, and managed reporting — turning a one-time implementation into an ongoing operational relationship.

Strategic Value

This service operationalizes the Ocean Risk Intelligence Framework™ by embedding it into daily governance and decision-making, replacing spreadsheets and static reports with a secure, scalable platform that integrates risk management, governance, controls, monitoring, reporting, and analytics in one place. As the native Ocean Risk Intelligence Platform™ evolves, this implementation capability gives ORI a clear path from advisory work to digital transformation, and clients a sustainable, technology-enabled way to run their Ocean Risk Intelligence program.

Ocean Risk Dashboard Development™

Executive Decision Intelligence Service

Overview

Ocean Risk Dashboard Development™ designs, builds, and deploys executive dashboards that turn ocean, environmental, operational, economic, and governance data into decision-ready intelligence. Almost every executive today expects dashboards; what sets ORI's apart is that they are risk dashboards, not environmental dashboards — an important distinction. They show enterprise risk, governance, and resilience, in the same tradition as the Security Operations Center, Network Operations Center, and enterprise GRC dashboards long used in other critical infrastructure sectors, rather than simply reporting ocean conditions.

Built on the Ocean Risk Intelligence Framework™, the dashboards become the visual interface for the Ocean Risk Register™, giving organizations continuous visibility into risk exposure, critical assets, KRIs, controls, governance performance, and emerging threats — a common operating picture for decision-making rather than a stack of disconnected reports.

Objectives

- Visualize enterprise ocean risk and support executive decision-making.
- Monitor resilience, track Key Risk Indicators, and improve governance oversight.
- Identify emerging threats, prioritize investment, and enable continuous monitoring.
- Give every stakeholder group a common operating picture.

Development Methodology

The engagement runs through executive discovery (interviews, decision analysis, KPI/KRI identification, use-case definition); a data assessment across the register, KRIs, satellite and weather feeds, AIS, IoT, GIS layers, and financial systems; dashboard design tailored to different audiences — executives, risk managers, scientists, port authorities, emergency managers, infrastructure operators, and board members; visualization development (heat maps, trend charts, risk matrices, geographic maps, gauges, scorecards, drill-downs); integration with the register, GIS, satellite, weather, AIS, IoT, GRC platforms, and AI analytics; and executive review through demonstrations, usability testing, and feedback workshops.

Dashboard Portfolio

ORI develops a suite tailored to organizational needs, typically including an Executive Ocean Risk Dashboard (overall risk index, top and emerging risks, trends, alerts, residual risk); a Risk Register Dashboard (active risks, ownership, status, treatment progress); an Asset Dashboard (criticality, condition, geographic distribution, exposure); a Risk Heat Map; a Key Risk Indicator Dashboard; a Governance Dashboard (maturity, ownership, audit findings, executive actions); a Control Effectiveness Dashboard; a Climate Intelligence Dashboard; a Critical Infrastructure Dashboard; a Blue Economy Dashboard (tourism, fisheries, shipping, insurance, investment performance); an Ocean Security Dashboard (illegal fishing, maritime traffic, AIS anomalies); an Ocean FAIR™ Dashboard; and, where a Digital Twin is in place, a Digital Twin Dashboard for real-time GIS visualization and scenario modeling.

Dashboards can be implemented in Microsoft Power BI or Fabric, Tableau, Esri ArcGIS Dashboards, ServiceNow, RSA Archer, Diligent, MetricStream, custom web applications, or the future Ocean Risk Intelligence Platform™.

Final Deliverables

Completed engagements deliver the full Ocean Risk Dashboard Suite™; a dashboard design standard ensuring visual consistency across the suite; the flagship executive dashboard; role-specific operational dashboards; interactive GIS dashboards; the Key Risk Indicator dashboard; a standard reporting library; user documentation; and a training package including executive demonstrations and knowledge transfer.

Managed Dashboard Services

ORI can continue to manage the dashboard suite after launch — administering it, updating KPIs and KRIs, monitoring data quality, refreshing visualizations, and running quarterly reviews — so the dashboards stay current as the organization's risk profile evolves.

Strategic Value

This service turns the Ocean Risk Register™ into a genuine decision-support capability rather than a static document. As organizations mature, the dashboard suite becomes the visualization layer connecting the register, Ocean FAIR™, the Digital Twin, and the Continuous Ocean Monitoring Program™ into a single command-and-control environment for governing ocean-dependent operations.

Ocean FAIR™ Analysis

Quantitative Ocean Risk Analysis and Financial Decision Support

Overview

Many organizations can assess environmental conditions. Very few can quantify what those conditions actually cost. Ocean FAIR™ (Factor Analysis of Ocean Risk) adapts the Factor Analysis of Information Risk model — the methodology that transformed cybersecurity by letting executives answer “how much could this cost, how likely is it, and where should we invest” — to ocean-related risk, giving organizations a structured, evidence-based way to measure financial, operational, environmental, and social impact.

Rather than relying only on qualitative ratings of “high,” “medium,” or “low,” Ocean FAIR™ translates uncertainty into measurable economic exposure, creating a common language that connects environmental science with finance, insurance, infrastructure planning, and executive governance. It is arguably the service that moves ORI from conservation into executive decision science.

Objectives

- Quantify ocean-related risk and estimate probable financial losses.
- Support investment decisions and prioritize mitigation initiatives.
- Improve insurance and underwriting decisions and support climate adaptation planning.
- Strengthen the business case for resilience investment and support funding applications.

Methodology

The engagement moves through scope definition (selecting risks, assets, geography, time horizon, and scenarios); asset valuation across natural capital, infrastructure, economic assets, and strategic assets; threat analysis covering events such as marine heat waves, hurricanes, harmful algal blooms, oil spills, illegal fishing, infrastructure failure, and cyberattack; a vulnerability assessment of existing controls, condition, and adaptive capacity; loss-event modeling across direct, indirect, and long-term losses; quantitative analysis using probable loss, annualized loss exposure, Value at Risk, Conditional Value at Risk, Monte Carlo simulation, and sensitivity analysis; mitigation analysis comparing alternative risk-reduction strategies on cost, risk reduction, complexity, and return; and, finally, investment prioritization based on that quantitative evidence.

Key Outputs

Ocean FAIR™ produces the same category of metrics used in financial and cyber risk management: Annualized Loss Exposure, Probable Maximum Loss, Value at Risk, Return on Resilience Investment, a cost-benefit comparison of mitigation alternatives, an investment prioritization matrix, scenario analysis across baseline and climate-stressed futures, and Monte Carlo simulation results that express uncertainty as a probability distribution rather than a single number.

Final Deliverables

The completed analysis includes an Ocean FAIR™ Analysis Report; an executive summary; a financial exposure assessment; an Annualized Loss Exposure report; a Probable Maximum Loss assessment; Monte

Carlo simulation results; an investment prioritization matrix; a Return on Resilience Investment report; an interactive Ocean FAIR™ dashboard; and a board-ready executive presentation.

Integration with the ORI Framework

Ocean FAIR™ draws on and reinforces nearly every other service in the portfolio: the Register supplies the risk inventory and scenarios; the Audit validates the underlying data and controls; the Maturity Assessment evaluates analytical capability; Dashboard Development visualizes the results; the Digital Twin simulates future financial outcomes under changing conditions; and the Continuous Monitoring Program keeps exposure estimates current as conditions evolve.

Strategic Value

This service converts ocean governance from qualitative judgment into quantitative decision science, giving boards, investors, insurers, and regulators a defensible basis for allocating capital, evaluating resilience investment, negotiating insurance, and securing funding. Over time, Ocean FAIR™ has the potential to become the quantitative standard for ocean risk analysis in the same way FAIR became the standard for cyber risk — positioning ORI not only as an authority on ocean governance but as the organization that defines how ocean risk is measured and valued in financial terms.

Ocean Digital Twin™ Integration

Predictive Ocean Intelligence and Scenario Modeling Service

Overview

The Ocean Digital Twin™ Integration service builds a dynamic, data-driven virtual representation of an organization's ocean-dependent assets, ecosystems, infrastructure, operations, and risk environment. The maturity progression across the portfolio runs: the Register identifies what risks exist; the Dashboard shows what is happening now; Ocean FAIR™ shows the financial impact; and the Digital Twin shows what happens next.

Unlike conventional digital twins, which mainly model physical infrastructure, the Ocean Digital Twin™ integrates enterprise risk management, environmental intelligence, governance, financial analysis, and predictive analytics into one decision-support platform, continuously ingesting the Ocean Risk Register™, satellite imagery, GIS data, ocean sensors, weather services, IoT devices, AIS vessel tracking, scientific monitoring networks, financial systems, and AI models to simulate current conditions and forecast future ones.

Objectives

- Create a digital representation of ocean assets and operations and simulate future scenarios.
- Integrate enterprise risk management with environmental intelligence for predictive decision-making.
- Evaluate resilience strategies, optimize investment, and improve emergency preparedness.
- Enable continuous situational awareness across the organization's ocean-dependent operations.

Architecture

The Digital Twin combines six layers of information into a single operating environment: a physical layer modeling assets from coral reefs and mangroves to ports, offshore wind, and subsea cables; an environmental layer of sea surface temperature, currents, wave conditions, water quality, coral bleaching, and biodiversity indicators; an operational layer covering port operations, vessel traffic, cargo throughput, and emergency response; a governance layer drawing on risk ownership, policies, controls, and audit findings from the Register; a financial layer incorporating Ocean FAIR™ analysis, asset valuations, and insurance exposure; and an intelligence layer applying AI, machine learning, anomaly detection, and scenario forecasting across all of it.

Integration Methodology

The engagement runs through strategy and vision setting (use-case definition, success criteria); asset modeling (GIS mapping, infrastructure and natural-asset modeling, dependency modeling); data integration across the register, satellite imagery, ocean sensors, weather services, AIS, IoT devices, and financial systems; embedding the risk register itself, including its dependencies and residual risk trends; developing predictive analytics for events such as marine heat waves, coral bleaching, flooding, and infrastructure failure; building a scenario library covering events such as a major hurricane, a coral bleaching event, an offshore infrastructure failure, or a sea-level-rise trajectory, each evaluated for risk exposure, operational impact, financial consequence, and mitigation effectiveness; and, finally, executive visualization through 3D GIS views, interactive maps, risk overlays, and scenario playback.

Final Deliverables

At completion, ORI delivers the Ocean Digital Twin™ itself; a digital twin architecture document; an asset model; the integrated risk model; a scenario library; predictive analytics models; an executive visualization suite; a decision-support dashboard; simulation reports from scenario analyses and stress tests; and a board-level executive presentation.

Integration Across the Portfolio

The Digital Twin functions as the integration point for the rest of the ORI ecosystem — incorporating the Register as its foundational data source, Dashboard Development for visualization, Ocean FAIR™ for financial modeling, the Governance Review for organizational context, and the Continuous Monitoring Program for live environmental and operational data.

Strategic Value

The Digital Twin represents the highest level of maturity in the Ocean Risk Intelligence framework, turning static registers, dashboards, and reports into a living, predictive environment where organizations can model future scenarios and understand cascading consequences before they occur. It becomes, in effect, the operational “brain” of Ocean Risk Intelligence, helping governments, ports, insurers, energy companies, and coastal communities move from reactive management toward anticipatory governance.

Continuous Ocean Monitoring Program™

Managed Ocean Risk Intelligence Service

Overview

The Continuous Ocean Monitoring Program™ (COMP) is a managed service providing ongoing monitoring, analysis, reporting, and early warning of ocean-related risk to critical assets, infrastructure, ecosystems, operations, and communities. It is operated through the Ocean Operations Center™ (OOC) — the ocean-governance equivalent of a Security Operations Center, Network Operations Center, or Emergency Operations Center — which serves as the central hub for monitoring, analysis, alerting, reporting, and executive decision support.

Unlike conventional environmental monitoring programs, which mainly collect scientific observations, COMP is built around decision intelligence: its purpose is not simply to measure ocean conditions but to help organizations anticipate risk, evaluate impact, and act on it in time to matter.

Objectives

- Continuously monitor ocean-related risk and detect emerging threats before impacts occur.
- Provide executive situational awareness and support operational decision-making.
- Track Key Risk Indicators, validate control effectiveness, and support emergency management.
- Enable predictive Ocean Risk Intelligence and continuous governance improvement.

The Ocean Operations Center™

The OOC integrates environmental intelligence, operational data, enterprise risk information, and predictive analytics into a common operating picture, continuously supporting risk monitoring, executive dashboards, early warning, incident detection, situational awareness, decision support, scenario forecasting, crisis management, and resilience planning.

Monitoring Methodology

The program begins with a monitoring strategy phase — executive workshops, KRI selection, alert thresholds, and escalation procedures — followed by data integration across environmental sources (satellite imagery, sea surface temperature, wave height, weather forecasts), operational sources (AIS, port operations, infrastructure sensors), scientific monitoring (coral reef and water quality data, fish biomass, biodiversity surveys), technology sources (IoT networks, autonomous vehicles, buoys, remote sensing), and enterprise systems (the Register, Ocean FAIR™, governance workflows, financial systems).

From there, the Ocean Operations Center runs continuous risk assessment, tracking emerging risk, changes in likelihood and impact, residual risk, control effectiveness, and KRI trends; automated early warning across environmental, infrastructure, economic, and security alerts; predictive intelligence using AI-driven trend analysis, pattern recognition, and scenario modeling; and structured executive reporting — daily situation reports, weekly and monthly risk reports, quarterly governance reviews, an annual outlook, and incident briefings as needed.

Monitoring Domains

COMP tracks risk across six recurring domains: environmental (sea surface temperature, coral bleaching, ocean acidification, harmful algal blooms, water quality); climate (storm activity, marine heat waves, sea level rise, coastal erosion); infrastructure (ports, harbors, offshore wind, pipelines, subsea cables); economic (tourism, fisheries, shipping, insurance, blue economy performance); security (maritime domain awareness, illegal fishing, cyberattacks on critical infrastructure); and governance (control effectiveness, audit findings, policy compliance, treatment progress).

Service Levels

- Essential Monitoring — monthly reporting, basic dashboards, and KRI tracking.
- Enhanced Monitoring — weekly reporting, executive dashboards, alert notifications, and trend analysis.
- Premium Monitoring — daily monitoring, Ocean Operations Center support, predictive analytics, and Digital Twin integration.
- Mission-Critical Monitoring — near real-time monitoring, 24/7 alerting, crisis support, and dedicated analyst support.

Final Deliverables

A fully operational program includes the Ocean Operations Center™ configuration — operating procedures, workflows, escalation protocols, and governance for the monitoring capability; a monitoring strategy; a full Key Risk Indicator catalog with thresholds and reporting frequencies; an executive dashboard suite; an early warning system with automated alerts and escalation workflows; recurring situation reports; Executive Ocean Risk Briefings™; predictive risk forecasts; an Annual Ocean Risk Outlook; and ongoing recommendations for continuous improvement.

Strategic Value

The Continuous Ocean Monitoring Program™ turns Ocean Risk Intelligence from a project-based methodology into an ongoing operational capability. Rather than delivering a report that goes stale within months, ORI provides continuous awareness of changing conditions, evolving risk, and governance performance through the Ocean Operations Center™ — positioning ORI as a long-term operational partner rather than only a project-based advisor, and giving the portfolio a genuine subscription-based, managed-service revenue model to complement its advisory work.

Future Ocean Risk Intelligence Services

As the discipline matures, ORI can expand beyond the twelve core services above into a broader suite of advisory and managed offerings. Advisory services could include Ocean Enterprise Risk Management, Ocean Resilience Strategy, Blue Economy Strategy, Climate Adaptation Planning, Ocean Governance Transformation, and ESG and sustainability advisory. Assurance services could extend to independent control assessments, ocean governance certification, third-party risk reviews, and regulatory readiness assessments.

On the technology side, the Ocean Risk Intelligence Platform™ itself, AI-powered ocean analytics, further Digital Twin development, GIS integration, and predictive risk modeling all represent natural extensions of the implementation and dashboard work already underway. Managed services could grow to include full Ocean Operations Center administration, risk register administration, executive reporting as a service, and KRI monitoring services delivered on a subscription basis.

Finally, an education and certification track — covering Ocean Risk Intelligence fundamentals, a Risk Register Practitioner credential, an Ocean Risk Manager and Ocean Risk Auditor designation, an Ocean Governance Professional credential, and an Executive Ocean Risk Leadership Program — would let ORI train the practitioners and assessors needed to scale the Ocean Risk Register™ Certification Program described earlier, much as ISO, ISACA, and (ISC)² built training and credentialing ecosystems around their own standards.

Strategic Positioning

Taken as a whole, this portfolio places Ocean Risk Intelligence in a category of its own. Rather than competing with traditional environmental consulting firms that focus on studies, permitting, or restoration projects, ORI positions itself as an enterprise governance and risk advisory firm for ocean systems — mirroring the maturity of leading GRC and cybersecurity consultancies while addressing the specific challenges of marine ecosystems, coastal infrastructure, and the blue economy.

The portfolio is also built to scale beyond advisory work on its own. The Register, Dashboard, FAIR, Digital Twin, and Continuous Monitoring services form a natural path toward software subscriptions and managed services; the Maturity Assessment, Audit, and Certification services form a natural path toward a broader assurance and standards practice; and the Identification Workshop and Executive Briefings keep the client relationship active at both the entry point and the ongoing advisory level. Together, they give ORI multiple, reinforcing paths to recurring revenue — software subscriptions, certification programs, managed services, and executive education — built around a single, defensible discipline: bringing enterprise risk management discipline to the governance of the ocean as the world's largest critical infrastructure system.