

## **REGULAR PROCESS FOR THE GLOBAL REPORTING AND ASSESSMENT OF THE STATE OF THE MARINE ENVIRONMENT, INCLUDING SOCIO-ECONOMIC ISSUES**

### **LIST OF EXPERTISE NEEDED FOR DELIVERING THE THIRD WORLD OCEAN ASSESSMENT**

The 18<sup>th</sup> meeting of the Ad Hoc Working Group of the Whole has been convened in accordance with the programme of work for the period 2021 to 2025 for the third cycle of the Regular Process. This programme of work was adopted by the Ad Hoc Working Group of the Whole on the Regular Process during its thirteenth meeting in October 2020, and endorsed by the General Assembly through its resolution 75/239 of 31 December 2020 on “Oceans and the law of the sea”.

The 18<sup>th</sup> meeting of the Ad Hoc Working Group of the Whole to be held from 27 to 28 March 2023 at the United Nations Headquarters in New York will consider the following documents:

**The proposed scope of the next World Ocean Assessment(s);**

**The comprehensive annotated outline of the World Ocean Assessment(s) containing a summary of content and format;**

**The list of expertise needed for the writing teams;**

**The assessment of potential gaps and overlaps in expertise and the way to manage them.**

Based on the draft outline of the third world ocean assessment, the Group of Experts undertook a review of the list of expertise for the second cycle to identify those categories that are relevant to the third World Assessment and to add additional expertise categories that will be needed to write the chapters of the assessment and facilitate peer review of the assessment. The output of this review is provided in Table 1.

Following the geographic expertise identified for the second cycle, the Group of Experts suggests that the same expertise be identified for the third cycle. This is provided in Table 2.

The list of expertise provided in these two tables will be utilised to populate those parts of the database that will link to the online nomination form for the Pool of Experts as currently being developed by the secretariat for the Regular Process.

Table 1. List of expertise required for delivering the third World Ocean Assessment

#	Expertise
1	Abyssal plains
2	Algal biochemistry
3	Algal production and economics
4	Alteration of habitats
5	Alteration of oceanographic processes
6	Anthropology (general)
7	Anthropology: cultural values associated with the ocean
8	Anthropology: spiritual values associated with the ocean
9	Aquaculture economics (financing)
10	Aquaculture economics (general)
11	Aquaculture economics (livelihoods)
12	Aquaculture economics (subsidies)
13	Aquaculture economics (trade)
14	Aquaculture economics (welfare)
15	Aquaculture governance (artisanal)
16	Aquaculture governance (co-governance)
17	Aquaculture governance (general)
18	Aquaculture governance (indigenous)
19	Aquaculture science (new technologies)
20	Aquaculture science (traditional assessment)
21	Aquaculture sustainability
22	Artisanal fisheries
23	Atolls, coastal and island lagoons
24	Benthic ecology
25	Biogenic reefs and sandy, muddy and rocky shore substrates
26	Biological oceanography
27	Blue financing
28	Boundary currents
29	Carbon emission pathways
30	Carbon sequestration and storage
31	Changes in coastal and marine infrastructure
32	Changes in erosion and sedimentation
33	Channels and fjords
34	Chemical oceanography
35	Citizen science
36	Climatology
37	Coastal communities (indigenous)
38	Coastal communities (infrastructure)
39	Coastal communities (livelihoods)

40	Coastal communities (migration)
41	Coastal communities (urbanization)
42	Coastal flooding (extreme events)
43	Coastal protection and land reclamation
44	Coastal tourism and recreation
45	Cold-water corals and sponges
46	Community based fisheries management
47	Continental shelf sea-bed habitats
48	Continental slopes and abyssal plains
49	Continental slopes and submarine canyons
50	Cumulative effects
51	Cyclones/hurricanes/typhoons
52	Decarbonization
53	Deep sea ecosystems
54	Deep water habitats
55	Desalination
56	Digitalization
57	DPSIR framework and its application
58	Dumping of waste at sea
59	Economic benefits of the ocean to humans
60	Economic inequality
61	Ecosystem based aquaculture management
62	Ecosystem based fisheries assessment
63	Ecosystem restoration
64	Effects of extreme climate events
65	Effects of tsunamis
66	Environmental impact assessments
67	Erosion and sedimentation
68	Estuaries and deltas
69	Fate of hydrocarbons in the marine environment
70	Fish biology/ecology
71	Fisheries economics (financing)
72	Fisheries economics (general)
73	Fisheries economics (livelihoods)
74	Fisheries economics (subsidies)
75	Fisheries economics (trade)
76	Fisheries economics (welfare)
77	Fisheries governance (artisanal)
78	Fisheries governance (co-governance)
79	Fisheries governance (indigenous)
80	Fisheries governance
81	Fisheries management

82	Fisheries science (data poor assessment)
83	Fisheries science (ecosystem based fisheries management)
84	Fisheries science (new technologies)
85	Fisheries science (traditional assessment)
86	Fisheries technology
87	Fish-stock propagation
88	Fjord systems
89	Gender studies (especially relating to maritime industries and coastal areas)
90	Geoengineering
91	Geopolitics
92	Global demographic dynamics
93	Global demographic dynamics: megacities
94	Global demographic dynamics: migration
95	Global demographic dynamics: urbanization
96	Global economic dynamics
97	Harmful algal blooms
98	High-latitude ice habitats
99	Human health and ocean recreational activities
100	Human health and ocean sourced nutrition
101	Human health and ocean-born diseases
102	Hydrothermal vents and cold seeps
103	Illegal activities
104	Illegal activities: piracy
105	Illegal activities: trafficking
106	Illegal fishing
107	Indigenous and traditional owner knowledge
108	Infographics
109	Inputs of nutrients to the marine environment
110	Inputs of radioactive substances to the marine environment
111	Integrated coastal zone management
112	International governance
113	Intertidal habitats
114	Invertebrate biology/ecology
115	Kelp forests and algal beds
116	Local community knowledge
117	Macroalgae
118	Management of maritime cultural assets
119	Mangroves
120	Mariculture
121	Marine and coastal community-based management
122	Marine and coastal cultural-based management
123	Marine and coastal ecosystem-based management

124	Marine biogeochemistry
125	Marine ecotoxicology
126	Marine debris
127	Marine food processing
128	Marine fungi
129	Marine genetic resources
130	Marine genomics
131	Marine geology and geophysics
132	Marine hydrates
133	Marine invasive species
134	Marine mammals
135	Marine microbiology
136	Marine offshore infrastructures
137	Marine pelagic invertebrates: cephalopods
138	Marine pelagic invertebrates: zooplankton
139	Marine protected areas
140	Marine reptiles
141	Marine socioeconomics
142	Marine spatial planning
143	Maritime disaster management
144	Maritime safety
145	Maritime security
146	Maritime transport
147	Ocean acidification
148	Ocean and human health
149	Ocean chemistry
150	Ocean data and data repositories
151	Ocean governance/law of the sea
152	Ocean governance: compliance, monitoring and enforcement
153	Ocean governance: maritime regulation regime
154	Ocean governance: ocean diplomacy
155	Ocean hazards and disasters
156	Ocean management capacity building
157	Ocean modeling
158	Ocean noise
159	Ocean observing
160	Ocean salinity
161	Ocean science capacity building
162	Ocean technology
163	Ocean temperature
164	Offshore and marine renewable energy development (environmental impact)
165	Offshore and marine renewable energy development (legislation)

166	Offshore and marine renewable energy development (technology)
167	Offshore hydrocarbon exploration and exploitation
168	Offshore mineral resources exploration and exploitation
169	Operational oceanography
170	Pandemics
171	Pelagic habitats
172	Physical oceanography
173	Phytoplankton
174	Pollution
175	Pollution: anti-fouling
176	Pollution: emerging contaminants (e.g. Pharmaceuticals, personal care products)
177	Pollution: litter/plastics (micro and nanoplastics)
178	Pollution: traditional contaminants (e.g. Metals, persistent organic compounds, organic halogenated compounds)
179	Psychology (well-being)
180	Recreational/sport/charter fishing
181	Ridges, plateaus and trenches
182	Role of the ocean in the climate system
183	Salt marshes
184	Salt production
185	Sargasso sea
186	Sargassum
187	Science communication
188	Science, technology and innovation indicators and data
189	Scientometrics/bibliometrics
190	Seabed mapping
191	Seabed mining
192	Seabirds
193	Sea-grass meadows
194	Seagrasses
195	Sea-level rise
196	Seamounts and similar submarine features
197	Sedimentologist - geomorphologist
198	Shipping related infrastructure
199	Shipping related services
200	Shipping
201	Small-scale/subsistence/indigenous fisheries
202	Socio-ecology
203	Sociology
204	Storm surge (including that associated with spring tides)
205	Subjective well-being associated with the ocean
206	Submarine cables
207	Submarine pipelines

208	Technological foresight/futurism
209	Transdisciplinary/interdisciplinary scientific approaches
210	Tropical and sub-tropical corals
211	Tsunamis (geophysics)
212	Unintended consequences of policy (including harmful subsidies)
213	Upwelling systems
214	Welfare and social status of fishers and workers in fish-handling trades
215	Welfare and social status of port workers
216	Welfare and social status of seafarers

Table 2. List of sea areas in relation to geographic expertise

	Sea area
1	The Global Ocean as a whole
2	The Arctic Ocean
3	The North Atlantic Ocean, the Baltic Sea, the Black Sea, the Mediterranean and the North Sea
4	The South Atlantic Ocean and the Wider Caribbean
5	The Indian Ocean, the Arabian Sea, the Bay of Bengal, the Red Sea and the Gulf of Aden and the Persian Gulf
6	The North Pacific Ocean
7	The South Pacific Ocean
8	The Southern Ocean