



20 April 2023

Mr. Michael Lodge  
Secretary-General  
International Seabed Authority  
Kingston, Jamaica  
Re: Application for NGO Observer Status

Dear Secretary-General,

On behalf of Minderoo Foundation, one of Australasia's largest modern philanthropic organisations, I am writing to apply for observer status. Per article 169 of the United Nations Convention on the Law of the Sea, rule 82, paragraph 1 (e), of the Rules of Procedure of the Assembly of the International Seabed Authority and the guidelines for observer status of non-governmental organizations with the International Seabed Authority, Minderoo Foundation requests observer status with the International Seabed Authority as an NGO. Attached is our formal application in the prescribed format.

We look forward to becoming an observer at the ISA and joining the diverse community of states and observers working towards fulfilling the mandate of the ISA.

We anticipate contributing our expertise to boost the Authority's work on the effective protection of the marine environment.

Thank you.

Sincerely,

Tony Worby

Director - Planet Portfolio & Flourishing Oceans  
Minderoo Foundation



**A. Information about the organization**

**1. Name of organization**

Minderoo Foundation

**2. Address of headquarters**

171-173 Mounts Bay Road  
Perth Western Australia 6000  
Australia

**3. Addresses of all branches and/or regional headquarters**

Amsterdam office  
Stichting EU Minderoo  
Prinsengracht 769  
1017JZ Amsterdam  
Noord-Holland  
The Netherlands

Sydney Office  
Level 8, 55 Market Street  
Sydney, New South Wales, 2000  
Australia

**4. Telephone Number**

Tony Worby: +61 418 400 678  
Margot Dons: +31 6 25 38 47 32

**5. Fax Number**

Not applicable

**6. Email address**

[tworby@minderoo.org](mailto:tworby@minderoo.org)  
[mdons@minderoo.org](mailto:mdons@minderoo.org)

**7. Name, title and contact details of focal point**

Tony Worby, Director Planet Portfolio and Flourishing Oceans  
[tworby@minderoo.org](mailto:tworby@minderoo.org)  
+61 418 400 678

Margot Dons, Project Associate Flourishing Oceans  
[mdons@minderoo.org](mailto:mdons@minderoo.org)



+31 6 25 38 47 32

## 8. Background information on the organization

Established by Dr Andrew Forrest AO and Nicola Forrest AO in 2001, [Minderoo Foundation](#) is one of the largest philanthropies in Australasia. Since its inception, it has invested more than AUD\$ 2.6 billion funds in philanthropic causes and has supported over 230 initiatives at a global level. These causes range from eliminating childhood cancer to improving early childhood education, ending modern slavery and driving accountability in and responsibility for global overfishing, plastic pollution, global warming and the tech ecosystem. Everything we do is driven by a deep love for people and our planet and a mission to improve our world for future generations.

Minderoo's [Flourishing Oceans Initiative](#) aims to return our ocean to a healthy thriving state, in line with Sustainable Development Goal (SDG) 14 "life below water". To achieve this this, we are committed to ending overfishing, eliminating the harmful effects of plastic , supporting the sustainable use of ocean resources, conserving key habitats and facilitating world class research.

**Our portfolio of complementary programs under this initiative includes:**

- 1) **Sustainable Fisheries:** end overfishing and promote sustainable, responsible fishing practices globally. Our world-first [Global Fishing Index](#) measures country-level performance to focus improvement efforts.
- 2) **Ocean Conservation:** fully protect 30 per cent of the world's ocean by 2030, supporting the effective management of marine parks, protecting ecosystems and livelihood. Minderoo is a core partner of the [Blue Nature Alliance](#), a global partnership to catalyze the conservation of 18 million square kilometres of ocean over five years.
- 3) **Research and Infrastructure:** enhance Australia's ability to deliver world-class science through investments in marine research and infrastructure. The Minderoo [Exmouth Research Lab](#) provides scientists with state-of-the-art facilities enabling high quality, high-impact marine research, on the doorstep of the World Heritage listed Ningaloo Reef.
- 4) **OceanOmics:** [advance eDNA-based marine genomics and AI](#) to revolutionise how we measure, understand and ultimately protect life in the ocean. By developing and deploying these technologies we will characterise and monitor marine wildlife at a pace and level of precision that traditional survey methods cannot achieve. The research vessel, Pangaea Ocean Explorer, is equipped with shipboard laboratories cutting-edge cellular and molecular biology equipment, including high throughput DNA sequencing instruments and bioinformatics workstations. We are investing in building and openly publishing the reference libraries for marine vertebrates which are necessary to accurately detect, monitor and determine the health of these species.
- 5) **Deep-Sea Research:** improve our understanding of the deepest, unexplored parts of the Indian Ocean - the least explored and understood basin on Earth. Minderoo Foundation and The University of Western Australia have joined forces to establish a world-leading [Deep-Sea Research Centre](#). The Centre will lead up to three expeditions a year to explore the hadal zones of the Indian Ocean and beyond. There they will use state-of-the-art technology to assess biodiversity, habitats, genetic connectivity, evolutionary adaptation and anthropogenic impacts. The Centre also aims to increase the seafloor mapping of



the Western Australian Exclusive Economic Zone and the wider east Indian Ocean through proactive data collection during expeditions and ships of opportunity. We also aim to establish sustained abyssal observatories to act as a precursor to future long-term monitoring initiatives at abyssal depths.

6) **Education:** engage the community in ocean conservation through outreach and education.

9. **Is the organization a member of, affiliated to or otherwise associated with another organization that has been granted observer status with the Authority?**

No.

10. **Is the organization affiliated to consultants of the Authority, contractors with the Authority, entities in connection with the law of the sea, the offshore and deep -sea mining industry, research institutes or the mineral marketing and processing industry?**

Minderoo Foundation's philanthropic work is supported by the Tattarang Group, the private investment group of Dr Andrew Forrest and Nicola Forrest AO. The Tattarang Group invests across a wide variety of sectors and assets classes, including in real assets, public and private markets, including Energy (Squadron Energy) and Resources (Fortescue Metals Group and Wyloo Metals).

11. **Relationships with intergovernmental organizations**

Minderoo Foundation is an accredited organisation with the United Nations Environment Program (UNEP). We are also associated with the UN Department of Global Communications (DGC) Civil Society Association Committee and a member of the UN Global Compact Network.

Minderoo is closely engaged in the ongoing negotiations of a new United Nations Treaty to combat plastic pollution (the Global Plastic Treaty). We are supporting the implementation of the recently adopted High Seas Treaty (BBNJ) by developing countries.

12. **List of publications and/or other relevant documentation**

[Minderoo Foundation's 2022 Annual Report \(2021\)](#)

[Minderoo Foundation Flourishing Oceans: Returning the Ocean to a Flourishing State by 2030 \(2022\)](#)

[The Global Fishing Index 2021: Assessing the sustainability of the world's marine fisheries \(2021\)](#)

[Harrison E, Ryland M, & Thomas Travaille K 2021, Mending the Net: Strengthening Australia's import policies to combat illegal seafood, Minderoo Foundation \(2021\)](#)

[Minderoo – UWA Deep Sea Research Centre Fact Sheet \(2022\)](#)

[Minderoo – Ocean Conservation Program Overview \(2022\)](#)



[Munderoo – Oceanomics Program Overview \(2022\)](#)

[Munderoo – Exmouth Research Lab Overview \(2022\)](#)

[Munderoo Foundation, DNA Reference Library – A Game-changer for environmental monitoring \(5 October 2022\)](#)

[Charles D & Kimman L 2023, Plastic Waste Makers Index 2023, Munderoo Foundation \(2023\)](#)

[P. Landrigan, S. Dunlop et al, The Munderoo-Monaco Commission on Plastics and Human Health \(2023\)](#)

**B. Interest in matters under consideration by the Assembly**

- 13. Briefly outline how your organization intends to demonstrate its interest in matters under consideration by the Assembly, including by answering questions 14 to 17 and by providing any other relevant information related to the application for observer status.**

Munderoo's Flourishing Oceans Initiative aims to return our global ocean to a flourishing state by 2030. This requires a thriving seabed and seabed ecosystem, which plays an integral role for overall ocean health. Through a portfolio of collaborative research, capacity building projects, we are advancing the science and knowledge on ocean health and anthropogenic impacts such as pollution, climate change and overfishing. These projects include deep-sea research, developing novel technologies (based on marine genomics and AI) for marine biomonitoring, sustainable fisheries and ocean conservation. We have long-standing expertise with policy development and implementation at the local, national and international level. We take a data-driven and science-based approach to ocean governance, with a goal to effectively protect 30 per cent of our ocean and achieve sustainable management of ocean ecosystems as a whole. Leveraging our experience with marine science and policy development, we intend to contribute to the Authority's mandate to protect the deep seabed from environmental harm and preserve the common heritage of mankind for future generations.

- 14. Briefly outline whether and how the purposes or activities of the organization relate to the work of the Authority.**

We've seen a rapid decline in ocean biodiversity from the cumulative effects of unsustainable fishing practices, rising seawater temperatures, ocean acidification, the expansion of oxygen minimum zones, pollution and eutrophication of coastal habitats. As a result, thousands of marine species are considered endangered and extinction rates have accelerated in the past century. Addressing this crisis is one of the most challenging tasks of our time.

Munderoo's Flourishing Oceans Initiative aims to return our global ocean to a flourishing state by 2030. A flourishing ocean requires a thriving seabed, which plays an integral role for overall ocean health. Our portfolio of projects is built on strong partnerships, collaborative research, advocacy, education and capacity building which focus on better understanding and protecting inter-linked ocean ecosystems. These projects include deep-sea (hadal and abyssal) research, developing new technologies for marine biomonitoring and mapping, creating large-scale marine protected areas and corridors, domestic and international policy development, as well as the construction



and operation of state-of-the art research infrastructure. Our work therefore contributes to the Authority's mandate and efforts to protect the deep seabed – the common heritage of mankind – from environmental harm.

#### Deep-sea research:

Minderoo Foundation and The University of Western Australia have joined forces to establish a world-leading research centre to increase understanding about the deepest parts of the ocean (6000m+).

The Centre will lead up to three expeditions a year to explore the hadal zones of the Indian Ocean and beyond. There they will use state-of-the-art technology to assess biodiversity, habitats, genetic connectivity, evolutionary adaptation and anthropogenic impacts. These will be contextualised through continuing this work in other similar ultra-deep features around the globe. The Centre will also conduct bathymetric mapping and establish long-term abyssal observatories to act as a precursor to future long-term monitoring initiatives at abyssal depths. These observatories are to examine deep-sea seasonality, long-term trends and community dynamics under ever changing climatic conditions.

The first expedition was to the Wallaby-Zenith Fracture Zone, on board the DSSV Pressure Drop, and conducted the [first comprehensive survey](#) of these deep east Indian Ocean features.

#### Oceanomics:

Minderoo Foundation's OceanOmics program aims to revolutionise marine conservation by unravelling the ocean genome.

Cataloguing marine biodiversity and describing ecological patterns that shape our understanding of species' distribution and evolution is fundamental to global conservation goals.

Nucleic acids (DNA and RNA) are the architectural blueprints for all life on Earth. Capturing and analysing these blueprints from pieces of DNA or cells found in the (marine) environment with genomic tools is the study of environmental DNA (eDNA). eDNA-based marine genomics and AI can form the technological basis for innovations that will help to characterise and monitor marine wildlife at a pace and level of precision that traditional survey methods cannot achieve.

The [Minderoo OceanOmics Centre](#) at The University of Western Australia combines a joint Ocean Genomes Laboratory, an OceanOmics Laboratory, and a Computational Biology Program.

At the Ocean genome lab, we are generating libraries of references for marine vertebrates which are needed to characterise marine biodiversity based on eDNA. That way, we can look up the snippets of DNA found in seawater and identify all the species present in our samples, similar to a dictionary. Unfortunately, to date only one per cent of the 20,000 known species of marine fish have had their genome sequenced. In collaboration with our partners, we will generate and release to the public the reference genomic resources for thousands of marine species to monitor and determine their health.

We have equipped the research vessel, *Pangaea Ocean Explorer*, with shipboard laboratories containing cutting-edge cellular and molecular biology equipment, including high throughput DNA sequencing instruments and bioinformatics workstations. The vessel has already embarked on eight voyages, enabling sample collection and onboard genomic analyses for population-scale monitoring of the health of Australia's ocean wildlife.



In collaboration with [UWA and Parks Australia](#), we are working to expand our Oceanomics program to deep-sea areas in Australian waters. eDNA samples collected from deep waters will be analysed and used to expedite the classification of species, ecosystems and key biodiversity areas in the deep using the IUCN Red List of Threatened Species to ensure their protection.

All these efforts are geared towards the goal of conserving 30 per cent of the world's ocean by monitoring and combating threats to marine wildlife and ecosystems, quantifying the health status of current MPAs and assisting governments and management agencies in identifying new biodiversity hotspots and ecosystems in need of protection.

#### Ocean conservation:

Minderoo is committed to achieving the protection of 30 per cent of our ocean by 2030. We are a core partner in the [Blue Nature Alliance](#), an ambitious global partnership to catalyse the conservation of 18 million square kilometres of ocean over five years. The alliance collaborates with governments, NGOs, indigenous peoples, and scientists to create effective large-scale marine protected areas.

Minderoo is also financially contributing to a collective USD \$5 million [supporting developing nations to implement the new BBNJ agreement](#).

#### Capacity building and research infrastructure

Minderoo has extensive expertise in the area of capacity building and research infrastructure. In collaboration with leading research and academic institutions, we are operating state-of-the art research facilities that can be used to advance the frontiers of environmental and medical science. For example, our [Exmouth Research Facility](#), established at the World Heritage Ningaloo reef, is attracting marine researchers from around the world to study and improve ocean health and resilience. In collaboration with the University of Queensland, we have built a [Minderoo Centre for Plastics and Human Health](#). This Centre enables world-leading research and protocol development for accurately sampling and measuring plastic chemicals and nanoplastic particles in human tissue.

15. Briefly outline whether and how your organization intends to contribute to the work of the Authority, for example by providing specialized information, advice or expertise, or by identifying or helping to procure the services of experts or consultants.

Minderoo intends to contribute to the work of the ISA and its members to effectively protect the deep seabed from environmental harm and preserve the common heritage of humankind for future generations. We will do this by participating in ISA discussions, including on regulations, standards and guidelines, through submissions, interventions and research publications. Our contributions will be informed by our expertise and scientific research capacity related to marine science and genomics, biomonitoring, fisheries, ocean conservation and international environmental policy.

16. Briefly outline whether and how your organization has the expertise and the capacity to contribute, within its field of competence, to the work of the Authority, in particular in connection with the law of the sea, the protection of the marine environment, the offshore and deep-sea mining industry, technology, minerals processing and marketing, activities in the Area and marine scientific research in the Area.





Minderoo has long-standing expertise with policy development and implementation at the local, national and international level. Our approach is data-driven and grounded in robust scientific evidence, which we generate in-house or through collaborative global partnerships. For example, based on our [Global Fishing Index](#) (2021), a world-first assessment of the governance and sustainability of fisheries in 142 coastal states, we are working to strengthen fisheries governance and data management practices across jurisdictions. At the international level, we are supporting governments in the ongoing negotiations of the Global Plastic Treaty by providing legal and scientific recommendations, including but not limited to environmental and human health impacts. Finally, we have been involved in the development and implementation of the BBNJ treaty.

Minderoo is therefore well-positioned to support the ISA's work on deep-sea mining. We have the capacity to contribute scientific and legal input needed to ensure ecosystem health.

- 17. Briefly outline whether and how your organization intends to contribute to the capacity-building programmes and initiatives of the Authority (e.g., Secretary General's award, voluntary commitments of the Authority).**

As outlined in response to question 15, Minderoo is experienced in capacity building and policy development, both at national and international level. Minderoo can and will contribute to capacity building at the ISA in whatever way is helpful and necessary. In particular, we will be able to contribute scientific evidence and recommendations on ways to effectively measure, monitor and protect biodiversity and life on the deep seabed.