**Terms of Reference for the**

**NZ Marine Geospatial Working Group**

***Minor revisions made by the Steering Group 17 March 2022***

**Background**

NZ’s exclusive economic zone is over 4 million km², 14 times larger than our land area. To manage our ocean in a sustainable way and grow our blue economy[[1]](#footnote-1), key marine geospatial[[2]](#footnote-2) datasets are crucial. They support navigational safety, contribute to better decision making in sectors like environmental monitoring, scientific research, resource management and exploration. They are also fundamental in preparing for and responding to climate change and natural disasters.

Considerable efforts are made and resources expended within New Zealand’s public and private sectors to collect, manage and use marine geospatial information (MGI). Greater collaboration has the potential to increase the value of these investments for the wider community.

Stakeholders attending the inaugural NZ Marine Geospatial Information Working Group (NZMGI-WG) meeting on 19 February 2019 acknowledged a growing awareness of the value of marine geospatial data and agreed the following opportunities exist for NZ MGI:

* Collaboration on data collection with a focus on multi-use data
* Increased transparency of data collections and upcoming surveys to create efficiency, save costs and increase value of collected information
* Collation of data portals or databases to simplify data discovery
* Implementation of data standards to facilitate interoperability
* National leadership and coordination across NZ agencies to maximise these benefits.

**Purpose**

The NZMGI-WG has been established to facilitate national collaboration and leverage opportunities to grow the value of MGI investments and benefits for all NZ.

**Role of the Working Group**

Specifically, the role of the NZMGI-WG is to:

* Contribute to and provide feedback on the national NZ MGI strategy and work programme
* Coordinate efforts and resources for data collection, management and distribution (including technologies and crowd sourcing)
* Discuss, align and promote standards and guidelines to enable data re-use
* Actively raise awareness on the value and potential uses of MGI, and influence across the wider sector
* Represent wider marine related interests
* Raise awareness and promote international initiatives
* Build and share capability in data management and data usage
* Share knowledge and technical expertise
* Facilitate active participation in the NZMGI community

**Goals**

The NZMGI-WG will work towards the following goals:

* MGI is Findable, Accessible, Interoperable and Re-Useable (FAIR Data Principles[[3]](#footnote-3))
* Widespread knowledge of data applications, uses and requirements
* Visibility of future marine data capture to reduce duplication and leverage opportunities for partnerships.

**Challenges**

The NZMGI-WG identified a number of challenges that could prevent the success of the group and achievement of objectives:

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|  | Challenge | Mitigation |
| 1 | Resourcing in terms of funding, capacity and capability. | The NZMGI-WG will establish a national common strategy, prioritise work and explore funding options. A Steering Group has been established to provide directions and approve the NZMGI-WG work and strategy. |
| 2 | Agreement on common goals, notably because of different business models and agendas. | The Steering Group will provide leadership, set directions for the work plan and facilitate the decision-making process. |
| 3 | Fair and meaningful representation. | The NZMGI-WG is open to representatives from the wider marine sector or with marine geospatial interests. Members are encouraged to engage within and outside their organisation, and at a higher level, to actively grow awareness of the NZMGI-WG work. |
| 4 | Ensuring the interests of Māori/ Iwi are well represented | All working group members will reach out to their relevant Māori/ Iwi contacts to make them aware of the NZMGI-WG and invite and encourage participation. |
| 5 | Getting buy-in at the senior/ executive level. | The NZMGI-WG will develop case studies showing the benefits of the work undertaken and communicate them to senior/executive champions from other organisations to influence up and across agencies. |
| 6 | Data storage and maintenance in perpetuity. | The NZMGI-WG will stay connected and aware of international best practise. |
| 7 | Industry/private sector see value in opening access to their data. | Case studies will describe the benefits and value of open data. |

**Working Group Membership**

To ensure broad expertise, fair representation and effectiveness, the NZMGI-WG is open to representatives with interest in marine geospatial information from Central and Local Government agencies, Māori / Iwi groups, Crown Research Institutes, academia and the private sector.

**Roles and Responsibilities of Members**

By joining the NZMGI-WG, members agree to:

* Be committed and actively contribute to progressing the NZMGI-WG goals
* Bring the expertise, support and perspective of their organisation to benefit NZ MGI
* Attend and prepare for meetings, including proposing agenda items and nominate a proxy when unable to attend
* Contribute to the NZMGI work programme technical sub-groups
* Accept the level of contribution may differ between organisations
* Provide feedback or reports in a timely fashion
* Report NZMGI-WG activities and decisions to their own organisation
* Connect their own networks with the NZMGI-WG where appropriate
* Acknowledge a Steering Group will provide direction and oversight of the work programme to align with the NZMGI-WG goals.

**Technical sub-groups**

Technical sub-groups and roles (*e.g.,* project lead, technical lead, chair, co-chairs, secretary) will be created as necessary to work on specific projects within the NZMGI-WG work programme. All sub-group projects will have defined deliverables, milestones and regular progress reports to NZMGI-WG.

**Meetings and Reporting**

The NZMGI-WG will meet annually. An agenda will be circulated to all members prior meeting and minutes/reports distributed within two weeks of the meeting.

Technical sub-group meetings will be agreed by their members as required by the projects and circumstances.

**Leadership and Governance**

A Steering Group will provide direction to the NZMGI-WG and oversee the development and implementation of a national marine geospatial work programme. The Steering Group will have decision making responsibilities on the delivery of a national work programme and ensuring the work programme aligns with NZMGI-WG goals.

The Steering Group will undertake a review of the NZMGI work programme and effectiveness of the Working Group on an annual basis.

1. The Worldbank defines the blue economy as the "sustainable use of ocean resources for economic growth, improved livelihoods, and jobs while preserving the health of ocean ecosystem”.  [↑](#footnote-ref-1)
2. For the purpose of this initiative ‘Marine Geospatial’ includes any location-based data or information relating to the marine environment (including estuaries, harbours, coastal waters and open sea). [↑](#footnote-ref-2)
3. The FAIR Data Principles are a set of guiding principles in order to make data findable, accessible, interoperable and reusable (Wilkinson, M. D. *et al*. 2016. The FAIR Guiding Principles for scientific data management and stewardship. Sci. Data 3:160018 doi: 10.1038/sdata.2016.18 [↑](#footnote-ref-3)