NZMGI-WG Meeting #5 Minutes & Actions

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| Meeting date | 17/02/2023 |
| Time | 9.30am-3pm |
| Venue | GNS Science/ MS Teams  |

Discussion items

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|  | Description |
| 1 | **Work Group Overview** Rachel Gabara (Toitū Te Whenua-LINZ) provided an update on changes to the terms of reference. The revised goals based on steering group review: * MGI is Findable, Accessible, Interoperable and Reusable (FAIR Data Principles)
* Widespread knowledge of data applications and uses
* Visibility of future marine data capture to reduce duplication and leverage opportunities for partnerships

Working group members were asked if the goals were fit for purpose: 85% Agreed, 15% Somewhat AgreeFree text feedback on WG goals was also provided: * I am happy to discuss opportunities to enable open data principles and consistent metadata for candidate datasets targeted for public use. I believe it is important to have each open data repository enabled to share to a 'master catalogue' of open data for all of NZ.
* Timely data availability is still important even if not a goal
* Identify ways to communicate the WG work, outcomes and priorities

Revise role of the Working Group * 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 of related initiatives
* Build and share capability in data management and data usage
* Share knowledge and technical expertise
* Facilitate active participation in the NZMGI community

Working group members were asked if the role description is fit for purpose:95% Agreed, 5.% Somewhat agreed Free text feedback on WG role was also provided: * I feel the awareness of initiatives, partnerships and collaboration opportunities is a key outcome for the working group; this can help centralise visibility of all of the work going on and provide focus for funding.
* A focus should be providing a platform for making datasets available.
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| 2 | **Steering Group Introductions**The current Steering Group members include: * DOC – Enrique Pardo/ Wendy Callaway
* GNS – Jenny Black/ Jess Hillman
* LINZ – Brad Cooper/ Rachel Gabara (Chair)
* MBIE – Miles Dunkin
* MFE – Aaron Napier
* MPI – Ryan Hughes
* NIWA - Jochen Schmidt/ Mike Williams
* NZDF – Robin Kuhn
* MNZ – Bonita Gestro
* Local Government Representative – Oliver Wade/Stephen Hunt
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| 3 | **Work Programme progress**Summary of progress in the last year, key achievements included the marine data innovation datamesh proof of concept, publishing MGI data themes, publishing MGI metadata guidance. Work on the MGI stocktake has slowed due to availability of resources. **Project updates:** **NZMGI national inventory** Daehyun Park Toitū Te Whenua LINZ provided a demo of web based concept for a national inventory. Reminder provided to the group that guidance for undertaking the stocktake is available on the LINZ website. <https://www.linz.govt.nz/resources/guide/marine-geospatial-information-stocktake-guidance>**MGI Meta data guidelines** Jochen Schmidt NIWA provided a review of the published MGI meta data guidance. Guidance is avaliable through the LINZ website <https://www.linz.govt.nz/guidance/marine-information/marine-geospatial-information/managing-and-reusing-mgi> **Building MGI use cases** Phillip Lubeck MPI provided an overview on the value and opportunities for use cases developed using story maps. **Marine Data Innovation project** Dave Johnson Oceanum provided a demonstration of the datamesh application [https://www.youtube.com/@oceanum-io](https://apc01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.youtube.com%2F%40oceanum-io&data=05%7C01%7Crgabara%40linz.govt.nz%7Cc2d450b8a5644291c7b608db1a038e2b%7C2134e9617e384c34a22b10da5466b725%7C0%7C0%7C638132374809679659%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=VDD9YIESSP8AESZsrC6BzIkOIDoyMOhF11qCmutpQzI%3D&reserved=0). Rachel Gabara provided an update on the status of the marine data innovation project i.e. Datamesh proof of concept complete, next is Te Ao Māori world view on marine geospatial data. **MGI work priorities feedback received:**  Working group members ranked the current work items as follows. 1. Create a national MGI inventory - 4.71 and Develop data capture guidance -4.71
2. Organisations contribute to the national MGI stocktake -4.00
3. Develop data management guidance -2.86
4. Capability building -2.43
5. Improve transparency of upcoming data capture programmes - 2.14
6. Develop an MGI use case library -2.00

The working group identified the additional high priority items as: 1. Building connections.
2. Enabling hybrid multi-cloud connectivity with push down processing to where the data is stored.
3. Progress data mesh functionality as a priority deliverable.
4. Identify potential funding options including contestable funding.

The working group identified the additional medium priorities as: 1. Hapu/iwi/Māori involvement.
2. Widening NZMGI working group members.
3. Enabling Ai/Ml to be embedded into the underlying database management system
4. Include mātauranga Māori in data inventory if viable/data storage is local.
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| 4 | **Presentations from the MGI community** 1. Brett Rogers/Elemental group: How collaborative data sharing in the marine environment would assist the offshore wind industry.
2. Annette Wilkinson / LINZ: New Coastline dataset – Mean High Water Springs.
3. Katherine Short & Tony Craig / Terra Moana:  Marine insights, operating context in Aotearoa.
4. Enrique Pardo /DOC: Re-using multibeam data for benthic terrain modelling and marine habitat mapping.
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| 5 | **The value of NZ MGI WG** The working group was asked overall if they thought the MGI WG was adding value: Yes - the WG adds considerable value 85 %The WG adds some value, but it could do more 15 %No - The WG is not adding value 0 % |
| 6 | **Interactive session (in person attendees only)** In person attendees split into 3 discussion groups (represented by colours below) and were asked to consider four questions. The results are below and will be used by the SG to shape next iteration of NZ MGI WG work programme and priorities.

| 1. Vision for Next 5 -10 Years  | 2. What does success look like?  | 3. What are the activities required?  | 4. How do we achieve them?  |
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| Govt Agencies, GIS Data/research not needlessly repeated because of lost data/people turnover | Vision is people are using data to make a valuable contribution to NZ. | Ambitious budgets ask across NRS on marine data | We have accessible metadata and web map services |
| Adding value to MG Data | We track the benefits of MGIWG | Regional council chief executive’s environmental forum | make very clear the overall future cost saving to funding decision makers |
| Value of MGI investment | MGI could aid cost off storing and maintaining data | Chief scientists Gerrard NRS chief scientists + economists + regional council chief scientist | Synthesis capacity. |
| Articulate and measure the future values | Government priorities based on marine geoscience data | Engage new stakeholder groups (regional councils) | Ability to put answers together out of data. |
| Easier Data Access for all | Users know which datasets are authoritative | MGIWG collaborates with similar interesting groups. | Meeting more often as special interest groups across NZ |
| Clear and well understood path for marine data to make it in public domain and made avaliable | Agencies have few barriers to data sharing - less duplication | Aiding each other in data management. | Data inventory/stocktakes |
| Robust infrastructure for data and data sharing | Environmental markets - want this data to improve the environment | \* Standardise data acquisition protocols for collection + storage + open | Identify gaps in what we consider as MGI? |
| Collaborative Data Sharing agreement, processes are well known (cross agency) | Business needs it to derisk and guide investment in sustainable responses | \* Explore data sovereignty for Māori | Set up organisation to run this database |
| Marine data is well governed and well documented. | An average GIS analyst/mapper knows where to go for marine data | Keep pursuing funding | New Zealand data centre established. |
| Well established network of marine governance professionals at all levels. | Time frame, rules for making CRI data public | Regional' working groups to address local priorities + connect to iwi | Communication  |
| AIS data included in discussions + databases | Monitor use of data in decision making | Explore the idea of 'high value' data? Most use to the most organisations | Define roles and responsibility in NZ marine data management  |
| Temporal scale/nature of data - needs to be understood | One source of truth | continue with data cataloguing - how do we make this live + curated? | Library of educational videos recorded by each organisation in the working group  |
| Focus on data availability + cataloguing - prioritise over processing tools. | All of government contract for AIS data currently active - link into other initiatives | Design a financial/ commercial model that evolves from government funded to industry funded.  | Build Apps for using geospatial data  |
| \* Understanding users of maritime data - how are these changing? Citizen science? | One stop shop for all maritime domain awareness | Connect with private sector who are in the marine adjacent space and needs our data  | Stable line of funding for collecting data  |
| At what stage do we need to include and implement values in data | Specific needs and values dependent on location - work with iwi to develop fit for purpose | Go to university open days to raise awareness  | Consider a vision of exporting GIS capability to other countries  |
| Who is using the data? Who is using the maritime environment? | \* National database (datamesh). - share cost and all contribute | Collaboration between stakeholders | Collaborate with VR/ gaming companies in weta, metaverse  |
| Land to sea transition needs to be considered - processes don't stop at the coast. | Data standards across regional boundaries | Involving uni graduates  | Establish a small project to study collaboration and funding models  |
| Continuity across National scale currently quite condensed/ fragmented | Secure long-term funding for this work | Create incentives that drive the need to keep moving forward  | Connect through organisations connecting to iwi and interested potential members  |
| Who is responsible for qc of datasets + archiving. | Control of data access + security? | Expand datamesh to more data streams  | More 'people' resource to support all the organisations who want to contribute but don’t have internal resources |
| Quality control of datasets - consistent - intuitive communication | A regulated platform  | Move to a marine geospatial office?  | Resource for data platforms is stable well-resourced and appropriate  |
| Marine environmental information - availability of data for event response | A framework that enables industry to fund the entire framework based on a user pays model  | Reach out to non-data organisations - make sure they know what/why MGI is | Dialogue with Māori as tangata moana  |
| Evolve capability to deal with data from evolving technology **e.g.** Drones/AI | A data management capability more focused on connecting before collecting data  | Collaborate with Australia actively  |  |
| A continually improving governed framework for collaboration across government, academia, industry  | Marine geospatial data is used more widely  | Access a wider community of interest  |  |
| Collaboration channels among agencies are established (on geospy)  | Not just data platforms but basic tools to help the public explore marine data  | connect with other ocean groups within NZ govt  |  |
| Collaboration **e.g.** data collection  | Gaps and needs to geospatial information are clear and defined  | Connect to DIA govt standard group  |  |
| Enhanced marine data collection coordination  | Better cross-govt transparency of marine environment data  | Increase visibility of marine geospatial data , govt funding prioritised  |  |
| A Marine group that is nationally represented - NGD, Govt, iwi, councils  | Buy in from Tangta Whenua, matauranga co-operation, mana enhancing  | Continuous professional development by collaboration with international peers  |  |
| collaborate an Aotearoa NZ approach  | Everyone in NZ can access Marine data in one platform  | Govt representation into standards NZ's international review group (IRG) for geographic information  |  |
| Greater involvement from **I**wi Māori  | A data analytic capability that enables simple and reliable financial governance  | Secondments  |  |
| More data, easier access, well-funded infrastructure  | Security of funding  | Consult with academia and other industries for their ideas  |  |
| Our Te riu Maui Zealandia Virtual  | Collaborate not compete  | Think of data products on marketplace, paid for by industry but avaliable for governmental and academia  |  |
| Have a strong govt leader for marine geospatial - move from committee  | A platform that keeps up with technology  | Build the 'game' platform Zealandia  |  |
| partnering with Māori on Marine spatial data initiative  | Minimal or no movement of data needed  | Celebrate we exist - keep meeting  |  |
| Model for a marine cadastre - completed (5yrs) - implemented (10yrs)  | Sovereign data  | Increase iwi involvement  |  |
| Understand the impact of having a geospatial framework  | No duplication of collection of data within the same area  | Win over policy analysts, our data driven future, to getting funding  |  |
| Raising profile of GIS data and importance at higher levels to ensure future funding for data collection  | A one stop shop for geospatial data/advice around the sea  | Connect lower levels to find out more about specific data sets  |  |
| Easy tools for metadata capture/ entry consistent and high quality  | Integration of data systems and findability  | Continuous professional development by getting experts involved in 150/TC211 Geographic Information and 06C open geospatial conformation  |  |
| all marine data avaliable in a national catalogue - of all geospatial data, consistent (standardised)  | At centre of sea-related climate change issues, policy, and advice  | Keep technology platforms evolving  |  |
| Alignment to International visions, goals - UN sustainable development goals  | 1 million visitors a year | Broaden NZMGI WG including, Iwi Māori and others  |  |
| Innovation with data to give NZ's environment, people, economy the best chance to go well  | Cohesive use of data relating to sea-related legislation  | Work out how to use data more case studies explaining data  |  |
| Increased accessibility and information on GIS data  | A place for all NZ to find spatial marine data and information  | Identify the users, marine managers, researchers what do they need.  |  |
| The MGI data standards to encourage findability, accessibility, connect/ interop and reusability  | Keeping data fair  | increase our understanding of the marine environment  |  |
| Digital data economy  | Fair principles by default |  |  |
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Actions

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|  | What | Who | When |
| 5.1 | Review feedback from the meeting and identify next steps/ refine work programme, priorities and how to resource activities. | Steering Group  | End April 23 |
| 5.2 | Resulting SG output (work programme / priorities) to be shared with the wider WG.  | LINZ | End April 23 |
| 5.3 | Share marine mapping economic reports | LINZ | Early March 23 |
| 5.4 | Raise awareness of the WG with Iwi/ Māori and encourage participation | All | On-going  |
| 5.5 | Identify contestable funding opportunities | All | On-going |
| 5.6 | Share outcome of Marine innovation Kaupapa 2 – Te Ao Māori wordview on MGI  | LINZ | Dec 23 |
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|  | Previous Actions Remaining Open |  |  |
| 4.5 | Communicate with NZMGI-WG framework and toolkit for Data Standards and Quality Assessment | Liz Kolster | NZMGI-WG Meeting 5 |
| 4.6 | Organisations collecting MGI, email hydro@linz.govt.nz to contribute to the National MGI Stocktake & Inventory | All NZMGI-WG members | On-going  |
| 4.8 | Organisations interested in contributing to case study library email hydro@linz.govt.nz | All NZMGI-WG members | By 10 Dec |
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