

# NZ-MGI Working Group

## Meeting #4

11 November 2021

# Karakia: Whakatakata te hau

**Whakataka te hau ki te uru**

Cease the winds to the West

**Whakataka te hau ki te tonga**

Cease the winds to the South

**Kia mākinakina ki uta**

Let the breezes blow over the land,

**Kia mātaratara ki tai**

Let the red-tipped dawn come with a  
sharpened air,

**E hī ake ana te atākura**

A touch of frost,

**He tio, he huka, he hauhunga**

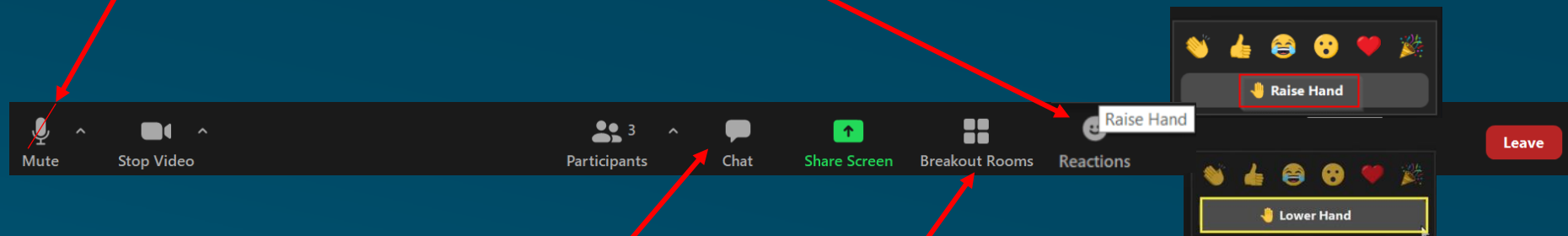
A promise of glorious day

**Tīhei Mauri ora**

**Nau mai haere mai**  
**Welcome to you all**

# Housekeeping

- Please mute your microphones if you are not speaking
- To speak, please raise your hand and lower it afterwards



- Post any questions in the meeting chat
  - Break out rooms: self assign to the breakout room most aligned to your expertise
  - The meeting is being recorded
  - The meeting notes and actions will be circulated to WG members



# Agenda

1. Welcome (1pm)
2. NZ-MGI WG Goals (1.15pm)
3. DIA Innovation Fund Opportunity (1.25pm)
4. Best Practice MGI Management (1.45pm)
5. Break (2.20-2.30pm)
6. National MGI Inventory (2.30pm)
7. Work programme priorities (2.50pm)
8. Next steps (3.35pm)

# Actions Meeting 3 - July 2020

- Seek a Maōri representatives for the Steering Group
- Investigate whether the stocktakes/spatial plan undertaken by the Bay of Plenty Regional Council, Takiwa and Whakatōhea could feed into the National MGI Inventory.
- Investigate CitSci Hub Taranaki (MBIE Curious Minds, Hotpsot) and Marine Meter Squared.

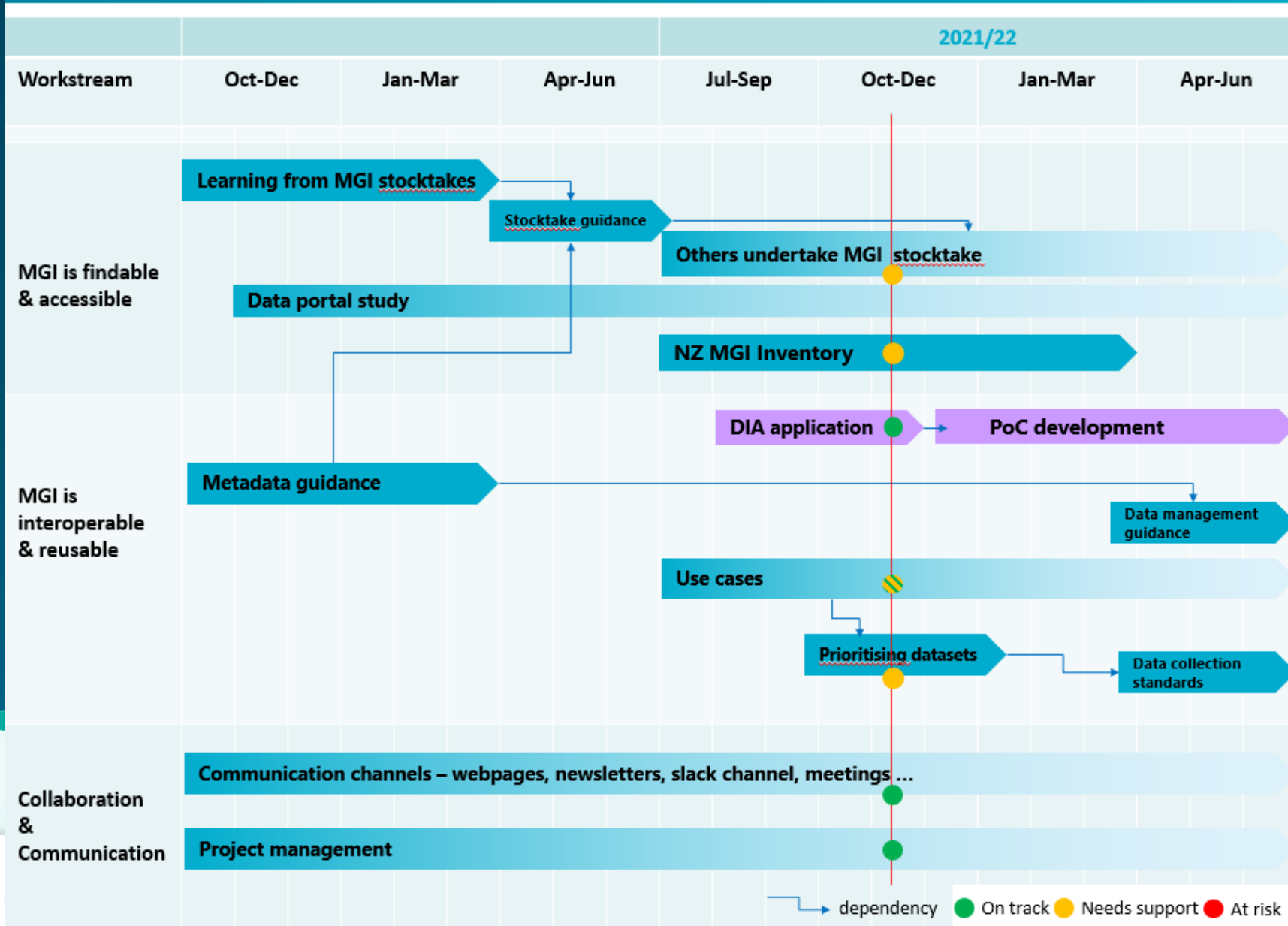
# Goals of the NZMGI-WG (Sept 2019)

1. MGI is Findable, Accessible, Interoperable and Re-Useable (FAIR Data Principles)
2. High-value marine geospatial data is collected and freely available
3. Widespread knowledge of data applications and uses
4. Visibility of future marine data capture to reduce duplication and leverage opportunities for partnerships
5. Timely availability of datasets

# Road Map

## NZMGI-WG Road Map – 2020-2022 Project Timeline

As at November 2021



# Question Time

## #1 WG Goals:

- Are the NZ-MGI WG Goals still relevant?

# DIA Innovation Fund Opportunity

# DIA Innovation Fund

- Government collaboration
- Digital and innovation
- Contestable \$5 million fund

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## Digital Government Partnership Innovation Fund

The innovation fund is an annual contestable fund that invests in digital and data innovation in the public sector.

### What is the innovation fund?

The Digital Government Partnership (DGP) Innovation Fund is an annual \$5 million contestable fund that invests in digital and data innovation.

### Eligibility

Applications must be led by one of the following New Zealand public sector organisations.

### Application criteria

Innovation fund applications must show how the initiative aligns with government priorities and the Strategy for a Digital Public Service focus areas.

### How to apply, timelines and reporting

The Digital Government Partnership (DGP) Innovation Fund application process and key dates.

### Guidance for applicants

Advice, guidance, preparation tips and the lean canvas template.

[Lean canvas](#)

[Tips for completing your lean canvas](#)

[The pitch](#)

[Help with your innovation fund application](#)

### Apply for the innovation fund

Submit your application for the Digital Government Partnership Innovation Fund before midnight 26 October 2021.

### Contact the Digital Government Partnership Innovation Fund team

The innovation fund is administered by the Digital Public Service branch at the Department of Internal Affairs.

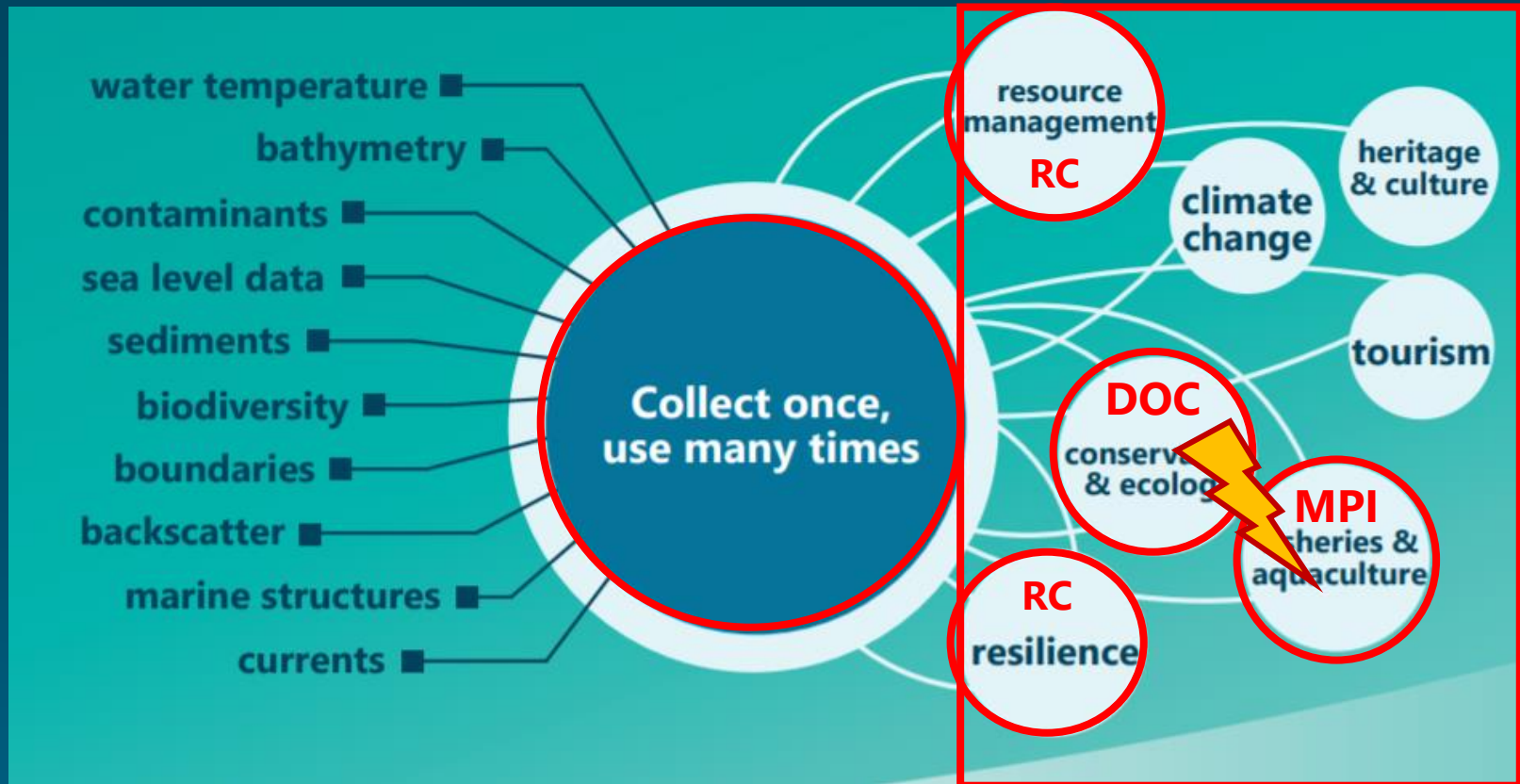
### Funding recipients

Find out which agencies and projects received innovation funding from the 2020/21 funding round.

**Digital government**

- About digital government
- Strategy
- Programmes and projects
- Leadership
- International partnerships
- Digital Government Partnership Innovation Fund**
- What is the innovation fund?
- Eligibility
- Application criteria
- How to apply, timelines and reporting
- Guidance for applicants
- Apply for the innovation fund
- Contact the Digital Government Partnership Innovation Fund team
- Funding recipients
- Support for government organisations during COVID-19
- Digital Public Service Hui

# NZ marine management





# Proof of Concept: enable integration of MGI

## Partner agencies



## System Developer





Environmental  
datacubes



GIS Layers



Databases



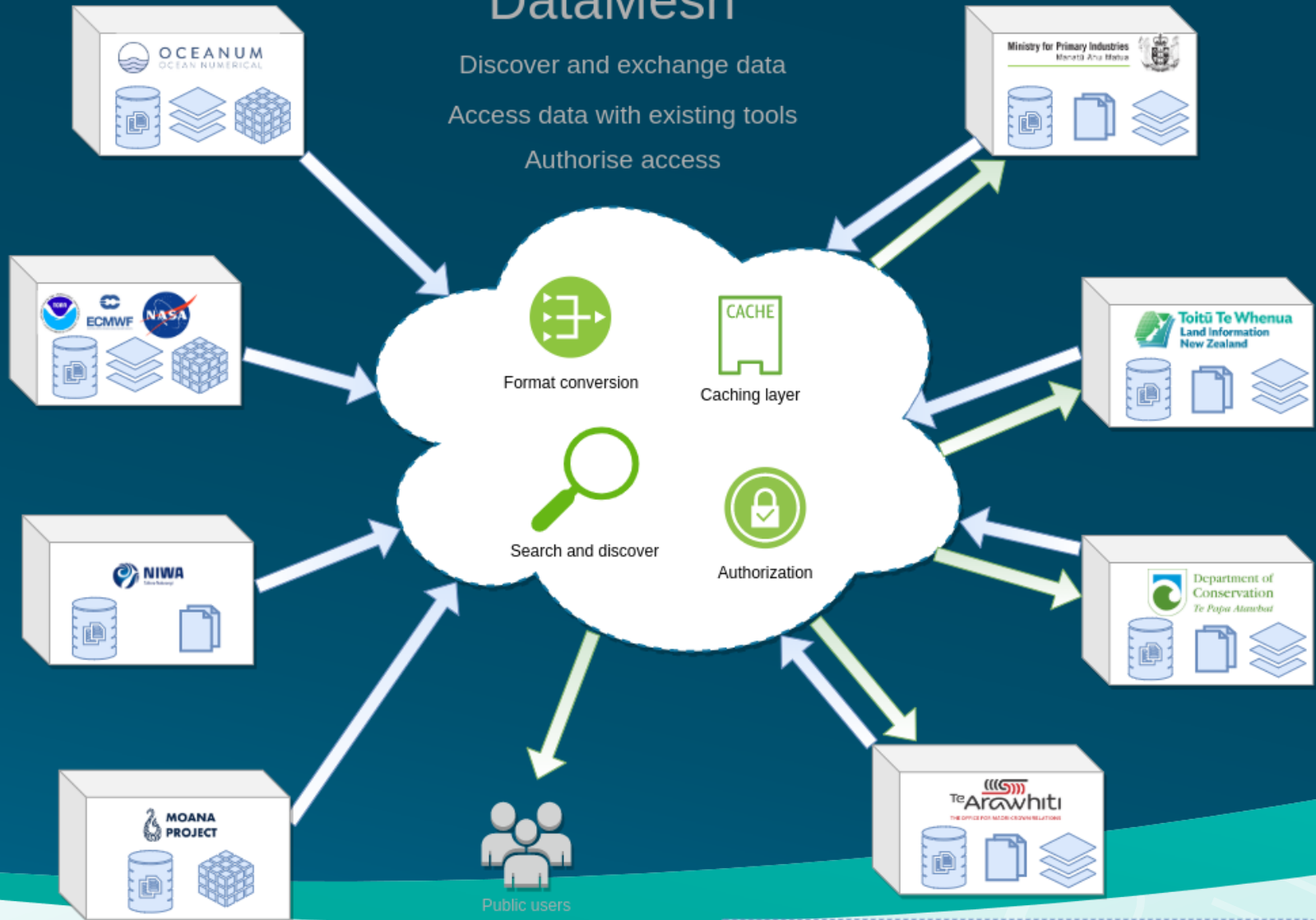
Documents  
Reports

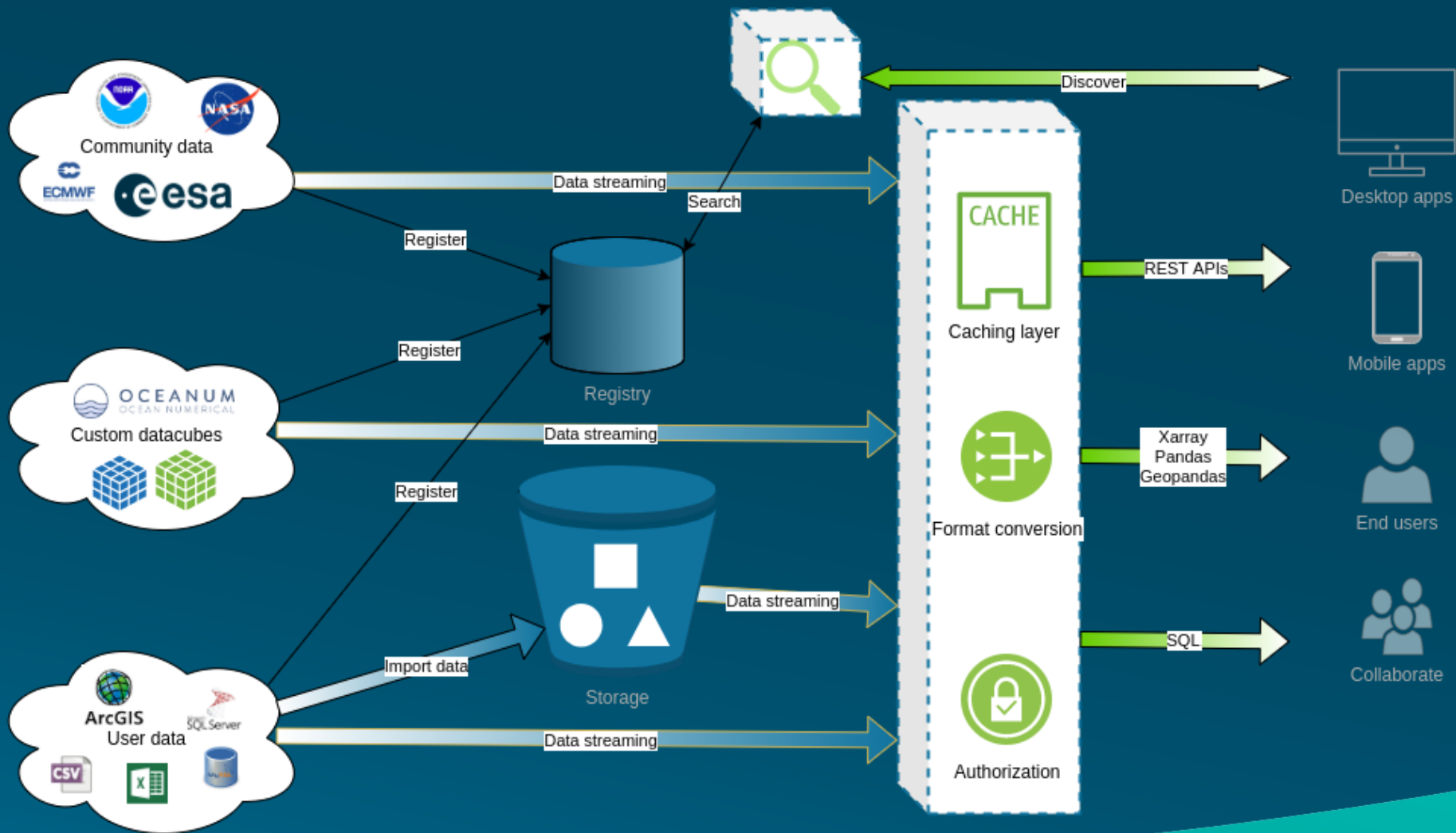
# DataMesh

Discover and exchange data

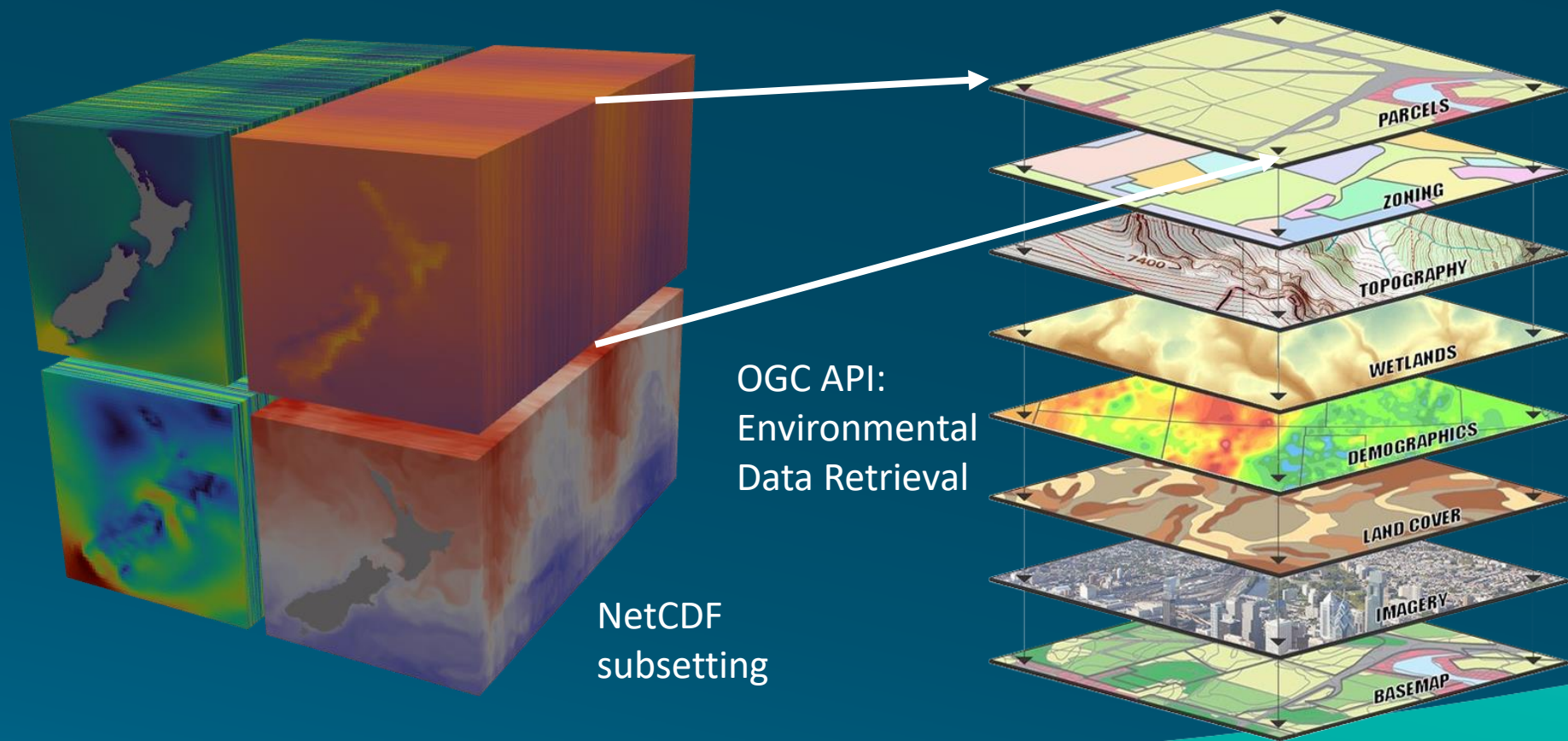
Access data with existing tools

Authorise access

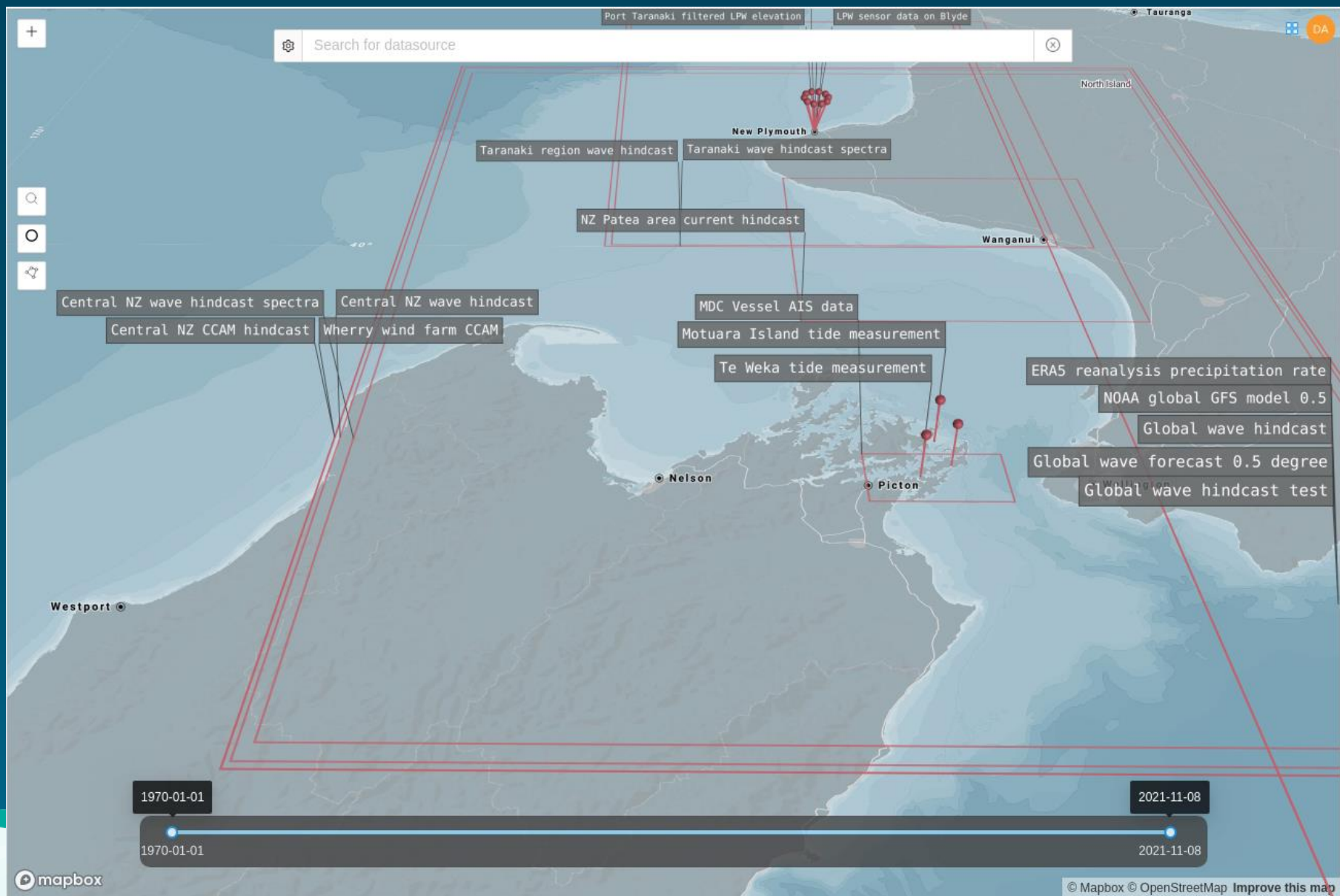




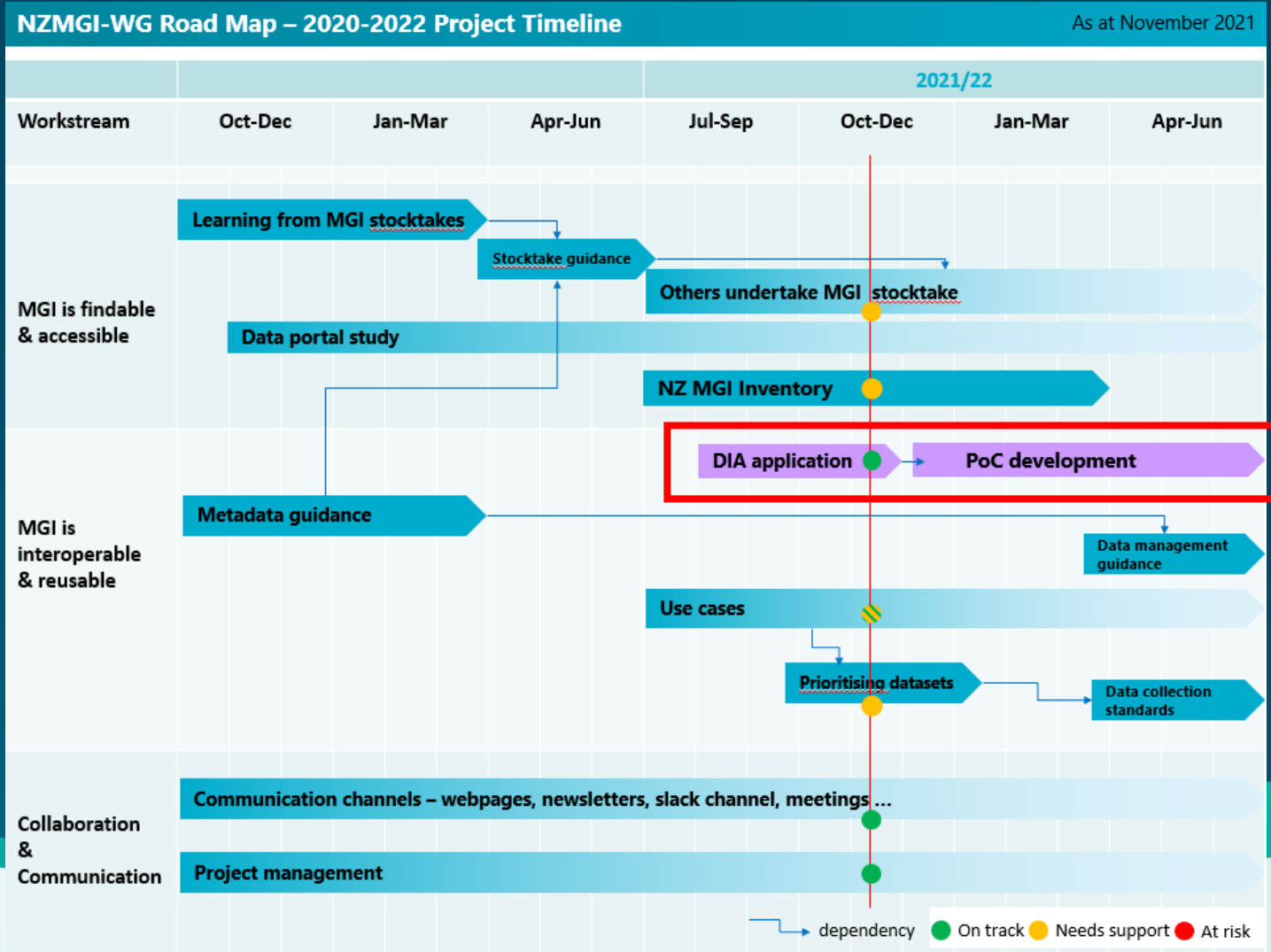
# Environmental Datacubes for GIS







# Timeframes



# Question Time

## #2 DIA Innovation Fund:

- Do you see benefit for NZ in this connected MGI system approach?

# Best Practice MGI Management



# MGI Themes



## Finding and accessing MGI

Finding and accessing data facilitates its reuse.

In New Zealand, MGI is collected by various public and private organisations. The NZMGI-WG aims to increase the findability and accessibility of MGI.

### National MGI Inventory

The development of a National MGI inventory is the first step in improving discovery of NZ's MGI. NZ marine data owners are encouraged to contribute to the National MGI Inventory. The preliminary results of this work are available through [catalogue.data.govt.nz/](https://catalogue.data.govt.nz/).

Support in undertaking a Marine Geospatial Stocktake and contributing to the National MGI Inventory is available. The NZMGI-WG has produced a guidance document:

[MGI Stocktake Guidance \(PDF 675KB\)](#)

For more information email [hydro@linz.govt.nz](mailto:hydro@linz.govt.nz) with the subject 'MGI Inventory'.

6 MGI inventories  
published on  
[data.govt.nz](https://data.govt.nz)

# MGI Themes

NZ MGI Working Group

## Marine Geospatial Information Themes

Categorising marine geospatial information in a consistent way has many benefits, including:

- supporting better data management practices,
- facilitating discovery, access, publication and reuse of information, internally and externally,
- improving data interoperability.

The categories recommended in this document aim to provide consistency in the NZ context and support the development of a NZ National MGI Inventory. The categories draw on input from international initiatives (i.e. IHO MSDI WG, AusSeabed, Australian Ocean Data Network) and the NZ MGI community through the NZMGI Working Group.

Please note: keywords/tags are not intended to be exhaustive nor exclusive to the themes and data types, these are examples.

## Administrative areas and boundaries

for data related to marine management and human usage

Data types	Examples of keywords / tags
Maritime jurisdictions	contiguous zone, exclusive economic zone, EEZ, continental shelf, high sea, maritime governance; jurisdictional boundaries; territorial sea
Marine conservation areas	protected areas; habitat classification; Marine Protected Areas <sup>1</sup> ; marine mammal sanctuaries; reserves; marine conservation; restored areas; conservancy; marine parks; benthic protection areas
Regulatory use restrictions	military areas; defence operations; energy exploration areas; permit boundaries; harbour limits; dredged areas; activity management areas; monitoring areas
Fishing/aquaculture areas	marine farms; fishery zones; fisheries; aquaculture; seaweed harvesting; fish farm; quota management areas; trawl footprint
Mining extraction/exploration areas	boulder exploration; drilling areas; exploration zones; extraction areas

<sup>1</sup> as defined in the MPA Policy and Implementation Plan 2005  
<https://www.doc.govt.nz/globalassets/documents/conservation/marine-and-coastal/marine-protected-areas/mpa-policy-and-implementation-plan.pdf>

NZ MGI Working Group

Māori customary interest areas	customary fishing zones; areas of interest for Māori/Iwi; Mātaitai; Taiāpure; rohe moana; temporary closures and restrictions on fishing methods; fisheries bylaws
Transportation	commercial shipping; ferry routes; separation scheme; AIS; charts; shipping areas; maritime routes; pilot boarding areas; anchorage areas
Recreational areas	tourism areas; water ski lines; diving sites; swimming /snorkelling areas; archaeological sites; surf breaks; shipwrecks; shore use; beaches; recreational fishing areas;
Permitted dumping ground	dumping/discharge grounds; radioactive areas; contaminated sites; disposal sites

## Biology

for data related to living species and their habitats

Data types	Examples of keywords / tags
Fauna	fish species; sea birds; turtles, marine mammals, feeding ground; stranding; microorganisms; nursing/nesting sites; species distribution; spawning areas; invertebrates; vertebrates; colony; biomass; abundance; breeding areas; mussels; sponges; corals
Flora	kelp forests; algae; vegetation coverage; biomass; abundance; seagrass;
Fishing catch effort	catch effort; landing; quotas; stock assessment; fish stock
Bycatch	accidental captures
Biosecurity	invasive species
Marine habitats/ecosystems	habitats; habitat classification; habitat mapping; ecosystems

## Geophysics

for data related to the physical properties of the Earth

Data types	Examples of keywords / tags
Earthquake locations	seismic activity; earthquakes; seismic waves; magnitude;

## Managing and reusing MGI

A “collect once, use many times” approach can grow the value of marine geospatial data.



Robust management for data collection, storage, maintenance and publication facilitates data reuse. Interoperability is key to making MGI truly reusable.

## MGI metadata

The use of metadata standards ensures consistency in how MGI is managed and published. The NZMGI WG has produced guidelines to support publication, discovery and reuse of NZ marine geospatial data.

[NZ Marine Geospatial Metadata Guidelines \(PDF 225KB\)](#)

## MGI vocabulary

Consistent data vocabularies support discoverability, interoperability, and reuse of data. There are a considerable number of marine data themes and controlled vocabularies for marine data that vary in function, scope, capability and content. The NZ Marine Geospatial Metadata Guidelines includes links to several vocabulary options.

## Marine data categories

MGI can be grouped in categories (e.g. data themes and data types). These categories facilitate data management and increase discovery and reuse of data. Marine data can be grouped in various ways. LINZ has worked with both international groups as well as the NZ marine community and recommends the following categories:

[Marine Geospatial Information \(MGI\) themes \(PDF 236KB\)](#)

# MGI Themes

1. Administrative areas and boundaries  
for data related to marine management and human usage
2. Biology  
for data related to living species and their habitats
3. Geophysics / Geology / Earth Science / Geoscience  
for data related to the physical properties of the Earth
4. Hydrography  
for data related to seabed features
5. Infrastructure  
for data related to marine constructions that support human activities
6. Oceanography  
for data related to the physical and chemical properties of the marine water

**Participants self assign to the breakout room most aligned with their work /expertise.**

# Administrative areas and boundaries

for data related to marine management and human usage

Types of data	Examples of keywords / tags
Maritime jurisdictions	contiguous zone, exclusive economic zone, EEZ, continental shelf, high sea; maritime governance; jurisdictional boundaries; territorial sea
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Permitted dumping ground	dumping/discharge grounds; radioactive areas; contaminated sites; disposal sites

# Biology

for data related to living species and their habitats

## Types of data

## Examples of keywords / tags

Fauna	fish species, sea birds, turtles, marine mammals, feeding ground; stranding; microorganisms; nursing/nesting sites; species distribution; spawning areas; invertebrates; vertebrates; colony; biomass; abundance; breeding areas; mussels; sponges; corals
Flora	kelp forests; algae; vegetation coverage; biomass; abundance; seagrass;
Fishing catch effort	catch effort; landing; quotas; stock assessment; fish stock
Bycatch	accidental captures
Biosecurity	invasive species
Marine habitats/ecosystems	habitats; habitat classification; habitat mapping; ecosystems

# Geophysics / Geology/ Earth Science / Geoscience

for data related to the physical properties of the Earth

## Types of data

## Examples of keywords / tags

Earthquake locations

seismic activity; earthquakes; seismic waves; magnitude

Volcanoes

volcanoes; eruptions; ash samples; volcanic ashfall forecasts; gas analysis data; collapse; explosion

Seismic reflection/refraction

seismic waves; seismographs; velocity

Magnetic features

magnetic fields; magnetic recording; magnetic anomalies

Gravity

gravity features; microgravity

Geothermal features

geothermal vents; geothermal bores

Fault locations

tectonic; extensional faults; compressional faults; strike-slip faults

Age

geochronology; radiometric dating

Heat flow

energy; radioactivity

Geology

geomorphology; aquifer; gas seeps; freshwater plumes; aquifers; mineral and fossil fuel resources; spring points; submarine landslides

Sediment

rugosity; grain size; substrate chemistry; sediment composition; rock samples; dredge, cores

# Hydrography

for data related to seabed features

## Types of data

## Examples of keywords / tags

Bathymetry

water depth; bathymetry; elevation; DEM/DTM; topography of submarine features; seabed; isobath; contours; multibeam; mosaic imagery; RGB imagery; processed bathymetry; grids; raw data; side scan sonar; fair sheets; sounding sheets; ungridded; processed data; bathymetric LiDAR; single beam echo sounder; echo sounder; satellite derived bathymetry; SDB

Seafloor backscatter

seafloor reflectance; multibeam; seafloor aspect; curvature; hill shade;

Coastline

mean high water springs; coastal mapping; chart datum; highest astronomical tide; mainland; islands; mean sea level; lowest astronomical tide

Physical obstructions

rocks; reefs; wrecks; obstructions



# Infrastructure

for data related to marine constructions that support human activities

Types of data	Examples of keywords / tags
Port/harbour facilities	marinas; harbours; ports
Shoreline constructions	seawalls; jetties; pontoons; boat ramps; wharves; jetties; sewage locations; storm water drainage
Pipelines & underwater cables	underwater cables; pipelines; overhead cables
Energy/resource production sites	oil/gas production sites; marine wind farms; wave/current farms; offshore platforms; oil/gas; mining/mineral extraction;
Aid to navigation	lighthouses; buoys; isolated dangers; lights; beacons
Communication structures & coverage	communication signal stations; radar transponders



# Oceanography

for data related to the physical and chemical properties of the marine water

Types of data	Examples of keywords / tags
Sea level information	tides; swell; waves; tsunami locations; sea surface height
Acoustic	passive records; acoustic; noise; active emissions
Meteorology	atmospheric reading; sea state; air pressure; UV radiation
Currents	direction; speed; velocity
Water quality	chemical composition; nutrients; sewage/stormwater discharge sites; water monitoring; river discharge; dissolve oxygen
Nutrients	nitrate; phosphate; phosphorus; silicate; chlorophyll concentration; carbon; oxygen
Suspended particles	sedimentation; suspended material
Water pollution	water contaminants; pelagic pollution; bacterial pollution; ocean dumping; plastics; fishing gear; heavy metals; biotoxin
Optical properties	turbidity; ocean colour; satellite reading; Secchi
CTD	pressure; conductivity, SST; density; salinity; sea temperature; water temperature; heat wave; sound velocity profiles; CTD profiles
Water column backscatter	water column return; raw data; SVP; backscatter; reflectance

# Question Time

## #3 Data Themes:

- Is there scope for your organisation to adopt these data themes?

# New Zealand Marine Geospatial Metadata Guidelines

Draft for discussion / further steps, developments

**Jochen Schmidt, Chief Scientist**  
**NIWA**

# Purpose

- Guidelines on the content, structure and formats for metadata describing marine geospatial datasets in New Zealand.
- Ensure **consistency** in how marine geospatial data is described and therefore to facilitate **improved discoverability** and **use** of this data.
- “Dataset” = structured collection of related data that forms a cohesive entity, for example all data / records are collected / generated for a particular purpose, project, or using similar technologies. It is left to the discretion of the respective organisation to define the scope for “dataset”.

# “Features”/ Principles

- “Flat” Structure
  - Minimum mandatory fields + “desired” fields
  - Option to add additional fields shall be based on existing standards, such as the Ecological Markup Language (EML), Dublin Core (DC), ISO19115 or other relevant published standards
- “Open Content” with best practice recommendations
  - Vocabulary options provided
  - ISO8601 Datetime Strings
- Based on / compared with existing standards: EML, DC, ISO19115

# Use of vocabularies

Use of vocabularies enables consistent discovery across published data sources. However, mandated vocabularies limit flexibility in describing specifics / details of data, and marine geospatial data is diverse in nature. Here the following approach is used to enable maximum flexibility.

- For relevant fields the use of vocabularies is recommended
- Generally, the option is left open for NOT using a vocabulary but using 'free text'.
- Vocabularies for use are recommended; users can choose one (or more for fields with multiple entries) of these vocabularies to use.
- Users can elect to use other vocabularies, and preferably these shall be published vocabularies.
- If a vocabulary is used, the reference to the published vocabularies shall be included, preferably through a persistent URL/URN).
- For some core fields vocabularies are mandated(?) to ensure enterprise search / discovery is possible.

# Metadata Categories / Sections

- General Information
- Roles / Contacts
- Spatial and Temporal Coverage
- Generation / Methods
- Format / Storage
- Content
- Identification / Versioning

# Mandatory / Minimum Fields

- Dataset title
- Dataset description
- Dataset subjects
- Dataset licence
- Dataset provider



# Question Time

## #4 Metadata:

- Is there scope for your organisation to adopt these metadata standards?

# BREAK 2.20-2.30pm

# Contribution to the National MGI Inventory

# Contribution to the National MGI Inventory

To develop common goals and priorities, the NZMG-WG agreed that a national stocktake of existing marine geospatial datasets is necessary. It will identify custodian agencies and facilitate gap analysis for future investments and data acquisition.

- 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 and Role

The NZMG-WG has been established to facilitate national collaboration and leverage opportunities to grow the value of MGI investments and benefits for all NZ. Specifically, the role of the NZMG-WG will be to:

- Develop a national NZ MGI strategy and work programme with deadlines and timeframes
- Jointly progress work and prioritise work programme deliverables
- Leverage opportunities for data collection, management and distribution (including technologies and crowd sourcing)
- Coordinate efforts and resources for data collection, management and distribution
- Agree and promote standards and guidelines to enable data re-use
- Determine funding options / business models where required
- Actively raise awareness on the value and potential uses of MGI, and influence across the wider sector (from ministerial advice to end-user education)
- Represent wide marine related interests

<sup>1</sup> The **Wordbank** 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".

<sup>2</sup> 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).

1

#### Achievement of objectives

Challenge	Mitigation
1 Resourcing in terms of funding, capacity and capability.	The NZMG-WG will establish a national common strategy, prioritise work and explore funding options. A Steering Group will be established to provide directions and approve the NZMG-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 NZMG-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 NZMG-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 NZMG-WG and invite and encourage participation.
5 Getting buy-in at the senior/ executive level.	The NZMG-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 NZMG-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.

<sup>3</sup> The FAIR Data Principles are a set of guiding principles <https://www.fairprincipl.es/> 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).

2

align with the NZMG-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 NZMG-WG work programme. All sub-group projects will have defined deliverables, milestones and regular progress reports to NZMG-WG.

#### Meetings and Reporting

The NZMG-WG will meet approximately twice per year. An agenda will be circulated to all members prior meeting and minutes/reports distributed within two weeks of the meeting. Members are encouraged to attend in person however virtual attendance may be possible.

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 NZMG-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 NZMG-WG goals.

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

A Governance Board will be considered once the work programme is defined.

3

# Contribution to the National MGI Inventory

## Finding and accessing MGI

Finding and accessing data facilitates its reuse.

In New Zealand, MGI is collected by various public and private organisations. The NZMGI-WG aims to increase the findability and accessibility of MGI.

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For more information email [hydro@linz.govt.nz](mailto:hydro@linz.govt.nz) with the subject 'MGI Inventory'.

## Marine Geospatial Information stocktake guidance

NZMGI Working Group

Published in partnership between MPI, NIWA and Toitū Te Whenua LINZ

August 2021

# Contribution to the National MGI Inventory

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# Question Time

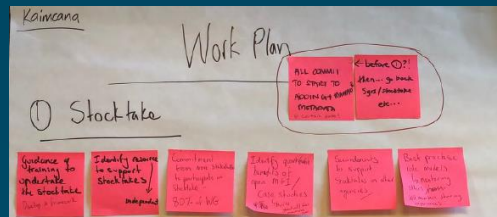
## #5 National Inventory:

- a) Will this guide be useful to your organisation in taking stock of the MGI you have?
- b) How likely is your organisation to contribute to the inventory in the next 12 months?
- c) How could the MGI inventory be best published ?  
(please answer in the chat)

# Work Programme Achievements and Next Steps



# Building the Work Programme



- Measure of success of stock take
  - ↳  $\frac{\text{its of what}}{\text{stock take for}}$  →  $\frac{\text{harvesting}}{\text{rehabilitation}}$
- Core Studies
  - ↳ standardisation
- Meta-data (description) for datasets
  - ↳ why?
- Clarity on data stock take requirements for all members.
  - 1. Decide on
  - 2. Refine.
- Decision on directory Finding
  - ↳ Transp Bid (NZ inc)
  - ↳ NZ

# Moving Stock take forward

- Value of stocktake (benefits)
- Consolidate lessons learned. to be in contact with training and HR
- Mentor / Trainer for organisations.
- Communicate benefits to execs.
- State services commission
  - ↳ try get message to execs from high level.
- Performance measure for CEs. (Stocktake status)

PAGE I

Evidence around Metachitta needs standards & quality assurance rather international but perhaps national

Capacity Building within organisations to do activities for other organisations to help our stakeholders

Recommendations for metachitta/datability SA/AC procedures - for us to follow

work for security data points

Security & privacy issues often linked

Access to information via internet / email / data gov / legislation

National organisation point of contact / public / private

Use international tunnels are examples

transmission data / H/W are channels / wireless

Specs learned from other former efforts

## 2. Other things to achieve

- Communication channels set up  
     Open for all interested parties  
     to keep conversation going & break  
     down silos
- fundamental policy on stewardship &  
     data management implemented (updated)  
     (meta data) align with others
- ID hurdles for interoperability between  
     datasets within & between organisations
- talk to national library & archives NZ  
     about what plans are for archiving data
- Each organisation ID which datasets they  
     master & top priorities
  - Webpage with links to all portals
- Lobby Govt to reinstate / set up new  
     Marine Geospatial data office, look to  
     international examples
- processes for classification of data to be  
     established & implemented
- lead by example - publishing & making accessible

[illegible]

- funding for other agencies & ID'ing what which are pri
- standardising metadata & col
- work to be done on suitable
- ensure stocktake part 2 ta lessons from part 1 & improves
- develop interoperable descn data sets.

## Business case

- Central Govt platform
- Nat signifi

Build - quality control  
Find

## Populate the data data!!

Standardised benefits of an inventory.

Need high level support.

Assume all data is valuable.

Agreed standards.

It's a social issue.

Metadata

- raise the profile
- How to make people change culture to include metadata
- Everyone hates it - but we all need it.

Champions

data owned by person

data = culture

data = purpose

No incentive for metadata

what if we lose him/her?

No contract if no mkt + str.

Data management is important as data collection

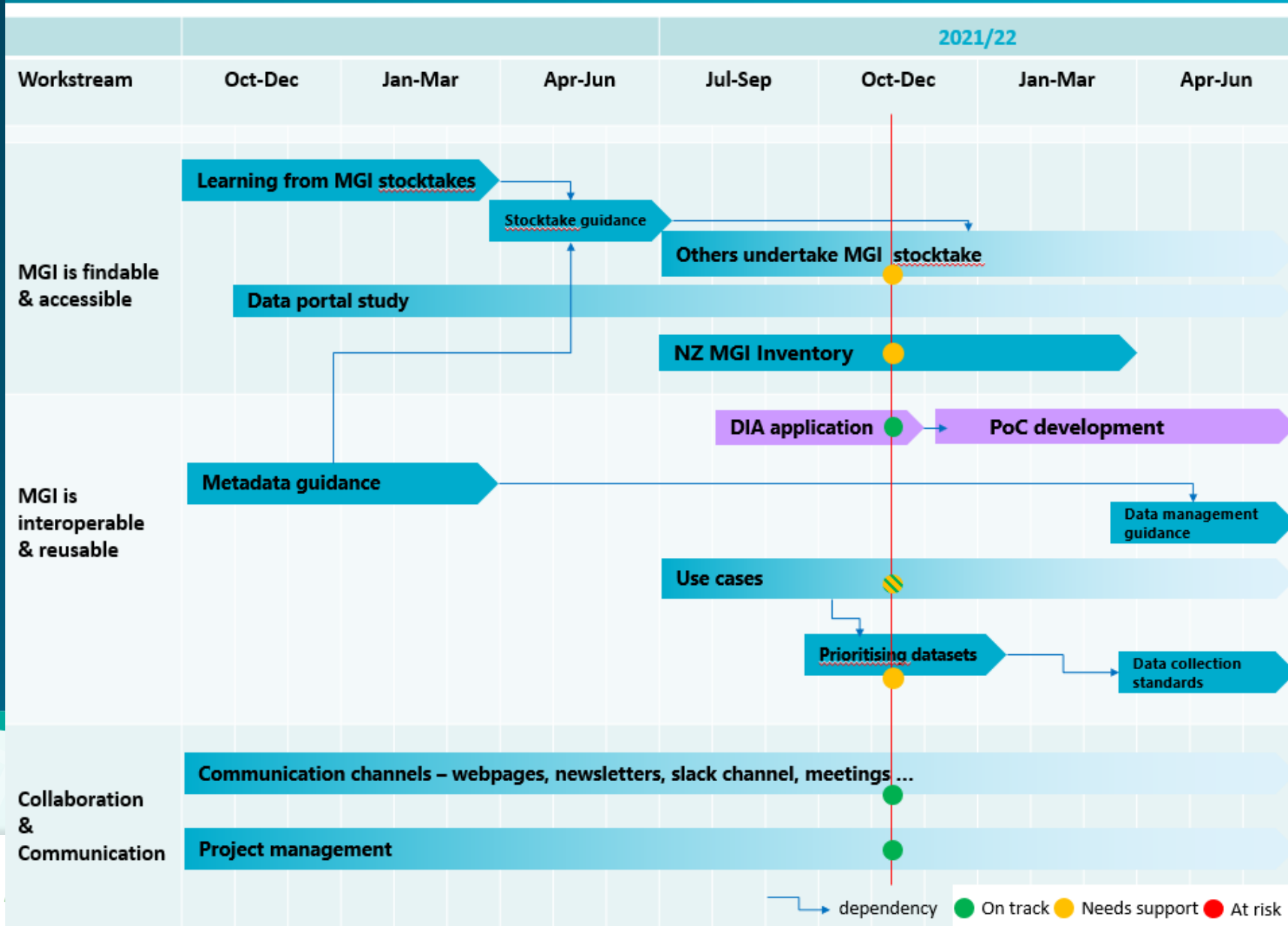
# Work Programme

GOAL	Category	Task	Priority (1/2/3)	Lead Organisation	Status (Updated 09/08/21)	Expected Completion
Findable (Stocktake)	Stocktake Support for Organisations	Develop guidance for organisations undertaking stocktake / include options for resourcing	1	LINZ	● Complete	Complete
		Identify and communicate benefits of undertaking the stocktake	1	MPI	● Complete	Complete
		Prioritise key organisations to undertake stocktake	1	Local gvt	● Complete	Complete
		Government funding to support national stocktakes (may not be required)	3			
	Building national stocktake/ inventory	Stage 1 - Statistics NZ support agencies to complete stocktakes	1	Stats NZ / LINZ	● Complete	Complete
		Stage 2 - Remaining key organisations contribute	2	LINZ	● Delayed	Jun-22
		Stage 3 - Encouraging wider MGI community to contribute	3			
	Publish Inventory	Agree mechanism for publishing i.e. data.gov or other	1	DOC / LINZ	● Delayed	Mar-22
		Collate stocktake results into a national inventory	2			
		Develop publishing viewer/webpage (if required)	2			
Accessible	NZ MGI Data Portal/s	Identify and review of international and national marine data portals - Identify strengths and limitations of each (e.g. NZODN, LAWA, IRA Moana, data.gov, LDS, PBE, TEZ, Petlab).	1	LINZ and MFE	● Complete	Complete
		NZMGI Webpage contains links to portals	1	LINZ	● Complete	Complete
		Identify options/ recommended approach to improve marine data accessibility in NZ. This may consider: -Improvements to current portals -Resource requirements -Processes to link the different data portals -A central government data platform?	2	LINZ /MPI/DOC/Te Arawhiti	● In Progress	Jun-22
		Collaborate with national library/archives NZ on data archiving (if required)	3			
	Data Management	Develop best-practise data management guidance	2	LINZ		
		Develop QC/data processing tools	3			
Interoperable	Standards	Identify and communicate stocktake metadata standards and attributes	1	NIWA	● Complete	Complete
		Identify data format standards	2			
		Identify and communicate recommended vocabulary	2	LINZ	● Complete	Complete
		Identify hurdles for interoperability between datasets within and between organisations	2			
Reusable	Re-use	Identify opportunities for standardisation – consider data management and data distribution	2			
		Promote the value of MGI and identify opportunities for data reuse – user cases	2	LINZ	● In Progress	Ongoing
Data Collection	Capture Standards	Identify and communicate standards and formats for data collection	2			
		Develop guidance for standardised data capture	2			
	Capture Programme	Identify national capture priorities criteria	3			
		Identify data gaps	3			
		Develop national data capture programme	3			
Capability	Communication and Education	Identify funding models for national capture programme	3			
		Set up communication channels: open for all interested parties to keep conversation going and break down silos / Slack Channel	1	LINZ	● Complete	Complete
		Develop a NZMGI-WG webpage/site	1	GNS / LINZ	● Complete	Complete
		Create a programme workplan with Project Management practise/ Timeline	1	LINZ	● Complete	Complete
		Create stocktake status performance measures	1 / 2	MBIE	● Complete	Complete
		Build capability -support/training/ mentoring secondments	2			
		Implement standardised progress reporting and the communication channels	2			

# Road Map

## NZMGI-WG Road Map – 2020-2022 Project Timeline

As at November 2021



# Findable (Stocktake) Priorities

GOAL	Category	Task	Priority (1/2/3)	Lead Organisation	Status (Updated Nov 2021)	Expected Completion
Findable (Stocktake)	Stocktake Support for Organisations	Develop guidance for organisations undertaking stocktake / include options for resourcing	1	LINZ	● Complete	Complete
		Identify and communicate benefits of undertaking the stocktake	1	MPI	● Complete	Complete
		Prioritise key organisations to undertake stocktake	1	Local gvt	● Complete	Complete
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		Stage 2 - Remaining key organisations contribute	2	LINZ	● Delayed	Jun-22
		Stage 3 - Encouraging wider MGI community to contribute	3			
	Publish Inventory	Agree mechanism for publishing i.e. data.gov or other	1	DOC / LINZ	● Delayed	Mar-22
		Collate stocktake results into a national inventory	2			
		Develop publishing viewer/webpage (if required)	2			

# Accessible Priorities

GOAL	Category	Task	Priority (1/2/3)	Lead Organisation	Status (Updated 09/08/21)	Expected Completion
Accessible	NZ MGI Data Portal/s	Identify and review of international and national marine data portals - Identify strengths and limitations of each (e.g. NZODN, LAWA, IRA Moana, data.gov, LDS, PBE, TEZ, Petlab).	1	LINZ and MFE	● Complete	Complete
		NZMGI Webpage contains links to portals	1	LINZ	● Complete	Complete
		Identify options/ recommended approach to improve marine data accessibility in NZ. This may consider: - Improvements to current portals - Resource requirements - Processes to link the different data portals - A central government data platform	2	LINZ /MPI/DOC/Te Arawhiti	● In Progress	Jun-22
		Collaborate with national library/archives NZ on data archiving (if required)	3			
	Data Management	Develop best-practise data management guidance	2	LINZ		
		Develop QC/data processing tools	3			



# Interoperable and Reusable Priorities

GOAL	Category	Task	Priority (1/2/3)	Lead Organisation	Status (Updated 09/08/21)	Expected Completion
Interoperable	Standards	Identify and communicate stocktake metadata standards and attributes	1	NIWA	● Complete	Complete
		Identify data format standards	2			
		Identify and communicate recommended vocabulary	2	LINZ	● Complete	Complete
		Identify hurdles for interoperability between datasets within and between organisations	2			
		Identify opportunities for standardisation – consider data management and data distribution	2			
Reusable	Re-use	Promote the value of MGI and identify opportunities for data reuse – user cases	2	LINZ	● In Progress	Ongoing

# Question Time

## #6 Case Studies:

- Is there scope to include an MGI case study from your organisation in the case study library?

# Data Collection and Capability Priorities

Data Collection	Capture Standards	Identify and communicate standards and formats for data collection	2			
		Develop guidance for standardised data capture	2			
	Capture Programme	Identify national capture priorities criteria	3			
		Identify data gaps	3			
		Develop national data capture programme	3			
		Identify funding models for national capture programme	3			
Capability	Communication and Education	<b>Set up communication channels: open for all interested parties to keep conversation going and break down silos / Slack Channel</b>	1	LINZ	● Complete	Complete
		<b>Develop a NZMGI-WG webpage/site</b>	1	GNS / LINZ	● Complete	Complete
		<b>Create a programme workplan with Project Management practise/ Timeline</b>	1	LINZ	● Complete	Complete
		<b>Create stocktake status performance measures</b>	1 / 2	MBIE	● Complete	Complete
		Build capability -support/training/ mentoring secondments	2			
		Implement standardised progress reporting and the communication channels	2			



# Question Time

## #7 Communication:

- Which communication channels/tools are most useful to you?

# Work Programme - Feedback

GOAL	Category	Task	Priority (1/2/3)	Lead Organisation	Status (Updated 09/08/21)	Expected Completion
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		Collaborate with national library/archives NZ on data archiving (if required)	3			
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		Develop a NZMGI-WG webpage/site	1	GNS / LINZ	● Complete	Complete
		Create a programme workplan with Project Management practise/ Timeline	1	LINZ	● Complete	Complete
		Create stocktake status performance measures	1 / 2	MBIE	● Complete	Complete
		Build capability -support/training/ mentoring secondments	2			
		Implement standardised progress reporting and the communication channels	2			

# Question Time

## #8 Work Progress:

- a) Overall, how happy are you on the progress made in the last 12 months ?
- b) Where do you think the group should focus efforts in the next 12 months?

# Notices: Seafloor classification



 Department of Conservation  
*Te Papa Atarahua*

 NIWA  
*Tūtahi Raukawa*

WEBINAR

## The New Zealand Seafloor Classification

Thursday 18th November 2021

9:30am - Part 1, Developing the New Zealand Seafloor Classification  
1:30pm - Part 2, Applications of the New Zealand Seafloor Classification

18th November 2021

**Kia ora, you're invited to a webinar  
about the newly developed New Zealand  
Seafloor Community Classification.**

Jointly hosted by DOC and NIWA

# Notices: LINZ hydro surveys

Area	Timeframe
Banks Peninsula	2021 Q3&4
Bluff & Stewart Island/Rakiura	2022 Q1&2
Nelson to Kahurangi Shoals	2022 Q3&4 2023 Q3&4
Western Marlborough Sounds (D'Urville Island, Port Hardy, Croisilles Harbour)	2022 Q3&4 2023 Q3&4
Approaches to Whanganui	2022 Q1&2 (TBC)
Approaches to Napier	2023/24
Approaches to Gisborne	2023/24



# Summary, next steps and closing remarks

# Closing Karakia:

**Kia tau tō rangimārie**

Let your peace

**Ki runga i a tātou katoa**

Reign on all of us

**Amine**

Amen



# Ngā mihi nui

# Thank you!