

New Zealand Digital Reform – netting the results

7th GFTEW – Halifax, Nova Scotia

www.fisheries.govt.nz



Fisheries New Zealand

Tini a Tangaroa

**Sustainable fisheries that provide
for all our people, now and in the future.**



Agenda

- How Electronic reporting works in NZ
- Technology & cost
- Data security & privacy
- Compliance
- On Board Cameras programme

Why Electronic Catch and Position Reporting?

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1. It's more accurate

Then



17% reporting errors

Now



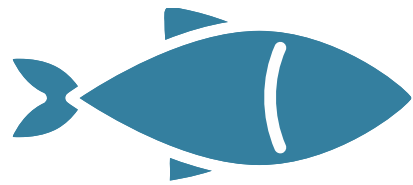
4% reporting errors

2. It's quicker



3. It's better

Not assessed



223 Stocks



29% of catch



22% of value



It's better for everyone

How the reporting process works?

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1 Aug

1 Sept

Can report electronically

Must report electronically



Fish caught and landed: reported on paper

Actual weights received from LFR

Update paper form; no need to do an electronic report



Trip Start



Fish catch report



NFPS report



Processing report



Disposal report



Landing report



Trip End



Record



Complete



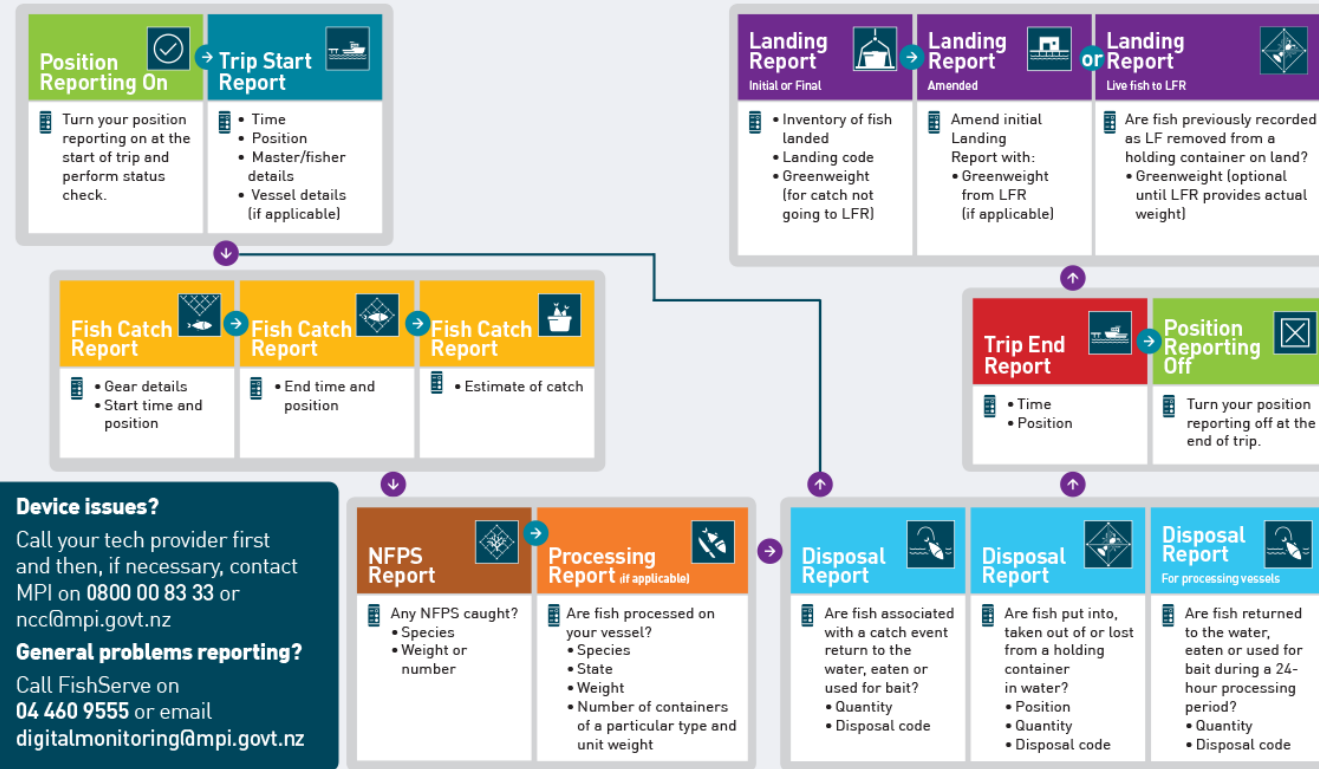
Provide

Electronic Catch and Position Reporting: A Day in the Life of a Fisher



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This chart **ONLY** shows the information you must **record** for each event report. Refer to the regulations, circulars and full version of the chart for when you must legally **complete** and **provide** reports.



New Zealand Government



Error messages



Reporting error messages on device

Master name

Mr ABC

Fishing method

BLL (Bottom long lining)

Submit

Error messages from the FishServe database

Example errors:

- Disposal not linked
- Catch reports with no associated GPR report
- Seabird capture code issues



15 days

What if the device fails?

- Carry out pre-departure checks ('status checks' or 'test pings')
- If there is a problem, **ALWAYS** call your tech provider FIRST
- Contact MPI: 0800 00 83 33 or NCC@mpi.govt.nz if the tech provider can't fix the problem

Direction to continue to fish

- If your equipment isn't working, you **CANNOT** go fishing if you don't have a Direction to continue to fish from MPI
- Alternative means of recording (your backup plan):
 - Business continuity forms on board or with you
 - App or plotter for GPR data
- Business continuity plans only apply **AFTER** a Direction has been granted

What if my device fails after departure?

- Call the tech provider **FIRST**
- MPI 0800 00 83 33 or NCC@mpi.govt.nz
- Fishers can only continue fishing if they receive a Direction from MPI

Preparing for electronic catch reporting: what happens after fishers land their catch



Preparing for electronic catch reporting: what happens after land your catch

Online tasks and where to get help

Updating a landing report with LFR details

The diagram below shows how the process of updating a landing report has changed with the introduction of electronic reporting. Instead of updating a paper form with weight details supplied on an LFR invoice and then sending the completed form to FishServe by mail, you will now have to enter the weights directly into the FishServe database. This might mean you will change how you store catch effort information in your office.

Then up to 8 weeks

On day of landing, fisher enters catch into **Landing Return**

Fisher enters **LFR Information** into **Landing Return** and posts to **FishServe**

Fisher waits for **LFR Invoice** to arrive

FishServe processes **Landing Return** & enters into **FishServe Database**

Fisher keeps a paper copy of **Landing Return**

Now up to 15 days

On day of landing, fisher provides report information to **FishServe** using **e-logbook**

Amend landing report with **LFR Invoice** information

View/export reports at anytime using **FishServe Online Services**

- Paper copies of electronic reports are not required to be kept
- Use FishServe Online Services (or authorise someone to use it for you)



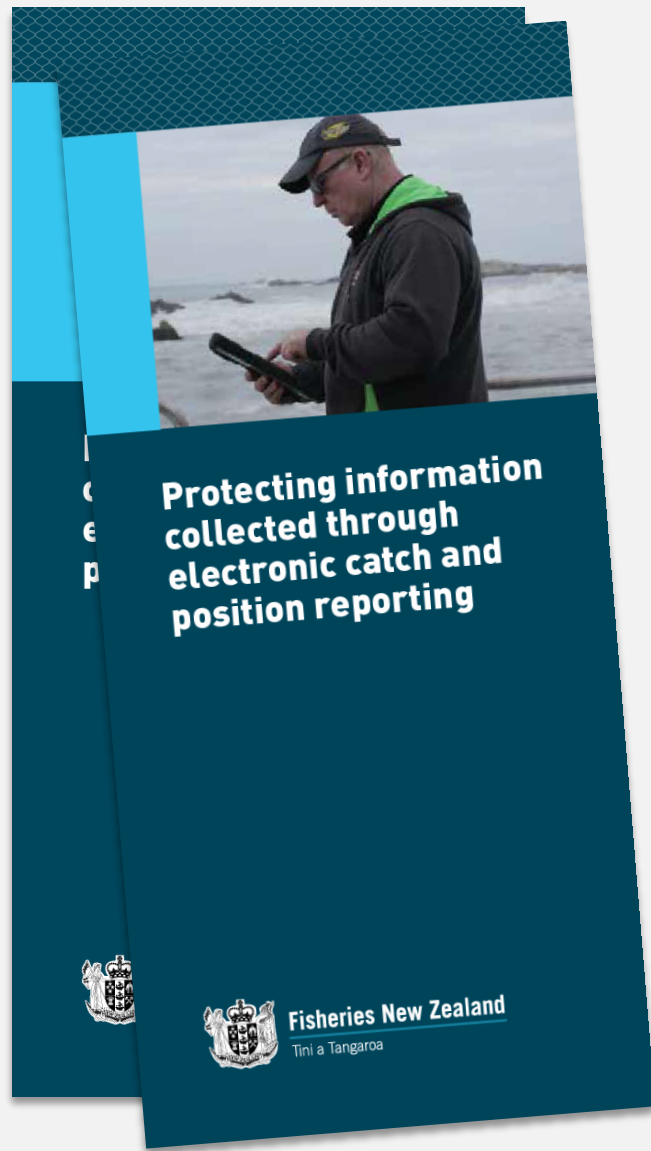
Protecting fishers information

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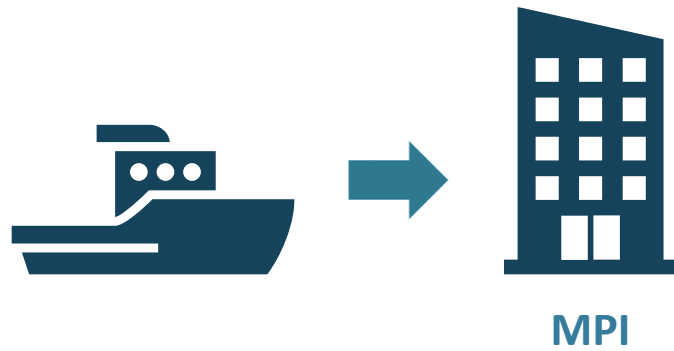
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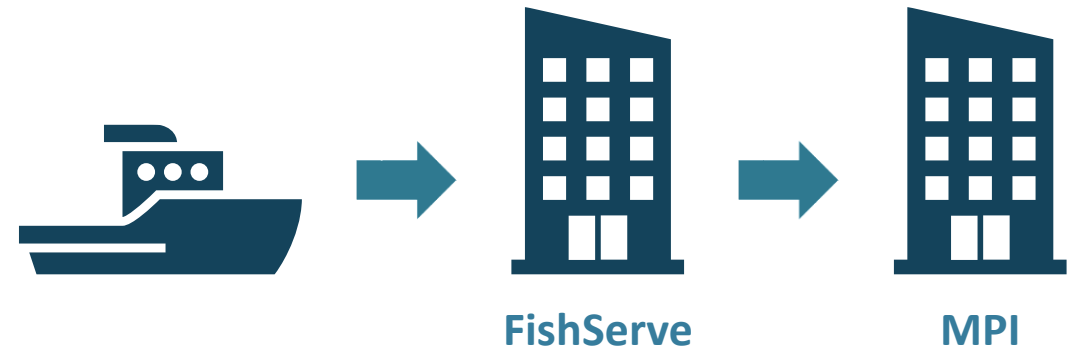


Protecting information collected through electronic catch and position reporting

Where does my data go and how can I protect it?



Position reporting



Catch reporting

How does the government keep the information secure?



What information does the government release?

- Official Information Act 1982
- www.fisheries.govt.nz/ereporting/#privacy

Compliance in the electronic era

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Communication is key

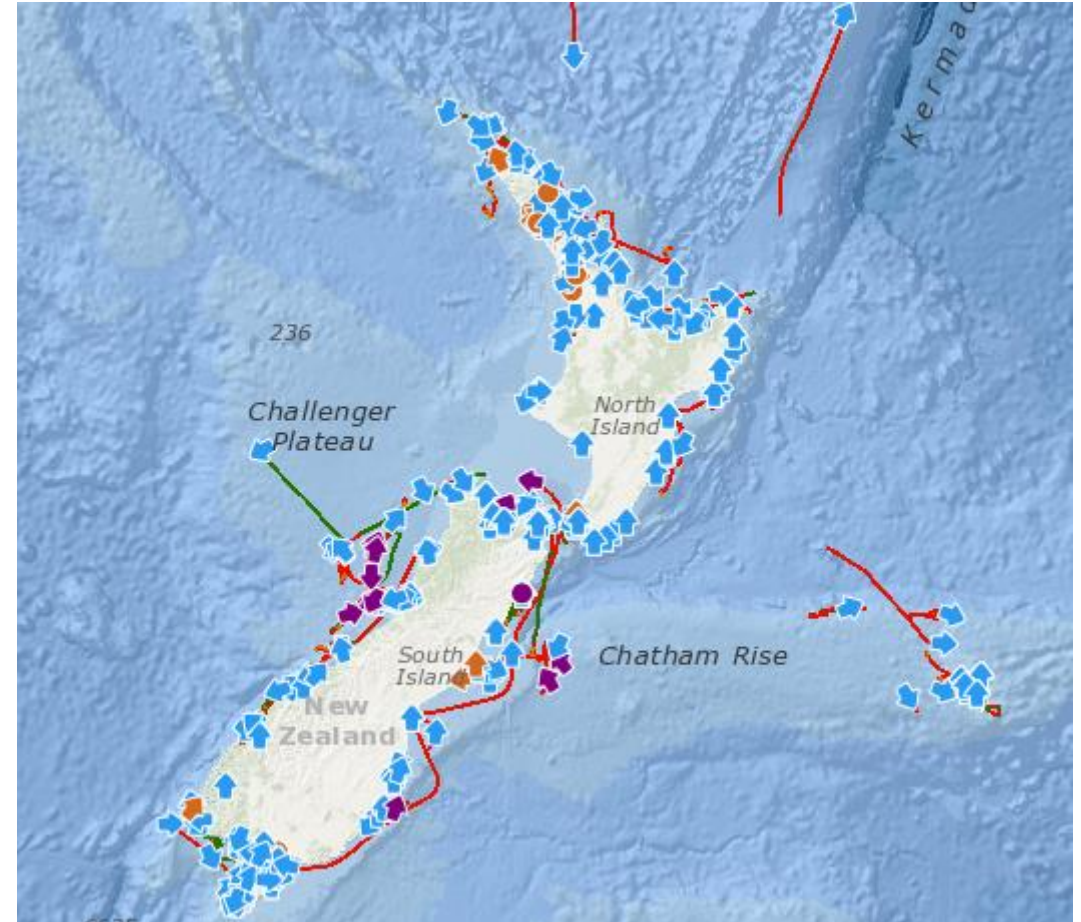
The system – Waka Haurapa

The good:

- Numerous closed area breaches – prosecution of both big and small operators – Domestic and RFMO based
- Benefit of responding in near real time to media and public complaints
- Large scale illegal discards can be tracked and investigated quickly
- Big data is more readily available and analysis / intelligence is improving

The not so good:

- Software issues often have a compounding nature in scale and size
- Updates are frequently required due to technology advancement / security etc
- Fisher tech understanding is variable and training intensive



On board Cameras Setting the scene



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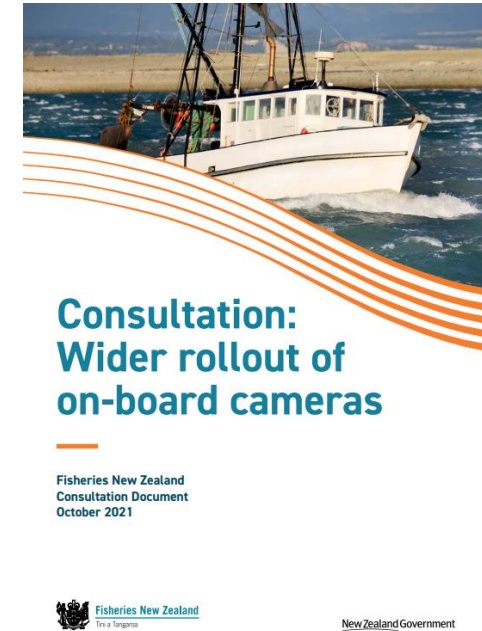
Context for on-board cameras



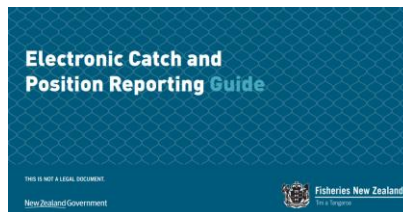
OUR VISION
Abundant and sustainable fisheries, thriving communities, and a healthy marine environment for the benefit of all New Zealanders.



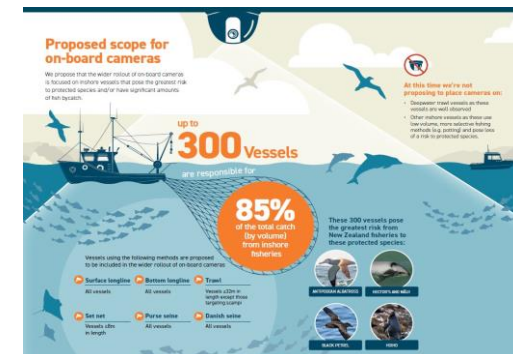
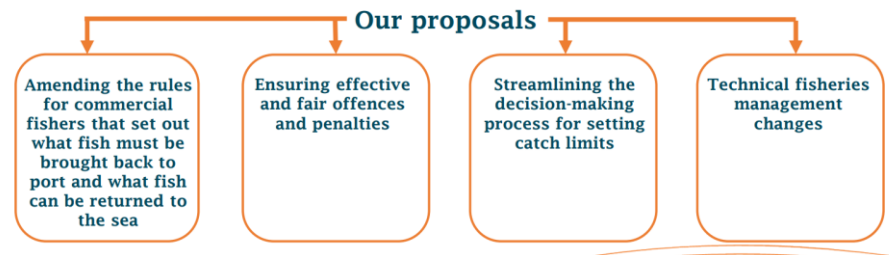
New Zealand Government

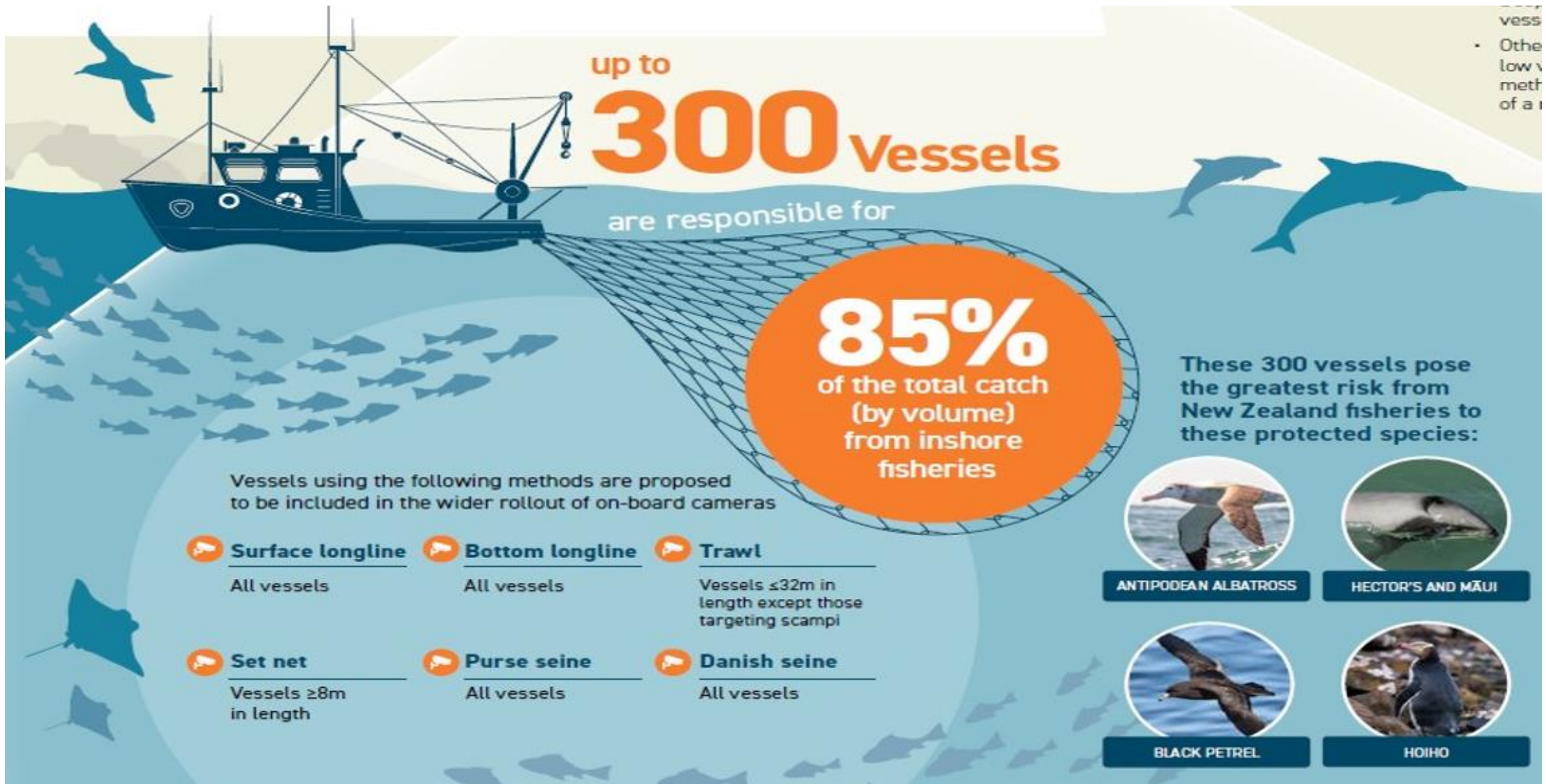


New Zealand Government



Improving our fisheries system to ensure more efficient and sustainable fishing

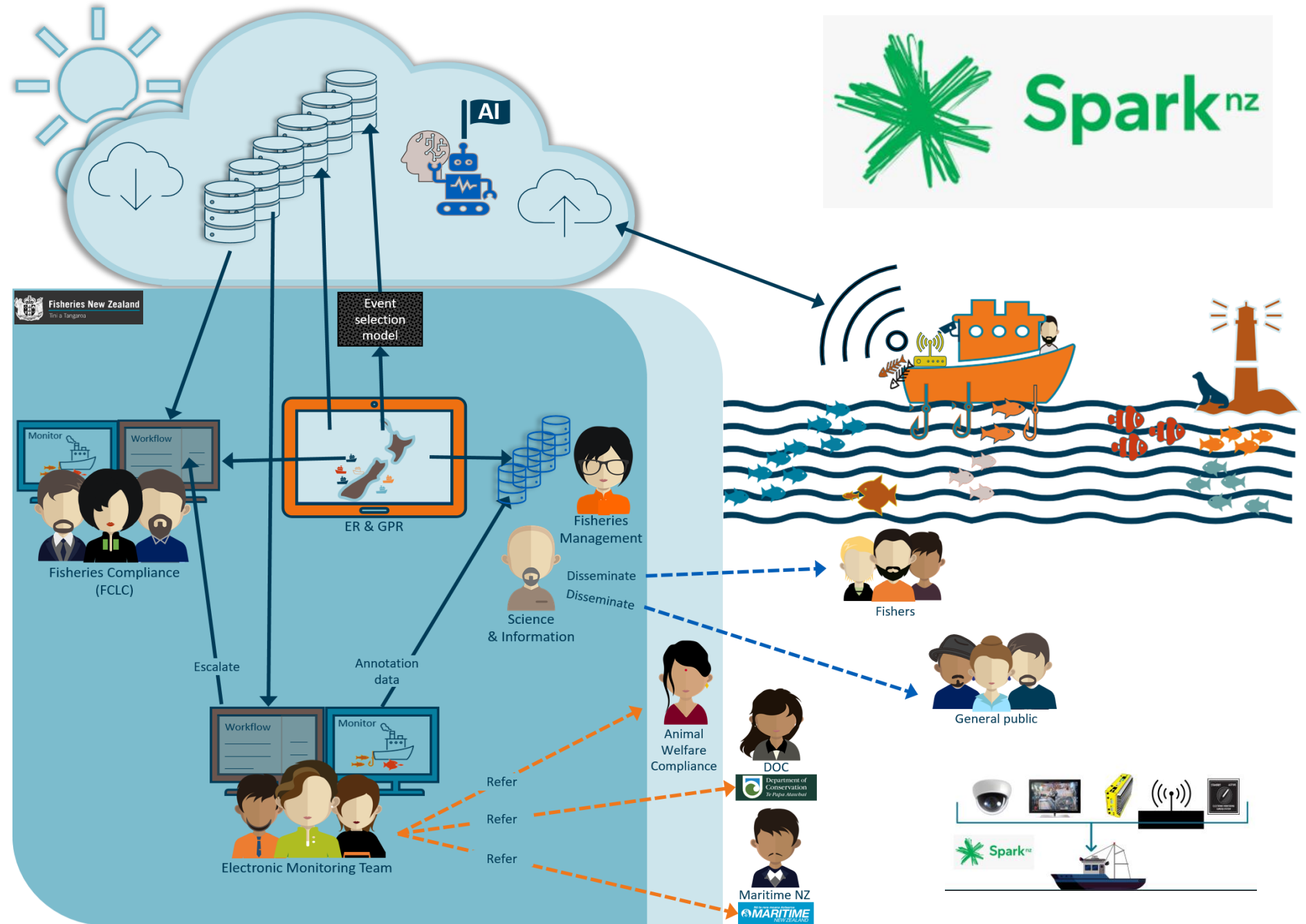




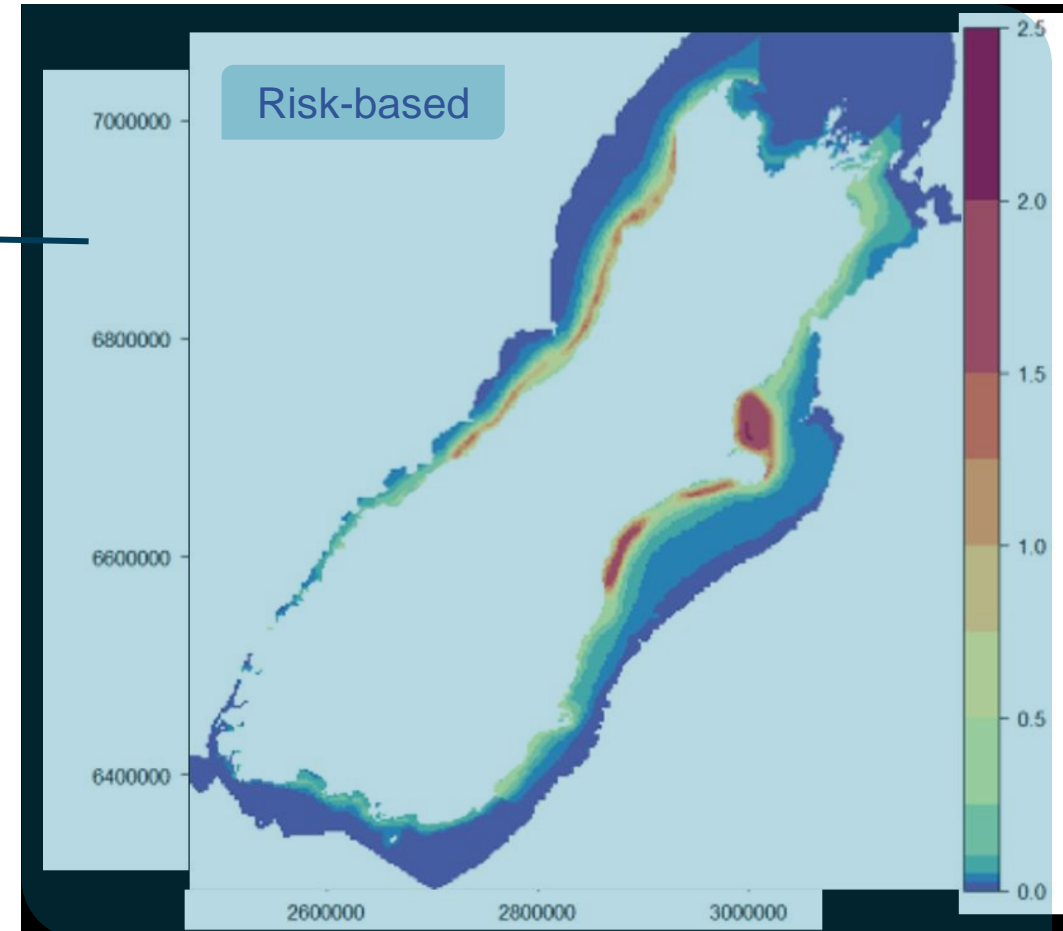
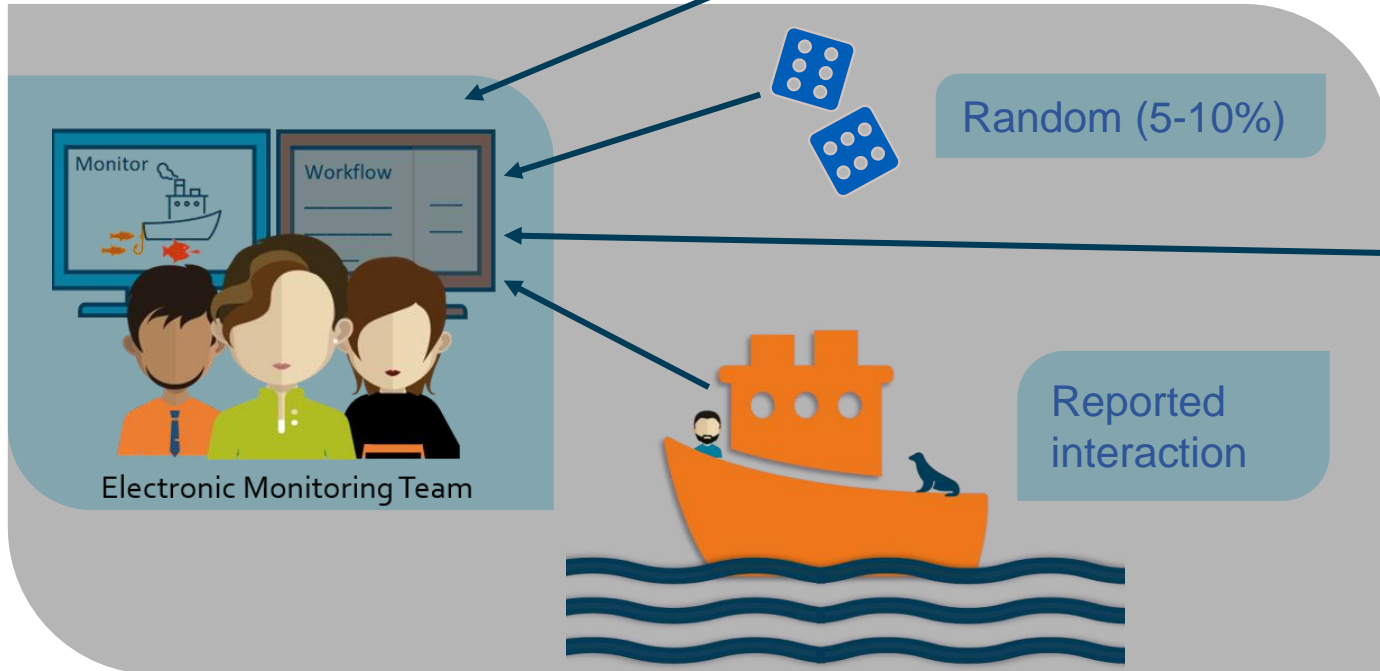
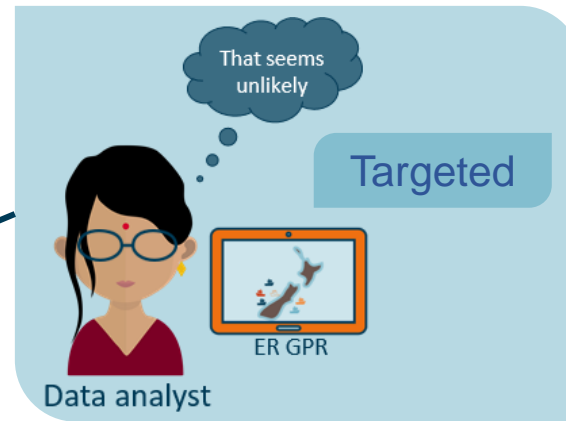
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Solution

- Activity recognition identifies fishing activity
- 4G upload of footage and meta-data
- Integration of electronic catch and effort reporting



Event selection



What we want to achieve through our innovation fund

- The Innovation Fund was approved in 2021 by business case to improve system capability.
- The proposed programme includes work to investigate, with the intention of developing, *“an Artificial Intelligence (AI) solution and other technology innovations to increase functionality and reduce human review, submission, and storage costs.”*
- Our Innovation Strategy will set out the framework for how the fund will be used.

Key fund objectives – develop solutions* that:

1. Improve the efficiency of how we **verify protected species captures** with a strong focus on small cetaceans and seabirds
2. **Automate detection** of use of bycatch mitigation devices and practices
3. Provide data/information in a timely manner to end users
4. Identify how we can **provide additional benefits** to those who fish
5. Improve the **cost efficiencies of information used to inform stock assessments** (e.g. species and/or size composition data)
6. **Reduce costs for data storage, transmission, and footage review**

* Note: new camera technology / hardware is not an immediate focus and not included in the current scope

Thank you!
Ka kite anō

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