

# **Status of TAIC open recommendations**

***Half-yearly report***

***For the six months ended 31 December 2020***

# Summary

## **Purpose**

This report is an update from the Civil Aviation Authority (CAA), the rail sector, and Maritime New Zealand (MNZ) on the status of recommendations issued to them by the Transport Accident Investigation Commission (TAIC).

The information given is for recommendations that were open at 31 December 2020.

## **Contents**

The report is mostly information about the recommendations issued to the regulators in the aviation, rail, and maritime sectors. This information is supplied by:

- the Civil Aviation Authority (CAA)
- Maritime New Zealand (MNZ)
- those in the rail sector with assigned recommendations:
  - Waka Kotahi New Zealand Transport Agency (NZTA)
  - KiwiRail
  - Transdev Auckland
  - the Ministry of Transport (MoT)
  - the National Rail System Standards Executive (NRSS-E)
  - Local Government NZ.

These agencies are reporting progress in implementation as a matter of good practice. TAIC has no mandate to compel recipients of recommendations to provide such information.

Numbers of open recommendations issued to the Ministry of Transport (MoT), State Owned Enterprises (SOEs), other government organisations (such as local government), and non-government organisations are also shown in the aviation and maritime sector reports.

TAIC has compiled the report from the information supplied.

## **Explanatory notes**

Explanatory notes are on the back page.

## Summary data

The table below shows summary data for recommendations TAIC has issued to the CAA, MNZ and the Rail Sector. It shows:

- recommendations issued and closed from 1 July 2020 to 31 December 2020 (left)
- the number open at 31 December 2020 (centre, shaded)
- the estimated time to closure for open recommendations (right).

	Recommendations issued & closed 1-Jul-20 to 31-Dec-20			Number open at 31-Dec-20	Estimated time to closure				
	Issued	Closed	Closed YTD*		Submitted to TAIC for closure	Within 12 months	1 to 5 years	More than 5 years	Not accepted/ no further action
<b>CAA</b>	0	0	0	49	43	3	2		1
<b>MNZ</b>	1	3	3	29		9	20		
<b>Rail total</b>	1	2	2	27	12	3	11	1	
Waka Kotahi NZTA				14	12		1	1	
KiwiRail				9		2	7		
MoT				2		1	1		
NRSS-E				1			1		
Local Govt NZ				1			1		

*\*For year ended 30 June*

# Aviation open TAIC recommendations at 31 December 2020

## Summary of open recommendations

The table shows the numbers of open recommendations by recipient in the aviation sector. The numbers for the CAA are also shown by area of activity.

Number of open recommendations	Issued to government organisations Regulator/MoT/SOEs/other							Issued to non-government organisations	
	Total	CAA	MoT	Airways	MetService	Other govt org	Est. closure within 12 months (CAA)	Not accepted (CAA)	Total
<b>Total</b>	<b>55</b>	<b>49</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>2</b>	46	1	16
Operations		1					0	0	
Airworthiness		2					1	0	
Aerodromes		1					1	0	
Air Traffic Control		1					1	0	
Licensing		1					0	1	
Submitted for closure		43					43	0	

## Status for CAA recommendations

### Operations

**Recommendation to extend the limitations and requirements of FAA AD 95-26-04 (US Federal Aviation Authority airworthiness directive) to R44 and R66 helicopters in New Zealand, and to all pilots of Robinson helicopters in New Zealand regardless of their experience.**

The Robinson Helicopter Company (RHC) made a submission to the US Federal Aviation Authority (FAA) in February 2019 to amend the Rotorcraft Flight Manual (RFM)<sup>1</sup> of the R22,

<sup>1</sup> A pilot handbook that sets out operating procedures, including operating limitations required by regulation or for the safe operation of the aircraft.

R44 and R66 and to incorporate changes to SFAR-73<sup>2</sup>. This would reflect the recent "flapping angle" study undertaken by RHC and the FAA helicopter directorate on the R44 and R66. Included in the issues looked at was the need (or not) for further restrictions on the R44 and R66 RFM. Inclusion of AD95-26-04 to extend to the R44 and R66 was not considered necessary. Whilst CAA has this information largely due to a working relationship with the original equipment manufacturer (OEM) there is nothing formalised other than the following summary. RHC (as OEM) has made a formal submission to the FAA who have agreed to amend SFAR-73 in a number of areas. However as this is a rule development issue the matter was referred to Congress. The current administration has a policy in place for very little new rule development issues but will consider via a case to case basis as a matter of urgency. This amendment is not considered a priority or urgent by Congress and as at August 2020 nil action taken. RHC have agreed to keep us advised.

At this point, CAA has no evidential basis to deviate from the FAA position to extend the AD to the R44 and R66. CAA continues to take its lead from the lead regulator (FAA) and OEM (RHC)

## Licensing

**Recommendation to include the knowledge and training requirements of Special Federal Aviation Regulation No. 73 (SFAR-73), or an equivalent requirement, as a prerequisite for the issue of a Robinson R66 type rating.**

See above regarding RHC submission to the FAA in February 2019.

RHC have agreed to keep us advised and we continue to monitor.

## Airworthiness

**Recommendation to amend policies and procedures for issuing certificates of airworthiness for imported second-hand aircraft.**

The Airworthiness Certificate procedures are currently in review and is still being finalised along with the Type Acceptance procedure. We are targeting to close this recommendation by April 2021.

**Recommendation to promote, through the appropriate ICAO forum, of the need for cockpit video recorders and/or other forms of data capture in the cockpits of certain classes of helicopter.**

This recommendation was accepted, subject to a cost-benefit analysis. CAA has considered some of the potential wider benefits of helicopter flight data monitoring and has carried out an internal Investment Logic Mapping (ILM) workshop to help inform future policy interventions.

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<sup>2</sup> Special Federal Aviation Regulation No. 73, which sets out the required levels of training and experience for R22 and R44 pilots.

A sector reference group has been formed through the Helicopter Association to aid engagement with stakeholders. An initial workshop with a group of operators was held in late July 2019, and there were further discussions with the reference group in August 2019. These discussions were centred around the potential benefits and barriers associated with the widespread implementation of helicopter cockpit cameras. Some valuable feedback was received at these sessions, and this will inform the development of an appropriate regulatory intervention.

In November 2020, the CAA Issue Assessment Panel agreed to an approach centred around the development of a package of non-legislative interventions to achieve the widespread voluntary uptake of cockpit cameras in light commercial helicopters. Work is progressing on this, and the CAA intends to engage with the sector on the preferred approach in the coming months.

## Aerodromes

### **Recommendation to review of operations at aerodromes around New Zealand that have opposing circuits, to assess and minimise the potential for a mid-air collision.**

This recommendation has been open for over 11 years. Over that time CAA has continued to monitor the safety performance of aerodromes and respond to identified safety risks, including engagements from aviation safety advisors as required. There is no additional work planned to specifically focus on this issue and CAA recommends this recommendation be closed.

Work in this area continues to progress. We are currently actively engaged with Wanganui, Tokoroa, Hamilton and Taupo Airports with regard to airspace safety improvements. We have recently completed interactions with Kaikoura and Glacier Country Aerodromes with regard to airspace safety in the vicinity of the aerodrome.

In the last two years, three additional aerodromes have become certificated – Glacier Country Heliport, Ardmore Aerodrome and Te Anau/Manapouri.

We have published additional guidance on airspace right of way rules and put out messaging on aerodrome circuit joining procedures.

We are also heavily engaged in the current review of the provision of air traffic services at Napier, Gisborne, New Plymouth, Invercargill, Rotorua, Kapiti and Milford Aerodromes for which aircraft circuit joining procedures is a key consideration.

We will also embark on an outreach/interaction with district councils to educate them on the requirements for aerodrome operators (councils are the largest grouping of airport owners) from a civil aviation act and HSWA 2015 perspective. This will likely commence in the second half of this year.

## Air traffic control

**Recommendation to raise public awareness of the visual flight rules (VFR)<sup>3</sup> traffic around the Hamilton area and work with aerodrome safety groups to resolve congestion hazards and traffic flow routes into and out of the zone.**

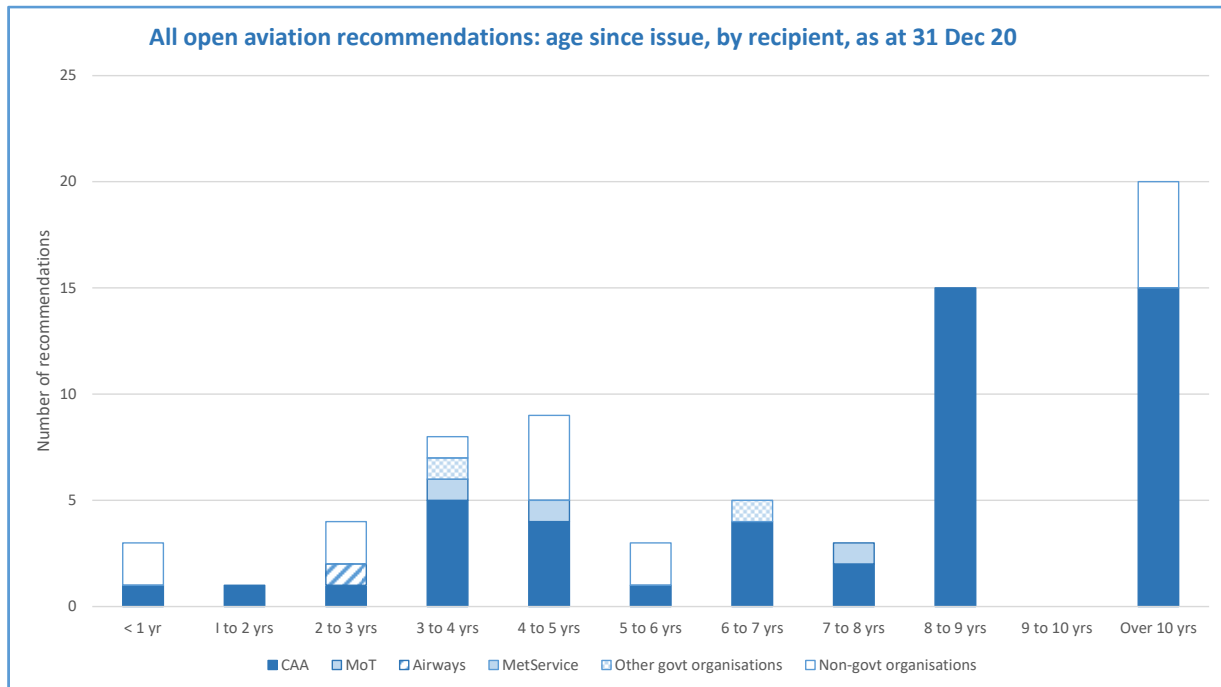
Engagement with the user group is ongoing. CAA identified that rather than a GAP booklet (with a print of 2000) better coverage of this issue could be achieved via the CAA Flagship publication 'Vector' (15,500 copies and also available online). Accordingly, this was profiled in the Autumn 2020 (February) edition and so recommend this can now be closed.

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<sup>3</sup> The rules under which a pilot operates an aircraft using only visual reference (that is, without navigational aids).

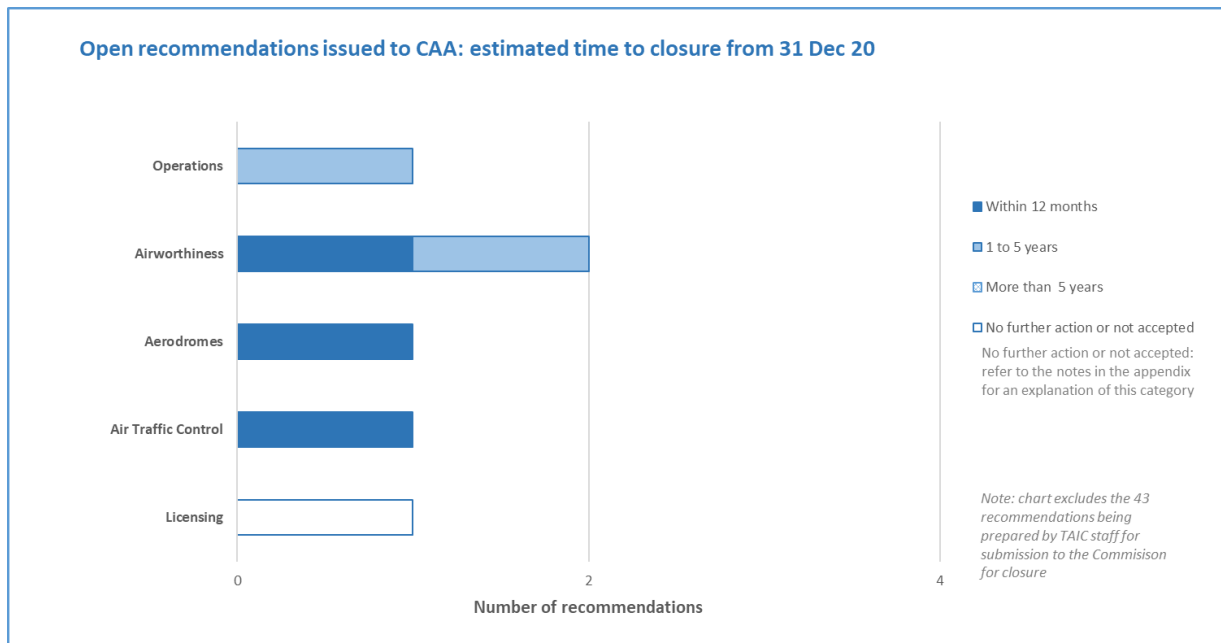
## Age of open recommendations

The graph below shows the age of all open recommendations by recipient in the aviation sector.



## Estimated time to closure for recommendations issued to CAA

The graph below shows the estimated time to closure for the recommendations issued to CAA.





# Rail open TAIC recommendations at 31 December 2020

## Summary of open recommendations

The table shows the numbers of open recommendations by recipient in the rail sector.

Number of open recommendation	Issued to government organisations							Issued to non-government organisations	
	Total	Waka Kotahi NZTA	KiwiRail	MoT	NRSS-E	Local Govt. NZ	Est. closure within 12 months	Not accepted	Total
<b>Total</b>	<b>27</b>	<b>14</b>	<b>9</b>	<b>2</b>	<b>1</b>	<b>1</b>	3	Nil	Nil
Level Crossings	8	6	1			1			
National Rail Systems Standards	6	3	1	1	1				
Impairment - drugs/ alcohol/health/fatigue	4		3	1					
Fire protection	3	3							
Training/Change Management	3	1	2						
Maintenance System Deficiency	1	1							
Signalling safety	2		2						

## Status of recommendations assigned to Waka Kotahi

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**Level crossings:** The issue of short-stacking at level crossings is essentially a result of roads and railways being planned and built in close proximity to each other for efficiency purposes throughout NZ's history. The issue has been exacerbated over time as both road and railway networks have become busier, with longer road vehicles and faster trains. The optimum solution for many of the busy level crossings with a short-stacking issue would be to grade separate those crossings. However, there are significant civil engineering and design costs associated with this solution that are not practicable in most cases.

Although grade separation is not possible for so many of these intersections, there are still engineering solutions available. Over the 2018-2021 National Land Transport Plan (NLTP) period, Waka Kotahi partnered with KiwiRail to improve safety of drivers and pedestrians by using treatments to prevent deaths and serious injuries at railway level crossings. We are delivering a \$26 million programme of level crossing safety upgrades on or near state highways. A key criteria for sites in this package was short-stacking. Furthermore, a business case is currently being considered for the 2021-2024 NLTP period to provide more funding to continue this work.

On top of this, the Land Transport Management Act (LTMA) has been amended to put in place a new planning and funding framework for the heavy rail track network owned by KiwiRail. KiwiRail is now required to prepare a Rail Network Investment Programme (RNIP) setting out what it intends to deliver over a three-year period, and the requested contribution from the National Land Transport Fund (NLTF). This change provides KiwiRail long term funding certainty and the ability to programme work further into the future. A part of the RNIP will be dedicated to Level Crossing investment and provides opportunities for KiwiRail and road controlling authorities to align level crossing NLTF bids, and subsequent programming of works.

Work continues to address these recommendations.

**Other open recommendations:** A further twelve recommendations have been submitted to the Commission for closure.

## Status of recommendations assigned to KiwiRail

**Medical Information for safety critical roles:** Legislation changes are required to allow the disclosure of personal medical record information to ensure the safe management of personnel in safety critical roles. The Ministry of Transport is assessing how to progress this.

**Signalling Safety:** This is still work in progress. 6 monthly updates are provided to NZTA, these are presented by KiwiRail & TransDev and will include Greater Wellington Regional Council.

**Fatigue Management:** Fatigue management project is still progressing. Significant work has been completed to incorporate Fatigue Reporting ability into the ORA database. Full implementation of Fatigue Management across the entire business will take some time.

## Status of the recommendation assigned to the Ministry of Transport

**Impairment: drugs/alcohol/health/fatigue:** The Ministry of Transport is working with Waka Kotahi and KiwiRail to address this recommendation. The relationship between the health professional and the worker/patient is governed by the ethics of the relevant health professional and by privacy laws. This relationship differs from the usual doctor-patient relationship because of the involvement of a third party – the rail transport operator or employer.

**National Rail Systems Standards:** The Ministry notes that NRSS/3 Standard for Health Assessment of Rail Safety Workers was updated in 2017 and clearly details the relationships and responsibilities between rail safety workers, their employers and medical professionals, and the information flow between these parties. Rail safety workers also have a duty of care to themselves and others. NRSS/3 also has clear guidance on Triggered Health Assessments, which overlay the scheduled periodic assessments and enable early intervention, appropriate management and timely monitoring of health problems that are likely to affect safety. The Ministry will provide a decision on this recommendation in the next six months.

### Status of the recommendation assigned to Local Government NZ

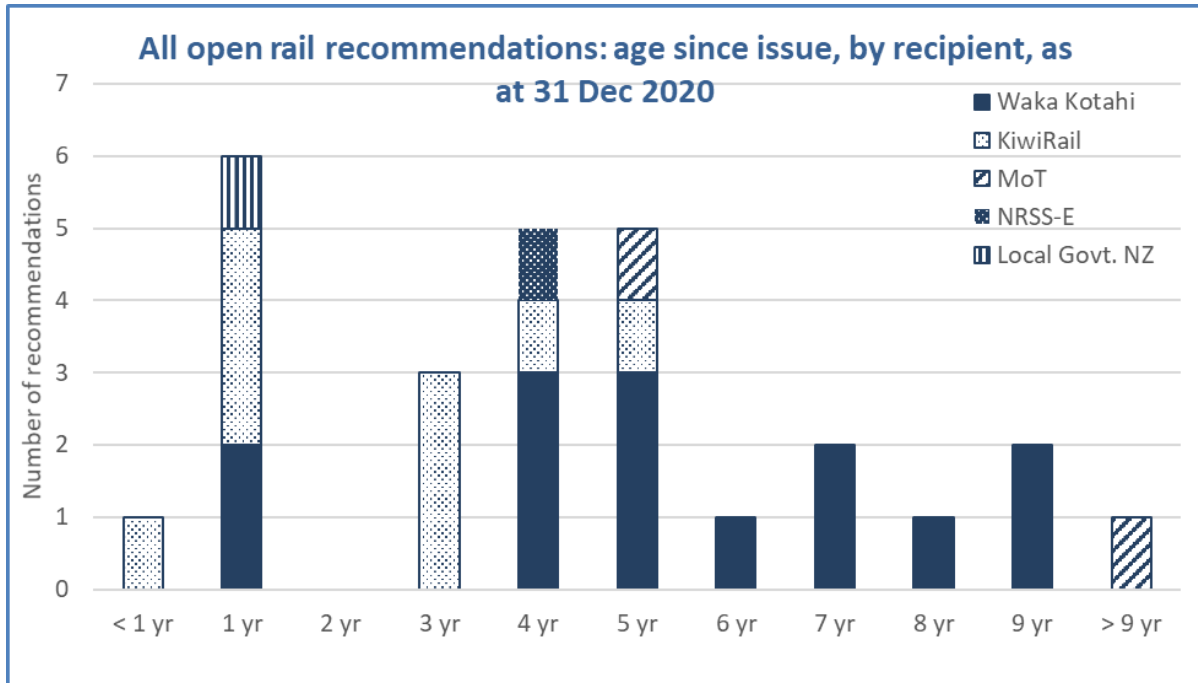
This is being incorporated into the road/rail interface workstream.

### Status of the recommendation assigned to the NRSS-Executive

KiwiRail is working on a review of the NRSS/6 Standard on Engineering Interoperability that will likely migrate to a network standard. Fire requirements will be covered in the NRSS/6 Standard update that is progressing, and any operational requirements arising from the last point will be covered in KiwiRail's tunnel safety plans.

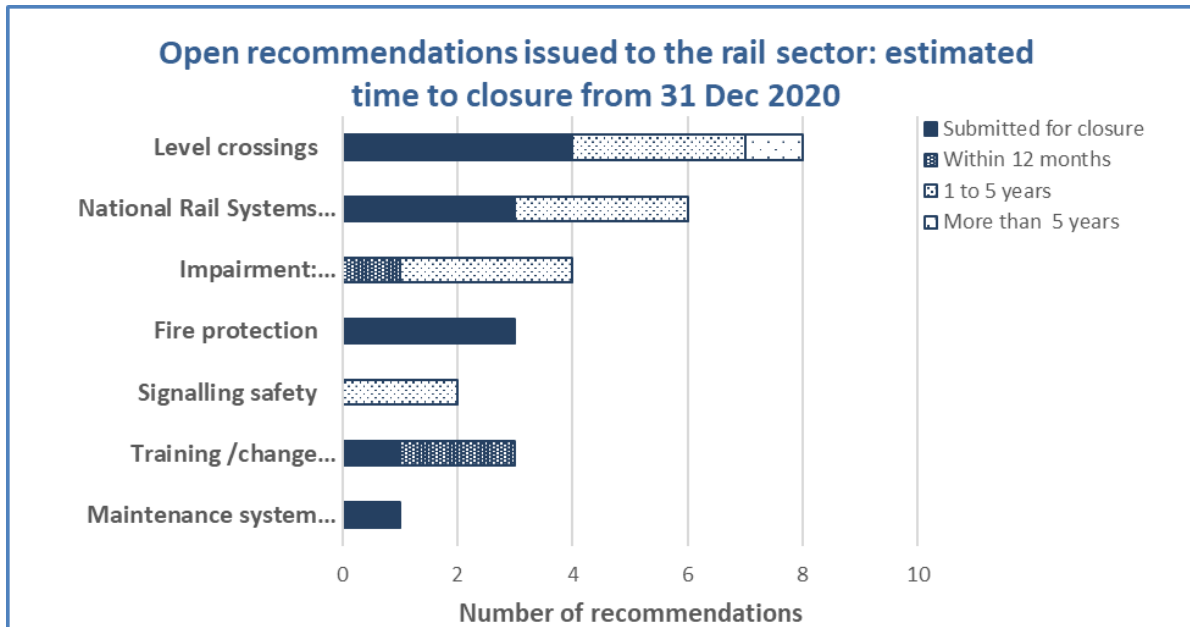
## Age of open recommendations

The graph below shows the age of all open recommendations by recipient in the rail sector.



## Estimated time to completion for recommendations

The graph below shows the estimated time for implementation of the recommendations issued to the rail sector.



# Maritime open TAIC recommendations at 31 December 2020

## Summary of open recommendations

The table shows the numbers of open recommendations by recipient in the maritime sector. The numbers for MNZ are also shown by area of activity.

Number of open recommendations	Issued to government organisations Regulator/MOT/SOEs/other							Issued to non-government organisations	Total
	Total	MNZ	MoT	KiwiRail	MetService	Other govt org	Est. closure within 12 months (MNZ)	Not accepted (MNZ)	
<b>Total</b>	<b>56</b>	<b>29</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>23</b>	9	Nil	35
Training or Education		5					1		
Maritime Rules		10					2		
Safety Management Systems		5					4		
Administrative		4							
Aids to Navigation		2							
Compliance		3					2		

## Status for MNZ recommendations

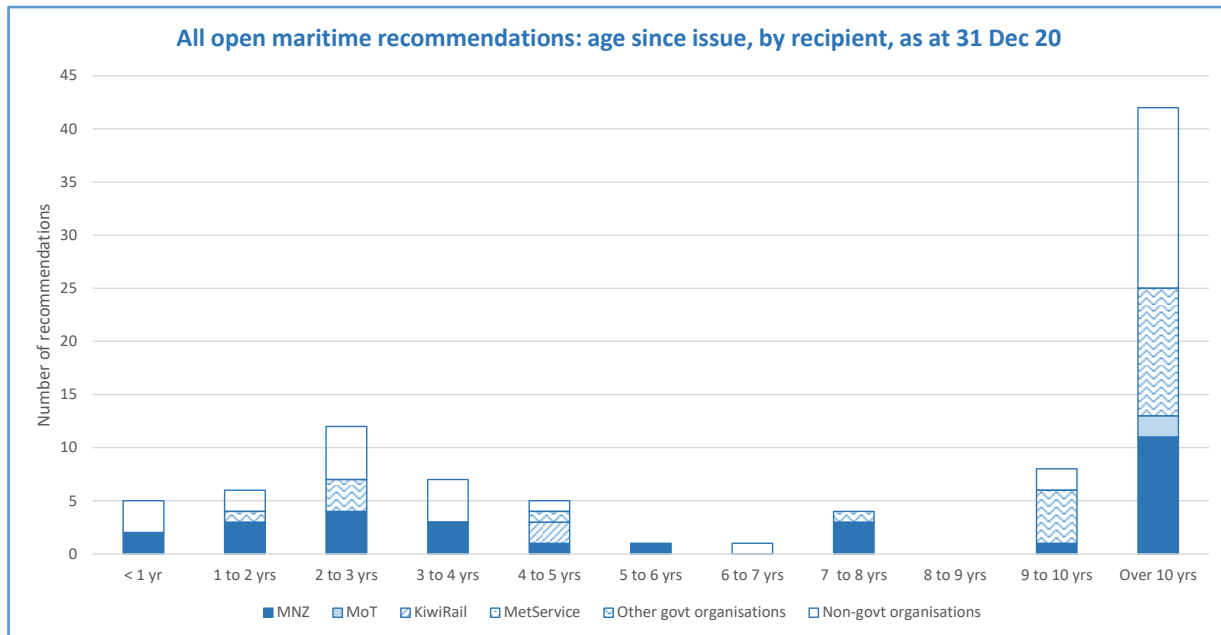
As at 31 December 2020, there were 29 TAIC recommendations issued to MNZ.

One new recommendation was received, and three recommendations were closed during this period.

MNZ continues to work in close cooperation with TAIC to ensure safety issues are addressed and recommendations are closed.

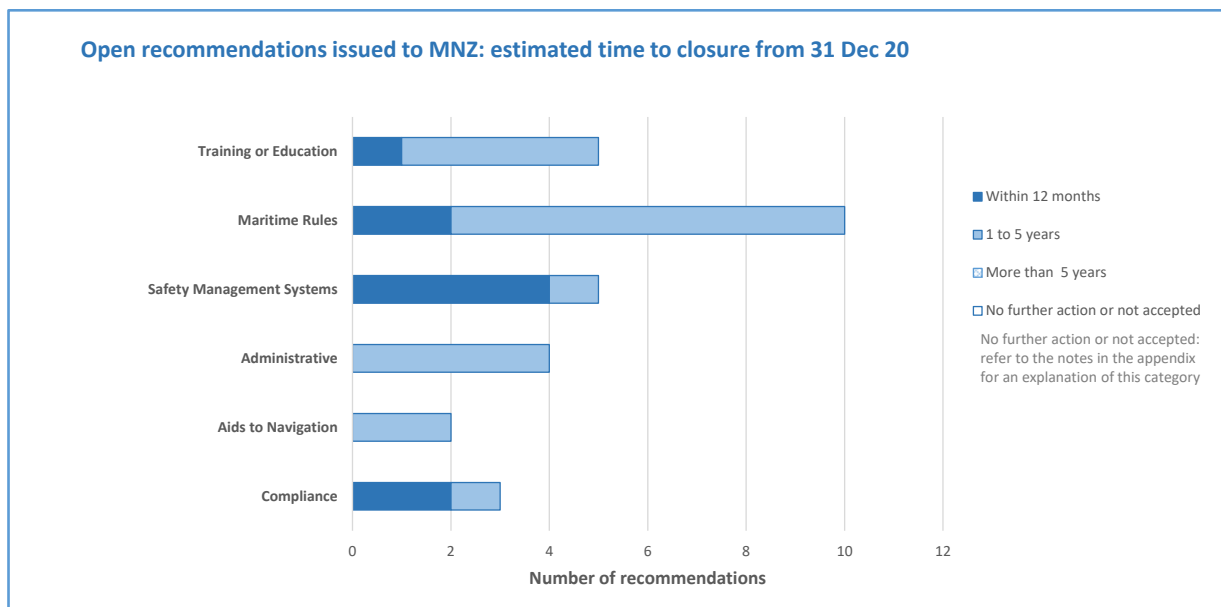
## Age of open recommendations

The graph below shows the age of all open recommendations by recipient in the maritime sector.



## Estimated time to closure for recommendations issued to MNZ

The graph below shows the estimated time to closure for the recommendations issued to MNZ.



# Appendix: explanatory notes

## Definitions

Government organisation	For the purposes of this report, a government organisation is a New Zealand regulator, SOE, or a commercial enterprise with more than 50% government ownership.
Not accepted	The recipient has not accepted the recommendation. For example, it might consider the recommendation is not relevant or not applicable. The Commission classifies such recommendations as 'open' or 'open, no acceptable action'.
No further action	The recipient has accepted the recommendation, and considers it has taken sufficient action to meet the intent of the recommendation; but the Commission does not agree that the intent has been fully met. The Commission classifies such recommendations as 'open' or 'open, no acceptable action'.
Classification of recommendations	<p>The Commission classifies recommendations as follows:</p> <ul style="list-style-type: none"><li>• Open: the recipient has accepted the recommendation, but has not yet submitted a request to close it.</li><li>• Open, no acceptable action: the recipient has not accepted the recommendation, or considers it has taken sufficient action (see 'no further action' above).</li><li>• Withdrawn/cancelled: the recommendation has been withdrawn in light of further information from the recipient.</li><li>• Closed superseded: the recommendation no longer applies because of changes in circumstances, for example, advances in technology, vehicle model no longer in use, or the recipient is no longer operating.</li></ul>

## ***Timeframes for implementation***

The time in which a recommendation can be implemented can vary considerably. Some recommendations can be implemented quickly because the action to meet its intent is specific and clearly identifiable, and relatively straightforward. Other recommendations may require considerable analysis and consultation to determine the best options, or they may depend on action by third parties. Recommendations requiring legislative change may take several years to implement.

## ***Historic recommendations***

In the rail sector, Waka Kotahi and TAIC have a well-established process for monitoring recommendations. The CAA and MNZ are working co-operatively with TAIC to close 'historic' recommendations. In the past, a lack of formalised monitoring processes resulted in some recommendations remaining open even though actions have been taken (or circumstances have changed) such that the regulators consider the intent of the recommendations has been met.