

**Discussion Paper**  
**Clear heads: options to reduce the risks  
of alcohol-and drug-related impairment in  
aviation, maritime and rail**

March 2015



Ensuring our transport system  
helps New Zealand thrive



**Section six – supporting material**

## Section six – supporting material

### Appendix one: different types of random testing

In an alcohol or drug testing regime, a person can be required to undergo an approved test for alcohol and/or drugs.

Under a **random** testing regime, the person can be tested without any prior reason or 'good cause to suspect' they are impaired by alcohol or drugs. The absence of the 'good cause to suspect' requirement is the key difference between a random and non-random testing regime.

Because the testing process is scheduled unpredictably, in essence anytime, anywhere, anyone, people are unable to anticipate with any certainty when they will be required to undergo a test. If testing is scheduled in a more predictable way, people may get around the testing process. For example, a driver or employee may only refrain from using alcohol and drugs when they perceive there is a high chance of being tested.

There are two types of random testing regimes.

#### Random testing for enforcement

An example of random testing for enforcement is New Zealand's alcohol testing regime for drivers. Under this regime, an enforcement officer may stop any driver who is driving a motor vehicle on a public road at any time. The enforcement officer can then require the driver to undergo a roadside breath alcohol screening test, which is used in place of the officer's 'good cause to suspect' judgement. If a driver fails the test, the officer has the legal mandate to detain the driver for further evidential testing. Drivers who pass the test are allowed to go on their way without further delay or inconvenience.

The primary purpose of a random alcohol and drug testing regime is to increase deterrence. The regime does this by increasing perceptions of the risk of being caught if people use alcohol and or drugs. Ways of enhancing the deterrent impact of a random testing regime can include conducting the testing in a highly visible manner (for example, driver alcohol check-point operations), and publicly advertising the enforcement effort.

#### Random testing in the workplace

Under a random alcohol and drug testing regime in the workplace, employers can require employees to be tested. Workplace alcohol and drug testing is usually outlined in employment contracts. Which employee will be tested and at what time is randomly generated. Usually, an employer will aim to test a certain proportion of their employees in a given time period.

Employers may contract a health or testing professional to carry out the testing. Results of the testing will not lead to prosecution, and any discipline will occur in-house.

The primary purpose of a random alcohol and drug testing regime in the workplace is to create a safe workplace for everyone. Its goal is to maintain an alcohol- and drug-free workplace to prevent hazards arising from alcohol and drug impairment.

Workplace testing falls primarily under the Health and Safety in Employment Act 1992

#### New Zealand Bill of Rights Act 1990

A random alcohol and drug testing regime may create inconsistencies with the New Zealand Bill of Rights Act 1990. These inconsistencies arise when enforcement officers are randomly detaining and testing people who are not yet suspected of having committed an offence.

Those involved in setting up a random testing regime can reduce the impacts of restricting people's rights by using a very quick and relatively non-invasive preliminary screening test. The extent to which a random alcohol and drug testing regime may be inconsistent with the Bill of Rights needs to be considered in the context of the problem the regime is meant to address, and the overall benefit to society of the regime. For example, minimising the social harm caused by drink-drivers outweighs the inconvenience of being stopped to undertake a random test.

## Appendix two: summary of some of the complexities of setting limits and testing for different drugs

1. The effects of alcohol in relation to driving have been well researched internationally for over 50 years. This means the relationship between alcohol and crash risk and levels of impairment is relatively well documented in the research literature. Research on drugs is more recent. The relationships between dosage and crash risk are less well understood for most drugs.
2. Alcohol is a relatively simple drug that behaves in predictable ways. When it is at its maximum concentration in the body, there is the maximum level of impairment. Some drugs do not behave in this manner – there is not a clear relationship between the detectable levels in the blood and the degree of impairment. Detectable levels of some drugs in blood (for example, cannabis) can persist for some time after their effects on behaviour have worn off. There may also be measurable impairment effects for some drugs when the drugs cannot be detected in the blood.
3. This makes it difficult to know where to set maximum limits based on impairment and safety risk.
4. The illicit nature of some drugs is often confused with their potential to impair behaviour. When applied to transport operators, drug testing regimes should relate to whether the operators are impaired, not whether they have used illicit substances. Yet a number of drug testing regimes make it an offence for a transport operator to have an illicit drug present in their bodily fluids. Impairment cannot be inferred from the mere presence of a drug in bodily tissues or fluids. This type of offence also ignores that legal drugs can impair behaviour and also pose a safety risk.
5. From a policy perspective, it may be difficult to justify setting a legal limit that is higher than zero for any drug that is illegal to possess, use, supply or cultivate.
6. Testing technologies for drugs are not as well developed as those available for alcohol testing. Unlike alcohol, drugs cannot be detected in breath specimens. While blood testing is the recognised ‘gold standard’ for evidential testing for both alcohol and drugs, the taking of a blood specimen is an invasive procedure that has to be administered by a suitably qualified health practitioner.
7. A less invasive test that has been developed and used by some jurisdictions (for example, Australian states) for random roadside drug testing of drivers involves testing oral fluids (including saliva). Oral fluid screening devices are improving but may still have issues as discussed below.
  - a. These devices can detect a limited number of drugs. The devices used in Australia detect only three drugs: cannabis, methamphetamine and MDMA (Ecstasy). They would miss a number of opiate-type drugs including methadone, a wide range of

narcotic analgesics (pain killers) and some amphetamine analogues. Sedative drugs (such as benzodiazepines) that are taken in tablet form do not easily come back out in saliva. An alternative impairment-based testing regime operates in parallel with the oral fluid testing regime to deal with impaired drivers who may have used drugs that are not detected by the oral fluid screening devices.

- b. Concerns have been raised in the past about the reliability of screening devices for detecting cannabis (that is, they were likely to miss around 50 percent of cases). Since then, there have been some improvements in the ability of screening devices to detect cannabis.
  - c. As a sample, saliva is open to contamination and dilution by food or drink in the mouth. Cross-reaction with non-drug compounds is possible. Cross-reactivity can lead to false positive results.
  - d. The performance of oral fluid screening devices can be susceptible to variations in environmental conditions (for example, temperature and humidity), which may lead to special testing and storage requirements.
  - e. Some screening devices have been found to rely on rigid adherence to a prescriptive and complex set of operating instructions in order to produce an accurate result. This may undermine their usefulness if they are used by Police officers who are not specialists in drug testing technology.
  - f. Oral fluid screening devices can only detect the presence of a drug in a sample. Unlike breath alcohol testing devices, they cannot be calibrated to provide a reading of the dosage or level of the drugs that are present.
  - g. They are slower at producing a result than breath alcohol screening tests. Improvements have been made over the last 2–3 years in relation to this aspect of their performance. The oral fluid devices used for the initial oral fluid screening test in Australia now take around 3 minutes to produce a result, compared to a few seconds for a passive breath alcohol test. In a random testing application, it would be necessary to consider whether it would be reasonable to detain a person for this time period without reasonable cause.
8. Drugs intended for recreational use are evolving all the time, often to circumvent drug control laws. This can make it difficult for forensic testing laboratories to keep up with the development of methodologies to test for designer drugs.
9. Testing specimens for drugs is likely to be considerably more expensive than testing for alcohol, because of the added complexity of enforcement regimes and the number of substances that specimens may need to be tested for.

## Appendix three: international standards and best practice

	Rail	Aviation	Maritime
<b>UK</b>	<ul style="list-style-type: none"> <li>▶ Legislation</li> <li>▶ Police testing for reasonable suspicion and post-incident</li> <li>▶ Major rail operators have random drug and alcohol testing in safety critical positions</li> <li>▶ Maximum blood alcohol content (BAC) of 0.08</li> <li>▶ Imprisonment not exceeding 6 months, or fine not exceeding £5,000, or both</li> <li>▶ Failure to comply with breath testing is fine not exceeding £3,000</li> </ul>	<ul style="list-style-type: none"> <li>▶ Legislation</li> <li>▶ Offence to carry out duties in alcohol- and drug-impaired state</li> <li>▶ Maximum BAC of 0.02</li> <li>▶ Imprisonment not exceeding 2 years, or fine not exceeding £5,000, or both</li> </ul>	<ul style="list-style-type: none"> <li>▶ Legislation</li> <li>▶ Offence to carry out duties in alcohol- and drug-impaired state</li> <li>▶ Maximum BAC of 0.08</li> <li>▶ Imprisonment not exceeding 2 years, or fine not exceeding £5,000, or both</li> <li>▶ Applies to seafarers and non-seafarers with the exception of pleasure vessels</li> </ul>
<b>US</b>	<ul style="list-style-type: none"> <li>▶ Employers are responsible for implementing Department of Transportation testing policies</li> <li>▶ The Omnibus Transportation Employee Testing Act of 1991 requires the testing of all safety-sensitive transportation employees across all transport modes but penalties are not centrally mandated for all sectors</li> <li>▶ Random testing is required for a minimum percentage of employees in safety-sensitive roles</li> <li>▶ Post-accident testing, for drug (urine) and alcohol (breath), is required for accidents that meet the testing threshold. The Coast Guard has mandatory alcohol testing up to 2 hours after a serious marine incident</li> <li>▶ Workplace programmes involving education, training, and referral for evaluation and treatment when necessary</li> <li>▶ Positive results mean removal from role pending rehabilitation programme, and follow-up testing without notice (minimum 6 times in first 12 months, then any number of times for up to 60 months following return)</li> </ul>	<ul style="list-style-type: none"> <li>▶ Maximum BAC of 0.04</li> <li>▶ Suspension and denial of application for certification (under administrative law)</li> <li>▶ Penalties not centrally mandated</li> </ul>	<ul style="list-style-type: none"> <li>▶ Imprisonment not exceeding 1 year, or fine not exceeding US\$500, or both</li> </ul>
<b>Australia (specific states)</b>	<ul style="list-style-type: none"> <li>▶ Regulated by the Office of the National Rail Safety Regulator</li> <li>▶ Post-incident alcohol and drug testing of rail safety workers following a Category A incident</li> <li>▶ Alcohol and drug testing of rail safety workers which includes intelligence-led risk-based testing and random testing</li> <li>▶ In NSW random testing of not less than 25% of rail safety workers every year</li> <li>▶ Formal drug and alcohol management programme</li> <li>▶ Maximum penalty of AU\$10,000 for a rail safety worker who tests positive for the presence of alcohol or drugs, refusing a test or not following the direction of an authorised person</li> </ul>	<ul style="list-style-type: none"> <li>▶ Centrally mandated regime</li> <li>▶ External random testing is permitted</li> <li>▶ Organisations can test internally post-accident, on reasonable suspicion, initial employment, and return to work</li> <li>▶ These prescribe a BAC of 0.02%, and testing for cannabis, cocaine, opioids and amphetamines</li> <li>▶ Organisations must develop and implement a drug and alcohol management plan</li> <li>▶ Required education programme</li> <li>▶ Various offences exist around performing safety-sensitive aviation activities with a positive result</li> <li>▶ Penalties for performing safety-sensitive functions while impaired are 50 penalty units (AU\$8,500 under federal law)</li> </ul>	<ul style="list-style-type: none"> <li>▶ Offence for any master or seaman to perform their duties while impaired by alcohol and drugs</li> <li>▶ Testing based on reasonable cause is authorised</li> <li>▶ Random testing is provided for recreational boating</li> <li>▶ In various jurisdictions, recreational boating is subject to penalties/offences for exceeding prescribed BAC levels</li> <li>▶ A BAC limit of 0.00 (0.02 in New South Wales) is prescribed for commercial vessel operators and operators under 21, or 0.05 for recreational boating</li> <li>▶ Under federal law, alcohol and drug impairment is an offence of 60 penalty units (AU\$10,200)</li> </ul>
<b>International standards</b>	<ul style="list-style-type: none"> <li>▶ The International Union of Railways provides recommended guidelines for the control of safety risks for alcohol, drugs and/or psycho-active medication</li> <li>▶ These are non-prescriptive, and organisations are expected to select cut-off levels</li> </ul>	<ul style="list-style-type: none"> <li>▶ The International Civil Aviation Organization (ICAO) has guidelines for problematic alcohol and drug users, but these do not have Standards and Recommended Practice (SARP) status</li> <li>▶ No prescribed limits for BAC. Suggests if a policy is to be implemented, it must be analysed by situation and be comprehensive</li> <li>▶ Prefers a collaborative, education-based approach</li> </ul>	<ul style="list-style-type: none"> <li>▶ Mandatory limit of 0.05 BAC under STCW</li> <li>▶ Suggests companies consider implementation of a drug and alcohol abuse prevention policy</li> <li>▶ Sets out a compulsory requirement that seafarers in safety and pollution prevention roles undergo training in personal safety, including alcohol and drug safety</li> </ul>

## Appendix four: current court-imposed penalties for alcohol offences on the road

Offence	Amount of alcohol		Penalty		
	Blood	Breath	Prison	Fine	Disqualification or suspension of licence
You kill someone when driving after drinking too much	More than 80mg/100ml	More than 400mcg/litre	Up to 10 years	Up to \$20,000	First or second offence 1 year or more, third or subsequent offence more than 1 year
You injure someone when driving after drinking			Up to 5 years		
You drive, or try to drive, after drinking too much and you are aged 20 years or over	More than 50mg/100ml	More than 250mcg/litre	<b>First and second offences</b>		
			Up to 3 months	Up to \$4,500	Six months or more
			<b>Third and subsequent offences</b>		
			Up to 2 years	Up to \$6,000	More than 1 year
You are under 20 years of age and you drive, or try to drive, after drinking too much	More than 30mg/100ml	More than 150mcg/litre	Up to 3 months	Up to \$2,250	Three months or more
	Between 0 and 30mg/100ml	Between 0 and 150mcg/litre		\$200 infringement fee and 50 demerit points	
You refuse to give blood when asked by a police officer, doctor or approved person			<b>First and second offence</b>		
			Up to 3 months	Up to \$4,500	Six months or more
			<b>Third and subsequent offences</b>		
			Up to 2 years	Up to \$6,000	More than 1 year
You refuse to go with a police officer for an evidential breath test or blood test				Up to \$4,500	As decided by the court
You are in charge of a vehicle after drinking too much and you do not hand over the keys when asked by a police officer				Up to \$10,000	

## Appendix five: example of a definition of ‘safety-sensitive’ in other legislation

### The Railways and Other Guided Transport Systems (Safety) Regulations 2006 (UK)

‘**controller of safety critical work**’ means any person controlling the carrying out of safety critical work on a transport system or in relation to a vehicle used on a transport system;

‘**safety critical task**’ means:

- a) in relation to a vehicle used on a transport system:
  - i. driving, dispatching or any other activity which is capable of controlling or affecting the movement of that vehicle;
  - ii. signalling, and signalling operations, the operation of level crossing equipment, receiving and relaying of communications or any other activity which is capable of controlling or affecting the movement of that vehicle;
  - iii. coupling or uncoupling;
  - iv. installation of components, other than where the installation of those components is subject to supervision and checking by a safety critical worker or a controller of safety critical work;
  - v. maintenance, other than where the carrying out of that maintenance is subject to supervision and checking by a safety critical worker or a controller of safety critical work; or
  - vi. checking that that vehicle is working properly and, where carrying goods, is correctly loaded before being used;
  
- b) in relation to a transport system:
  - i. installation or maintenance of any part of it or of the telecommunications system relating to it or used in connection with it, or of the means of supplying electricity directly to that transport system or to any vehicles using it or to the telecommunications system other than where the carrying out of that task is subject to supervision and checking by a safety critical worker or a controller of safety critical work;
  - ii. (ii) controlling the supply of electricity directly to it or to any vehicles used on it;
  - iii. (iii) receiving and relaying of communications; or
  - iv. (iv) any person ensuring the safety of any persons working on or near to the track, whether or not the persons working on or near to the track are carrying out safety critical work;
  
- c) in relation to training, any practical training or the supervision of any such training in any of the tasks set out in sub-paragraphs a) to b)

‘**safety critical work**’ means any safety critical task carried out by any person in the course of their work or voluntary work on or in relation to a transport system and related expressions shall be

construed accordingly; and which could significantly affect the health or safety of persons on a transport system.



## Appendix six: the Commission's findings and safety recommendations related to impairment by drugs or alcohol

### Inquiry 12-201: Fishing vessel *Easy Rider*, capsized and foundering, Foveaux Strait, 15 March 2012

The report of the inquiry into the capsizing and foundering of the fishing vessel *Easy Rider* discussed the survival aspects of the accident. It stated:

- 4.5.4. *Another factor that is detrimental to cold-water survival is alcohol consumption. Alcohol accelerates hypothermia through increased rates of heat loss due to increased blood flow through the skin. Therefore alcohol in the blood system reduces the chances of survival in cold water (Water Safety New Zealand, 2012). Of the 4 bodies recovered, one of the passengers had a blood-alcohol level of 125 milligrams per 100 millilitres of blood (1.5 times the legal limit for driving a car), which is consistent with impairment of decision-making and psychomotor co-ordination. It is possible that this level of alcohol reduced his survival time through swim failure and/or hypothermia.*
- 4.5.5. *One passenger and one of the crew members reported to be asleep down below in the cabin at the time of the accident had levels of THC in their blood that were consistent with a recent consumption of cannabis. Recent consumption may have been associated with mental impairment to the extent that it might have affected their ability to escape from the capsized vessel. A crew member has safety responsibilities to all on board.*

### Inquiry 12-001: Hot-air balloon collision with power lines and in-flight fire, near Carterton, 7 January 2012

#### *Findings related to impairment by drugs or alcohol*

The report's findings included the following.

- 5.9. *The pilot had a post-mortem THC blood level of 2 micrograms per litre. This was likely the result of 2 factors: the pilot smoking cannabis shortly before the flight (considered highly likely), and residual THC from his having ingested cannabis over a longer term that redistributed into his blood after he died. It was not possible to determine if either factor contributed more or less to the toxicology result.*
- 5.10. *The accident was caused by errors of judgement by the pilot. The possibility that the pilot's performance was impaired as a result of ingesting cannabis cannot be excluded.*
- 5.11. *The long-term and recent ingestion of performance-impairing substances such as cannabis by crew of any transport vehicle is a serious safety issue that needs to be addressed as a matter of priority.*

#### *Open recommendations related to impairment by drugs or alcohol*

The Commission made the following recommendation in relation to impairment by drugs or alcohol.

- 7.5. *On 11 October 2013 the Commission made the following recommendation to the Secretary for Transport:*

*The post-mortem toxicology results for the pilot in the Carterton hot air balloon showed that he had a positive result for tetrahydrocannabinol (a constituent of cannabis). It was likely that this was due to 2 factors: first, the pilot smoking cannabis shortly before the accident flight; and, second, residual tetrahydrocannabinol, from ingesting cannabis over a longer term, redistributing in the pilot's blood after his death.*

*The Commission found that the accident was caused by errors of judgement by the pilot. It also found that it could not exclude the possibility that the pilot's performance had been impaired as a result of ingesting cannabis.*

*This is not the first time that the Commission has inquired into occurrences where persons operating aircraft, vessels or rail vehicles, or where persons performing functions directly relevant to the operation of these, have tested positive for performance-impairing substances such as illicit drugs and alcohol. The Commission is increasingly seeing more occurrences where the use of performance-impairing substances is a feature.*

*Unless this safety issue is properly addressed, further occurrences where the use of performance-impairing substances is a contributing factor will occur. Legislative or regulatory reform in this area is necessary.*

*The Commission, therefore, recommends that the Secretary for Transport complete, as a matter of priority, all necessary work that will support the introduction of appropriate legislation or rules that will:*

- ▶ prescribe allowable maximum levels for alcohol*
- ▶ prohibit persons from operating an aircraft, vessel or rail vehicle if they are impaired by drugs*
- ▶ require operators to implement drug and alcohol detection and deterrence regimes, including random testing*
- ▶ prescribe post-occurrence testing requirements for drugs and alcohol.*
- ▶ This legislation or these rules should apply:*
  - ▶ across the aviation, maritime and rail transport modes*
  - ▶ to persons operating an aircraft or a marine craft for recreational purposes. (012/13)*

#### **Findings related to impairment by drugs or alcohol**

- 5.14. *The protection person had been a regular user of cannabis, and subsequent testing confirmed that he had probably continued to use cannabis during the month following the incident. It is not possible to determine if the protection person was impaired by cannabis at the time of the incident. Nevertheless, the use of cannabis by staff performing safety-critical tasks is of concern, and was contrary to KiwiRail's drug and alcohol policy at the time of the incident.*

Note: The protection person is the member of a work group who is the liaison point with the person in charge of the protected work area to ensure that all personnel and equipment are clear of the track for rail movements.

#### **Open recommendations related to impairment by drugs or alcohol**

- 7.4. *The protection person was a user of cannabis. Although it could not be established scientifically that his performance was impaired by cannabis at the time of the incident, he did have a detectable level of THC-acid in his urine when he was tested after the incident. Under no circumstances should the performance of any rail worker performing any safety-critical task be affected by alcohol or drugs of any kind. The Commission recommends that the Chief Executive of the NZ Transport Agency work with the National Rail System Standard Executive in developing a National Rail System Standard that requires all rail participants to have drug and alcohol policies that: have zero tolerance of performance-impairing substances for workers engaged in safety-critical tasks; require post-incident and accident and random testing for drugs and alcohol; and require a system for rail workers to report discreetly co-workers suspected of using or being under the influence of drugs or alcohol in the workplace. (007/13)*

### **Inquiry 10-009: Walter Fletcher FU24, ZK-EUF, loss of control on take-off and impact with terrain, Fox Glacier aerodrome, South Westland, 4 September 2010**

#### **Findings related to impairment by drugs or alcohol**

- 5.19. *An alcohol and drug testing regime needs to be initiated for persons performing activities critical to flight safety, to detect and deter the use of performance-impairing substances.*

#### **Open recommendations related to impairment by drugs or alcohol**

- 7.2.6. *On 22 March 2012 the Commission made the following recommendation to the Secretary for Transport:*
- The use of performance impairing substances is known to have a detrimental effect on the ability of people to safely operate in critical transport environments. The Commission recommends that the Secretary for Transport promotes the introduction of a drug and alcohol detection and deterrence regime for persons employed in safety critical transport roles (011/12).*

## **Inquiry 09-201: Collision: private jet-boat/private personal watercraft Kawarau River, Queenstown, 5 January 2009**

### **Findings related to impairment by drugs or alcohol**

- 5.17. *Although alcohol was not considered a factor in this accident, it was present on board the jet-boat and had been consumed in small quantities. Until legislation is made setting limits of alcohol and other performance-impairing substances for commercial and recreational boat drivers, the risk of substance-impairment-related accidents will be elevated.*

### **Open recommendations related to impairment by drugs or alcohol**

- 6.6. *Until legislation is made setting limits for and testing of alcohol and other performance impairing substances for recreational and commercial boat drivers, the risk of alcohol-related accidents will be elevated.*

*It is recommended that the Secretary for Transport address this safety issue by promoting appropriate legislation to set maximum allowable levels of alcohol and other performance impairing substances for persons in charge of recreational and commercial craft, and supporting legislation to allow testing for such levels in these cases. (005/11)*

## **Inquiry 06-204: Fishing vessel, Kotuku, capsize and sinking, Foveaux Strait, 13 May 2006**

### **Findings related to impairment by drugs or alcohol**

- 3.16. *Consumption of alcohol is considered to have been a factor contributing to 2 of the 6 deaths through the accelerated onset of hypothermia and consequent near-drowning experiences. Consumption of alcohol by the survivors put them at an elevated risk of succumbing to the effects of hypothermia, but to what level of risk could not be determined due to the absence of legislation allowing post-accident and incident testing for performance-impairing substances.*
- 3.17. *Although it could not be established if the deckhand's ingestion of THC contributed to his death, it is of concern that a crew member ingested a performance-impairing substance while in the course of his duties, regardless of whether the Kotuku was operating as a commercial or pleasure vessel.*

## **Inquiry 05-003: Piper PA34-200T Seneca II, ZK-FMW, controlled flight into terrain, 8 km north-east of Taupo Aerodrome, 2 February 2005**

### **Findings related to impairment by drugs or alcohol**

- 3.20. *The pilot's mental function and flying performance may have been impaired as a result of prior cannabis use, but this could not be proved.*

## **Inquiry 04-212: Fishing vessel Iron Maiden, foundering, off Pandora Bank, Northland, 16 August 2004**

### **Findings related to impairment by drugs or alcohol**

- 3.9. *Once the Iron Maiden rounded Cape Reinga, the skipper would have been presented with the full fury of the gale ahead of him. Why he chose to continue cannot be known, however:*

- ▶ *he may have been anxious to return home, where his partner was expecting their first child*
- ▶ *he may have felt pressure to continue because he knew of the owner's financial difficulties and his own career prospects depended on the Iron Maiden starting set net fishing as soon as possible*
- ▶ *the role that cannabis ingestion had in the skipper's decision-making is uncertain, but the level of THC in his blood indicated that he was likely to have been impaired when making the decision to round Cape Reinga and continue with the voyage*
- ▶ *the deckhand was unlikely to challenge the skipper, as they were cousins and friends who had previously faced challenges together and had built up trust and confidence.*

## Appendix seven – list of questions to consider

### COMMERCIAL

#### YOUR ROLE

Q1. What is your interest in alcohol impairment in the aviation, maritime and rail sectors?

Are you:

- ▶ A private individual
- ▶ Part of the transport sector

if you are part of the sector, please describe your interest, including your role:

(you may tick more than one)

- ▶ Commercial Aviation
- ▶ Commercial Maritime
- ▶ Recreational Aviation
- ▶ Recreational Maritime
- ▶ Rail

Q2. Would you like us to email you with the results of the consultation process?

- ▶ Yes
- ▶ No

If you answered 'Yes', please enter your email address:

Please refer to the [Clear heads discussion paper](#) for information to support your submission.

#### REDUCING THE RISK OF IMPAIRMENT IN COMMERCIAL OPERATIONS

Q3. Should maximum blood alcohol limits be set in the aviation, maritime and rail commercial sectors and if so at what level?

##### MARITIME

- ▶ No legal maximum level
- ▶ 20mg/100ml of blood (zero tolerance)
- ▶ 50mg/100ml of blood (the same as the land transport)

##### AVIATION

- ▶ No legal maximum level
- ▶ 20mg/100ml of blood (zero tolerance)
- ▶ 50mg/100ml of blood (the same as the land transport)

##### RAIL

- ▶ No legal maximum level
- ▶ 20mg/100ml of blood (zero tolerance)

- ▶ 50mg/100ml of blood (the same as the land transport)

Q4. Who should the maximum blood alcohol limits apply to?

- ▶ Pilot/master/driver
- ▶ Anyone whose job can affect the safety of the journey (safety-sensitive role)

Q5. Who should be responsible for minimising the risks associated with alcohol impairment in the aviation, maritime and rail sectors?

- ▶ Government agencies (CAA, Maritime NZ, NZTA, WorkSafe NZ)
- ▶ Police
- ▶ Commercial operators

Q6. What type of alcohol testing is appropriate in the aviation, maritime and rail commercial sectors? (you may tick more than one)

- ▶ Employers testing employees if they suspect impairment
- ▶ Employers testing employees randomly
- ▶ Police testing key staff after an accident
- ▶ Police testing key staff if there is good cause to suspect impairment
- ▶ Police randomly testing key staff
- ▶ None, but an education campaign is necessary

Q7. What penalties are appropriate for breaching the maximum blood alcohol limit in the aviation, maritime and rail commercial sectors? (you may tick more than one)

- ▶ Loss of licence
- ▶ An instant fine for the employee (the equivalent of a speeding ticket)
- ▶ A court-mandated fine for the employee (the equivalent of a drink-driving conviction)
- ▶ An instant fine for the employer
- ▶ A court-mandated fine for the employer

Q8. What is your preferred option for alcohol management in the aviation, maritime and rail commercial sectors?

- ▶ Option 1 – status quo with an education campaign
- ▶ Option 2 – drug and alcohol management plan (DAP)
- ▶ Option 3.1 – DAP with mandatory post-occurrence testing
- ▶ Option 3.2 – DAP with mandatory third party post-occurrence testing
- ▶ Option 4.1 – post-occurrence testing for enforcement
- ▶ Option 4.2 – post-occurrence testing for enforcement

Q9. Should the Transport Accident Investigation Commission have the powers to test any person who is involved in an accident?

- ▶ Yes
- ▶ No

Q10. Are there any other comments you would like to make? We are particularly interested in hearing your experiences, including implementing a drug and alcohol policy, or comments that will help us build an evidence base for the benefits and costs of our proposed options. Please note if you would like to make a full written submission, you can email [clearheads@transport.govt.nz](mailto:clearheads@transport.govt.nz) at any time before 24 April 2015.



## RECREATION

### YOUR ROLE

Q11. What is your interest in alcohol impairment in the aviation, maritime and rail sectors?

Are you:

- ▶ A private individual
- ▶ Part of the transport sector

If you are part of the sector, please describe your interest, including your role:

(you may tick more than one)

- ▶ Commercial Aviation
- ▶ Commercial Maritime
- ▶ Recreational Aviation
- ▶ Recreational Maritime
- ▶ Rail

Q12. Would you like us to email you with the results of the consultation process?

- ▶ Yes
- ▶ No

If you answered 'Yes', please enter your email address:

Please refer to the [Clear heads discussion paper](#) for information to support your submission.

If you would like to submit on the recreational aviation sector, please go to Q13.

If you would like to submit on the recreational maritime sector only, please go to Q17.

### REDUCING THE RISK OF IMPAIRMENT IN RECREATIONAL SECTOR – AVIATION

Q13. Should maximum limits be set for alcohol in recreational aviation and if so at what level should they be set?

- ▶ No legal maximum level
- ▶ 20mg/100ml of blood (zero tolerance)
- ▶ 50mg/100ml of blood (the same as the proposed land transport)

Q14. What type of alcohol testing is appropriate in the recreational aviation sector? (you may tick more than one)

- ▶ Police testing the pilot after an accident
- ▶ Police testing the pilot if there is good cause to suspect impairment
- ▶ Police randomly testing the pilot
- ▶ None, but an education campaign is necessary

Q15. What penalties are appropriate for breaching the maximum alcohol limits in recreational aviation? (you may tick more than one)

- ▶ Loss of licence
- ▶ An instant fine (the equivalent of a speeding ticket)
- ▶ A court-mandated fine (the equivalent of a drink-driving conviction)

Q16. What is your preferred option for alcohol management in the recreational aviation sector?

- ▶ Option A – Status quo with education campaign
- ▶ Option B.1 – Post-occurrence testing
- ▶ Option B.2 – ‘Good cause’ testing

If you are not completing the section on recreational maritime, please go to Q23.

#### **REDUCING THE RISK OF IMPAIRMENT IN RECREATIONAL SECTOR – MARITIME**

Q17. Should maximum limits be set for alcohol in recreational maritime and if so at what level should they be set?

- ▶ No legal maximum level
- ▶ 20mg/100ml of blood (zero tolerance)
- ▶ 50mg/100ml of blood (the same as the proposed land transport)

Q18. What type of alcohol testing is appropriate in the recreational maritime sector? (you may tick more than one)

- ▶ Police testing the skipper after an accident
- ▶ Police testing the skipper if there is good cause to suspect impairment
- ▶ Police randomly testing the skipper
- ▶ None, but an education campaign is necessary

Q19. What penalties are appropriate for breaching the maximum alcohol limits in recreational maritime? (you may tick more than one)

- ▶ An instant fine (the equivalent of a speeding ticket)
- ▶ A court-mandated fine (the equivalent of a drink-driving conviction)

Q20. What is your preferred option for alcohol management in the recreational aviation sector?

- ▶ Option A – status quo with education campaign
- ▶ Option B.1 – post-occurrence testing
- ▶ Option B.2 – ‘good cause’ testing

**REDUCING THE RISK OF IMPAIRMENT FOR ALL RECREATIONAL SECTOR**

Q21. Are there any other comments you would like to make? We are particularly interested in your experiences or comments that will help us build an evidence base for the benefits and costs of our proposed options. Please note if you would like to make a full written submission, you can email [clearheads@transport.govt.nz](mailto:clearheads@transport.govt.nz) at any time before 24 April 2015.