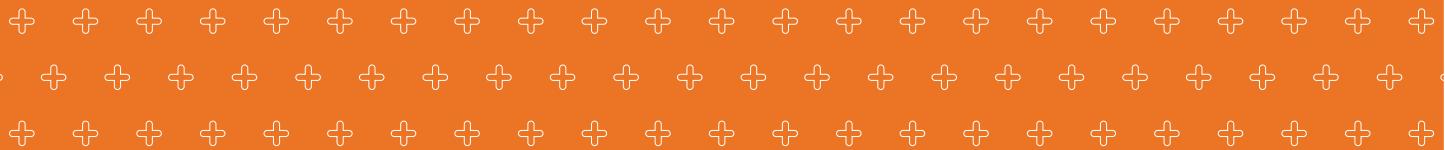




# **Review of risk management and safety in the adventure and outdoor commercial sectors in New Zealand 2009/10**

## **FINAL REPORT**

June 2010



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## I. EXECUTIVE SUMMARY

This report by the Department of Labour (the Department) was sparked by concerns about a number of serious incidents in the adventure and outdoor commercial sector.

It is the Department's report, but it is informed by the work of members of the steering group set up at the Prime Minister's request to investigate and report back on ways of improving risk management and safety in the sector. It contains recommendations to the Minister of Labour on possible improvements.

The review team's main conclusions are:

- There does not appear to be a fundamental problem in the sector's ability to develop appropriate safety systems
- However, there are gaps in the safety management framework which allow businesses to operate at different standards than those generally accepted
- While these gaps remain there is insufficient assurance that preventable accidents will not occur
- This situation could result in harm to individuals and their families and damage to New Zealand's reputation as an international visitor destination.

For the review, the Department formed a steering group of senior officials from a range of government departments and Crown entities, the Tourism Industry Association New Zealand and representatives of Local Government New Zealand. A working group with a similar mix was established to support the governance group and a 67-member external reference group of relevant people and organisations was drawn from the sectors.

The review's range of enquiry was defined and 44 adventure and outdoor commercial sector activity types were identified as coming within its scope. Terms of reference were established with a two-phase process for the review. Phase 1 was to scope and establish the knowledge base, and Phase 2 was to analyse, define the problem and report.

The review team observed that people should not expect that all accidents in these sectors can be eliminated. Rather, it should be expected that all practicable efforts are made to effectively manage the risk and minimise accidents as much as possible.

Available data on serious harm accidents and fatalities in the adventure and outdoor commercial sectors in New Zealand suggests that most are managing risk well. Many of the activities carry heightened inherent risks but the number of serious harm accidents and deaths appears low when compared to known participation levels.

However, the review team found that there is insufficient assurance that all activities involving heightened inherent risk are being managed safely and that preventable accidents will not occur. Such accidents could result in harm to individuals and their families as well as damage to New Zealand's reputation as an international visitor destination.

Given the wide range of successful approaches within the sector, there does not appear to be a fundamental problem in the sector's ability to develop appropriate safety systems. In general, the problem is more one of unidentified gaps where, for a variety of reasons, businesses can start up and operate at a different standard than what is accepted across the sector as safe practice.

Issues that apply to the whole of system, to one or more jurisdictions, or to particular activities, were identified as contributing to this problem.

The review team considered a range of options to improve risk management and safety in the sector including: stronger regulatory controls and government requirements; industry-driven codes of practice; initiatives to improve sector capability through qualification requirements; and specific system and administrative enhancements.

There is, in the review team's view, no one single measure that will address the issues identified in the review. Therefore we are recommending that government adopts a package of measures providing a mix of regulatory requirements, industry initiatives and system improvements.

Foremost, however, the review team strongly recommends that a registration scheme is introduced with a requirement for up-front and ongoing external safety audits of operators' safety management provisions. This would go a considerable way towards providing assurance that activities are being managed safely.

The review team also strongly recommends a number of complementary initiatives, including:

- Partnering with an industry-led entity to strengthen the safety management framework for the sector
- Developing a practice guide for the sector
- Undertaking an evaluation of the voluntary safety auditing schemes for adventure and outdoor commercial sector operations and developing a register of government-accredited safety auditing schemes
- Promoting qualifications
- Clarifying which government agency is responsible for which activities
- Better information collection and collation
- Improving information about operators' current responsibilities.

Further initiatives that are worth considering are:

- Linking taxpayer-funded promotion to a satisfactory safety audit and educating consumers to look for a safety mark from an accredited safety auditing scheme
- Expanding the rules-based approach taken under the Maritime Transport Act and the Civil Aviation Act
- Linking Accident Compensation Corporation (ACC) payments to evidence of audited safety management plans

- Increasing the level of inspection under the Health and Safety in Employment (HSE) Act
- Investigating whether or not New Zealand should be represented on the International Organisation for Standardisation's TC 228 Working Group for Adventure Tourism
- Scoping the development of guidance on land owners' and land managers' safety-related responsibilities when they grant permission for adventure and outdoor commercial sector activities to operate on land that they own or manage.

## II. RECOMMENDATIONS TO THE MINISTER OF LABOUR

It is recommended that you:

1. **Note** that the adventure and outdoor commercial sector has grown quickly to a significant size, is innovative and dynamic, and its safety management systems reflect that quick growth and are still developing

**Noted**

2. **Note** that the review found assurance and information gaps in the safety management framework that applies to the sectors.

**Noted**

### Addressing assurance gaps

3. **Agree** to introduce a registration scheme for the adventure and outdoor commercial sectors with a requirement for up-front and ongoing external safety audits of operators' safety management provisions (to a level commensurate with the risk) and an obligation on operators to keep their registration up-to-date

**Agree / Do not agree**

4. **Agree** to partner with an industry-led entity to strengthen the safety management framework for the sectors

**Agree / Do not agree**

5. **Agree** to the development of a practice guide for the sector

**Agree / Do not agree**

6. **Agree** to an evaluation of the voluntary safety auditing schemes for adventure and outdoor commercial sector operations to ensure they are fit for purpose

**Agree / Do not agree**

7. **Agree** to investigate the development of a register of government-accredited adventure tourism-related safety auditing schemes

**Agree / Do not agree**

8. **Note** that agencies will clarify which government agency is responsible for which activities in the adventure and outdoor commercial sector

**Noted**

**9. Note** that the Department of Labour will ensure that when the review of the Machinery Act and Amusement Devices Regulations occurs, that it carefully considers the adequacy of the Act and Regulations for the adventure and outdoor commercial sectors

**Noted**

**10. Agree** to better inform operators about their current responsibilities

**Agree / Do not agree**

**11. Agree** to further work being undertaken to determine whether instructors and guides should be required to hold qualifications and work only within the scope of their qualifications for some activities

**Agree / Do not agree**

#### **Addressing information gaps**

**12. Agree** to work being undertaken to collect better and more consistent information on the sector and to improve its collation

**Agree / Do not agree**

#### **Further worthwhile initiatives**

**13. Note** that if the proposed registration scheme is not approved, the Department of Labour will undertake further work to consider the value of educating consumers to look for a safety mark from an accredited safety auditing scheme when selecting an adventure or outdoor commercial sector provider

**Noted**

**14. Agree** to further work being undertaken regarding a requirement for operators to have a satisfactory safety audit in order to receive any taxpayer-funded promotional benefits, (such as inclusion through i-Site stands, Tourism New Zealand)

**Agree / Do not agree**

**15. Direct** the Department of Labour to undertake further work with other agencies as applicable in order to consider the appropriateness of the following initiatives:

**A.** Expanding the rules-based approach taken under the Maritime Transport Act and the Civil Aviation Act for possible application to other adventure based activities

**Agree / Do not agree**

**B.** Linking ACC payments to evidence of audited safety management plans

**Agree / Do not agree**

**C.** Increasing the level of inspection under the HSE Act

**Agree / Do not agree**

**16. Agree** to investigate if New Zealand should be represented on the International Organisation for Standardisation's TC 228 Working Group for Adventure Tourism

**Agree / Do not agree**

**17. Agree** to the Department of Labour scoping the development of guidance on land owners' and land managers' safety-related responsibilities when they grant permission for adventure and outdoor commercial sector activities to operate on land that they own or manage

**Agree / Do not agree**

### **General**

**18. Note** that Cabinet has approved the development of aviation rules for commercial adventure aviation and new maritime rules for commercial jet boating and rafting to improve the safety regulatory framework for these activities, and that this work is well advanced

**Noted**

**19. Note** that the proposed rules for adventure aviation activities and commercial jet boating and rafting being developed for the Minister of Transport will adequately address the current deficiencies in the safety regulatory framework applicable to those parts of the adventure and outdoor commercial sector

**Noted**

**20. Agree** to the Department of Labour undertaking further work on the funding and institutional arrangements to deliver the key recommendations in this paper, with a particular focus on the appropriateness of industry-government shared models

**Agree / Do not agree**

**21. Note** that the Department of Labour will assist, coordinate or initiate any further implementation issues arising from this report.

**Noted**

### **III. INTRODUCTION**

#### **Background to the review**

On 16 September 2009, the Prime Minister of New Zealand wrote to the Minister of Labour (the Minister) expressing concern about a number of incidents in the adventure and outdoor commercial sectors, including the tragic death of young British backpacker Emily Jordan<sup>1</sup>. The Prime Minister noted public concerns about the various regulatory regimes governing these activities.

The Prime Minister advised the Minister that he would like the Department of Labour (the Department) to lead a cross-departmental group to investigate and report back on the situation and ways of improving risk management and safety in the sector. He asked for a report on the group's findings and suggestions from the Minister on any changes necessary.

#### **Purpose of the review**

The aim of the review was to determine whether changes were needed to the risk management and safety systems in the adventure and outdoor commercial sectors to reduce accidents and fatalities and ensure New Zealand continues to be seen as a quality destination for international visitors.

The key objectives were to investigate and report back to the Minister on the current systems and practices and to identify any improvements needed.

#### **The sector**

The adventure and outdoor sector is important to New Zealand tourism and our reputation. For the year ended March 2009:

- International tourist expenditure accounted for \$9.3 billion or 16.4% of New Zealand's exports (including international airfares paid to New Zealand carriers)
- Tourism directly and indirectly contributed \$15.0 billion (or 9.1%) to New Zealand's total GDP (excluding GST and import duties)
- Tourism directly supported 94,600 full time equivalent employees (4.9% of the workforce)
- In 2008, 38% of all international tourists (849,200 in total, aged 15 years or over) participated in at least one adventure activity while in New Zealand (note: this figure does not distinguish between recreational and commercial activity)
- In total, international visitors who participated in at least one adventure tourism activity (international adventure tourists) spent \$3.0 billion on their New Zealand trips (excluding international airfares). This is more than half of total international visitor expenditure (\$5.9 billion).

Clearly, adventure tourism is an important part of the New Zealand experience for our international visitors. As such, any negative publicity associated with

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<sup>1</sup> The letter from the Prime Minister is attached as Appendix 8.

preventable fatalities and serious harm incidents could have a serious impact on our reputation as an attractive, high quality tourism destination.

New Zealand has a strong reputation for developing innovative and successful adventure tourism products (e.g. commercial jet boating, bungy jumping and plastic sphere globe riding). This is helped by the current system, with low barriers to entry and performance-based legislation.

The sector is relatively new and still maturing in terms of its business processes and systems, including its safety management. But it has grown to some considerable size and it is time for it to step up and properly manage the risks associated with its business.

Much has been done, and continues to be done, by the sector and by government to address shortcomings in the sector's safety management framework. For example, Maritime New Zealand has worked closely with the river boarding and river sledging sector to develop white-water boarding safety guidelines. These guidelines have been in place since February 2009 and are presently being reviewed<sup>2</sup>. All but one river boarding operator has been safety audited to the white-water boarding guideline, with the remaining operator being scheduled to be safety audited before the commencement of the next summer season.

## **The international context**

A limited stock-take of international risk management and safety provisions in the adventure and outdoor commercial sectors showed that New Zealand compares to Australia, Brazil, Chile, France, India, Switzerland and the United Kingdom in that it primarily uses non-statutory accreditation programmes to ensure safety in the sector. France also has statutory qualifications for activity leaders and the United Kingdom also has a licensing scheme for some activities provided to young people under age 18 not in the company of their parents.

The stock-take found that non-statutory schemes appear to be preferred, perhaps because:

- Voluntary regimes may, in effect, be obligatory in order for providers to obtain insurance, access public land or make use of state-supported marketing
- Statutory regulations tend to set minimum standards whereas accreditation emphasises high standards
- Non-statutory accreditation schemes provide a balance between credible assurance of safety standards and excessive administration burdens on providers or supervisory bodies.

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<sup>2</sup> This is expected to be completed in time for the 2010/2011 summer season.

## What adventure tourists want

Surveys of adventure tourists in Queenstown found that they were seeking fear and thrills ('perceived risk') from commercial adventure activities, rather than actual risk and an uncertain outcome. Adventure travellers expect to experience various levels of risk, excitement and tranquillity and to be personally tested (Bentley and Page, 2008, *A decade of injury monitoring in the New Zealand adventure tourism sector: A summary of risk analysis*).

## Methodology

The Department formed governance, working and external reference groups to assist with the review and established the terms of reference (Appendix 1).

The range of enquiry for the review was scoped and defined and the working group identified 44 activities to be considered. These are shown in Table 1 below.

**Table 1: List of activities covered by the review**

<b>Land-based activities</b>	<b>Water-based activities</b>
1. Abseiling	27. Diving (from vessels <6m/within 5Nm from coast)
2. Adventure-based learning	28. Diving (from vessels >6m/>5Nm from coast)
3. Bungy jumping	29. Events
4. Canyoning	30. Jet boating
5. Caving	31. Marine mammal swimming
6. Cycle touring	32. Rafting (white water)
7. Events <sup>3</sup>	33. River sledging / boarding
8. Glacier walking	34. Sailing
9. Globe riding (plastic spheres)	35. Sea kayaking
10. Go karting	36. Snorkelling
11. Horse trekking	37. Surfing
12. Hunting	38. Swift water kayaking / canoeing
13. Indoor rock climbing	39. Water skiing
14. Infrastructural attractions (extreme rides not covered by other legislation)	
15. Infrastructural attractions (extreme rides covered by other legislation)	<b>Air-based activities</b>
16. Land-based fishing	40. Hot air ballooning
17. Luge riding	41. Microlight passenger flights
18. Motorcycle touring (on road)	42. Parasailing
19. Mountain biking	43. Tandem hang gliding and para gliding
20. Mountaineering	44. Tandem parachuting
21. Quad bike touring	
22. Rock climbing	
23. Sand boarding	
24. Ski fields (activities on)	
25. Ski touring	
26. Walking / tramping	

<sup>3</sup> Note that land-based and water-based events may include multiple activities or a single type of activity.

All activities that equate to transport services only (e.g. scenic bus tours, water taxi rides, ferry rides or scenic flights) were excluded from the review.

The first phase of the review included:

- Undertaking stock-takes of risk management and safety provisions in New Zealand and internationally
- Disseminating questionnaires and preparing a consultation report
- Inviting comment from the next-of-kin of people who died while participating in the sectors during the five-year period from 1 July 2004 to 30 June 2009.

The second phase of the review included:

- Undertaking a high-level five-variable gap analysis of the risk management and safety provisions in the adventure and outdoor commercial sectors in New Zealand
- Developing a set of principles for operators (Appendix 7)
- Risk profiling and comparing results to the types of controls in place for each activity
- Interviews and a focus group with operators and other stakeholders
- Considering coroners' reports, judges' verdicts and feedback from the next-of-kin of people who died while participating in the sectors (Appendix 5)
- Defining the problem and developing options and recommendations for the Minister of Labour.

A full summary of the review methodology is given in Appendix 2.

Throughout the review, the views and suggestions of a wide range of stakeholders were sought on safety problems in the sector and possible solutions. Some views and suggestions were outside the scope of the review, but were reflected in the summary of consultation responses report published in January 2010<sup>4</sup> or have been reflected in this report. Where views and suggestions were within the scope of the review, the review team considered them. The review team considers that, if adopted, the package of initiatives put forward in this report will provide reasonable ongoing safety management assurance and will respond to a large degree to the concerns of these stakeholders, including the families of people who died while participating in the sectors.

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<sup>4</sup> Department of Labour, *Summary of consultation responses: A contributing paper for the review of risk management and safety in the adventure and outdoor commercial sectors in New Zealand 2009/10*, January 2010, ISBN 978-0-478-36039-4

## **IV. KEY FINDINGS**

The key findings of the review are presented here in an overview. For a fuller description of the review findings see Appendix 5: Review findings.

### **a. The nature of the sector involves inherent risk**

There should not be an expectation that all accidents in these sectors can be eliminated. Rather, it should be expected that all practicable efforts are made to minimise the risk of accidents.

While all serious adventure tourism accidents and deaths are inherently tragic, they are seen as even more so if it is found that effective safety systems were not in place.

Penalties after the fact may act as a partial deterrent but are not satisfactory from a reputational perspective, and in any case, might be seen as the ambulance at the bottom of the cliff when what is really needed is the fence at the top.

### **b. Different activities have widely varying risks**

Activities can take place in highly managed locations (e.g. bungy jumping from a specially-designed fixed platform) through to locations where operators have very little control over the natural hazards (e.g. mountain climbing on Aoraki Mt Cook).

Some activities occur where the weather is constantly changing and clients are exposed to the elements (e.g. sea kayaking, rafting or mountaineering).

Different locations can require different levels of risk management for the same activity (e.g. guided sea kayaking in the relative shelter of the Waitemata Harbour versus the Kaikoura coast or Fiordland, or abseiling from fixed anchor points on a man-made dam versus abseiling beside a natural waterfall).

Risk management needs to be tailored according to different types of client – on the same trip, or between trips – especially for short experiences such as rafting where a guide may lead multiple trips in a day. Complicating factors include situations in which clients do not speak English as their first language (so may not understand instructions), are unfamiliar with the activity or operating environment or lack essential skills (such as confidence in water).

Some activities require a degree of competence from participants. Operators must assess participants' competence and manage activities accordingly (exclusion, further training, adjust activity).

There are risks associated with new and innovative products entering the marketplace. Small tourism businesses often have an operator who is knowledgeable and passionate about the product or activity, but may not always have the skills or knowledge to implement appropriate risk management systems.

### **c. There are information problems**

Nearly all participation statistics available for adventure and outdoor commercial sector activities are a mixture of recreational and commercial figures. This makes it very difficult to determine trends and risk levels, which are key tools for safety management. This is a problem when it comes to applying the highest focus to the areas of highest risk.

This situation is worsened by under-reporting of serious harm accidents, and inconsistent or poor methods of collecting information on them and collating that information.

Additionally, lack of information about where operators are, what activities they offer, and whether these activities have adequate safety management provisions, makes enforcement of health and safety difficult (as is offering appropriate support to providers).

Operators also commonly report that they do not understand all of their obligations under the Health and Safety in Employment (HSE) Act 1992.

### **d. Approaches to managing safety are inconsistent**

Approaches to managing safety are inconsistent across activities, environments and responsible agencies.

There is a reasonable rationale for this situation. In many cases this reflects the need for approaches that are 'fit for specific purpose'. Specific compulsory controls have also emerged in areas with the greatest perceived need; for example, where accident statistics have warranted specific attention. This also reflects an approach where agencies have specific expertise in a general environment.

However, this situation creates safety problems for the following reasons:

- There is a high variation in safety guidance to the sector and accepted industry practice between activities
- Some activities (even those with specific controls) have weaknesses in some aspects of safety controls (for example, under-reporting of accidents)
- Some non-compulsory approaches are at similar levels to compulsory systems (e.g. sea kayaking) while others are much less developed
- There is no overall system which proactively identifies and addresses gaps and assesses whether they pose significant safety risks
- Risk profiling and an analysis of the level of controls for each activity showed that some activities with high levels of inherent risk are controlled only by the HSE Act, or the law plus industry guidance, while other high-risk activities are covered by activity-specific rules

- With different approaches across multiple agencies there is a risk that safety standards will fall between jurisdictional cracks and that there will be barriers to sharing safety information (including learning from accident reporting). There is no system for preventing these problems or ensuring valuable 'whole of sector' safety coordination occurs.

### **e. There are perception problems**

As well as the safety risks, the lack of demonstrable coherence across activities poses other potential problems. The wide variety of standards, responsible organisations and qualifications (as shown in the New Zealand stock-take undertaken for the review) presents a risk that safety in this sector is seen as poorly coordinated and inconsistent in its approach. This poses a risk for New Zealand's reputation as a high quality adventure tourism destination.

The wide range of approaches is also potentially inefficient, especially for businesses which operate in multiple environments or are managed by different organisations.

### **f. There are unidentified gaps**

Given the wide range of approaches which are successful in many different contexts, there does not appear to be a fundamental problem in the sector's ability to develop appropriate safety systems (although up-front checks may be the exception.) The issue is more one of unidentified gaps where, for a variety of reasons, businesses and possibly whole activity sub-sectors can start up and operate at a different standard than what is generally accepted as safe practice.

### **g. There is insufficient assurance**

While these gaps remain there is insufficient assurance that preventable accidents which harm individuals and New Zealand's reputation will not occur.

### **h. Relying solely on overarching legislation poses problems**

Legislative controls place obligations on businesses to identify hazards and either eliminate, isolate or minimise them. In this sector some risk is inherent in many products. In such a context it may not be appropriate to leave businesses to come up with their own standards.

The HSE Act is primarily designed for safety in employment. Customers are covered by the reference to 'others in the workplace'. There is a wider policy question here about whether this is the best fit for this sector in which the primary focus is the safety of consumers. However, the working group acknowledges that the legislation itself is workable.

Except for activities with rules-based systems, the legislation places no obligations on many businesses to comply with up-front checks or safety audits, relying instead on full awareness and understanding of obligations and penalties as deterrence to

non-compliance. This creates a situation where businesses can operate below optimum safety levels by not prioritising safety, either knowingly or unknowingly.

In the aviation and maritime sectors, up-front checks can be required through civil aviation rules or maritime rules. The Civil Aviation Act 1990 and the Maritime Transport Act 1994 enable the Minister of Transport to require participants in the aviation or maritime sectors to hold appropriate documents. The Director of Civil Aviation (CAA) and the Director of Maritime New Zealand (Maritime NZ) are responsible respectively for granting and reviewing an aviation document or maritime document.

### **i. Amusement Devices Regulations**

The Amusement Devices Regulations, with their primary focus on mechanical equipment, do not seem fit for purpose for the adventure and outdoor commercial sectors and their application to these sectors is not always clear. These were originally designed for devices such as fairground rides and other machinery for entertainment and cover only mechanically-powered equipment. While safe equipment is vital, most adventure tourism and outdoor commercial activities involve more complex operating situations than these regulations were designed for.

### **j. Qualifications and standards**

Some qualifications and standards used in adventure tourism and the outdoor commercial sectors are based on recreational standards. This can cause problems when these standards are expected to control commercial environments with high-frequency participation, professional duty of care, commercial pressures and competition. Recreational-based systems are also difficult to scale up quickly as commercial activities grow (e.g. where they rely on volunteer experts).

Many activities rely on staff knowledge derived through the guide/instructor qualifications to guide safety management. This may not be appropriate in a commercial context, given that many aspects of safety management are likely to be in the control of the business. These include: equipment standards; maintenance and product design; the number of participants at any one time; risk disclosure; and, crucially, safety management systems.

In some cases, there seems to be a mismatch between what the sector requires in terms of safety competencies and the training and qualifications provided (particularly by the tertiary system). This places a heavier burden on the industry as the most recognised qualifications come from small (i.e. not tertiary-funded) associations with limited delivery capacity. There is also a confusing array of training and qualifications across the sector and across activities. Given this, the industry places a heavy emphasis and value on training provided by the businesses themselves.

This said, there are very good qualifications available to the sector, but they appear to be undervalued. By contrast, in some cases countries such as the UK and France

require instructors and guides to be qualified and working only within the scope of their qualifications.

### **k. Safety auditing needs improving**

There is room for improvement in the scope of safety audits that look at the safety management processes used by operators. Some operators said that external auditing and peer review processes were essential to reduce the potentially dangerous learning curves which operators sometimes go through when they start a new business or activity.

For example, one operator reported that they learnt from an actual incident to set up a process for when distractions occurred while fitting safety harnesses<sup>5</sup>. The auditor had not asked what process they would use in such an instance.

Other operators also gave examples of where they had learnt from experience: for example, increasing the number of escape routes after realising they were insufficient.

## **I. Land managers' responsibilities**

Land managers' views differ on whether, and to what degree, they have safety assurance responsibilities for operations they authorise on the land they are responsible for. As a consequence, their practice is variable.

For instance, the Department of Conservation (DOC) operates a 'required safety audit regime' for concessionaires on public conservation land and the Queenstown Lakes District Council (QLDC) requires an application for resource consent from operators once they have guided five people within its jurisdiction, including a safety management plan.

The Department's view is that the Occupiers' Liability Act places an onus on land owners as occupiers to ensure that anybody invited on their land is aware of any hazards arising and is generally safe. The land owner can, however, discharge this through actions such as placing signs.

Section 2 of the HSE Act defines, in relation to a place of work, a "person who controls a place of work" as:

a person who is –

- (a) the owner, lessee, sublessee, occupier, or person in possession, of the place or any part of it; or
- (b) the owner, lessee, sublessee, or bailee, of any plant in the place (emphasis added).

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<sup>5</sup> Note that the operator had a back-up safety system so no injury occurred and the activity remained safe, but the operator acknowledged that a new process was needed to respond to distractions.

"Place of work" is defined as "a place (whether or not within or forming part of a building, structure, or vehicle) where any person is to work, is working, for the time being works, or customarily works, for gain or reward ...".

The wording of the definition of "a person who controls a place of work" appears broad enough to capture land owners of a place where work is carried out (even if the workplace itself is not owned or managed by the land owner). As the land owner is a person in control of a place of work, they have a number of duties as prescribed under section 16 of the HSE Act, including taking all practicable steps to ensure that no hazard that is or arises in the place harms people in that place. What exactly constitutes practicable steps in a particular case is a matter of fact and degree depending on the circumstances. Clarification about the safety responsibilities of those who manage the land where people participate in commercial activities may be advisable.

### **m. Risk disclosure**

Given that some risk is inherent in the sectors, it is important that clients are aware of, and accept, the level of safety assurance that the business can realistically provide. Risk disclosure is required by some approaches (e.g. Rule Part 80 under the Maritime Transport Act) but not others.

### **n. Solutions will need to suit the different characteristics of commercial adventure tourism and outdoor activity businesses**

The sector is typically made up of small enterprises which employ fewer than six staff.<sup>6</sup> Small businesses tend to have a day-to-day operational focus and may have limited resources, time or skills to improve business management such as safety management systems and strategic planning.

Many operators indicated that when hiring staff they first look for people skills (such as good communication, presentation and the 'x-factor') and that recognition of qualifications can be of a lower priority. We understand that these operators are of the opinion that technical training will take place on-site.

Many businesses are very seasonal and reduce employees in the off-season (e.g. ski fields, sea kayaking). Some smaller businesses may close for their off-season period. This seasonality can lead to:

- Issues around retention of experienced staff
- An ongoing (annual) loss of institutional knowledge
- A constant focus on training new employees rather than up-skilling existing staff
- High flexibility and variability in resource use (e.g. staff, equipment, and finances).

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<sup>6</sup> According to a Skills Active Labour Market survey in 2005, 70% of businesses surveyed employed less than six staff.

Some business models involve direct supervision, (for example, guiding), while others involve indirect supervision (such as multisport events).

Differences and similarities between commercial adventure tourism and outdoor education operations are shown in Appendix 2.

Safety management for events is another sub-sector captured in the review. Events can involve a large number of participants with a range of skills and experience (for example, multi-sport races, off-road motorbike and quad bike farm rides as community fundraising events). Some events involve multiple activities and can take place on public roads, private land and public conservation lands. Safety management includes consideration of other users, provision of first aid and volunteers over a wide area and numerous communication issues before, during and after the event.

Note that the recommendations in this paper apply to the commercial adventure tourism and outdoor education sectors and the sub-sectors within those that come within the terms of reference for the review.

## **V. PRIORITY ISSUES TO BE ADDRESSED**

### **a. Overarching issues**

The review team found:

- There does not appear to be a fundamental problem in the sector's ability to develop appropriate safety systems
- However, there are unidentified gaps which allow businesses to operate at different standards than those generally accepted
- While these gaps remain there is insufficient assurance that preventable accidents will not occur
- This could result in harm to individuals and their families and damage to New Zealand's reputation as an international visitor destination.

These overarching issues have a number of different aspects which are examined below.

### **b. Whole of system issues**

Activities and operations that pose unmanaged risks may not be noticed until accidents bring them to the attention of the safety agencies responsible. This is not appropriate for a sector which by its nature involves exposing participants to higher risks and where failures can have an impact on New Zealand's reputation.

There are information problems. A lack of data – including under-reporting of incidents – means that actual risk and safety trends cannot be determined. Additionally, information-sharing across the whole sector is constrained by the fragmented nature of the sector and the jurisdictional split across three different agencies (Department of Labour, Maritime New Zealand, Civil Aviation Authority).

Much of the sector has no entry requirements. This creates the potential for substandard operations.

The sector is open to the perception that safety management is not coherent and that different standards apply for different activities, with some not covered at all. There may also be some confusion over the jurisdiction of agencies overseeing safety provisions of certain activities (especially water-based).

### **c. Issues that apply to one or more jurisdictions**

In situations where activities are offered in an unsafe manner, it is unclear whether there are powers under the HSE Act to require that the delivery of the activity is ceased. It is the view of the Department that the HSE Act provides sufficient scope for the issuing of prohibition notices which, in certain circumstances, could be used to curtail operations in the adventure tourism sector. However, the current wording of the legislation, particularly as regards service of prohibition notices, does not provide a natural fit in respect of the circumstances that may arise in such cases. Accordingly, clarification through legislative change may be desirable.

The legislation governing the sector is often ill-fit for adventure activities, as its main intent is to regulate things like transport activities or the health and safety of employees in a workplace.

There is no established 'across and within jurisdiction' benchmark for intervention by safety agencies, resulting in some activities operating at similar risk levels to other activities but with significantly different safety oversight. This is particularly the case for maritime and land-based activities.

The current regulatory safety standards applicable to commercial adventure aviation were designed for recreational (non-commercial) activity and do not provide sufficient assurance that commercial activities involving inherent risk are safely managed. This deficiency has previously been identified and is being rectified by the development of Civil Aviation Rule Part 115 – Adventure Aviation, which is at an advanced stage of development in the Ministry of Transport's current rule programme approved by Cabinet. The review team understands the CAA has identified the poor safety performance of this part of the sector and, working within the limits of the current regulatory framework, is giving priority to ensuring that safety standards are maintained and enhanced to the extent possible pending the introduction of Rule Part 115. The review team is satisfied that an effective safety regulatory framework is under development to manage safety within the commercial adventure aviation sector and does not propose to duplicate that by making recommendations for change within this sector. However, there may be sector-wide issues (e.g. information and data availability) that apply to both the aviation sector and other parts of the adventure tourism and outdoor commercial sector.

There are different required safety standards based on who is managing the land on which the activity is occurring. It is not clear to land owners or land managers what safety-related responsibilities they have when granting permission for commercial operators to deliver activities on the land that they own or manage.

Uptake and recognition of relevant qualifications is low in the sector.

#### **d. Issues that apply to particular activities**

Some individual activities pose similar risks to others that are specifically controlled but they do not have the same standards.

## **VI. INITIATIVES TO ADDRESS THE PRIORITY ISSUES**

Although the risk of harm to individuals who participate in most adventure and outdoor commercial sector activities is not currently quantifiable, there is wide acceptance that there are heightened risks inherent in many such activities and associated risks to New Zealand's reputation and economy.

The review identified a number of areas where improvements could, and should, be made to enhance the management of those risks. A number of initiatives are already underway to address some of the issues by individual operators, sector organisations and/or regulatory agencies.

The review found that there is a case for introducing additional control systems and processes either through industry self-regulation or government intervention. A range of options is presented for consideration.

It should be noted that given the very wide scope of the review, the following analysis is high level only. With this in mind, the review's recommendations regarding specific activities propose more robust and detailed investigation of each activity.

### **Addressing assurance gaps**

#### **a. Introducing a registration scheme**

For all land-based and water-based activities, excluding white water rafting and jet boating, this could include requiring all operators (or all operators within a certain risk profile) to be on a register managed by a central oversight body.

Those on the register would have to declare against certain requirements (e.g business description information and possession of a safety plan) and also comply with certain requirements in order to operate. Note that once Rule Part 115 – Adventure Aviation is implemented, commercial white water rafting and jet boating, and adventure aviation activities will already be covered adequately by similar rule-based requirements.

The main requirements would be:

- An up-front external safety audit of operators' safety provisions (to a level commensurate with the risk)
- Ongoing periodic external safety audits (perhaps three-yearly)
- An annual declaration that they are still complying with their safety plans
- An obligation on operators to ensure their registration details are kept up to date.

Lead organisations in the tourism and outdoors sectors consider that ongoing periodic external safety audits like this are good practice. For example, OutdoorsMark, one of New Zealand's premier safety auditing systems for these

sectors, specifies three-yearly safety audits with annual declarations that operators continue to comply with their safety plans.

The audits could be against generic safety criteria or activity-specific codes of practice (note that audits against generic safety criteria would limit any negative impact on innovation). Minimum standards for the provision of activities could also be added (e.g. fit and proper person criteria).

The registration scheme would be complemented by ensuring details are correct and the operators are continuing to comply with their safety plans. Operators who did not register would be barred from operating. Operators found to be operating without registration would be prosecuted. A public register could be used as an enforcement tool.

This is, in effect, the type of regime under which a large number of adventure and outdoor commercial sector operators in New Zealand operate now.

For example, the Department of Conservation requires that all operators providing recreation/tourism activities on public conservation land apply for a concession to do so and have an independently audited safety plan. That requirement applies to about 1500 operations within the scope of this review.

Some territorial authorities (especially QLDC whose jurisdiction covers a large number of adventure and outdoor commercial sector operators) also run a concessions-style process that requires evidence of a safety plan.

This initiative would require:

- Identifying requirements to register against
- A legislative/regulatory mandate (note that there is scope within the HSE Act to create a registration scheme)
- An entity to manage the scheme
- Resources to establish the register (although businesses could be charged at the point of registration)
- Resources to monitor compliance
- Enforcement against non-registered and non-compliant operations
- Penalties for non-compliance (e.g. "name and shame" or financial)
- Possible assessment of risk profiles (by an association/oversight body) and benchmarks for inclusion
- Decision on what details to audit against (generic minimum standards or activity-specific)
- Possible minimum standards/codes of practice for all relevant activities - if a non-generic approach to safety auditing was taken – and a process for updating these as required
- A pool of approved auditors/activity-expert auditors (audits could involve a field check) and resources to ensure auditor capacity to avoid slowing down business decisions (although the market may respond to demand).

Key concerns about this approach, however, include:

- Defining the boundaries of the adventure and outdoor commercial sectors could be difficult
- It is unclear whether the market would respond to ensure auditor capacity so as not to slow business decisions down
- If activity-specific codes of practice were the basis for audits, it is unclear how new activities would be serviced in a timely way in terms of standards development and audit processes.

The Department has also considered a notification-only scheme and a licensing scheme. A notification-only scheme would involve a one-off listing on an online database and declaration against certain requirements. A licensing scheme would involve the same requirements as the registration scheme but also that operators apply for a licence on a periodic (perhaps three-yearly) basis.

The Department considers that a full licensing scheme would be disproportionate to the scale of the problem with higher compliance costs than a registration scheme and a notification-only scheme would not address all of the assurance problems identified in this report.

The following table shows the differences between notification-only, registration and licensing schemes in terms of the safety assurance they offer.

	<b>Notification only scheme</b>	<b>Registration scheme</b>	<b>Licensing scheme</b>
All operators (or all operators within a certain risk profile) would be required to have a safety plan at the point of registration	✓	✓	✓
Ability to contact operators and provide them with support resolved at a point in time	✓	✓	✓
Information on the size and profile of the sector, including participation and incident levels, collectable at a point in time	✓	✓	✓
The entity selected to manage the scheme could assume other roles	✓	✓	✓
Ability to contact operators and gather information resolved in an ongoing way (database will not become out of date)	✗	✓	✓
Safety assurance resolved on the <u>existence</u> of an operator's safety plan at start up	✗	✓	✓
Safety assurance resolved on the <u>quality</u> of an operator's safety plan at start up	✗	✓	✓
Safety assurance resolved on the <u>ongoing existence</u> of operators' safety plans	✗	✓	✓
Safety assurance resolved on the <u>ongoing quality</u> of operators' safety plans	✗	✓	✓

	<b>Notification only scheme (cont.)</b>	<b>Registration scheme (cont.)</b>	<b>Licensing scheme (cont.)</b>
Safety assurance resolved that all operators (or all operators within a certain risk profile) <u>implement</u> their safety plans	<b>X</b>	✓	✓

**b. Establishing a new industry-led entity to strengthen the existing framework and safety provisions**

This would involve creating a new industry-led entity to strengthen the existing underpinning framework and provisions for safety management that apply to the sectors. This entity would:

- Facilitate information gathering across the sector (possibly including a scanning function to proactively identify emerging activities and changes in the profile of existing activities as discussed under Initiative J)
- Identify situations where standards are inconsistent<sup>7</sup>
- Identify inappropriate gaps in safety oversight
- Identify any safety outcomes which are inconsistent across jurisdictions commensurate with risk
- Advise whether interventions are fit for purpose
- Advise government about targeted intervention and information dissemination
- Manage (or oversee) entry and ongoing requirements for the sector (i.e. through a notification, registration or licensing scheme)
- Possibly accredit industry safety auditing schemes and auditors.

In addition to these benefits, this initiative could also:

- Rectify the perception that there is little coherence and oversight in the sector
- Capture emerging activities and changes (if the entity is tasked with a scanning role as discussed above)
- Help rectify jurisdictional coverage confusion (e.g. for non-certified water-based activities).

This initiative could be similar in form to the Adventure Activities Industry Advisory Committee (AAIAC) in the United Kingdom. The AAIAC was established in 1996 and represents a wide range of stakeholders from the UK adventure activities sector. It works with the industry and participants to identify, develop and disseminate good practice, and to advise governments and agencies accordingly on request. It has no statutory role, but it:

- Advises on industry-wide safety issues and standards

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<sup>7</sup> Recognising that standards consistency does not necessarily mean that a standard approach is applied; rather that all approaches deliver a consistent standard of risk management across activities with similar risk profiles.

- Has a role in advising on skill development and the setting of competency standards, particularly in those instances where no relevant 'Sport Governing Body' exists
- Liaises with other bodies regarding educational visits
- Has assumed a self-appointed role in advising on the details, and the implementation, of the existing statutory licensing scheme for some adventure activities and any proposed new or non-statutory licensing or accreditation scheme(s)
- Has a role in creating relevant material and in disseminating, promoting and publicising relevant issues<sup>8</sup>.

This initiative would require a secretariat and funding. Such an entity might also be tasked with sector engagement.

The Department also considered an industry/government entity, or partnership of responsible agencies for this role, but decided that an industry-led model with government observers would be more appropriate given the increasing maturity of the sector and expertise within it.

#### **c. Developing a practice guide for the sector, excluding aviation and certified maritime activities**

This initiative would involve adopting a generic overarching standard of practice for the sector. Such a standard could ensure that operators have a safety management plan and know what they need to do to keep their clients and staff safe. It could specify what codes of practice or other standards, entry approval and pieces of legislation operators should abide by according to the associated risks. It could lay out what operators need to comply with to meet their obligations under the HSE Act. Activity-specific information or standards could be developed at a later stage in conformity with the over-arching standard.

Such a standard could take the form of either a Best Practice Guidance (BPG) document or an Approved Code of Practice (ACOP) prescribed under Section 20 of the HSE Act. In either form, the standard would be effectively a statement of preferred work practices or arrangements for the adventure and outdoor commercial sectors.

The standard could therefore also be used to articulate the importance of:

- Benchmarking agreed industry safe practice
- Sharing incident information and lessons learnt externally
- Operators appropriately disclosing the risks involved in any activity to their clients
- Mechanisms for customer complaints
- Competent staff.

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<sup>8</sup>AAIAC – see <http://www.ccpr.org.uk/Resources/CCPR/Documents/Word/AAIAC%20%20what.doc>

An ACOP tends to be necessary where consensus is difficult or unable to be achieved. Then the legislative requirement for ministerial consultation ensures all competing interests have the opportunity to express their views and be heard. At the end of this process a decision needs to be made despite the lack of consensus.

In contrast a BPG can be used where there is consensus or where there is a tightly defined industry sector or activity where a representative body able to take ownership of the content exists. Generally, the advantage of a BPG over an ACOP is that it is not subject to the legislative constraints regarding consultation required for the production and updating of an ACOP. A BPG is more flexible, and can be more readily updated to reflect industry changes and developments, and to incorporate learning from accidents and incidents. For these reasons the Department generally prefers BPGs to ACOPs as a means of setting industry standards in consultation with industry. When technical specification is necessary, it can often be achieved in a BPG by requiring adherence to manufacturers' standards (rather than by attempting to lay down specific standards at a point in time).

If approved, the new industry-led entity recommended in this report could play an important role in the development, promotion, and maintenance of this and other industry standards.

#### **d. Evaluating voluntary safety auditing schemes (auditing the auditors)**

This would involve an investigation into the methodologies and capability of organisations that offer safety auditing schemes to the adventure and outdoor commercial sectors (e.g. Qualmark, OutdoorsMark, the Register of Outdoor Safety Auditors <ROSA>, Bureau Veritas and ACC schemes). This would determine if these schemes can provide assurance to consumers, operators and government that adequate risk management provisions are in place in adventure and outdoor commercial sector activities. Training programmes for auditors would also be captured by this initiative.

Note that some government agencies such as the Department of Conservation and some local authorities rely on these auditing schemes when granting concessions or resource consent for adventure and outdoor commercial activities, yet they have little independent assurance that the safety audits are fit for purpose.

It may be appropriate to test the methodologies used by these auditing systems against best practice models internationally and their alignment with international standards for risk management generally. An evaluation of these schemes would give government agencies and local authorities some assurance of their efficacy and would be likely to drive improvements.

This initiative would require:

- Identifying an agency to commission an evaluation
- Resources to fund the evaluation
- Selection of a suitable provider/s to conduct the evaluation.

Note that in conjunction with Initiative E below, this evaluation would effectively be part of an accreditation process.

#### **e. Developing a register of government-accredited safety auditing schemes for the sector**

This would be a logical further step to that discussed above. It would involve accrediting voluntary safety auditing schemes based on an evaluation and registering them on a list of government-accredited safety auditing schemes.

Government agencies and local authorities granting permission for adventure and outdoor commercial sector activities would then be able to rely on a range of government-accredited safety audit providers.

Consumers would also be able to make some judgement about the quality of the safety audits and safety management systems.

If the proposal in this report for a new industry-led entity to work to strengthen the existing underpinning framework and provisions for safety is accepted, that entity could be the accrediting body for these safety auditing schemes.

This initiative would require:

- Deciding benchmarks for inclusion on the register
- Identifying which agency would manage the register
- Resources to establish a register.

#### **f. Clarifying who is responsible for what**

Clarifying what activities each agency is responsible for would help reduce the potential for jurisdictional gaps between safety agencies.

This has been a problem with water-based activities when different types of craft have been used. For instance, river sledges or white water boards have been interpreted to be 'ships' for the purposes of the Maritime Transport Act and therefore under the jurisdiction of Maritime New Zealand. However, the legal definition of 'ship' is still unclear and could be challenged in the courts. A review of definitions could more clearly delineate the jurisdiction of agencies or, alternatively, the issue could be resolved through amending the memorandum of understanding between the Department and Maritime NZ.

There could still be issues in identifying whose jurisdiction emerging activities come under.

This initiative could potentially require:

- Clarifying legislation
- Amending the memorandum of understanding between the Department of Labour and Maritime NZ and the operational agreement that underpins this

- Associated resource shifts within agency baselines.

Key concerns about this approach include that it is possible that definitional clarification may work for current activities but still pose issues for identifying under whose jurisdiction emerging activities lie.

#### **g. Reviewing the Machinery Act and Amusement Devices Regulations**

When the review of the Machinery Act and Amusement Devices Regulations occurs (currently on the Department of Labour's work programme for 2010/11 and factored into existing budgets), this would require carefully considering the adequacy of the regulations for the adventure and outdoor commercial sectors.

Reviewing the Act and Regulations could:

- Address more coherent coverage of motorised and non-motorised amusement equipment<sup>9</sup>
- Result in a better fit with more modern types of activity offered within these sectors.

This initiative would require integrating the Act and Regulations with the HSE Act to allow all issues to be addressed in a coherent way as part of the upcoming regulatory review agenda.

Key concerns about this approach, however, include:

- If the current focus on machinery was retained through the review of the legislation, the revised Act and Regulations would not address systemic safety management processes used by operators and therefore could not be relied upon alone to ensure safety in activities
- If retained, the third party engineering check of machinery could similarly not be relied upon alone to ensure safety in activities
- It is anticipated that this review may take up to two years.

#### **h. Better informing operators about their responsibilities**

This could involve producing further adventure tourism-specific guidance about complying with the HSE Act and the Maritime Transport Act or providing additional resources to industry bodies to create better and more accessible guidance for the sectors. This could be in the form of activity-specific approved codes of practice

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<sup>9</sup> Such as coverage of quad bike tour operations; inclusion of some equipment or gravity-powered activity, such as flying foxes, giant swings, water slides and luges which are fundamentally mechanical in nature; and clarification that "carried by" the device includes inflatable devices such as bouncy castles and slides and devices where the rider is in control of the vehicle such as mini excavators operated by children.

(approved by the Minister of Labour), or endorsed guidelines (developed by the Department of Labour and industry), prioritised by risk level.

It could include:

- Providing information outlining the current safety framework to better inform operators of their responsibilities
- More clearly defining what incidents and accidents should be reported and to whom
- Considering whether unique incident reporting forms should be developed (e.g. as Maritime NZ has done for rafting).

Proposed changes to the definition of serious harm would contribute to this initiative, although further work may be needed to ensure that it is appropriate for this sector.

Benefits of this initiative include:

- Helping to address under-reporting of incidents and accidents and enabling actual risk and safety trends to be determined
- Helping to address the problem that operators do not always fully understand their obligations under the HSE Act
- Better recording of what works well and industry learning
- Operators seeking to up-skill will find this easier to comply with.

However, it should be noted that up-take of such guidance would be voluntary. While “good” operators will take the time and resources to appropriately respond to the guidelines, others may still choose not to respond.

This initiative would require reallocation of financial and human resources within safety agencies.

### **i. Stating government’s expectations about qualifications**

By stating expectations about qualifications being used in the adventure and outdoor commercial sectors, government would:

- Promote the value of having a qualified workforce
- Promote the value of revalidating qualifications
- Support providers of qualifications within the sectors
- Promote and support the qualifications themselves
- Support the New Zealand Outdoor Registration Board
- Help to create a ‘level playing field’ across the sector.

The primary purpose would be to support industry bodies to increase the proportion of qualified instructors and guides by ensuring that a range of qualifications is provided that are not only fit for purpose but build careers and lift the professionalism of the adventure and outdoor commercial sectors.

This could also include supporting:

- Rationalisation and simplification of the qualifications pathways
- Introduction of leader level qualifications to meet the needs of new employees
- A wide scale and industry-inclusive review of all qualifications to ensure they are fit for purpose
- A new assessor training and development programme that the review team understands has been embraced by the industry
- New assessment methodologies that improve the accessibility of qualifications.

These initiatives aim to build better qualifications, enhance workplace capability, better enable workplace training and assessment, increase skill levels and productivity, remove barriers to qualifications and build career pathways that will encourage progression and retention of staff within the sectors.

This initiative might also support the sector to:

- Work towards ensuring that qualifications are benchmarked to recognised international standards
- Establish a new process for cross-crediting overseas qualifications
- Deliver existing safety education strategies
- Conduct research into new activity-specific qualifications
- Undertake further work on recognising relevant overseas qualifications.

This would be a low-cost option for government to increase individual competency in the sector. However, possible effects on compliance costs need to be considered in the context of other changes recommended.

Key concerns include:

- Defining the boundaries of the adventure and outdoor commercial sectors could be difficult
- Whether training providers could meet a rapid increase in demand for qualifications
- Whether training would be accessible, especially for small to medium enterprises
- Whether people will commit to work in the industry long enough to see qualifications as worthwhile for career development
- Who would pay for training for qualifications – government (through the Tertiary Education Commission), employers or workers.

## **Addressing information gaps**

### **j. Better information collection and collation**

This involves three things:

- Collecting better information

- Collecting consistent information
- Improving systems of collation.

### Collecting better information

For all land-based and non-certified water-based activities this could involve collecting information through:

- **The proposed registration scheme**
  - Who in New Zealand offers land-based and non-certified water-based activities on a commercial basis, what activities they offer and where.<sup>10</sup> Collecting business details through a registration scheme would be easy for agencies if entry requirements are introduced.
- **Directing safety agencies (or tasking a new industry-led entity) to investigate activities in more detail**
  - What risk management provisions are in place for each activity and what the risk management practices are amongst all relevant parties.<sup>11</sup> This would determine if greater activity-specific intervention is needed. Directing safety agencies to investigate activities in more detail is likely to be resource intensive and would require a shift within agency baselines away from other agency activity (with implications for regulatory involvement with other high-risk industry sectors and activities). Tasking a new industry-led entity to do this work would require corresponding resources.
- **A scanning function**
  - Proactively identifying emerging activities and changes in the profile of existing activities. Agencies could be instructed to scan more proactively according to consistent criteria. Scanning could also be assigned to an overarching entity for the sector<sup>12</sup>. The cost of scanning should be low, although directing safety agencies to undertake this would require a shift within agency baselines away from other agency activity.
- **A database/reporting approach**
  - Information on incidents that led, or could have led, to serious harm accidents.<sup>13</sup> Addressing the current information deficit about the number of incidents and accidents in the sector could help determine actual risk for each activity.
  - This approach could involve expanding and resourcing the existing National Incident Database managed by the New Zealand Mountain Safety Council. Information supplied to safety agencies could be integrated into that database also. An annual report could be produced to summarise the information gathered.
  - The database/reporting approach would require a gap analysis of the National Incident Database and resources to expand or re-design and promote it (low cost). Endeavours to integrate information from safety

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<sup>10</sup> This information is already collected for the adventure aviation sector and certified water-based activities.

<sup>11</sup> This information is already collected for the adventure aviation sector and certified water-based activities.

<sup>12</sup> As discussed under initiative J in this report

<sup>13</sup> This information is already collected for the adventure aviation sector and certified water-based activities.

agencies would also take some re-alignment of agency resources (higher costs).

- **A study-based approach, or incident surveillance programme**

- As an alternative or complementary approach to the database/reporting approach above, an annual survey and report could be produced (possibly by a tertiary institute). The study-based approach or incident surveillance programme would require medium ongoing funding for research.

For all activities this would involve collecting information through:

- **A participation study**

- Information provided through an annual survey and report. A participation study would address the lack of knowledge about how many people participate in adventure and outdoor commercial sector activities and the consequent inability to determine risk levels and serious harm injury rates.

Note that in terms of implementing this initiative, defining the boundaries of the adventure and outdoor commercial sectors could be difficult.

#### Collecting consistent information

This would involve aligning reporting requirements so that all relevant safety agencies gather consistent information on reported incidents. It would include the Department of Labour, CAA, Maritime NZ, ACC, the Ministry of Economic Development (MED) and possibly others.

This would require a lead agency or mechanism to coordinate changes to the way data is collected and the type collected. It would provide better quality and comparable information that could be analysed so that lessons from incidents might be learnt. However, it may be difficult to achieve consistency across agencies because current data is collected to meet different legislative requirements.

#### Improving systems of collation

So that the adventure and outdoor commercial sector can learn from incidents and accidents, systems of collation need to be improved. This could involve the following:

- Ensuring that information on incidents and serious harm accidents reported to the Department of Labour and ACC is comprehensive, the outcome is clearly identified and the information can be collated
- Ensuring that commercial and recreational incidents and accidents can be differentiated and collated
- Ensuring that the activities in which incidents and accidents occurred can be easily identified and collated
- Requiring an annual report (public) for the adventure and outdoor commercial sectors.

This initiative would allow good quality analysis of reported incidents that led, or could have led, to serious harm accidents.

It would be appropriate to undertake these enhancements after the proposed legislative changes to the definition of serious harm have been introduced.

This initiative would require resources to improve existing Department of Labour and ACC incident and accident reporting and recording systems.

This initiative would be relatively easy to implement. However, it would divert resources from other agency activities.

## **Further worthwhile initiatives**

### **k. Exploring ways to educate consumers about what to look for**

This could involve exploring ways to educate participants selecting adventure and outdoor activities to look for one of a range of accredited safety audit marks (from the register discussed earlier).

The Department of Labour understands that past experience with consumer education/awareness strategies suggests that it can take considerable time before they start to change consumer behaviour and their effectiveness is unclear. However, the review team puts this initiative forward as a mechanism to complement government oversight of the ongoing safety of activities in the sector. This initiative will be less important if government approves the proposed registration scheme for the sector with up-front and ongoing periodic external safety audits.

### **I. Linking safety certification to promotion**

This initiative would involve undertaking further work to determine if operators could be required to have a satisfactory safety audit in order to receive any taxpayer-funded promotional benefits (e.g. inclusion within i-Site stands and off-shore promotion with Tourism New Zealand). Such a requirement would include a phase-in period.

This would be a low-cost option for government to provide an incentive for operators to get safety audits of their activities.

However, while this initiative would be likely to endorse existing practice by more professional and larger operators, it would be unlikely to change behaviours among smaller operators (including those less likely to have a safety certificate) or relatively new businesses.

### **m. Expanding the rules-based approach**

This would involve directing the Department of Labour to undertake further work with Maritime NZ and CAA to consider the appropriateness of expanding the activity-specific rules approach taken under the Maritime Transport Act and the Civil Aviation Act – currently used for white water rafting, jet boating and being developed for adventure aviation activities – to all adventure and outdoor commercial sector activities with a similar risk profile.

It could include developing HSE regulatory requirements for land-based activities and water-based activities where no 'ship' is being used.

This initiative would:

- Set minimum safety requirements for a wider range of activities and provide an increased level of assurance about the risk management provisions
- Allow monitoring of entry, audit activities and closing down unsafe operations
- Bring a consistency of approach across water, air and land-based activities with similar risk profiles.

Key concerns about this approach include:

- It would be likely to be a slow process for improving safety management provisions and for attaining greater assurance about the provisions that apply to a wider range of activities
- It would be an expensive process for government and for the sector in its advisory role to help develop the rules
- As new activities, or variants on existing activities, were developed, it would require new sets of rules or revision of rules
- It would require on-going review of rules as practice and technology changes
- It may be that this level of control is disproportionate to the scale of the problem.

### **n. Linking ACC payments to evidence of audited safety management plans**

This would involve directing the Department of Labour to undertake further work in order to consider the appropriateness of extending the Workplace Safety Discount Programme to adventure and outdoor commercial sector operators to provide for reduced ACC payments based on evidence of audited safety management plans.

In this initiative, operators would have a monetary incentive to undertake sound safety management and improve safety systems and it could also lower overall costs to government. Potential gains for government could be significant where large numbers of clients participate in a business's activity.

Key concerns about this approach include:

- There would need to be strong support from operators as a group in order for it to be worthwhile
- This is an initiative for the longer term as it will take some time for benefits to be realised and it will not be immediately obvious to visitors (therefore potentially not addressing current reputation issues)
- The levy paid by employers only relates to the injuries of workers, not customers, so any savings on ACC levies for individual businesses would be likely to be small.

The legislative process to implement this would be relatively simple as the regulations are updated every year.

This initiative would require an initial investment, although it could lower overall costs to government and provide financial benefits to participating operators.

#### **o. Increasing the level of inspection under the HSE Act**

This would involve directing the Department of Labour to undertake further work to consider the appropriateness of doing more investigations into accidents in the adventure and outdoor commercial sector with a more proactive approach to assessing the safety and risk management systems of operators. The proactive approach could occur prior to the commencement of some or all operations, and/or at more frequent intervals once operations are in place, depending on risk.

This could allow findings to be shared within the sectors to reduce future risk. Findings may also show a need to raise standards in particular activities or industry sub-sectors. Enforcement action resulting from investigations, including prosecutions, provides clear messages to the industry about the need for high standards of safety and risk management. The proposed new industry entity would play an important role in disseminating this kind of information.

A complementary initiative would be for the Department of Labour to investigate clarifying whether the HSE Act provides sufficient scope for the issuing of prohibition notices.

Depending on the type and level of increased inspections, this initiative could mean:

- Operators would have more face-to-face contact with a Department of Labour inspector and would be required to show evidence of safety systems and safety management more frequently
- The interaction with the inspector would provide an opportunity to learn about good practice
- Market demand in response to increased inspection could lead to greater development of activity-specific guidelines/codes of practice (including continual review to ensure they remain current)
- The continuation of voluntary codes and other instruments at lower administration costs than new interventions

- Participants would have greater assurance that operators have a safety management plan and that it has been reviewed.

Key concerns about this approach could include:

- Participants would not have complete assurance, unless the additional resources for increased inspection provide scope for consistent start-up and ongoing audits by inspectors and those inspectors were qualified to make a full assessment of the safety management provisions operators put in place
- Reliance on frequent ongoing inspections shifts the burden of responsibility for safe operations away from an operator and towards the regulators<sup>14</sup> perhaps raising public and operator perceptions that the regulator is assuring the safety of individual operations
- The logistics involved in taking responsibility for frequent ongoing inspection of a large number of very diverse operations across the sector, frequently in remote locations
- Without a registration scheme, it would only capture those operators and activities known to government.

This initiative could require shifting the allocation of resources within agency baselines by reducing other activities or additional funding.

#### **p. Investigating if New Zealand should be represented on the ISO working group**

This would involve instructing the Department of Labour to investigate if New Zealand should be represented on the International Organisation for Standardisation's TC 228 Working Group for Adventure Tourism.

#### **q. Considering developing guidance on land owners' and land managers' safety-related responsibilities in relation to the sector**

This would involve the Department of Labour scoping the development of guidance for land owners and land managers to assist them to meet their safety-related responsibilities under the HSE Act when they grant permission for commercial operators to deliver activities on the land that they own or manage. This guidance could be particularly helpful for local authorities to clear up the lack of clarity about whether they should seek safety audits of adventure and outdoor commercial sector operations that they grant permission to operate on land such as road reserve. It could also address private land owners' safety-related responsibilities when granting permission for such operations to be delivered on private land. Given there are a myriad of interests in land use which are not limited to work, consultation with other agencies and stakeholders will be a critical component of the scoping phase.

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<sup>14</sup> This is contrary to the objects of the HSE Act to promote systematic management of health and safety by employers and others with duties under the Act.

## **General**

### **r. Noting that the proposed rule for adventure aviation will adequately address current deficiencies**

The review team supports and endorses the Ministry of Transport's current work on the development of Civil Aviation Rule Part 115, which is due for implementation in early to mid-2011. Subject to the results of the regulatory impact assessment and cost-benefit analysis, the review team considers the proposed regulatory intervention appropriate to the level of risk associated with adventure aviation activities and that the new rule will adequately address the current deficiencies in the safety regulatory framework applicable to the sector.

The review team does not make recommendations with respect to the adventure aviation sector.

### **s. Noting that the new rules for commercial jet boating and rafting will adequately address current deficiencies**

The review team also supports and endorses the Ministry of Transport's current work on the development of Maritime Rules Parts 81 and 82. Subject to the results of the regulatory impact assessment and cost-benefit analysis, the review team considers the proposed regulatory intervention appropriate to the level of risk associated with commercial jet boating and rafting and that the new rules will adequately address the identified deficiencies in the regulatory framework applicable to the sector.

The review team does not make recommendations with respect to the commercial jet boating and rafting sub sectors.

## **VII. ACRONYMS USED IN THIS REPORT**

ACC	Accident Compensation Corporation
ACOP	Approved Code of Practice
ATTTO	Aviation Tourism Travel Training Organisation
CAA	Civil Aviation Authority
DOC	Department of Conservation
HSE Act	Health and Safety in Employment Act 1992
ISO	International Organization for Standardization
LGNZ	Local Government New Zealand
Maritime NZ	Maritime New Zealand
NZOIA	New Zealand Outdoor Instructors Association
NZORB	New Zealand Outdoor Registration Board
QLDC	Queenstown Lakes District Council
ROSA	Register of Outdoor Safety Auditors
SFRITO	Sport, Fitness and Recreation Industry Training Organisation (now called Skills Active)
SPARC	Sport and Recreation New Zealand
WSMP	Workplace Safety Management Practices programme

## VIII. APPENDICES

### Appendix 1: Review terms of reference (updated, April 2010)

#### Background

On 16 September 2009, the Prime Minister wrote to the Minister of Labour expressing concern about a number of incidents in the adventure and outdoor commercial sectors, including the tragic death of young British backpacker Emily Jordan. The Prime Minister noted public concerns about the various regulatory regimes governing these activities in New Zealand.

The Prime Minister advised the Minister of Labour that he would like the Department of Labour to lead a cross-departmental group to investigate and report back on the situation and ways of improving risk management and safety in the sector. He requested a report on the group's findings and suggestions from the Minister on any changes she considers necessary to improve risk management and safety in the sector.

#### Purpose

The purpose of the review is to investigate the current situation and ways of improving risk management and safety in the adventure and outdoor commercial sectors in New Zealand and to report to the Minister of Labour with suggestions for changes to improve risk management and safety in those sectors.

#### Scope

The following has been determined to be within, or outside of, the scope of the review:

<b>In scope:</b>	Where an adventure or outdoor commercial service is being sold or provided; agency resources; jurisdictional issues.
<b>Out of scope:</b>	Activities not paid for (non-commercial) / purely recreational.

#### Definition

For the purposes of the review, 'adventure and outdoor commercial sectors' has been defined as meaning *all recreational-type activities offered on a fee-for-service basis that carry heightened inherent risks that must be managed*.

The review will include activities carried out indoors (such as indoor rock climbing) where those activities carry inherent risks of a similar nature to activities conducted outdoors.

While the definition may capture some activities not generally considered as 'adventure and outdoor' activities, the review will determine the focus of its next activities when the stock-take has been completed.

#### Review structure

##### Governance

The Group Manager Workplace, Department of Labour, will be the sponsor for the review. The Manager, Workplace Health and Safety Policy, Department of Labour, will be the responsible manager. A Senior Advisor Workplace Health and Safety Policy, Department of Labour, will be the project manager.

A steering group has been established to assist the Group Manager in his role as sponsor and comprises the following internal and external members:

Name	Title	Organisation
Craig Armitage	Group Manager, Workplace Policy (Chair)	Department of Labour
Paul Barker	Chief Advisor, Workplace Policy	Department of Labour
Glen-Marie Burns	Manager – Aviation & Security Sector	Ministry of Transport
Ray Salter	General Manager	Ministry of Tourism
Graeme Harris	General Manager Personnel Licensing & Aviation Services	Civil Aviation Authority
Geoff Ensor	Advocacy Manager	Tourism Industry Association NZ
Tim Cossar	Chief Executive	Tourism Industry Association NZ
Evan Freshwater	Relationship Manager	Tourism Industry Association NZ
Catherine Taylor	Chief Executive and Director	Maritime New Zealand
Lindsay Sturt	General Manager Strategy and Communications	Maritime New Zealand
Ray Campbell	Acting Manager Public Safety/Workplace Safety	ACC
Helen Gilbert	Corporate Planning Manager, Community and Strategy, Taupo District Council	(on behalf of) Local Government New Zealand

#### **Project working group**

A project working group has been established and comprises the following internal and external members:

Name	Title	Organisation
David Mulholland	Senior Policy Advisor (Chair)	Department of Labour
Bryan Williams	Senior Advisor Operational Policy (Sector)	Department of Labour
Tim Frank	Advisor	Ministry of Transport
Mark Walter	Policy Advisor	Ministry of Tourism
Graeme Harris	General Manager Personnel Licensing & Aviation Services	Civil Aviation Authority
Liam Brennan	Strategic Advisor Safety	Maritime New Zealand
Geoff Ensor	Advocacy Manager	Tourism Industry Association NZ
Tim Cossar	Chief Executive	Tourism Industry Association NZ
Evan Freshwater	Relationship Manager	Tourism Industry Association NZ
Malcolm Francis	Team Manager Injury Prevention	ACC
Paul Chaplow	General Manager	Outdoors New Zealand
Jamie Dale	Total Quality Manager, Strategic Development, Taupo District Council	(on behalf of) Local Government New Zealand
Mike Davies	Senior Technical Support Officer Research and Development Group	Department of Conservation
Nicola Chapple	Senior Policy Advisor	Department of Labour
Ross Clapcott	Chief Advisor	Ministry of Tourism

### ***External reference group***

An external reference group of key stakeholders will be drawn from the sector according to the advice of the governance group.

### ***Process***

The review is being undertaken in two phases:

#### **Phase I – Scoping and establishing the knowledge base (21 September – 29 January 2010)**

Phase I of the review will include:

- Forming governance and working groups to lead and administer the review
- Forming an external reference group of key stakeholders
- Developing terms of reference that will include indicative deliverables and timing
- Developing a communications strategy
- Developing a project plan
- Developing a sector engagement plan
- Undertaking a **stock-take** of risk management and safety provisions in the adventure and outdoor commercial sectors in New Zealand. This will include:
  - The activities / types of activity included in the sector review
  - The number of operators in the sector
  - What regulations apply to them
  - Agency jurisdictions and any jurisdictional issues
  - Any controls for entry into the sector/starting the activities, or gaps at the front end
  - Any education of tourists and other service users
  - Whether there are any standards, guidelines (including voluntary and sector-driven guidelines), licensing regimes or registration systems that apply
  - Whether there are any auditing, monitoring, quality assurance systems that apply
  - The degree of injury reporting
  - Any data on accidents by type of activity, incident reports, serious harm and fatalities and investigations undertaken
  - Who has the authority to close an operation down and nature of that authority
  - Current work being undertaken for regulation, quality assurance, etc.
- Undertaking a **stock-take** of risk management and safety provisions in the adventure and outdoor commercial sectors internationally, including work underway to improve those provisions (e.g. international standards, regulations, licensing regimes)
- Undertaking **consultation with reference group** members
- Undertaking **consultation with operators, other peak bodies and other stakeholders** in the adventure and outdoor commercial sectors for their views on the current situation and ways of improving risk management and safety in the sector. This may involve questionnaires, key informant interviews, focus groups and/or calling for submissions either directly from operators and stakeholders or through their representative groups
- An initial review of findings from the stock-take of risk management and safety provisions in the adventure and outdoor commercial sectors in New Zealand and the consultation, identifying any urgent issues that need to be addressed.

## Phase II – Analysis, problem definition and reporting (1 February to 31 May 2010)

Phase II of the review will include:

- Undertaking a **gap analysis** of risk management and safety provisions in the adventure and outdoor commercial sectors in New Zealand
- **Analysis of findings** from the stock-takes, gap analysis and consultation
- **Problem definition**
- **Developing options** for ways of improving risk management and safety in the sector and reporting back to the Minister of Labour **with recommendations**.

### **Indicative deliverables and timing**

The responsible manager will provide regular updates to the sponsor, governance group and Minister of Labour, plus four formal reports as follows:

1. A stock-take of risk management and safety provisions in the adventure and outdoor commercial sectors in New Zealand by 29 January 2010
2. A stock-take of risk management and safety provisions in the adventure and outdoor commercial sectors internationally, including work underway to improve those provisions by 29 January 2010
3. A report on consultation by 29 January 2010
4. A final report for the Minister of Labour with options and recommendations by 31 May 2010.

## **Appendix 2: Methodology**

### **Scoping and establishment**

The Department formed a steering group to assist the Deputy Secretary, Workplace, in his role as sponsor of the review. The group included senior officials from a range of government departments and Crown entities, plus representatives from the Tourism Industry Association New Zealand and, initially, QLDC on behalf of LGNZ. A representative from Taupo District Council on behalf of LGNZ later replaced the representative from QLDC. A list of governance group member agencies is provided in the terms of reference for the review (see Appendix 1).

A working group was established to support the governance group and the Department in conducting the review. It was also composed of officials from a range of government departments and Crown entities, plus representatives from the Tourism Industry Association New Zealand, Outdoors New Zealand and, again initially, from QLDC on behalf of LGNZ (later changed to Taupo District Council). A list of working group member agencies is provided in the terms of reference for the review (Appendix 1).

A 67-member 'virtual' external reference group of people and organisations with relevant expertise, and/or representing particular parts of the adventure and outdoor commercial sectors, was drawn from the sectors based on advice from the governance and working groups. Members were drawn from:

- Organisations or groups representing a number of adventure and outdoor commercial sector operators
- Adventure and outdoor commercial sector operators
- Academic researchers studying relevant aspects of the sector
- Industry training organisations, standard setting organisations and educational bodies
- Auditing, monitoring and quality assurance bodies
- Any relevant central or local government agencies not represented on the governance or working groups
- Other relevant experts as determined by the governance group.

Terms of reference were established that laid out a two-phase process for the review (see Appendix 1). The first phase included the following deliverables:

- A stock-take of risk management and safety provisions in the adventure and outdoor commercial sectors in New Zealand
- A stock-take of risk management and safety provisions in the adventure and outdoor commercial sectors internationally
- Consultation with reference group members, operators, other peak bodies and other stakeholders in the adventure and outdoor commercial sectors (plus a report on the consultation)
- An initial review of findings from the stock-take of risk management and safety provisions in the adventure and outdoor commercial sectors in New Zealand and the consultation, identifying any urgent issues that need to be addressed.

The range of enquiry for the review was then fully scoped and defined.

For the purposes of the review, 'adventure and outdoor commercial sectors' was defined as meaning *all recreational-type activities offered on a fee for service basis that carry heightened inherent risks that must be managed*. Adventure or outdoor commercial services that are sold or provided, and agency resources and jurisdictional issues were determined to be within the scope of the review. Activities not paid for (non-commercial) and that are purely recreational were determined to be out of scope. Additionally, the governance group for the review decided that hire of equipment would not be part of the primary focus of the review, but that this might be reassessed if review findings suggested it would be appropriate.

When considering an appropriate definition for the adventure and outdoor commercial sectors, the governance group considered a range of definitions of adventure tourism, both nationally and internationally. It was agreed that the scope and definition included activities carried out indoors (such as indoor rock climbing) where those activities carry inherent risks of a similar nature to activities conducted outdoors. It was acknowledged and agreed that while a close analysis of this definition may capture activities not generally considered as 'adventure and outdoor' activities, the review would determine the focus of its next activities once a stock-take of the sector was completed.

The working group then moved to identify the main adventure and outdoor commercial sector activities that occurred in New Zealand that would be covered by the review. Forty-four activities were identified and were considered by the review.

The second phase of the review included:

- Undertaking a high level gap analysis of risk management and safety provisions in the adventure and outdoor commercial sectors in New Zealand
- Analysis of findings from the stock-takes, gap analysis and consultation
- Problem definition
- Developing options for ways of improving risk management and safety in the sector and reporting back to the Minister with recommendations.

### **The stock-takes**

The review team undertook a stock-take of risk management and safety provisions that applied to the adventure and outdoor commercial sectors in New Zealand. This was undertaken to gather information on:

- The activities/types of activity included in the review
- The number of operators in the sector
- Participation levels
- What regulations apply to operators
- Agency jurisdictions and any jurisdictional issues
- Any controls for entry into the sector
- Any education of visitors and other service users
- Whether there are any standards, guidelines (including voluntary and sector-driven guidelines), licensing regimes or registration systems that apply

- Whether there are any auditing, monitoring, quality assurance systems that apply
- The degree of injury reporting
- Any data on accidents by type of activity, incident reports, serious harm and fatalities and investigations undertaken
- Who has the authority to take action against an operator and nature of that authority
- Current work being undertaken on the regulatory frameworks, quality assurance, etc.

The report on this stock-take is available from the Department of Labour, (*Stock-take of risk management and safety provisions in the adventure and outdoor commercial sectors in New Zealand: a contributing paper for the review of risk management and safety in the adventure and outdoor commercial sectors in New Zealand 2009/10*, January 2010, ISBN 978-0-478-36033-2).

The review team also undertook a stock-take of risk management and safety provisions in the adventure and outdoor commercial sectors internationally, including work underway to improve those provisions (e.g. international standards, regulations, licensing regimes). The report on this stock-take is available from the Department, (*International stock-take of risk management and safety in the adventure and outdoor commercial sectors*, January 2010, ISBN 978-0-478-36036-3).

## **Consultation**

### **Questionnaires**

In November 2009, the Department of Labour disseminated two types of questionnaire. It did this either directly to stakeholders or through peak industry bodies and government safety agencies and by making them available from its website. One questionnaire was for adventure and outdoor commercial sector operators, associations and organisations. The other questionnaire was for individuals such as academics and staff of adventure and outdoor commercial sector businesses.

Respondents were asked to tick one or more pre-determined boxes to describe their interest in the review and to answer set questions. The report on this consultation is available from the Department, (*Summary of consultation responses: A contributing paper for the review of risk management and safety in the adventure and outdoor commercial sectors in New Zealand 2009/10*, January 2010, ISBN 978-0-478-36039-4).

### ***Submissions from the next-of-kin of people who died in the sector***

The Department wrote to the next-of-kin of people who died while participating in the sectors during the five-year period from 1 July 2004 to 30 June 2009 informing them of the review and inviting them to submit comments.

Comments from people who responded are discussed in Appendix 5: Review findings.

### ***Discussions with operators and other parties***

Members of the working group conducted interviews with adventure tourism operators, local government representatives, a regional representative of the Department of Conservation, tourism marketing agencies and an academic working in the adventure tourism field. The aim of the interviews was to gather information to complete the gap analysis, especially in relation to activities about which the working group felt that it had less knowledge.

A total of 20 interviews were conducted in Queenstown and Rotorua involving 24 individuals. These regions were selected because they have a high number of adventure tourism operators.

Key issues the interviews focused on were:

- The accuracy of information the Department held about specific activities
- The working group's thinking about the coverage, quality and implementation of the variables being considered in the gap analysis
- What new emerging activity providers did in relation to health and safety before commencing and during the first year or two of operations
- Regulators' views on whether bylaws, licensing regimes or other schemes that were in place were adequate
- What processes and practices land managers used to give consent for an activity on any land they managed and to monitor its ongoing operation
- Whether regulators or land managers had any concerns about jurisdictional gaps
- Criteria marketing agencies used for marketing operators
- Auditing and quality assurance processes used by the sector
- Qualifications
- Where improvements might be made to risk management and safety.

The findings of the interviews are discussed in Appendix 5.

### ***Comments from the external reference group***

The 67-member external reference group for the review was consulted by email throughout the review. Comments received on the stock-takes, gap analysis and problem definition were considered and changes made to those documents as the working group found appropriate. Due to time constraints, some comments on the options and recommendations were able to be considered prior to completing this report, while others were not. Where comments from the group were not able to be fully considered prior to completing this report, arrangements were made to discuss these with the Minister of Labour.

### ***National organisations focus group***

The Department held a focus group with seven national organisations that have expertise in industry standards and guidelines, qualifications and knowledge of the New Zealand Outdoor Registration Board process to elicit their views on those matters. These organisations were the New Zealand Mountain Safety Council, Water Safety New Zealand, Outdoors New Zealand, New Zealand Outdoor Instructors

Association, Skills Active, Adventure Tourism Travel Training Organisation (ATTTO) and Sport and Recreation New Zealand (SPARC).

The findings of the focus group are discussed in Appendix 5.

### **Gap analysis**

The working group for the review undertook a high-level, five-variable gap analysis of risk management and safety provisions in the sectors to assist the governance and working groups in developing the problem definition and options and recommendations for the Minister.

The report aimed to identify where:

- There are gaps in five key areas of risk management and safety provisions in the sectors (coverage)
- These risk management and safety provisions could be improved (quality)
- Operators need to improve their uptake of the risk management and safety provisions (implementation).

To enable it to complete the gap analysis, the working group first used a matrix tool to assess the activities examined by the review according to whether there is satisfactory coverage, quality and implementation of the following risk management and safety provisions that applied to them:

- Activity-specific legislation or other controls for entry
- Guidelines and standards
- Qualifications and licences
- Auditing and quality assurance processes
- Relevant associations.

These five provisions were the variables about which information was obtained for the stock-take undertaken for the review. The working group considered that high coverage, high quality and high implementation of these variables were the appropriate benchmarks for the gap analysis (taking into account the fact that the HSE Act provides a generic rather than an activity-specific legislative framework for managing health and safety issues).

The working group made determinations about the level of coverage, quality and implementation of these variables drawing on: the New Zealand stock-take; responses to the consultation undertaken for the review; agency knowledge (including from other experts brought in to assist with the gap analysis); targeted field visits; and communications with other experts.

The working group then analysed the determinations in the matrix by activity and by variable.

Note that during this process the working group also developed a set of principles for operators which strongly guided its thinking. These are shown in Appendix 7.

## **Risk profiling**

In order to make some determination about the scale of any risk management deficiencies affecting the sector, the working group undertook high level risk profiling for each activity covered by the review, assigning risk scores to each activity. The working group then compared the risk scores for each activity to the type of controls in place for those activities. The full methodology for this process and its findings are discussed under Appendix 6: Risk profiling.

## **Considering coroners' reports and judges' verdicts**

A review of coroners' findings for 21 deaths in the adventure and outdoor commercial sectors during the five-year period covered by the review, and two relevant judges' verdicts, was undertaken to identify if the recommendations made might provide useful to inform the review. The findings are discussed in Appendix 5.

## **Problem definition**

The review team then developed the problem definition. This has been amended for this report and has been re-presented as Section 4: Key findings.

## **Applying solutions to the different parts of the sector**

When considering the options and recommendations for the review, the review team recognised that solutions will need to suit the different characteristics of commercial adventure tourism and outdoor education businesses. Differences and similarities between these types of businesses are shown below.

<b>Adventure tourism context</b>	<b>Outdoor education context</b>
• Commercial for profit businesses	• Mostly not for profit businesses
• International and domestic clients	• Primarily domestic clients • Clients tend to be school groups
• Tendency to shorter duration experiences e.g. < 1 day	• Often longer duration experiences e.g. 3-5 day camp
• Clients – tendency for individual rather than group bookings	• Clients tend to be group bookings rather than individual
• Seasonal	• Less likely to be seasonal
• Usually single activity experiences	• Often multi-activity experiences
• Primarily leisure objectives ("guiding")	• Often educational objectives (curriculum, instructional, nature, personal development)
• High levels of new clients (limited repeat visitation)	• Often repeat clients e.g. schools

<b>Adventure tourism context (cont.)</b>	<b>Outdoor education context (cont.)</b>
<ul style="list-style-type: none"> <li>• Less school-aged clients (predominantly 15-34 yrs)</li> </ul>	<ul style="list-style-type: none"> <li>• Clients are often minors</li> </ul>
<ul style="list-style-type: none"> <li>• Strong focus on marketing</li> <li>• Tourism distribution channel focus</li> </ul>	<ul style="list-style-type: none"> <li>• Limited marketing of activity</li> </ul>
<ul style="list-style-type: none"> <li>• Performance of sector has potential to impact NZ's international reputation</li> </ul>	<ul style="list-style-type: none"> <li>• Less likelihood of causing damage to international reputation</li> </ul>
<b>Similarities between Adventure Tourism and Outdoor Education</b>	
<ul style="list-style-type: none"> <li>• Adventure tourism businesses are often contracted to run activities for outdoor education</li> <li>• Some businesses serve both markets</li> <li>• High cross-over of staff between sectors</li> <li>• Many independent contractors work both sectors</li> <li>• Successful new activities can grow quickly.</li> </ul>	

Note that the recommendations in this report apply to the commercial adventure tourism and outdoor education sectors and the sub-sectors within those that come within the terms of reference for the review.

### **Options and recommendations**

After identifying the priority issues to be addressed (as shown in Section V of this report), the review team then developed options and recommendations. These are shown in Section VI: Initiatives to address the priority issues and Section II: Recommendations to the Minister of Labour of this report.

## **Appendix 3: The New Zealand legislative / regulatory context**

This section has been reproduced from the report on the New Zealand stock-take done for the review.

### **Safety management framework applicable to the sector**

No specific legislation covers the health and safety of participants in adventure tourism activities in New Zealand.

Instead, because the majority of activities are organised by businesses for gain or reward, the sector is regulated by means of the HSE Act, Maritime Transport Act and Civil Aviation Act. The HSE Act promotes the health and safety of people at work and those affected by workplace activities.

Where particular hazards or workplaces warrant it, or there is social consensus on how certain hazards should be dealt with, regulations may prescribe a particular means of addressing them. This applies to particular hazardous equipment, such as pressure equipment and other machinery, amusement devices, or workplaces such as mines, and the presence of young people in workplaces.

Overall it appears that the approach taken in the HSE Act is effective. Since the introduction of the performance-based regime, performance (in terms of improving safety standards) has generally improved. However, there is always scope for more acceptable solutions to be developed by different sectors (so that businesses know what they have to do to comply with the HSE Act requirements).

Numerous statutes have an impact on adventure activities. The publication *New Zealand's Safety Related Law* provides a comprehensive overview of the relevant New Zealand legislation and regulations related to safety or injury prevention. This can be found at:

[www.nzips.govt.nz/documents/safety\\_related\\_law\\_update\\_2008.pdf](http://www.nzips.govt.nz/documents/safety_related_law_update_2008.pdf)

New Zealand's no-fault Accident Compensation Scheme administers a 24-hour, 7-day per week, no-fault, comprehensive accident insurance scheme covering New Zealanders and those people visiting New Zealand. In return for this cover, people do not have the right to sue for damages if another person is at fault.

A significant network of sector-specific associations and user groups are an integral part of New Zealand's adventure and outdoor sectors. Associations (to a greater or lesser degree) organise meetings, workshops and newsletters for operators as well as provide a single point of contact for regulators or others who seek to work with the sector. A significant amount of activity is undertaken by these groups and a number have been involved in establishing industry codes of practice and standards for the adventure and outdoor commercial sector.

### **Agency jurisdictions and jurisdictional matters**

The Department administers the provisions of the HSE Act and various regulations made under that Act (and both the CAA and Maritime NZ are designated agencies

under Section 28B of the Act, that is, they are responsible for enforcing and investigating breaches of the Act in their spheres of jurisdiction).

The Department, CAA, Maritime NZ, DOC and territorial local authorities all have various jurisdictions for safety in adventure tourism.

Some agencies have the authority to certificate commencement of an activity for specified activities or to restrict its commencement through consenting processes, but licensing or approval is not required for many operators to commence commercial activity provision.

Powers to order adventure and outdoor commercial sector activities to cease to operate are similarly constrained.

### **Consumer education**

A wide range of initiatives exist to educate consumers of adventure and outdoor commercial sector activities about the risks involved in participation and how to ameliorate those risks. These are carried out by a number of government and non-government agencies, and by the sector itself.

### **Agency resources**

Agencies that are involved in the review report having varying levels of resources to carry out their regulatory functions in relation to the sector.

### **Commercial adventure aviation**

'Adventure aviation' is the name given to a large and growing segment of New Zealand's adventure tourism industry. Adventure aviation operations are considered to be those operations carrying passengers for hire or reward where the object of the operation is for the passenger's recreational experience of participating in the flight, or engaging in the aerial activity.

By their nature and definition, adventure aviation activities involve a level of safety risk that is significantly higher than that encountered in commercial air transportation<sup>15</sup>. Adventure aviation activities presently fall within a safety regulatory framework that was developed for purely sport and recreational purposes rather than commercial air operations. Comprehensive standards for entry control, monitoring, and exit control do not currently exist for commercial adventure aviation operations, and there is no existing CAA certification process for adventure aviation operators.

Accident and injury statistics covering adventure aviation activities are classified by the CAA under the "sport transport" safety target group. As of September 2009, the average social cost for adventure aviation activities was approximately \$65.00 per person per hour of exposure. In comparison, the average social cost for air transport operations is approximately \$0.10 per person per hour of exposure.<sup>16</sup> In contrast to

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<sup>15</sup> Statistical analysis shows the risk of injury (per operating hour) while engaging in adventure aviation activity is approximately 600 times greater than flying on an air transport/commercial transport flight.

<sup>16</sup> CAA Aviation Safety Summary Report, 1 July – 30 September 2009

other safety target groups, the social costs associated with adventure aviation activities are significantly higher and trending upwards.<sup>17</sup>

This review notes that the deficiencies in the safety regulatory framework applicable to commercial adventure aviation and the potential to improve the safety performance of the sector have already been identified by the Ministry of Transport. The nature of adventure aviation operations precludes them from the general concepts and safety standards for air transport operations that are required to be conducted under the Civil Aviation Rules applicable to 'normal' commercial air transport operations. The Ministry of Transport has a Rule (Part 115 – Adventure Aviation) at an advanced stage of development in the current aviation Rules programme approved by Cabinet which will prescribe requirements for the certification and continuing operation of operators conducting adventure aviation operations. Part 115 will apply to operators wishing to carry passengers for hire or reward while performing the following adventure aviation activities:

- an A to A flight in an aeroplane or helicopter issued with a *standard category* airworthiness certificate conducting formation flight, aerobatic manoeuvres, and similar non-standard flight manoeuvres such as steep climbs, steep descents, and steep turns
- an A to A flight (including an interim water landing for amphibious aircraft) in an aircraft issued with an appropriate *special category* airworthiness certificate
- an A to A flight in a Class 2 microlight aircraft
- a flight in a hot air balloon
- a flight in a glider
- a parachute-drop aircraft operation
- a tandem parachute operation
- a tandem hang glider (including para-glider) flight<sup>18</sup>.

The objective of Rule Part 115 is to:

- improve passenger/participant safety
- contribute to economic development by protecting and enhancing New Zealand's reputation as a safe place in which to participate in commercial adventure aviation activity
- remove distortions from the current safety regulatory framework that unreasonably restrict certain activities from taking place and which see different safety standards being applied to very similar operations
- provide a safety regulatory framework that encourages growth and innovation in the commercial adventure aviation sector.

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<sup>17</sup> CAA Aviation Safety Summary Report, 1 July – 30 September 2009

<sup>18</sup> Note that the Ministry of Transport advises that it is not intending to include parasailing within the scope of the proposed Rule Part 115. Analysis shows that parasailing is a lower risk activity than the other adventure aviation activities. In addition, given that the only commercial parasailing in New Zealand is conducted off vessels which are governed by maritime rules and that Civil Aviation Rule Part 101 specifies requirements for the aviation element of the operation, it is considered that there is no justification for including parasailing within the scope of Part 115.

Part 115 will require adventure aviation operators to be certificated in much the same way (although not to the same standards) as air transport operators that are currently required to be certificated under other Rule Parts. In particular, operators will need to satisfy the Director of Civil Aviation, through their exposition, that:

- they have appropriate management systems, structures, and operating procedures in place to ensure compliance with the relevant safety standards
- employees are appropriately qualified, and trained
- equipment is appropriate to the task and properly maintained
- key people are fit and proper to undertake their responsibilities.

In summary, the Ministry of Transport intends to:

- define a new category of commercial aviation activity within the general aviation sector to be called “adventure aviation”
- regulate the various activities that make up the commercial adventure aviation sector through a new rule Part 115 and through consequential amendments to existing rule Parts
- develop within the proposed Part 115 a set of general requirements that are applicable to all adventure aviation operators along with separate requirements that are specific to the individual activities
- include, as a key element of the proposed rule Part, a requirement for individual operators to hold an aviation document issued under Part 115
- administer the proposed Part 115 utilising industry experience as much as is practicable.

### **Commercial jet boating and rafting**

Commercial jet boating and rafting operations have been regulated since 1999 by Maritime Rule Part 80 made by the Minister of Transport in accordance with the process for rule-making in the Maritime Transport Act 1994. Part 80 sets specific minimum standards for the safe operation of commercial jet boats and rafts and no operations may commence until they have been inspected for compliance with those relevant standards. All jet boating and rafting operations are subject to ongoing and compulsory audit and inspection to ensure their continued compliance with Part 80.

The regulatory approach behind Part 80 has proven for the most part to be appropriate and serviceable, but a number of technical changes have been proposed following a review of the sectors by Maritime NZ. As a consequence, the Ministry of Transport proposes to replace Part 80 with two new rules - Maritime Rules Parts 81 and 82 - that deal separately with jet boating and rafting. Work on the amendments is well advanced.

## **Appendix 4: The international context**

The stock-take of risk management and safety provisions in the adventure and outdoor commercial sectors internationally undertaken for the review provided information about how New Zealand's safety management framework for the sectors compares to those of other countries. The international stock-take canvassed the regulation of adventure tourism activities in various countries, primarily in Australia, Canada, Chile, France, Ireland, Norway, Switzerland, the United Kingdom, and Utah in the United States. The summary of that report is reproduced below.

### **Size of the tourism sector**

Tourism is a significant contributor to the economies of the countries examined: Organisation for Economic Cooperation and Development (OECD) data (2009) shows that as a proportion of GDP, tourism in general ranges from 2% in Canada to 6.3% in France (and 9.2% in New Zealand). The adventure activity sector is considered to be a growing part of the tourism industry in all of these countries. However, due to the lack of standardised definitions, it is not possible to provide a set of comparable statistics showing the size of the adventure activity sector in the countries examined in relation to employment numbers and types, participation, and economic value.

### **Incident rates**

Information on incident rates in the adventure tourism sector internationally is poor. While work has been done on some activities and some locations, incident databases are in their infancy.

### **Approaches to safety and risk management**

Internationally, risk and safety management in adventure activities has increasingly received the attention of government agencies. In addition to workplace health and safety legislation, regulatory or non-regulatory accreditation of safety provision in adventure activities (for people who are dependent on the leadership and judgement of others) can be categorised in the following ways:

- accrediting the provider organisation's fitness to oversee the risk management and safe delivery of the activity
- certifying the activity instructor/guide who is with a dependent client.

Accreditation (not statutory regulation) of providers is overtaking the certifying of instructors/guides. Provider accreditation takes into account all the elements of operational quality (one of which is instructor/guide qualifications and competence).

In the countries examined in this work, provider accreditation is generally non-statutory and incorporates inspection. An exception to this is for providers of some activities for under 18-year-olds not in the company of their parents in the UK.

Although this review has found little comment on the relative merits of statutory versus non-statutory schemes, the latter appear to be preferred perhaps because:

- voluntary regimes may in effect be obligatory in order for providers to obtain insurance, access public land or make use of state supported marketing

- statutory regulations tend to set minimum standards whereas accreditation emphasises high standards
- non-statutory accreditation schemes provide a balance between credible assurance of safety standards without excessive administration burdens on providers or supervisory bodies.

The table below indicates the approaches taken to the adventure tourism sector as a whole by the jurisdictions included in this review.

<b>Non-statutory accreditation programmes</b>	<b>Statutory regulations</b>	<b>Other</b>
Australia - Adventure Activity Standards	Costa Rica - Regulations for the Operation of Adventure Tourism Activities	Northern Ireland – currently considering an accreditation scheme
Brazil - Aventura Segura programme	France – statutory qualifications for activity leaders	
Chile - Quality System for Adventure Tourism	United Kingdom - AALA <sup>19</sup> (under 18s without parental guidance)	
France – Quality Tourism brand	Yukon (Canada) - Wilderness Tourism Licensing Act	
India – Basic Minimum Standards for Adventure Tourism activities		
New Zealand - Outdoorsmark <sup>20</sup>		
Switzerland – Safety in Adventure certifications		
United Kingdom - Adventuremark		

### **Effectiveness of approaches**

No material evaluating the various approaches in relation to improved safety was found in the course of this work, however licensing or accreditation of the provider rather than certification of an instructor or leader appears to be preferred presumably because it encompasses more dimensions of performance than instructor accreditation.

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<sup>19</sup> Adventure Activities Licensing Scheme.

<sup>20</sup> OutdoorsMark (launched in 2004) is the national outdoor safety quality assurance programme designed specifically for organisations involved in outdoor education, outdoor recreation, and adventure activities ([outdoorsnz.org.nz](http://outdoorsnz.org.nz)).

Annett (2005) who reviewed the approaches in a number of countries considers (without providing supporting reasons) that the most effective schemes are those in France and the UK where it is an offence to offer some activities without going through the appropriate systems and where there are statutory standards and safeguards in place to protect the dependent participant's interests.

### **Current work on approaches to safety and risk management**

The International Organisation for Standardisation (ISO)<sup>21</sup> is currently working to develop consensus-based international standards in adventure tourism that would provide a common basis for safety management. At the time of writing, New Zealand is not participating in this. The new Working Group on Adventure Tourism leading this work will focus on developing working plans that lead to three new areas of international standards including:

- Safety management requirements (*including a glossary of terms*)
- Leader/guide competence/cies
- Minimum information provided to clients<sup>22</sup>.

The timeframe for completing these standards was not known to the Department at the time of writing this report. The Department recommends investigating whether New Zealand should be represented on the working group.

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<sup>21</sup> The International Organization for Standardization is a network of the national standards institutes of some 162 countries, with a central office in Geneva, Switzerland, that coordinates the system and publishes the finished standards (iso.org).

<sup>22</sup> <http://www.adventuretravelnews.com/first-iso-adventure-tourism-working-group-meeting-set-for-october-23-adjacent-to-2009-adventure-travel-world-summit-in-quebec-canada>

## **Appendix 5: Review findings**

### **A. The New Zealand stock-take**

The New Zealand stock-take undertaken for the review should be read in conjunction with this report. The stock-take is available from the Department, (*Stock-take of risk management and safety provisions in the adventure and outdoor commercial sectors in New Zealand: a contributing paper for the review of risk management and safety in the adventure and outdoor commercial sectors in New Zealand 2009/10*, January 2010, ISBN 978-0-478-36033-2).

### **B. The gap analysis**

The gap analysis undertaken for the review involved an analysis of the activities according to whether there is satisfactory coverage, quality and implementation of:

- Activity-specific legislation or other controls for entry
- Guidelines and standards
- Qualifications and licences
- Auditing and quality assurance processes
- Relevant associations.

*Coverage* in this context refers to whether activity-specific legislation or other controls for entry, guidelines and standards, qualifications and licences, safety auditing processes, and relevant associations exist, are in place or are available.

*Quality* in this context refers to whether activity-specific legislation or other controls for entry, guidelines and standards, qualifications and licences, safety auditing processes, and relevant associations are fit for purpose and of a high standard.

*Implementation* in this context refers to whether activity-specific legislation or other controls for entry, guidelines and standards, qualifications and licences, safety auditing processes, and relevant associations are fully implemented, and/or have buy-in or uptake.

The findings of the gap analysis in relation to the five variables were as follows.

#### ***Activity-specific legislation or other controls for entry***

Based on the information available to it, the working group noted that activity-specific legislation and/or activity-specific controls for entry apply to the following activities examined by the review:

- Cycling (the Road Code for Cyclists)
- Hunting (Firearms Regulations 1974)
- Infrastructural attractions, including go karts (Amusement Device Regulations 1978 and Code of Practice for Passenger Ropeways in New Zealand AS/NZS 5848)
- Motorcycle touring (Land Transport Rule: Operators Licensing 2007)

- Aspects of ski-field operations (HSE Pressure Equipment, Cranes and Passenger Ropeways Regulations 1999 apply and other legislation for the road access ways where they are private roads)
- Diving (numerous – see New Zealand stock-take for the review)
- Jet boating (Maritime Rule Part 82 – Commercial Jet Boat Operations and Part 80 Marine Craft used in Adventure Tourism)
- Rafting (Maritime Rule Part 80 Marine Craft used in Adventure Tourism/81 Commercial Rafting Operations)
- All aviation activities (Civil Aviation Act 1990).

For other activities, no activity-specific legislation applies in relation to the health and safety of participants. Instead, because the majority of activities are offered by businesses for gain or reward, the sector is regulated by the HSE Act.

Additionally, DOC concessions are required for all commercial activities on public conservation land and QLDC's district plan requires that any operator of any adventure tourism activity seeks resource consent once that operator has provided the activity to five people for reward (it is then defined as 'commercial'). It is a requirement for a concession from DOC and for resource consent from QLDC that applicants have a safety management plan.

When considering the quality of the activity-specific legislation or other controls for entry that apply to the activities examined by the review, the working group was interested in their fit for purpose. It noted the following issues with the activity-specific legislation that is in place for some activities.

- The Amusement Device Regulations 1978 need reviewing. A review of these regulations is planned for 2010/11
- Amendments are being proposed to the existing rules for jet boating and rafting
- The proposed CAA Part 115 Rule will address concerns about the legislation covering adventure aviation activities.

In terms of implementation of legislation or other controls for entry, while not activity-specific, the working group heard that some operators are likely to be transporting passengers without a current passenger endorsement on their drivers licence. Whether using a bus, shuttle, taxi or another vehicle, if operators carry passengers for some type of fee, their drivers' licences must include a current passenger (P) endorsement. This verifies that they have the proven skills to provide this service safely.

### ***Guidelines and standards***

Based on the information available to it, the working group noted that guidelines and standards of some form exist for most activities, but were notably absent for:

- Hot air ballooning

- Infrastructural attractions (e.g. bridge swinging and flying fox-type thrill rides)
- Luge riding<sup>23</sup> / go karting
- Marine mammal swimming
- Motorcycle touring
- Sand boarding
- Surfing
- Water skiing.

When considering the quality of the guidelines and standards that apply to the activities examined by the review, the working group made some key assumptions. These were:

- New Zealand Standards that apply will be of a high standard
- The proposed CAA Part 115 Rule will introduce standards that are fit for purpose
- The code of operation for riding plastic spheres (globe riding) is likely to be of a high standard as the operator has involvement in international forums for safety management, has worked to meet the ASTM (American Society for Testing and Materials) F119 standard on emerging attractions, and has attained insurance through an international firm for that activity.

The working group was not able to assess the quality of the guidelines and standards that are available for the activities examined by the review, but noted the following gaps in development or implementation.

- The draft code of practice for heli-ski operators needs further work before it can be considered functional
- The review of guidelines for river boarding/river sledging is not yet complete
- There appears to be variable buy-in and uptake of the guidelines and standards for indoor rock climbing, mountain biking and quad bike touring
- There appears to be poor uptake of available guidelines for land-based fishing
- Guidelines and standards for commercial microlight activities are not implemented although these standards will be included in the proposed CAA Part 115 which is strongly supported by the microlight sector.

### ***Qualifications and licences***

Based on the information available to it, the working group noted that qualifications of some form exist for most activities, but appeared to be notably absent for:

- Canyoning (although a range of relevant qualifications in related activities – e.g. caving – do exist)

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<sup>23</sup> Although the main and perhaps only operator of luge rides on artificial surfaces at present has very strong systems audited under ACC's Workplace Safety Management Practices Programme.

- Cycling (although Cycle Tour Operators of New Zealand have internal competencies – Guide Mechanic Standards (Cycle 1 and Cycle 2))
- Quad bike touring
- Motorcycle touring
- Globe riding (plastic spheres).

The working group also noted that the development of specific white-water boarding qualifications remains in progress.

When considering the quality of the qualifications and licences that apply to the activities examined by the review, the working group made a key assumption that qualifications registered on the New Zealand Qualifications Framework are fit for purpose (note that to appear on New Zealand's Register of Quality Assured Qualifications, qualifications must be approved and quality assured, and delivered by an accredited education or training organisation).

The working group was not able to assess the quality of the qualifications and licences that are available for the activities examined by the review, but noted that clarity is needed in terms of which qualifications relevant to kayaking apply in different environments (e.g. sea kayaking versus swift water kayaking).

The working group noted the following concerns about implementation of the qualifications and licences that are in place for some activities:

- Hunting and mountain biking operators show poor uptake of the qualifications available for these activities
- Several operators reported that Transport Service Licence endorsements on drivers' licences took too long and were too expensive to obtain. This led some operators to avoid obtaining them (and not pursuing obtaining a Qualmark audit because of this). Several operators reported difficulty complying with the requirement for a Transport Service Licence because of a shortage of people who held them to employ.

### ***Safety auditing processes***

Based on the information available to it, the working group noted that Qualmark, ROSA or OutdoorsMark safety auditing is available for all activities, should they wish to be audited. Additionally, safety auditing processes are available for all water-based activities required to meet vessel and equipment audits under maritime rules. Safety audits under the ACC's Workplace Safety Management Practices Scheme are also available for some activities and Bureau Veritas is also available to audit some operations.

In the time available, the working group was not able to assess the quality of the safety auditing processes available for the activities examined by the review. However, it noted the following points in relation to the safety auditing processes that are available:

- Some Qualmark Tertiary criteria are in need of review and this process has begun
- The coroner's findings<sup>24</sup> in respect of the 2008 Mangatepopo Gorge canyoning tragedy included a recommendation that Outdoors New Zealand reviews its policies and procedures around the OutdoorsMark safety audits and the training provided to its auditors. Note that the working group understands that Outdoors New Zealand undertook an internal review of all processes associated with OutdoorsMark after this event, annual moderation processes continue to be reviewed, and an external review of OutdoorsMark is underway.

The working group noted that the following activities appeared to have poor or variable uptake of safety auditing processes.

- Events (unless they were international events)
- Quad bike touring
- Land-based fishing
- Indoor rock climbing
- Motorcycle touring
- Diving (from vessels greater than six metres operating beyond five nautical miles from shore)
- Surfing
- Water skiing
- Hot air balloons.

### ***Relevant associations***

Based on the information available to it, the working group noted that relevant associations do not appear to exist for the following activities.

- Canyoning (although one is being formed)
- Quad bike touring (although a strong user group exists)
- Horse trekking
- Indoor rock climbing
- Infrastructural attractions
- Luge riding/go karting
- Motorcycle touring
- Sand boarding (although there appear to be few operators in New Zealand)
- Globe riding (there is only one operator in New Zealand)
- Marine mammal swimming
- Water skiing
- Microlight passenger flights.

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<sup>24</sup>Coroner Devonport. Mangatepopo Gorge Inquest – Written Findings of the Coroner. 30 March 2010.

The working group was not able to assess the fit for purpose of all of the associations available for the activities examined by the review, but made the following observation:

- Cycle Tour Operators of New Zealand is working to make its organisation more relevant to mountain biking operators to attract more members and to be more representative of the wider cycle tour industry.

The working group noted that the following activities appeared to have poor or variable uptake of membership in associations, where associations exist.

- Cycling (amongst smaller operators)
- Small events
- Heli-skiing (the operators' group being quite new)
- Walking/tramping
- Sea kayaking
- Diving.

### **C. The consultation**

The summary report on consultation responses developed for the review should be read in conjunction with this report. The report is available from the Department, (*Summary of consultation responses: A contributing paper for the review of risk management and safety in the adventure and outdoor commercial sectors in New Zealand 2009/10*, January 2010, ISBN 978-0-478-36039-4).

### **D. What families told us**

People who lost a family member to a fatal incident while they were participating in adventure or outdoor commercial sector activities in New Zealand during the five-year period covered by the review were invited to submit comments. Responses were received from six families. The review team acknowledges that it would have been difficult for families to engage in this process.

Families made a number of recommendations to improve the risk management practices of adventure and outdoor commercial sector operators.

The overwhelming message communicated by families was the need for change. A key change recommended was in safety culture. One of the families noted the following Taiwanese proverb to illustrate this point:

‘The attitude determines the altitude’ — this is to say that from a person’s everyday manner, one can tell his/her judgement and attention to detail.

Families sought an assurance that there will be more accountability for actions and decisions from regulatory agencies and adventure tourism operators.

### ***Themes in families' responses***

Themes in the responses from families have been summarised below.

#### Effect on families

Families expressed that the pain, impact and sense of suffering that they endure due to the loss of a loved one is immense and immeasurable. There is nothing that can replace their grief and loss. This loss extends to the loss of enjoying a future life together and the ongoing impact of the death. They said there would, however, be some assurance and comfort in knowing that the legacy of the death of their loved ones was that improvements in safety were made.

Two families said that the differences between Eastern and Western cultures need to be considered. This includes acknowledging the pain and difficulty associated with spiritual damage that has a negative impact on family members' health and quality of life and the impact of the long-term financial loss through losing a main income earner for the family.

This was articulated in one of the responses:

In Chinese society, the child is responsible for supporting his/her parents. This is the standard rule of filial piety. To be more specific, in a Chinese family, the child is part of the property of the parents, and is their retirement fund. Therefore, we lost our only child, lost the extension of our generation and the chance of enjoying life together with our offspring, and also lost our only hope, property and future.

Two families expressed a high degree of dissatisfaction with the action taken by the regulatory authorities against the operators offering the activities in which their loved ones died. They said that this compounded their grief.

Families' recommendations were:

- There should be more attention to the difficulties and cultural differences experienced by the parents of international students as the result of an accident
- The New Zealand government should provide interpreting assistance for families where required
- The New Zealand government should provide support for families to enter New Zealand, and all other necessary and relevant support
- The New Zealand government should issue a special permit that would give the deceased's family a status equivalent to New Zealand residents that would allow relatives to visit the accident site from time to time. In addition, a special permit would allow families to live in New Zealand long-term to benefit from the mutual support of other families who suffered as a result of the same accident.

### Safety Culture

Families said that there could be improvements to the safety culture of some companies and staff attitudes. Recommendations were:

- The attitude of staff should be more careful, and the level of professional qualifications and observation ability must be improved
- Companies should clearly communicate the risks involved with an activity to clients in advance of undertaking the activity
- Safety and risk management should be the top priority for all outdoor events. Event managers, marshals and participants should be more aware of their responsibilities and the risks involved and follow good practice. They should listen and act on any information received.

### Efficiency of the New Zealand justice system

Some families said that they felt that the efficiency of the New Zealand justice system was low. They said that the length of time it took to prosecute and sentence operators added to their distress. They also noted that financial compensation payments were not always made in a reasonable time. Their recommendations were:

- Improvements need to be made to New Zealand's justice system that reduce the length of time between prosecution and sentencing
- Regulations should be put in place that allow for the prosecution of individuals who cause death or injury.

### Coronial System

Families said that they considered the length of time it could take for a coronial inquest to occur was an unacceptable system failure that also led to delays in any recommendations being implemented. A recommendation was:

- Improvements need to be made to the Coronial system to reduce the length of time between a death and an inquest occurring.

### Compensation is low and inadequate to cover costs

Where ACC payments or payments by operators have occurred, the financial compensation is considered to have been minimal. Families reported that often, the compensation payments have not covered the costs of visiting New Zealand to make arrangements following the death. One family noted that New Zealand compensation levels are below those of some developing countries. This is seen as demonstrating that the New Zealand government does not value safety and take risk management seriously. A recommendation was:

- There should be higher financial compensation for families following an accident.

#### New Zealand's no-fault accident compensation scheme

Some families considered that New Zealand's no-fault accident compensation scheme and 'no compulsory security provisions' were inappropriate for a developed country. Some also said that the inability to sue operators in New Zealand, except for exemplary damages, provided no incentive for companies to have good safety practices. A recommendation was:

- There should be compulsory business insurance and 'security provisions'.

#### Inadequate penalties for non-compliance with legislation

Some families said that minimal fines and low levels of enforcement were a disincentive for compliance with safety legislation. They said that the minimal fines did not deter companies from taking high risks and ignoring guidelines.

One family noted that the fine for a company that was prosecuted for a fatality was inadequate and would not have equalled the amount of money that was spent by the person who died while they were in New Zealand as a tourist before their death. A recommendation was:

- There should be higher penalties for operators who are prosecuted and found guilty.

#### Licensing

Some families considered that licensing adventure and outdoor commercial sector businesses was necessary. They said this would:

- Ensure that businesses do not commence operating without any controls
- Ensure new activities meet safety standards and have safe operating procedures before they start operating
- Change the safety culture of individuals within some companies.

A recommendation was:

- There should be licensing of adventure tourism business operators to ensure businesses do not commence operation without any controls and that new activities meet safety standards and have safe operating procedures before they start operating.

#### Limitations of the HSE Act

The HSE Act was considered by some families to have a number of limitations and "lack teeth" as a mechanism for managing adventure tourism activities. Specific concerns were:

- The HSE Act is being administered in a reactive rather than proactive way
- The HSE Act is not enforced by regular visits to companies or by any other means
- Lack of proactive enforcement contributes to companies taking risks
- By default, a new activity can commence without inspection.

Families' recommendations were:

- The Department of Labour's investigation and prosecution procedures should be more robust
- There should be a requirement for external checks
- New Zealand government authorities should inspect and examine the equipment of outdoor activity companies and the safety of the activity from time to time.

#### Adequacy of guidelines

Families said that existing safety guidelines for operators need to be improved. This included specifying safe operating procedures and equipment requirements specific to activities. Recommendations were:

- There needs to be a higher degree of clarity about the safety obligations of operators, and existing guidelines need to be improved. This includes specifying safe operating procedures and equipment requirements specific to activities
- Adventure activity standards should be implemented that are similar to those in Australia. Standards should outline risk management and key business practices, such as emergency procedures and leader competency, with the aim to encourage responsible and consistent practices across New Zealand's adventure industry.

#### Equipment

Families said that operators should have adequate and fit for purpose equipment for the activity. Their recommendations were:

- To review the rescue method and rescue equipment held by each outdoor activity company
- People participating in rescues should be provided with better and more advanced equipment
- The leader of each activity team should be equipped with better and more advanced tools for rescue
- There should be roll bars on quad bikes
- Personal Flotation Devices should meet safety standards.

#### Media coverage, advertising and information on company websites

Some families commented on partial reporting by media and the impact this had on them.

One family expressed concern that a company involved in a fatal accident stated on its website that it had won an award. The marketing was viewed as very painful for the next of kin.

Families' recommendations were:

- The government should restrict the media to impartial reporting which does not blame the victims and avoids causing additional hurt to the victims' families
- Advertising information and endorsements by tourists on company websites where those companies have had a fatal accident should be banned.

Recommendations made by families whose loved ones died in the Mangatepopo Gorge tragedy (specific to outdoor education activity)

- Relevant authorities and agencies (such as the Ministry of Education, agencies organising outdoor activities, evaluation agencies, training companies and schools) should ensure that school teachers and outdoor activity instructors understand the meaning of "catchment area" and "run off detention effect"
- Schools should be one of the supervision authorities in addition to the provider that organises the activity. Even if a school has signed an agreement with the activity supervisor, they should have responsibility as a supervisor
- Staff from relevant agencies should never allow students to undertake water-based activities when the water has been estimated to be low by eyesight only
- Each leader's experience, professional knowledge, observation ability, sense of judgement, emergency management skills and skills in leading students out of emergency situations must be strengthened
- Individuals whose work involves keeping people safe should have to pass some kind of national qualification and be licensed.

Activity oversight by voluntary associations

While it was acknowledged that activity-specific voluntary associations can provide a forum for sharing information and providing training courses, they were not considered effective as a means of setting consistent standards for all businesses. Voluntary associations were seen as more effective for the companies that are already well managed and take safety seriously.

Difference in criteria for running activities

Families said that there should be consistency in controls and requirements to operate an activity.

## **E. Lessons learnt from fatalities**

### ***Review of coroners' reports and judges' verdicts***

A review of coroners' findings for 21 deaths and two judges' verdicts was undertaken to identify if the recommendations that were made might provide useful information to inform the review.

The Coronial Service of New Zealand provides an independent coronial system for investigation and to prevent deaths and promote justice through:

- Investigations, and the identification of the causes and circumstances, of sudden and unexplained deaths, or deaths in special circumstances; and
- The making of specified recommendations or comments that, if drawn to public attention, may reduce the chances of the occurrence of other deaths in similar circumstances.<sup>25</sup>

As a number of case files are still active and under the jurisdiction of a coroner, not all relevant case information could be reviewed. Additionally, three coroners' reports made no recommendations or comments.

The deaths covered by the coroners' reports occurred in the following activities: heli-skiing, mountain climbing, skiing, quad bike touring, infrastructural attractions, diving, canyoning/outdoor education, indoor rock climbing and events – motorbike racing. The two judges' findings related to quad bike touring and river boarding.

There is an emphasis in the coroners' findings and judges' verdicts on the importance of operators not only having safety management procedures in place to manage the risk of the activity, but also having some assurance that the procedures are being implemented. One of the features of participating in a high risk activity is that often it is carried out in extreme and not always predictable terrain, and as such there is an inherent risk to those participating in the activity that cannot be entirely eliminated.

In the inquiry into the deaths that occurred at the Sir Edmund Hillary Outdoor Pursuits Centre, Coroner Devonport summarised the importance of having proper risk identification and risk management procedures in place in his final comment:

All reasonable steps must be taken to minimise the chances of serious injury. Proper risk identification and risk management is vital to avoid serious injury or death. In the Mangatepopo gorge, this requires an awareness of the environment, identification of hazards, proper assessment of the likelihood of adverse events occurring, and plans prepared if an adverse event occurs. Even if those risk management strategies are in place, complacency can defeat them. Continual awareness is required. For commercial/educational outdoor educational institutions, regular emergency exercises are required.

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<sup>25</sup> <http://www.justice.govt.nz/courts/coroners-court/coronial-services-of-new-zealand>

Under the HSE Act, adventure tourism operators have a duty of care to their participants and are therefore liable should they fail to provide the appropriate standard of care to their participants.

As Judge Tompkins put it in his decision in the case of the Department of Labour versus Waitomo Big Red Limited<sup>26</sup>:

Generally, the scheme of the Act is preventative, in that it places relatively onerous positive duties on, in this case, the defendant company, to seek out relevant hazards, then proactively anticipate the possible harm, and to 'take all practicable steps' to ensure that no hazard is present or arises that causes harm.

Judge Tompkins also states:

There is, by the Act's adoption of the necessarily relative concepts of 'reasonably practicable...in the circumstances', a balance to be found. It is neither possible nor desirable to remove all risk. To do so would be to the longer term detriment of New Zealand.

The coroners' recommendations and judges' verdicts provide guidance on the expectations of how adventure tourism operators should meet their legal obligations to operate within reasonable levels of risk to protect client safety.

### ***Key recommendations in coroners' reports***

Coroners made the following recommendations:

#### Emergency procedures

- Ensure that, at all times in which it is technically and practically possible, a client has an independent means of summoning help in the event of incapacity of their guide
- All individual companies should have emergency procedures and systems in place, and where practicable, these are tested.

#### Auditing

- Ensure that facilities are formally inspected at regular intervals
- Outdoors New Zealand should review its policies and procedures around the OutdoorsMark safety audits and the training provided to its auditors.

#### External safety training and education

- Operators should seek external safety training and education.

#### Guidance from national organisations

- Operators should take guidance from national industry organisations

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<sup>26</sup> 19/11/2009, Judge Tompkins, DC Te Kuiti, CRI-2009-073-000065.

- National organisations and/or associations should establish an annual “skills and knowledge” meeting to be run in conjunction with the annual general meeting, to include discussion and analysis of any incidents/accidents of the past year and of previous years, if relevant, and to promote knowledge to their members of the content and findings of the session.

### Equipment

- Ensure regular maintenance of equipment or facilities.

### Information so clients can make informed decisions

- Provide information for clients to make informed decisions about their skill levels and ability to participate in the activity
- An information sheet should also give basic instructions on safety, including emergency contact details if something goes wrong
- Clients should understand the risks of participating in the activity and have the informed opportunity to continue with the activity or not.

### Licensing of outdoor education/adventure operations

- Government should consider licensing outdoor education/adventure operations which provide activities to persons under 18 years of age to ensure minimum standards are met.

### Meteorological Service (MetService) weather warnings and forecasts

- The MetService should include severe weather warnings in applicable regional forecasts
- The MetService should issue written forecasts with the time of the preparation of the forecast clearly displayed
- The MetService should review its procedures around follow-up communications to forecast recipients when there is an error in a forecast.

### Infrastructural Attractions (Amusement Devices)

- The Department should prepare clear operational guidelines and training procedures for operators of amusement devices that cover all aspects of safe operation of such devices.

### Canyoning

- Advice should be given to the public and in particular, training institutions, including polytechnics, that linking individuals swimming or floating in moving water is potentially dangerous.

### White river boarding

- Operators should seek out external white water safety training and education.

## **F. Lessons learnt from workplace serious harm accidents**

Due to the limited centrally-held data held by the Department of Labour on the cause and outcomes of serious harm accidents, the working group was not able to conduct a review of serious harm accidents to determine lessons that might be learnt.

Readers of this report should also note the following key issues with the recording and reporting of statistics given for workplace serious harm accidents and fatalities.

### ***Serious harm accidents***

- The working group acknowledges that there is likely to be under-reporting of workplace serious harm accidents
- Some workplace serious harm accidents have been reported and recorded as such when they appear not to have been workplace serious harm accidents according to the definition of serious harm. Data available at the time of writing this report did not allow the working group to isolate out those cases
- Some workplace serious harm accidents may not be fairly attributable to the provision of the activity (e.g. one 'accident' reported was a member of the public suffering a seizure while entering the jump area for a bungy)
- Some workplace serious harm accidents may not be fairly attributable to the activity provider (e.g. a mountain boarder who injured his wrists was not wearing wrist guards despite them being supplied and a recommendation made that they be worn)
- Classification of workplace serious harm accidents by activity type is inconsistent in some cases (e.g. dirt bikes classified as motorcycles in some cases and mountain bikes in others)
- ACC claims from employees of adventure and outdoor commercial sector operators who are injured while providing the activity to clients are registered as workplace accidents, but ACC claims from clients participating in the activities are registered as recreational activities.

### ***Fatalities***

- Some fatalities may not be fairly attributable to the provision of the activity (e.g. death of a fishing guide and his client in a hut)
- Where a fatality is deemed not to have occurred in a workplace, it is referred to the appropriate agency (e.g. Energy Safety Services or the New Zealand Police)
- Some fatalities may not be fairly attributable to the activity provider (e.g. a possible cardiac arrest while diving).

## **G. Interviews with operators and other agencies**

Members of the working group conducted interviews with adventure tourism operators, local government representatives, tourism marketing agencies and an academic working in the adventure tourism field.

## ***Key themes from the interviews***

### Changing safety culture

Some operators said that the main challenge they face is changing the safety culture of a few, and sometimes new, businesses who operate less professionally and 'under the radar'. They said that the current operating environment has allowed some businesses to commence and operate for a length of time (sometimes years) without any entry requirements, standard operating procedures in place, health and safety policies for staff or external audits and reviews of safety.

One suggestion to reach those 'under the radar' was providing mentoring and assistance for new operators. This could include 'assistance packages' or 'templates' on what constitutes good safety and business practice, and support on issues such as where to obtain advice on specific health and safety information, how to manage staff and managing internal and external communications.

One larger operator worked to improve safety culture by linking internal safety audits to remuneration.

### Information sharing

Some companies and operators told the working group members that they exchange information with other operators, including incident data, and actively engage in peer review of practice. However, it was also identified that commercial considerations were sometimes a barrier to sharing information. Another barrier identified was that some operators were reluctant to share information with regulatory authorities in case of possible "blame culture" ramifications or possible prosecution.

### Voluntary auditing schemes

There was very strong feedback from the discussions that for external auditing of operations to have credibility with operators/owners, it needed to be undertaken by peers, or where there were a limited number of people with the specific activity expertise, by people/organisations who had outdoor experience and an understanding of the wider sector issues. They said that external auditing needed to have some "added value" component for owners/operators. They said that this could include advice on ways to improve safety and business practice and external auditors could also assist operators to develop risk management plans.

### Qualmark

Several interviewees commented on Qualmark auditing and queried whether Qualmark was sufficiently fit for purpose for assessing the safety of adventure activities. They said that while the Qualmark assessment included aspects of commercial business operations that can influence and drive good safety management, often the audits were perceived as service-driven, and not providing depth in terms of assessing risk management or safety practice.

### ACC Workplace Safety Management Practices programme

Larger operators indicated that the ACC Workplace Safety Management Practices (WSMP) programme provided a robust auditing process. They said that the reward-based nature of the system worked well for larger operators who employ a number of staff.

One operator suggested that there would be some value if aspects of Qualmark and WSMP could be combined, or if there was some mechanism where Qualmark, ROSA or OutdoorsMark could be 'bolted on' to the WSMP programme.

### Qualifications

Some operators said that qualifications were not always viewed as a measure of competence. They said that they were recognised as a way for individuals to acquire knowledge in a limited time, but not as providing the exposure to experience that allowed individuals to have the knowledge to run an operation safely. They said that relevant outdoor experience was often the determining factor for them when employing staff.

Other operators stated that they prefer a mix of qualifications, experience and 'nous' and encouraged uptake of qualifications based on need. Time-in-field training was valued equally, if not more, by some operators as a way to improve skill sets and competence.

### Suggestions for improvements to qualifications

Some operators said that the current qualifications funding model was inadequate to cater for specialist training requirements where they are needed by only a few staff of some activities. They said this could be improved by having a clear qualifications pathway that provided incentives for individuals to up-skill or obtain a qualification.

Some operators commented on the difficulties for staff to obtain a Transport Service Licence endorsement on their driver's licence. They said it can take up to eight months to obtain a licence due to Police and immigration requirements. They said that as there was a shortage of staff with licences, this could have a significant impact on smaller operations.

Some operators suggested the quality and availability of the *Pre-hospital emergency care* qualification could be improved. They said there was a minimum requirement of 10 people for a tailored course to run and that this restricted when courses were available and when staff could attend. This qualification was considered a minimum requirement for staff to be competent in emergency procedures.

### Professional associations

Professional associations were considered important for supporting operators to deliver safe and professional services. However, some professional activity-based associations were not considered effective in providing a forum for sharing health

and safety information. A strength of professional associations was considered to be their ability to set a national guiding standard specific to the activity they were involved in.

#### User groups

In addition to professional associations, a number of operators said they belonged to industry user groups. They said that a strength of user groups is that their voluntary nature allows people/companies to achieve changes that would be difficult or take time through a regulatory process. Difficulties identified with user groups included that some were more active in regions than others, and that the funding and time commitment required to keep the user groups active was significant.

#### Marketing of adventure tourism activities

The two marketing agencies interviewed viewed their roles as destination marketers. They said that they had no safety criteria for agreeing to market operators.

#### Local government

The Local Government Act provides for communities to determine their own priorities and their own approaches to service provision. Regional councils operate in and on the same land that sits within territorial authorities (district and city councils), and some districts have multiple regional councils (e.g. Taupo District is covered by four regional councils). This creates substantial boundary and jurisdictional issues to be managed.

In consequence, local government approaches to public safety and the levels of intervention (especially on private land) vary widely among different authorities. At one end of the spectrum are the many councils that view safety in adventure tourism as a Department of Labour concern for efficiency and capability reasons. In their view:

- It is more efficient to have a single regulator than to have many all addressing the same issues. For example, across-boundary jurisdictional issues would impose varying requirements for safety management systems. If operators worked across local authority boundaries, they may need approval from multiple agencies
- Most local authorities are too small to retain complex safety regulation capability and expertise within their districts.

QLDC operates at the other end of the spectrum, requiring operations that have guided five people as a commercial activity to apply for resource consent. QLDC undertakes an initial assessment of the health and safety provisions of new activities and seeks external expert advice when it does not have sufficient knowledge internally to assess these provisions. For water-based activities, it seeks advice from the harbourmaster.

One large Queenstown operator commented that the resource consent process could be a time-consuming, slow and expensive process, especially if it involved the Environment Court.

#### Comments made by operators on DOC functions

Most safety plans that are developed to meet DOC concession requirements are audited and approved for up to five years. However, if significant infrastructure is included the approval can be for much longer.

Three operators noted that the requirement to obtain a safety audit to obtain a DOC concession had assisted with developing their company's individual safety plans.

It was noted, however, that DOC did not check compliance once an operator had a safety audit. Operators also said they were aware of overseas guides operating illegally without DOC concessions or external checks.

#### Staff

Some operators said that the seasonal nature of some activities had an impact on their ability to retain staff.

They commented that it was often easier to recruit temporary overseas staff who had the relevant qualifications and experience to meet seasonal requirements.

Of concern to the working group was that some operators indicated that they did not have written standard operating procedures or policies for staff, although they may have a detailed company health and safety plan.

#### Department of Labour registration process for certification of amusement devices

Two large operators noted that they had difficulties with obtaining their Amusement Device Regulations registration. One said that their first Department inspection occurred six months after their businesses had been operating. While they considered that the Department provided useful business operational recommendations, they said they would have found it more useful to have the Department's input and oversight at an earlier stage. One said that a difficulty with obtaining registration was that the Department did not recognise a local engineer as suitable for the third party engineering check of machinery required, even though the engineer was recognised internationally.

#### Department of Labour Codes of Practice

Some operators commented that they have found the development of the Department's codes of practice useful for providing safety guidance (e.g for indoor rock walls).

## **H. Advice about qualifications, standards, guidelines, training and experience**

The Department received advice from peak bodies involved in qualifications and safety in the sector, and also operators, about the importance of qualifications, standards, guidelines, training and experience. It also held a focus group with seven national organisations with expertise in industry standards and guidelines, qualifications and knowledge of the New Zealand Outdoor Registration Board (NZORB) process which provided further advice. These organisations were:

- New Zealand Mountain Safety Council
- Water Safety New Zealand
- Outdoors New Zealand
- New Zealand Outdoor Instructors Association (NZOIA)
- Skills Active
- Aviation Tourism Travel Training Organisation
- Sport and Recreation New Zealand.

NZORB is a joint initiative between the New Zealand Mountain Safety Council, Skills Active and NZOIA. The Board provides a revalidation scheme for existing qualifications for individuals. Revalidation can be signed-off by an approved organisation where internal training is strong or if an organisation has OutdoorsMark.

One large organisation involved in providing qualifications for the sector pointed out the importance of the following:

- Having a qualified and registered workforce (reflecting revalidated qualifications also)
- Supporting providers of qualifications within outdoor recreation
- Supporting qualifications themselves
- Supporting NZORB.

It was felt that it was crucial that the review team firmly supported good employers who encouraged and supported their staff through qualifications, as well as the many people who voluntarily and at considerable expense gained qualifications, and who revalidated their qualifications to ensure they were up to date and working to recognised standards of best practice by attending refresher training and registering with NZORB. These views were similarly expressed in the national organisations focus group.

Two key reasons why qualifications were so important in the sectors were pointed out by the training provider. These were as follows.

### 1. Ongoing personal recreational involvement

Since many people receive their first experience of outdoor recreational pursuits on commercially provided activities, it is essential that they observe best practice being role modelled and are provided with the correct safety messages and skills on a consistent basis. Failure to deliver this level of quality may create problems for the future particularly if the participants go on to take up these activities for their

personal recreation. The provision of a safe experience is one thing; the provision of a quality experience is another. Quality is critically important for safety. Focusing solely on serious harm accidents and fatalities within workplaces is overly simplistic and overlooks the impact that poor role modelling and instruction may have during later independent activity.

The ACC Drowning Prevention Strategy and River Safety Education Strategy are examples of current initiatives that recognise this issue and seek to act in a preventative way by ensuring that participants receive quality instruction and leadership which conveys clear and consistent safety messages.

There are significant indirect consequences of poor leadership and supervision.

## 2. The employee

A focus on safety assurance at an organisational level is not enough. A recommendation or strategy is needed for upgrading the overall skill level of the labour force and recognising the particular and significant role played by the employee in the uncontrolled outdoor environment. By international standards New Zealand does not have a highly skilled work force in large parts of the adventure activity industry (although there are notable exceptions). Indeed significant numbers of people enter the industry unqualified and leave before ever gaining a qualification. By contrast, the review of other nations shows that in some cases countries such as the UK and France require instructors and guides to be qualified and working only within the scope of their qualifications. For the following reasons, this must not be overlooked.

### *The working environment*

A skilled, qualified and experienced workforce is extremely important in the outdoors. This is because instructors and guides often work alone, in 'uncontrolled' workplaces that do not have the immediate safety net of other workers or emergency services and where communications may not be immediate or fully reliable. It is also a dynamic environment where changes caused by weather conditions and the risks presented by height, water and speed all compound the safety management scenario and call for quick decisions and excellent judgement. This sort of judgement and decision-making ability is gained through quality experience as a guide or instructor. It takes years to accumulate and it is difficult to train. Maturity is a significant factor in judgement and decision-making. Many employers prefer 'older' staff if they can get them; others consciously avoid employing young people, but many do not have the luxury of choice.

### *Skills, pay and retention and their impact on safety and quality of experience*

- Employers regularly report that they are having difficulty getting skilled staff
- New Zealand is highly dependent on a migrant labour force that brings skilled employees from overseas seasonally and on a permanent basis
- Pay in the sector is low and working conditions can be poor. Seasonal work, pay per trip, repetitive tasks, long hours, time away from home and family,

- extreme weather, risk, high living costs in centres such as Queenstown, or life in remote locations all take a toll
- Staff retention as a consequence of the above is poor. This is costly in economic terms and gives a poor return on employer investment (and government investment in education)
- High staff turnover means that staff are unlikely to be thoroughly experienced in their immediate work situation and environment
- Institutional knowledge may be low because people do not stay long enough to either gain it or to pass it on
- Staff are often young and inexperienced
- Many employers lack the size to have a hierarchy of staff and thus an internal career progression
- The high proportion of small businesses means that there is limited capability and capacity for meaningful internal training towards nationally recognised qualifications
- The short careers of most guides and instructors means that only a small proportion go on to develop extensive experience and higher skills and qualifications
- Working as an adventure guide or instructor is seen by many as fun for a while until you get a proper job.

*The impact of poor staff retention on safety, safety assurance and quality of visitor experience*

Few employers in any industry would dispute the importance of personal skills when selecting staff, and no more so than in service industries where interaction with clients is a significant part of the job. The training provider expressed that they found it hard to believe that an employer would accept and wish to train someone completely unskilled and unqualified over someone with a nationally recognised qualification.

- Research shows that a high proportion of small businesses do not have the internal capability or capacity to train staff (this is why Skills Active ITO and its predecessor SFRITO had difficulty establishing workplace training and assessment in large parts of the sector, and why the NZOIA 'workshop' type of training and assessment model has been so successful and why Skills Active and NZOIA are now working in partnership)
- By contrast, good employers already recognise the benefits to themselves and the industry as a whole of supporting nationally recognised qualifications and resent the fact that while they incur the cost of this their neighbours gain financial advantage by not doing so. Good employers want a level playing field. They also want universal standards because nobody benefits from shoddy operators who damage the reputation of the whole industry
- Qualifications must be fit for purpose. As in any industry, they cannot be an exact fit with every variation in workplace or activity; rather they provide a benchmark upon which an employer has a responsibility to build through in-house training. In the outdoors this should in all cases be related to operational procedures and internal safety management systems, but is also likely to include technical training at specific sites or in particular activities that are unique to the employment situation

### *Trained staff versus qualified staff*

- Recognised national standards are important for safety and quality assurance
- Assessment to national standards can only be achieved with any reliability by a registered assessor who has been trained and regularly moderated. Assessment to recognised standards is not an ad-hoc process in any industry
- In-house training on its own may equip an employee to operate a particular activity in a specific environment but is unlikely to include the depth and breadth of a nationally recognised qualification. The broader knowledge, skill set and competency of a qualification is likely to better equip an individual to cope with new or unexpected situations
- In-house training is not recognised by other employers. It does not enable employees to move from one workplace to another easily and does not reward achievement and competency in a recognised format. It does not help build careers.

In-house training to the exclusion of nationally recognised qualifications is directly linked to high staff turnover and short careers in the outdoor industry, and this is directly linked to safety.

Focus group participants considered that the current New Zealand Qualifications Authority review of qualifications would assist with providing clarity in qualification pathways. Participants also noted that commercial operators and volunteer leaders often have the same level of responsibility and risk when instructing or leading groups. They said that volunteers and commercial operators should be required to meet the same standards and qualifications.

Focus group participants considered that often customers were unclear about what qualifications actually meant in terms of the ability of an operator to provide them with safety assurance.

Qualifications were viewed as a minimum standard and not necessarily an assurance that someone had the skill required to operate in a complex environment.

Focus group participants considered that having a range of standards could potentially devalue standards. They supported the development of a common recognised standard that could be applied across all activities. The essential components of a common standard would be guidance on core skills for risk management, first aid, emergency procedures and group leadership.

The national organisations focus group made the following recommendations:

- Qualification alignment is necessary and should be resourced
- Information should be made available for the public to assist them to understand what standards and qualifications operators have, what to look for and how to keep themselves safe
- There should be a requirement for entry point checks before new businesses commence providing their activities and ongoing external oversight to ensure consistent standards.

One peak safety agency involved in the sector noted that the infrastructure of the volunteer and not-for-profit entities involved in the sector contributed significantly to ensuring safe practice.

It also considered that the National Qualifications Framework should be used as a benchmark for meeting the educational requirements of commercial operators and the not-for-profit sector. It said that this would ensure access and equality to training from the range of accredited providers. It would also reduce potential variation of standards between the commercial and not-for-profit sectors.

The agency noted that current funding constraints have an impact on access and affordability of qualifications and that this has the potential to prevent people in the voluntary or not-for-profit sectors from obtaining qualifications compared to the commercial workforce.

It said that ensuring career and educational pathways were seamless would assist in meeting New Zealand's need for qualified staff and reduce its reliance on recruiting overseas staff over the longer term.

One individual reference group member with extensive experience in industry training commented that the increase in unit standards and qualifications in the outdoor sector has not resulted in a highly trained and skilled workforce. He considered that this was due to the current qualifications funding model being inadequate to cater for the specialist training needed when there were low numbers of participants. He said that, as a result, there had been an increase in 'lower end and easier to obtain qualifications' for activities in which there were high numbers of participants (e.g. rock climbing, kayaking and general outdoor education).

Another individual member of the external reference group who reported that he had been working in the sector for more than 20 years raised the importance of well trained and experienced guides. He noted that badly trained junior guides were far more likely to put clients at risk and that senior experienced staff needed to be valued. He noted:

New people in the industry need quality training by experienced people with good instruction skills. It is not systems and flash equipment that keep people alive. Its high skill level and good judgment in the dynamic environment we work in.... In our risk management the first thing we do is hire the best senior guides we can. Anything you write on paper can not make the trip go better or safer. It is the skill level and their experience of the guides that makes that trip run well.

## **Appendix 6: Risk profiling**

In order to make some determination about the scale of any risk management deficiencies affecting the sector, the working group first undertook high level risk profiling for each activity covered by the review.

The risk profiling work drew on:

- Available information about commercial participation in the activity
- Available information about workplace serious harm accidents and fatalities that occurred through the activity being offered commercially
- Responses to the consultation undertaken for the review (including external reference group advice)
- Working group knowledge of the way the activities are delivered and the environments in which they are delivered
- Media and anecdotal reports
- Other empirical evidence
- Professional judgement.

The risk profile for each activity was assessed in three areas:

- Risk associated with undertaking the activity
- Risk associated with the environment where the activity is undertaken
- Risk of the activity to others not undertaking the activity.

For the first two of these risk areas, a set of standard hazards was identified.

For each risk area, a high, medium or low score was allocated based on the extent of hazards that existed in each risk area.

For each activity, an overall risk score (consequence and likelihood assessment) was then allocated. Consequence was scored based on the hazards identified in each of the risk areas. Likelihood was scored using available incident data. This was calculated as a high, medium or low score for the activity.

The working group then ran a 'common sense' check across the overall risk scores but decided not to change any risk scores unless evidence supported such a change.

The working group accepted that, for each activity, the risks associated with different hazards may vary significantly. The risk analysis was therefore approached in a generalised manner with the objective of broadly categorising the risk profiles of various activities, while accepting that many variables exist that may change the profile for individual businesses.

The working group then compared the risk scores for the activities to the type of controls in place for those activities. It noted that the levels of controls across the activities considered by the review could be divided into four broad categories.

These are:

- Those activities for which only the HSE Act acts as a safety control
- Those activities where the HSE Act is complemented by industry-based guidance
- Those activities where the HSE Act is complemented by industry-based guidance and safety agency guidance and perhaps also specific requirements
- Those activities for which compulsory and specific guidance applies, including rules-based approaches under other legislation.

The risk levels for each activity considered by the review and the level of controls that applies to them are shown on Table 2 below.

**Table 2: Risk levels for each activity compared to level of controls that applies to them<sup>27</sup>.**

<b>Risk level</b>				
<b>High</b>	Infrastructural attractions (not covered by other legislation) Luge riding* Sand-boarding	Abseiling Adventure-based learning Canyoning Caving Horse trekking Indoor Rock Climbing Mountaineering Quad bike touring* Rock climbing Ski touring	Diving (from vessels >6m & beyond 5Nm of coast) River sledging/ boarding Ski fields Microlight passenger flights* Tandem hang gliding & para gliding* Tandem parachuting* Hot air ballooning*	Diving (from vessels <6m & within 5Nm of coast) Jet boating Rafting
<b>Medium</b>	Events Marine mammal swimming Snorkelling Surfing	Cycle touring* Glacier walking Globe riding Hunting* Mountain biking Walking/ tramping	Bungy jumping Go-karting Infrastructural attractions (covered by other legislation) Motorcycle touring* Para-sailing Sea kayaking Swift water kayaking/ canoeing Water skiing	Sailing
<b>Low</b>	Land-based fishing			
	<b>HSE Act only</b>	<b>HSE Act plus industry guidance only</b>	<b>HSE plus industry and safety agency guidance and specific requirements</b>	<b>Compulsory and specific guidance (incl. rules-based approaches under other legislation)</b>
	<b>Low level of control</b>		<b>High level of control</b>	
	<b>Level of current controls</b>			

<sup>27</sup> Please refer to the notes on the following page in relation to this table.

\* indicates a special note.

**Notes on table 2:**

- The working group recognises that luge riding is conducted on tracks with artificial surfaces and on tracks with natural surfaces and that the level of risk associated with luge riding on each type of surface may be markedly different. The working group acknowledges the very high level of participation in luge riding on artificial surfaces and that there appear to be very few serious harm accidents by comparison
- Cycle touring, motorcycle touring and quad bike touring are also covered by compulsory and specific requirements when they are conducted on public roads (adherence to road code rules for cycle tours; adherence to road code rules, vehicle registration and warrants of fitness; and driver licensing for motorcycle touring and quad bike touring)
- Participants in guided hunting are also required to hold a firearms licence and abide by the Arms Code
- All adventure aviation activities will be subject to the new Rule Part 115 – Adventure Aviation when they are implemented. It is anticipated that this will occur in early to mid-2011.

**Accident and injury profile**

The following table shows the number of workplace serious harm accidents and fatalities reported to the Department, Maritime NZ and the CAA during the five-year period covered by the review, by activity.

**Table 3: Reported workplace serious harm injuries and fatalities by activity type over the five-year period 1 July 2004 to 30 June 2009.**

<b>Activity</b>	<b>Reported workplace serious harm injuries 1 July 2004 to 30 June 2009</b>	<b>Reported fatalities 1 July 2004 to 30 June 2009</b>
1. Abseiling	1	0
2. Adventure-based learning	Covered under specific activities	
3. Bungy jumping	3	0
4. Canyoning	1	7
5. Caving	2	0
6. Cycle touring	0	1
7. Events (land-based)	Covered under specific activities	
8. Glacier walking	3	1
9. Globe riding (plastic spheres)	5	0
10. Go karting	20	0
11. Horse trekking	40	0
12. Hunting	1	0
13. Indoor rock climbing	17	0
14. Infrastructural attractions (extreme rides not covered by other legislation)	7 <sup>28</sup>	1 <sup>29</sup>
15. Infrastructural attractions (extreme rides covered by other legislation)		
16. Land-based fishing	0	2 <sup>30</sup>
17. Luge riding	31	1 <sup>31</sup>
18. Motorcycle touring (on road)	0	0
18b. Motorcycle touring (off road)	6	0
19. Mountain biking	11	2
20. Mountaineering	1	4
21. Quad bike touring	26	1
22. Rock climbing	0	0
23. Sand boarding	0	1
24. Ski fields (activities on)	102	0
25. Ski touring	0 <sup>32</sup>	2
26. Walking / tramping	8	1

<sup>28</sup> Three arising from flying fox rides and four arising from swings.

<sup>29</sup> Arising from bridge swinging.

<sup>30</sup> These involved death of a fishing guide and his client in a hut and may not be fairly attributable to the activity.

<sup>31</sup> This was on an off-road luge cart track.

<sup>32</sup> This nil report may be because the accidents were viewed as recreational rather than occurring in workplaces. The New Zealand Mountain Safety Council notes that every winter there are incidents that involve clients and guides getting caught and occasionally buried.

<b>Activity (cont.)</b>	<b>Reported workplace serious harm injuries 1 July 2004 to 30 June 2009</b>	<b>Reported fatalities 1 July 2004 to 30 June 2009</b>
27. Diving (from vessels <6m/within 5Nm from coast)	6	5
28. Diving (from vessels >6m/> 5Nm from coast)		
36. Snorkelling	1	0
29. Events (water-based)	Covered under specific activities	
30. Jet boating	11	1
31. Marine mammal swimming	0	0
32. Rafting (white water)	41 <sup>33</sup>	3
33. River sledging / boarding	1 <sup>34</sup>	2
34. Sailing	0	0
35. Sea kayaking	0	0
37. Surfing	0	0
38. Swift water kayaking / canoeing	4	0
39. Water skiing	0	0
40. Hot air ballooning	0	0
41. Microlight passenger flights	0	2
42. Parasailing	0	0
43. Tandem hang gliding and para gliding	33	2
<b>Totals for period 1 July 2004 to 30 June 2009</b>	<b>382</b>	<b>39</b>

<sup>33</sup> Most of these appear to be in white water rafting, although two were clearly in black water rafting.

<sup>34</sup> The low number of workplace serious harm accidents reported may be the result of ambiguity over reporting requirements under the Maritime Transport Act 1994. This has been addressed in the white-water boarding safety guidelines, which specify that operations should have recording and reporting procedures for accidents, incidents and mishaps, which should comply with sections 30 and 31 of the Maritime Transport Act 1994, and the HSE Act 1992.

## **Appendix 7: Principles for operators**

### **Two founding principles**

#### ***Operators demonstrate a positive safety culture driven by committed leaders***

A positive safety culture: The first principle upon which all others are founded, it is characterised by an overt commitment to safety at every level of an organisation; it relies on leaders promoting and adhering to good safety practices, e.g. leading by example consistently.

Organisations with a positive safety culture are characterised by communications founded on mutual trust, by shared perceptions of the importance of safety and by confidence in the efficacy of preventive measures.

#### ***Operators have a safety management system (SMS) relevant to their operation***

Safety management system: A coordinated and comprehensive set of processes specifically designed to optimise safety performance.

An SMS addresses safety across all aspects of the organisation and includes provisions for recruitment, training, safe communication, well documented standard operating procedures, internal and external assessment programmes, safety reporting, incident reporting, and emergency action plans. An SMS addresses the potential for both systemic weaknesses and active failures.

### **Six additional 'core' principles**

#### ***Operators have an external assessment before commencing operations***

Initial external assessment: An assessment by an independent third party appropriately qualified to assess and approve the type of activity being undertaken.

Its primary function is to assess the SMS and provide operators with advice and support: is the SMS comprehensive, workable and tailored correctly for that activity? It includes a site visit.

#### ***Operations are subject to ongoing external assessments***

Ongoing external assessments: Primarily for verifying compliance with approved standards, procedures and/or national standards where available; as with the 'initial' audit, they assess the relevancy and effectiveness of the SMS and provide advice and support to operators. They also include a site visit.

***Operators ensure that staff are competent***

Staff competency: Organisations ensure staff have appropriate experience supported by relevant training and/or qualifications. Induction training is followed by ongoing training at a frequency and depth that is consistent with the nature of the activity. The correct balance of experienced to less-experienced staff is consciously managed.

***Operators clearly communicate the risks involved and responsibilities the clients themselves have in mitigating them***

Risk and safety information to clients: prior to undertaking the activity, clients are provided with appropriate risk and safety information in a form and depth that is tailored for the activity, but addresses cross-cultural communication barriers. Client information can be delivered in writing, verbally, pictorially or via a combination of mediums.

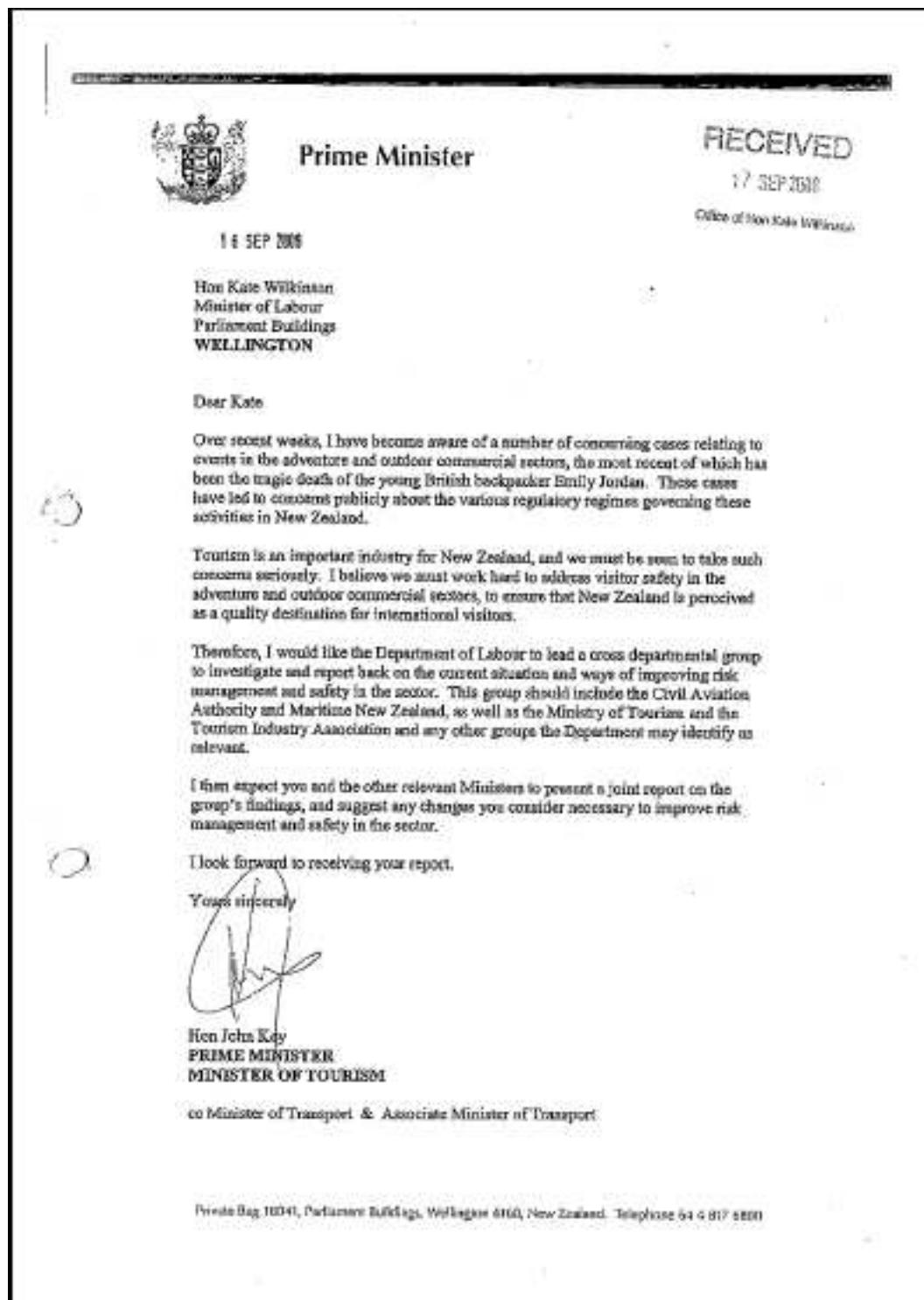
***Operators have well maintained equipment that is fit for purpose***

Well maintained, fit for purpose equipment: equipment and/or infrastructure is subject to regular review under the SMS framework. It is maintained or replaced at intervals that ensure it remains fit for purpose and suitable for commercial delivery of the activity.

***Safety information is willingly exchanged externally***

Exchange of safety information: organisations make a conscious and formalised effort to share safety information (including lessons learned) with others while externally seeking information that may strengthen their own safety provisions. Commercial interests are pushed aside in the interests of achieving better safety outcomes through shared learning.

## Appendix 8: Letter from the Prime Minister



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