Examination Policy

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Executive Summary

1. Background

1.1 The current policy on the delivery of aviation examinations was established in 1991. This is the first time the policy has been reviewed. Following the decision to defer the amendment to Civil Aviation Rule Part 141 in July 1998, a consultation paper was put to industry for comment in March 1999 as part of the review process.

2. Submissions

2.1 A large number of submissions (182) were received mainly supporting the current arrangements and rejecting change. The bulk of these submissions (102) were in the form of a standard response form. A limited number of submitters addressed the key issues presented in the consultation paper, and only a few discussed alternatives as part of considering future policy direction. A small number recommended introducing competition with multiple providers, and five submitters supported having two nationwide providers.

2.2 The main concerns and issues raised by the submitters focused on standards, costs and international matters. It was felt that introducing multiple providers would degrade examination standards and this would have an adverse impact on New Zealand’s international reputation. Also, costs were likely to rise because of increased CAA monitoring, and the small size of the market being shared by more than one provider. Concerns were also raised regarding the standard of current examination syllabuses, and the need for greater monitoring of examination providers.

3. Considerations

3.1 In order to move forward, the CAA considered a number of strategic issues with the key question being “Is examining a Crown function?”. Legal opinion found that examining is not a Crown function but an administrative process that forms part of the overall assessment of an applicant for the issue of an aviation document. As a result, there is not a requirement for a delegation approach to regulating examining. It should be noted that the function of issuing aviation documents is essentially a Crown function according to both ICAO Annex 1 and the Civil Aviation Act. In the case of the Civil Aviation Act, that function is performed by the Director of Civil Aviation, whereas, ICAO requires the State to fulfill that role. Because the Civil Aviation Rules require applicants to pass examinations, the CAA has an obligation to ensure reasonable access to the assessment process. Therefore, it is in the CAA’s interests to hold the examination question bank for all the mandated examinations for licences. This also gives the CAA more effective control of the examinations that are conducted under delegation, and would provide a level playing field for any competitive tendering process for development and delivery of such examinations.

3.2 The CAA took on board industry feedback and came to the conclusion that any change to the current system is dependent on the establishment of examination development and delivery standards, along with improvements to the examination syllabuses. The syllabuses would be more useful if they were in the form of performance specifications (standards that specify safe productive human performance).

3.3 Improving overall education, training and examination outcomes that result in safety gains is another area the CAA wishes to pursue. Such improvements could contribute to the reduction of the accident rate to less than the forecast one wide-body aircraft accident every week by the year.
2020. Benefits such as greater licence portability and lower compliance costs could also be realised through harmonisation with other States and the New Zealand national qualification framework.

3.4 The CAA has formed a vision for a future aviation examination system that brings together the national qualification framework with personnel licensing. This combines with the move to require professional training to be conducted by certificated organisations or recognised education institutions. However, appropriate Civil Aviation Rules need to be developed before this can happen.

4. The Way Forward

4.1 The predominant arguments put forward by the submitters favoured maintaining the status quo, and not changing to a multiple provider regime. As a result, the Authority intends to continue consulting with industry on its vision for a future system, and not make any significant policy changes in the short term. Irrespective of any policy change, there are however, several standards improvements the CAA wants to implement (see list below).

4.2 A way forward using a staged approach with the following key conditions is proposed:

(a) Maintaining the status quo for at least up to the end of the current delegation to Aviation Services Limited (July 2002);

(b) Developing standards in Civil Aviation Rules for examination development and delivery, and modifying the examination syllabuses into performance specification format;

(c) Expanding the current CAA monitoring of all organisations that conduct licence or rating examinations to include examination validity and reliability checks;

(d) Requiring all organisations conducting aviation examinations used for licensing or rating purposes to be certificated, and to nominate senior persons to be examiners who will be accountable for examination conduct;

(e) Requiring all professional training to be conducted under Civil Aviation Rule Part 141.

(f) Identifying those safety critical examinations and tests that the Director chooses to conduct under section 72K of the Civil Aviation Act.

(g) Ensuring the CAA holds an examination question bank for all professional licences.

(h) Opening a competitive tender for a single provider to develop and deliver the CAA’s examinations commencing 1 July 2002. The service is to be nationwide offering the full slate of examinations.

While the tender conditions have not been determined, the contract period will be between three to five years. The CAA would consider a tender that included sub-contracted components.

(i) Further consultation with industry on the CAA’s vision for the future qualification and assessment system.

5. Summary

5.1 The conditions outlined above are all designed to enhance the current examination delivery system. The plan takes account of industry’s position and it opens the way for further consultation.
on CAA’s vision for the future. Concern over a lack of competition in the market has been addressed by offering a competitive tender at the end of the current delegation term, however, there will be a requirement for all organisations that conduct examinations for licences or ratings to be certificated under Civil Aviation Rules. The longer term future requires further discussion with industry and other key stakeholders.

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Introduction

6. Purpose of Report

6.1 This report completes the review of the policy on the delivery of aviation examinations in New Zealand. The purposes of the report are:

(a) To summarise the background to the review;
(b) To present information on the submissions received;
(c) To discuss strategic issues relating to aviation examinations;
(d) To present a way forward for improving the overall personnel licensing training and assessment package; and,
(e) To communicate the outcomes of the review to industry and other interested parties.

7. Purpose of the Review - Background

7.1 Events such as the State sector reforms of the 1980s, and the release of the Swedavia-McGregor Report in 1988 led to major changes to the civil aviation system. As far as personnel licensing was concerned, the greatest impact was felt when user charges were applied to what was a heavily subsidised service. Service quality, thereafter, became a topic of great interest to industry, and a significant problem to resolve as part of the debate over the rise in examination and licensing fees.

7.2 The solution to the fees problem was to delegate the function of delivering aviation examinations to an industry based independent examination organisation, while keeping personnel licensing as a Director’s function. One of the conditions of moving to an industry-based examiner was the examining company had to deliver a nationwide “full slate” service. (Full slate means all the subjects currently tested by Aviation Services Limited (ASL)) The circumstances at the time meant that the delegation approach to regulatory control over examinations was the best choice.

7.3 Since the first delegation was made to ASL in 1992, the rules framework has been developed to the point where it is the predominant means of regulating the civil aviation system. For aviation document holders, this is known as the “lifecycle” approach where participants are assessed at the time of entry, monitored, and assessed for exit from the system when appropriate.

7.4 In 1997, the CAA received an organisation’s application to conduct licensing examinations. Because the rules framework was not sufficiently developed to meet that end, the CAA could not process the application. This became the stimulus for reviewing the rules and considering the possibility of expanding the examination service options for industry.

7.5 A draft amendment to Civil Aviation Rule Part 141 was put to industry in January 1998, however, it was met with strong opposition. Following industry-CAA meetings, the CAA agreed to suspend the rule making process in July 1998 in favour of a wider Review of the Policy on the Delivery of Aviation Examinations in New Zealand (title of consultation paper).

7.6 Industry stakeholders were then invited to make submissions to the policy review following the release of a consultation paper on 25 March 1999. The main issues put to industry centred around:
(a) Which regulatory approach best suits the requirement to examine applicant’s knowledge and skills as part of the entry control process;

(b) Whether competition would bring greater efficiencies and deliver service benefits at a reasonable cost, without compromising safety and the international reputation of New Zealand licences and ratings; and

(c) Whether the examiner needs to be independent of the training provider in all cases.

7.7 The issues were presented as a series of key issues and questions in the consultation paper. It was intended that respondents would address these points in their submissions. It should also be noted that the consultation paper concentrated on the examination delivery system, and not the broader issues of education, training and the national qualification framework.

Information on Submissions to the Review

By the close off date of 31 May 1999, 182 submissions had been received. The response to the review was very encouraging, with a broad spectrum of industry stakeholder interests represented. Just over half the submissions (56%) were by way of standard response forms distributed by ASL.

8. Main Issues and Concerns

8.1 The main issues and concerns expressed in the submissions were centred around six general points:

(a) Keeping faith with the original arrangements set up in 1992. What is wrong with the current system – “if it ain’t broke, don’t fix it”?

(b) Standards and the implications of changing the system on the reputation of New Zealand aviation qualifications internationally, and our international obligations.

(c) Maintaining the split between examining and training to overcome the problems of commercial imperatives and the integrity of the system.

(d) A desire to seek international harmonisation and the benefits that would come from greater licence portability.

(e) Costs and the treatment of low demand-high cost examinations such as AME examinations.

(f) The quality of the current syllabuses and the monitoring role of the CAA.

8.2 These issues and concerns are addressed in the discussion on Strategic Issues below.

9. Summary of Stakeholder Submissions

9.1 A general overview of feedback from the stakeholder groups is set out in Appendix 1 – Summary of Stakeholder Submissions, on page 15.

9.2 ASL ran a strong campaign, which successfully raised the level of interest in the review, and that generated a higher than expected number of responses. In addition to distributing information material, ASL distributed a standard response form that directed submitters to support ASL’s position. Only a small number of these forms rejected ASL’s stance. Because it was impossible to differentiate between those who were making ASL proxy submissions and those who
had a position on the specific issues raised in the ASL response form, the weighting of the data derived was adjusted by lowering the contribution of those submissions to the combined results.

9.3 With the exception of the response forms, the discussion in the majority of submissions was limited to knowledge examinations and did not raise the issue of practical tests. While only one submission considered air traffic control licence examinations, there were many submissions that raised issues relating to aircraft maintenance engineering, and many more relating to flight crew. No submissions considered other qualifications such as flight engineers. This is not unexpected due to the demise of flight engineers since the change in aircraft types.

9.4 The general theme distilled out of the submissions was “maintain the status quo”. However, there were several detailed submissions recommending switching to a multiple provider regime. Five submitters strongly supported a two-provider regime under a delegation arrangement. Linking the national qualification framework to the civil aviation licensing system was considered by a small number of submitters. One of the main arguments for change was to gain benefits from a more competitive environment.

Discussion on the Strategic Issues

After analysing the submissions, the CAA identified a set of strategic issues for further consideration. These issues are now discussed.

10. Purpose of Examining.

10.1 Civil Aviation Rules require applicants for licenses and ratings to pass various forms of examinations as part of a complex assessment process. The purpose of the process (including conducting examinations) is to ensure that the individuals wanting to enter civil aviation, such as aircraft maintenance engineers, have achieved minimum safety standards. The process requires the Director to be satisfied that the applicant is a fit and proper person who has the requisite knowledge and skills to exercise the privileges of the licence or rating being sought.

10.2 Traditionally, examinations have been conducted by the civil aviation licensing authority; in New Zealand’s case, the CAA (and its predecessors the Air Transport Division and the Civil Aviation Division of the Ministry of Transport). Examinations have normally been external to the training organisation, conducted on a national basis, and to a standardised format. Some exceptions have existed such as airline type ratings and approved courses with internal assessments (eg. human performance and limitations). The structure and style of these examinations has changed little since the system was first established and is confined largely to remembering and using facts, rules and procedures.

10.3 International experts, and agencies such as ICAO, predict that by the year 2020 there will be a wide-body aircraft hull loss each week if the current accident rate is not reduced. The international aviation community is working hard at finding solutions that will reduce the risk of these catastrophes. One area that can contribute is personnel licensing through the application of improved education, training and assessment methodologies.

10.4 We are all very aware of the benefits of introducing human factors into aviation training, and the time taken to institutionalise the process. However, the proportion of accidents and incidents that attribute human factors as the prime cause still remains at around 80%. The understanding of human factors at the operational and organisation management levels has yet to reach its full potential in the knowledge base hierarchy. System improvements need to be actioned as soon as possible if any impact on the year 2020 forecasts is to be made. Adopting a human performance approach instead of the current task approach to licensing is a key aspect to this improvement and that can be achieved through the pursuit of higher qualifications.
10.5 Up until recently, there has been no linkage between civil aviation licensing and national qualifications. Even though recent change in the tertiary education sector has spawned growth in dedicated tertiary qualification programmes, only one link exists (Massey University’s degree course). Tertiary sector change includes the funding of private training organisations and the increased availability of finance through the student loan scheme.

10.6 Some progress has been noted in aligning industry training organisation standards and the CAA’s licensing requirements, especially in the aircraft maintenance engineering area. Over time, the CAA anticipates growth in the number of civil aviation education/training programmes that will lead simultaneously to nationally based qualifications and civil aviation licensing.

10.7 Implementing an approach to knowledge and skill assessment that is in concert with the national qualification framework would be advantageous to trainees and the trainers for various reasons. Apart from reducing compliance costs such as removing duplication in examining and auditing, synchronising the systems would allow a more flexible integration between safety factors (the domain of the CAA) and other competencies (domain of the industry) seen as appropriate for aviation professionals in their respective specialisations. It would also allow for greater employment flexibility in career changes. Harmonising civil aviation licensing with national qualifications that have higher safety and operational performance standards is expected to benefit civil aviation across the board.

11. Is Examining a Crown Function – Delegation or Rules?

11.1 The key question in the review is whether delivering examinations that are used for licensing purposes is a Crown function.

11.2 Delegations are used where a function or power needs to be given to another person or organisation, but kept very close to the CAA for control purposes. This is especially true for Crown functions. If examining is a Crown function, then a delegation arrangement would be appropriate. Many of the reasons for adopting the delegation approach in 1992 no longer apply; such as the development of a rules and monitoring framework, and the now established status and viability of ASL. Delegations may also be used for reasons of convenience where there is to be only one service provider, or where rules have not been created.

11.3 Annex 1 of the International Civil Aviation Convention, the Civil Aviation Act 1990, and the Civil Aviation Rules have all been reviewed to ascertain whether examining is a Crown function (the documents are referenced on page 18). None of these documents require the Crown to examine, however, applicants must demonstrate knowledge and skills prior to licence issue. This leads to the conclusion that examining is an administrative process leading to the issue of licences. In terms of regulatory control, therefore, it is not essential that it be controlled by delegation. This is consistent with the other transport modes and the regulatory model applied to personnel licensing. Managing the aviation examination system by Civil Aviation Rules is possible and preferable from the CAA’s perspective.

11.4 In the case of safety critical examinations, the Director may choose to exercise examining powers provided for in section 72K of the Civil Aviation Act. An example might be the Airline Transport Pilot Licence flight test. A delegation for the conduct of these examinations should not be regarded as undertaking a State function as described above. This approach might also be taken in circumstances where the Director is dissatisfied with the examining standards being exercised by the industry or certain sections of industry. A delegate, however, should be certificated under the rules to keep standards consistent.
12. **Obligation to Ensure Provision and Full Slate.**

12.1 Applicants for licences or ratings are entitled to reasonable access to the assessment processes that are mandated by Civil Aviation Rules for the granting or renewal of aviation documents. It would be unreasonable if these examinations were not available, or access to them was made difficult. The CAA recognises its responsibility to ensure any required examinations and tests are available for applicants, and so as a point of last access, the CAA must hold a basic examination bank, or have an arrangement with a provider that guarantees provision. This could be with a local provider in New Zealand or perhaps with another regulator such as Civil Aviation Safety Authority of Australia.

12.2 There is concern about the future supply of low demand examinations. One way of overcoming the problem is to require examination providers to supply the full slate of examinations to a wide spread of examination centres nationwide.

**CAA Holding the Examination Question Bank**

12.3 While the aviation examinations are conducted under delegation, it would be better if the CAA controlled the examination question bank. The delegation arrangement would then be to deliver examinations and undertake routine question “maintenance” under contract to the CAA. One benefit of ownership would be to set a level playing field in the event the delegated service contract is awarded through a competitive tendering process.

13. **International Understanding and Acceptance.**

13.1 Much has been said about international recognition, portability, and reputation. As far as ICAO and other States are concerned, the critical issue is – “Who issues the licence?”. The CAA issues licences in New Zealand, and they are recognised as being ICAO compliant. The CAA will continue to issue licences and continue to comply with ICAO requirements.

13.2 There are three areas for discussion:

(a) **Recognition** – The operation of New Zealand registered aircraft internationally is dependent on other States accepting New Zealand licences. Being a State-to-State matter under the ICAO umbrella, the recognition of New Zealand licences is not seen as a problem, irrespective of the examinations system employed.

(b) **Portability** – New Zealand licence holders often want to obtain another State’s licence and use the New Zealand licence for validation purposes. Few countries actually accept another State’s licence to issue a licence to a non-resident, but that is more for political than technical reasons. The biggest obstacle is usually residency. Where recognition is given, it is the licence and not the examinations per se that counts. Other States do not recognise examinations credits alone.

(c) **Reputation** – Offshore airlines and air traffic service operators contract New Zealand training organisations to train their ab initio pilots and air traffic controllers. This usually (though not in every case) involves accepting New Zealand licences based on the quality of training delivered by the training provider, and the certificates the provider holds. Course content is usually adjusted to meet the client’s specific or national needs. In most cases, the client’s regulatory authority becomes involved and directly approves the training organisation and the course. Whether the CAA conducts the examinations is not critical to this process. What the client and its regulator are concerned with are CAA’s ongoing monitoring of the training organisation and whether the organisation continues to maintain the standards necessary to be certificated.
13.3 The CAA is pursuing harmonising New Zealand's licensing standards with other States such as Australia, Canada, the United States, and Singapore, and with the European standards. The CAA does not envisage any adverse effect on the standing of New Zealand's licences and ratings in the international arena if the examination system changes, however, greater harmonisation will reduce differences where portability options are available.

14. Raise Standards through Better Training, and Drive Better Training through Better Examining

14.1 Any changes to the current system need to be based on identifiable benefits taking account of the likely costs. The Authority recognises that the current rules do not permit any extension to the current examination system to allow for more than one nationwide full slate provider. There are two links in the chain that need strengthening and they are: examination development and delivery standards, and licence standards (otherwise referred to as examination syllabuses). Examination development and delivery standards set out the requirements for an organisation and examination writer to write examinations according to strict quality standards. These standards would include such things as research, style relevant to the topic and the purpose of the test, benchmarking, and moderating. Organisations would also be expected to set up systems that ensure all examinations are valid and reliable measures of the subjects being examined. Delivery standards include security, invigilation, system integrity, handling, marking and reporting results. Both sets of standards require considerable attention before the CAA can move on changing the current arrangements.

14.2 Once examination conduct and syllabus standards are set and validated, competent individuals or organisations should be permitted to conduct examinations. Providing an organisation establishes robust policies and procedures in its exposition, it should be able to qualify as a training organisation as well as an examination organisation and assess its students. The Director would have to be assured, through the routine monitoring process, that the assessment outputs are at least matching the standards required for licence or rating issue. This places greater attention onto the assessment processes, in much the same way as other critical sectors of civil aviation are managed. Care will need to be exercised to ensure that commercial pressures do not degrade in any way the integrity of the assessment process. Each aspect requires substantial resources and expertise on the part of the examination organisation and its personnel.

14.3 The call by industry to keep training and examining separate is driven largely by concerns over commercial pressures and the potential to compromise standards. With few exceptions such as ATC, type ratings and equivalence programmes, the training undertaken by licence applicants is not taken into consideration. This, along with the lack of rules and procedures to manage in-house assessments, are two areas that can be changed. One approach would be to require an organisation to hold separate certificates: one for training and another for assessing that specify clear accountabilities and compliance obligations against which the CAA would audit. There are recognised weaknesses in the current system that result from having a small question bank, despite the best endeavours to keep the system secure.

14.4 In much the same way as the CAA requires air transport operators to employ senior persons to take responsibility for key functions, examination organisations also need to employ appropriate senior persons. These persons would be responsible for the assessment processes for their company as well as the signing off of candidates' documentation that the CAA would use when issuing aviation documents.

14.5 At the moment, Advisory Circulars to the Civil Aviation Rules set out syllabuses on which examinations are based. Training organisations develop courses based on these syllabuses, however, they rely heavily on the sample examination papers and previous training delivery experience to pitch courses at the most appropriate level. There is a call from submitters to improve these syllabuses to more effectively drive training and the assessment process to achieve better safety outcomes.
14.6 The CAA wants to improve the integrity of the licence entry standards so that document holders are better equipped for commercial operations. It believes that by improving the assessment process, training standards will improve and therefore individual performance levels will rise. This is the primary focus of attention for future developments.

14.7 The second focus is on the quality of the examinations themselves, and particularly the development and delivery processes.

15. Competition and Tendering.

15.1 The small size of the New Zealand market would seem to limit the commercial viability of having more than one nationwide full slate provider. It is likely that the commercial pressures on multiple providers would cause undue strain on examination development and delivery standards to the detriment of the system as a whole. Even though CAA monitoring is not a major component of a provider’s costs, increased CAA resources to manage multiple providers would follow, and these would have to be passed onto the industry and ultimately the client candidates.

15.2 One method of achieving gains for consumers is to introduce competition after June 2002 in the form of a competitive tendering process in line with section 72E of the Civil Aviation Act. Competitive pricing, level and quality of service, the use of advanced systems, the acquisition of specialist expertise, and management systems would all be considered in the tendering process. Options such as allowing for sub-contracting components of the examination package would be considered. The CAA might choose to specify the sub-contracting of examination development or other specialist or niche expertise in the tender where it is deemed necessary.


16.1 In 1998, the Director renewed ASL’s delegation to conduct examinations and flight tests up to 30 June 2002, and unless a case arises for performance reasons to revoke the delegation, the Director intends to see the delegation through. The reasons for seeing the delegation through include: CAA’s acknowledgement that the outcome of the 1990’s consultation process was there should be a single provider, that while CAA is entitled to review existing examination policy, it’s respecting of ASL’s need to receive reasonable notice of any changes that might have an adverse impact on its business; and, allowing the necessary time for rules and standards to be developed to make way for other providers to participate in the future.

CAA’s Position and The Way Forward

17. CAA’s Position

17.1 In developing the CAA’s position, the following have been taken into account.

(a) A conservative direction has been used in deciding the best approach to take for the delivery of aviation examinations into the future. This approach is balanced by the desire to provide a platform for innovation, development and progressive improvement.

(b) New Zealand's international obligations and the need for closer harmonisation are important factors.

(c) The CAA recognises ASL’s current delegation and the commitments bound into that delegation. The CAA would look to ASL to continue supporting the delivery of
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examinations until the new standards are well established. It would also be open to ASL tendering for the development and delivery of the CAA’s examinations, if they so wish

(d) The CAA acknowledges the need to improve the level of system monitoring and examination delivery standards.

(e) The CAA accepts it has a responsibility to ensure that applicants for licences have reasonable access to examinations.

(f) The CAA recognises the advantages in being the holder and controller of the aviation examination question banks.

17.2 The CAA recognises the industry’s preference to maintain the status quo, and it has decided not to make any significant policy changes in the short term, because:

(a) The CAA recognises the advantages in having industry support for policy initiatives such as this to ensure the outcome from the policy change realises the best results.

(b) The CAA does not have a safety concern over the integrity of the current system so there is no urgency to implement changes that, in the view of the CAA, are likely to benefit industry.

17.3 Nevertheless, the CAA does have a vision for the future that it would like to present to industry for further discussion as part of the way forward. The suggested policy for this vision follows.

Personnel Licensing Qualification Assessment Policy Statement

• The Director of Civil Aviation, in considering applications for aviation documents, takes account of knowledge and skills assessments appropriate to the licence or rating being sought. The assessments are meant to test the person’s competence to exercise the privileges of the licence or rating. Standards are established against which the assessments are made, and are applied consistently to all candidates irrespective of the form of assessment undertaken. Standards also need to be established for the development and delivery of examinations and tests to ensure the results of these assessments are a reliable measure of the candidate’s safety knowledge and skills.

• The Director will recognise examinations and practical tests, conducted by competent certificated organisations, for the purpose of issuing an aviation document. A competent organisation is a certificated organisation under Civil Aviation Rules that has policies and procedures to ensure the integrity of the assessment processes; employs appropriately qualified persons, who would be appointed as senior persons (examiners); operates according to a set of quality management processes; and adopts assessment best practices in line with standards established in Civil Aviation Rules. Qualifications gained through recognised education institutions or bodies where professional aviation expertise resides could also be accepted for licensing purposes.

• Examining organisations, which may also be training organisations, would conduct examinations and practical tests in specialised areas, and may provide a service to third party training organisations. The standards to be examined are to be prescribed as performance specifications which portray not only the final outcome of the performance, but also the mechanism and means whereby that performance is achieved. Applying these specifications will ensure the highest level of standardisation in safety factors is achieved without precluding diversity and higher standards that a training organisation may seek particularly in the professional development area.

• Where appropriate, the Director may choose to conduct examinations and tests where it is deemed the subject or activity is critical to safety, and certificated organisations can not provide the Director with adequate standards assurance.
• Harmonisation between civil aviation standards set by the CAA and complimentary standards set by national qualification agencies is to be pursued. Industry is expected and encouraged to participate in the establishment and on-going development of licensing standards, and to keep abreast of changing technology and operating environments.

18. Bridging the Gap between CAA’s Vision and Industry’s Position

18.1 There is a gap between the position taken by the majority of submitters and the future system being put forward by the CAA (described under the heading “Personnel Licensing Qualification Assessment Policy Statement” above).

18.2 In order to bridge this gap, the CAA needs to embark on a programme of in-the-field consultation on the broader issue of raising total education/training and assessment outcomes across the civil aviation system. The reason for taking this approach is to ensure that the industry and the CAA are working collectively on achieving these improvements to the quality of the New Zealand licences and ratings.

18.3 While the proposed future system is being considered, the CAA plans to introduce a competitive tendering process for the award of a fixed term contract to a single provider of examination delivery services to commence from the end of the current ASL delegation. The term of the contract should be limited to between three and five years to make way for future developments as outlined in the CAA’s preferred future position.

19. Implementation

19.1 A three-step approach has been developed to move forward as follows.


• Maintain the Status Quo of ASL being the only nationwide full slate provider.

• Expand the level of CAA monitoring of all current examination delivery organisations.

• Establish examination development and delivery standards.

• Develop the licensing standards in performance specification terms.

• Consult with industry on the CAA’s vision for the future personnel licensing performance assessment system.

Step Two – July 2001 through to July 2002

• Maintain the Status Quo of ASL being the only nationwide full slate provider.

• Establish a full slate examination bank by the CAA.

• Identify any examinations or practical tests that are critical for reasons of safety standards that should be conducted by the Director under section 72K of the Civil Aviation Act.

• Validate the CAA monitoring process.

• Complete rule writing for conducting examining (Part 141 or alternative), and licensing standards (Part 60 series rules).
• Open a competitive tender for the development and delivery of CAA’s aviation examinations for a fixed term from July 2002. The contract would be for a nationwide full slate service. Organisation to be certificated by the CAA and senior persons appointed as examiners.

**Step Three – from July 2002**

• Successful tenderer to develop and deliver CAA’s aviation examinations nationwide under contract for a fixed term of between three and five years.

• Training organisations for professional licences and ratings transition to Rule Part 141 certification.

• Require all professional training to be conducted under the auspices of certificated organisations. This includes Commercial and Airline Transport Pilot Licences, Air Traffic Control Licences, Aircraft Maintenance Engineer Licences.

• Finalise joint national qualification agency / CAA training and assessment processes for the issue of aviation documents in conjunction with the award of national qualifications.

• Regularly update the personnel licensing performances specifications by joint industry-CAA working groups.

**The CAA’s vision of the future system**

• Recognise national qualifications for the issuance of New Zealand aviation documents.

• Permit any competent certificated organisations to conduct examinations.

• Accept internal assessments from approved courses and certificated organisations as long as clear policies and procedures are in place to overcome commercial pressures.

• The CAA to conduct critical examinations under s.72K, which may be a delegated function.

• All professional training conducted by certificated training organisations.

**Summary and Outcomes**

20. **Summary**

20.1 The CAA has taken note of industry’s concerns to maintain the status quo for aviation examinations. This position assumes that no change is made to the current arrangements using the delegation approach and nationwide full slate provision. However, once new standards are put in place, there should be a move forward to enhance education and training outcomes in civil aviation.

20.2 Safety benefits are expected from following the approach of developing these standards irrespective of whether there is a move away from the current external examination system. The task of setting them is substantial and requires active industry participation. Some work has already begun in the area of amending the Part 60 series rules using the CIRAG process.
20.3 Further consultation and dialogue between the industry and the CAA on the proposed direction favoured by the CAA are needed, and should take place as soon as possible. Industry buy-in to this vision is necessary before it can be implemented. In the interim, it is proposed that a competitive tendering process is the best solution to realising benefits from competition in the small New Zealand market for aviation examining, while a nationwide full slate system is in place.

20.4 As far as the CAA’s proposed future system is concerned, any competent organisation should be able to supply examinations for licensing purposes. The changes to the tertiary education sector need to be taken into account. The CAA would be the backstop supplier with a full slate of examination banks in the event there is a lack of reasonable access. The Director may choose to conduct key examinations and tests where appropriate for safety reasons, using the examining power provided for in s72K of the Civil Aviation Act.

20.5 The position being taken by the CAA will allow for flexibility in system development, and allow training organisations to enhance their courses to meet the changing and challenging future needs of industry. Industry’s position on maintaining the status quo for the near future is recognised by the CAA.

21. Outcomes

21.1 In conclusion, the Authority has accepted this report and has decided to move forward on the basis of the implementation plan set out on page 12. The current arrangements with ASL, as the principal examination provider, will be maintained through to the end of its current term, which is June 2002. During this period, the CAA will call for tenders for the award of a fixed term contract to deliver the service currently provided by ASL, from July 2002. In addition, the CAA will continue to consult with industry on its vision for the future examination system, and will proceed to develop appropriate rules and standards for the conduct of examinations and the licensing syllabuses.
Appendix 1 – Summary of Stakeholder Submissions

1. The stakeholders identified in the review are:
   - Clients seeking aviation documents (e.g. licence/rating applicants)
   - Industry representative organisations
   - Training organisations
   - Government
   - International civil aviation regulatory authorities
   - Current providers of examinations
   - Potential examination providers
   - Aviation Travel Tourism Training Organisation
   - End user organisations (e.g. airlines).

Clients Seeking Aviation Document (licence/rating applicants)

2. A small number of trainees submitted concerns about the future reputation of New Zealand aviation documents. A number appealed for improved standards and service quality. These submissions did not enter the debate to any great depth.

Industry Representative Organisations

3. The major representative organisations made brief submissions to the review and concentrated on supporting the status quo. Major issues included the history of the current arrangements and lack of evidence that change is needed. These submissions did not contribute substantively to the question of future developments.

Training Organisations

4. As expected, training organisations made up the largest stakeholder group making submissions. Overall, the group expressed strong support for the current provider, and appealed for maintaining the status quo. Many submitters made the comment that there is nothing wrong with the current system. Dissatisfaction over the inflexibility and excessive prices of the current system was expressed by a number of submitters. Concerns were also raised on the standard of the syllabuses, and the lack of supervision of the current provider from a standards perspective.

5. Reasons for maintaining the status quo included:
   - Nothing wrong with the current arrangements.
   - ASL is an industry organisation and represents the interests of industry.
   - The present system has improved significantly in recent years.
   - It is essential to have an independent examination system.
Examination Policy

6. A number of submitters considered alternative arrangements that included alignment of the CAA licensing system with the NZQA approach with caveats that standards are established and maintained by the CAA.

Government

7. No submissions were received from any government agencies or departments.

International Civil Aviation Regulatory Authorities

8. One aviation authority made a submission and supported the CAA conducting examinations using its own resources; being consistent with the submitter’s own policy. It prefers the CAA develop and deliver examinations from its own resources. However, the key issue was the licence issuing organisation. Providing New Zealand licences continue to be issued by a State agency then the reputation of the aviation documents would not be compromised.

Current Examination Providers

9. The largest provider, ASL argued for maintaining the status quo for reasons of standards maintenance, small market and problems with low demand examinations, importance of independent examining for State licensing, and the benefits from having an “industry owned” provider.

10. Massey University submitted that provision should be made for in-house examinations where appropriate, but multiple providers should be able to establish an examination service based on standards set out in rules.

11. Simuflight (NZ) Limited (Simuflight) and Examinations Services Limited (Examserve) made submissions supporting a two provider regime using the delegation approach. This is elaborated below.

Potential Examination Providers

12. Both ASL and the Simuflight/Examserve group favour using computer-based systems. Examserve already conduct some examinations using this technology, and ASL is developing its capability. ASL has indicated their interest in collaborating with CASA.

13. Major submissions were received from Simuflight and Examserve supporting the two-provider under delegation regime. The main thrust of their argument was based on competition and innovation. Competition will bring innovation in examination systems and content that will drive improvements in syllabuses and training standards. Both organisations raised concerns about the current syllabus standards and promoted their syllabus as being the only one meeting ICAO standards. Adopting the Examserve system would mean adopting the syllabus on which their question bank is based.

14. Examserve have already invested in an electronic delivery system that offers good security and provides valuable feedback on both student performance and examination system performance. This system is currently under trial in conjunction with Simuflight.

Aviation Travel & Tourism Training Organisation

15. The ATTTO submitted that the examination system should take advantage of the NZQA qualification framework to maximise benefits to individuals under training. Multiple providers were seen as the best alternative under strict criteria.

End User Organisations (e.g. Airlines)
16. No submissions were received from end user organisations representing their specific interests and needs.
Appendix 2 – ICAO and CAA references to Personnel Licensing

The following references are provided to support the position that the issuance of a licence, especially for international flights, is a function to be fulfilled by the Crown, and that conducting examinations is not a Crown function.

1. Article 32 to the International Civil Aviation Convention (Convention) refers to Licences of Personnel.

   (a) The pilot of every aircraft and the other members of the operating crew of every aircraft engaged in international navigation shall be provided with certificates of competency and licences issues or rendered valid by the State in which the aircraft is registered.

2. Annex 1 to the International Civil Aviation Convention sets out requirements for personnel licensing. The following references have been copied from the Annex.

   Licensing Authority. The Authority designated by a Contracting State as responsible for the licensing of personnel. Note – In the provisions of this Annex, the Licensing Authority is deemed to have been given the following responsibilities by the Contracting State:

   a) assessment of an applicant’s qualifications to hold a licence or rating;

   b) issue and endorsement of licences and ratings;

   c) designation and authorisation of approved persons;

   d) approval of training courses;

   e) approval of the use of synthetic trainers and authorisation for their use in gaining the experience or in demonstrating the skill required for the issue of a licence or rating; and

   f) validation of licences issued by other Contracting States.

Chapter 1 Definitions and General Rules Concerning Licences

An Applicant for any pilot licence or rating shall demonstrate, in a manner determined by the Licensing Authority, such requirements for knowledge and skill as are specified for that licence or rating.

Chapter 2 Licences and Ratings for Pilots; paragraph 2.1.1.3.1)

Knowledge. The applicant shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of a (private pilot licence – aeroplane), in at least the following subjects.

Skill. The applicant shall have demonstrated the ability to perform ....... the following procedures and manoeuvres. (for pilots)

Skill. The applicant shall have demonstrated, at a level appropriate to the privileges being granted, the skill, judgement and performance required to provide a safe, orderly and expeditious control service. (for ATC)

Chapter 2, 3 & 4 Licences and Ratings (for each personnel group)
3. The Civil Aviation Act (Act) does not require candidates to be examined by the Director.

   - Section 7 of the Act lists those who require an aviation document and that requirements, standards, and application procedures shall be prescribed by rules made under the Act.

   - Section 8 of the Act requires individuals to apply for the grant or renewal of an aviation document to the Director of Civil Aviation.

   - Section 9 of the Act requires the Director to grant the application for a document if he or she is satisfied that all things in respect of which the document is sought meet the relevant prescribed requirements, and the applicant … holds the relevant prescribed qualifications and experience …, is a fit and proper person, … meets all other relevant prescribed requirements, and it is not contrary to the interests of aviation safety for the document to be granted or renewed.

   - Section 10 of the Act sets out the criteria for the fit and proper person test.

   - Section 72B sets out the functions of the Authority, which do not expressly include examination functions.

   - Section 72K gives the Director the power to set, conduct, and administer examinations and tests, conduct flight testing, and carry out such other functions in relation to such examinations, tests, and flight testing as may be necessary.

4. The Director uses s.72K powers to set, conduct, and administer examinations and flight tests now for a large number of subjects. However, this is not the only means of assessing knowledge and skill used in the assessment of a licence or rating application.

5. Civil Aviation Rules require applicants for any licence or rating to comply with all of the eligibility requirements specified in the Subpart for that licence or rating – 61.11(d), 65.13(3), and 66.9(a)(3).