AVIATION
CHIEF REMOTE PILOT

Case for Change

Name of allocated IRC: Aviation IRC
Name of the SSO: Australian Industry Standards

1. Administrative information

*For a list of the products proposed to be reviewed as part of this project, please see **Attachment A**.*

Name of IRC(s):	Aviation Industry Reference Committee
Name of SSO:	Australian Industry Standards

1.1 Name and code of Training Package(s) examined to determine change is required

AVI Aviation Training Package.

2. The Case for Change

*For information on the job roles to be supported through the proposed qualifications updates, enrolments data, completion rates, and the number of RTOs delivering these qualifications please see **Attachment B**.*

2.1 Rationale for change

Drones open up new opportunities and generate efficiencies in industries such as mining, agriculture, building, oil & gas and other large industrial facilities. They have become known as incredibly powerful, versatile industrial tools capable of completing a wide range of applications. Industry professionals are progressively using drones to improve and optimize industrial processes as well as enhance operational efficiencies. The capacity for data gathering and analysing capabilities make automated drones valuable for several industry sectors.

Currently a Remote Operator Certificate (ReOC) is required by the Civil Aviation Safety Authority (CASA) for drone industry operators to conduct Remote Pilot Aircraft (RPA) operations commercially. The IRC has identified that there are over 2000 Remote Pilot Operator certificate (ReOC) holders currently in Australia. This is obtained through an application to CASA for approval.

Currently a licensed remote pilot takes on the responsibilities associated with the ReOC. This includes high level aviation management, operational planning and risk assessment in a commercial environment.

A Diploma of Aviation Chief Remote Pilot (CRP) is proposed to be developed for this role to enhance regulatory and procedural leadership and to support this expanding industry and the mobility of workers. This project will consider using existing aviation units and those from other Training Packages in addition to the development of new units.

The proposed qualification and occupational skills standards are required to improve safety and meet compliance standards in the drone industry. The role of a CRP is challenging based on legal obligations to provide high level operational and risk management considerations to carry out constant monitoring and supervision of complex drone operations, training obligations, alongside administration requirements.

The Part 101 (Unmanned Aircraft and Rockets) Manual of Standards 2019 provides detailed information on what is needed to be a certified operator. It covers four main areas:

1. RPA training and competency
2. airspace use and restrictions
3. extended visual line of sight and beyond visual line of sight
4. essential record keeping and notification.

2.2 Evidence for change

The Aviation IRC conducted industry research, held discussions with the drone industry and CASA and conducted an industry consultation webinar to determine the level of need. On November 11, 2020 an email survey was conducted with 20 industry recipients who were involved with the Technical Advisory Committee for RPA in excluded category operations . The group for the most part felt that a new Diploma in Chief Remote Pilot was relevant.

The following rational provides the case for this development:

Exponential growth of RPA use in Australia

Some estimates suggest that over one million RPA are operating in Australia . One reason could be due to the extensive usage of RPA in combating COVID-19. RPA have been effectively deployed during the COVID-19 pandemic in response to both public safety and business opportunities where drones can be used. RPA have been used for public announcements in locations such as beaches, parks or café strips, in which groups of people may not be adhering to social distancing and mass gathering rules.

Safety skills needs

The growing use of RPA in Australia directly correlates with a significant increase in reported RPA safety incidents to the Australian Transport Safety Bureau in 2020/21. A recently published report states that there has been a total of 448 incidents from 2020 to date, with the global number of incidents rising from 135 in January to 174 in March, up from 4.3 to 5.6 incidents per day. RPA have the potential to cause serious injury to people or property and interfere with other aircraft.

Many Australian businesses are using RPA for tasks that have traditionally been undertaken manually by a human in response to safety and efficiency, or in some cases to enhance data collection for analysis. Some organisations are flying for the first time and they are now exposed to greater personal and commercial liability risks. QBE claims data reveals that one in fifty drones will be involved in an accident, equivalent to a crash occurring approximately every 2,000 hours of operation .

2.3 Consideration of existing products

This project proposes to use existing aviation and imported units of competency to build this qualification.

2.4 Approach to streamlining and rationalisation of the training products being reviewed

This is a new qualification to formulise a key role in remote pilot operations.

3. Stakeholder consultation

3.1 Stakeholder consultation undertaken in the development of Case for Change

*For a full list of industry-specific stakeholders that actively participated in the stakeholder consultation process undertaken to develop the Case for Change, please see **Attachment C**.*

The work was outlined during a webinar which included over 60 representatives from all States/Territories and regional areas of those jurisdictions. Feedback on the proposed work was invited during the webinar.

The work was posted in the Engagement Hub of the AIS website and feedback invited.

Notification of the opportunity to provide feedback through the Aviation webinar, or in writing through the Engagement Hub, was provided to over 1000 Aviation sector stakeholder subscribers.

Development of the Case for Change involved consultation with stakeholders via the following communication mechanisms:

- Stakeholder webinars

- Face to Face meetings (Virtual)

- AIS Website

- Stakeholder networks

- Teleconferences

- Emails

Stakeholders include industry representatives from across the states and include rural, regional and remote.

3.2 Evidence of Industry Support

For a list of the issues raised by stakeholders during consultation and the IRC's response to these, please see Attachment D.

Evidence from industry supports the development of the Diploma Aviation Chief Remote Pilot given the increased level of drone operations and the need for operational and risk management aspects associated with this role.

Please see attachment D.

3.3 Proposed stakeholder consultation strategy for project

Note: For a full list of industry-specific stakeholders who are planned to be contacted to participate in the stakeholder consultation process undertaken for this project, please see Attachment E.

Key Industry stakeholders have been identified in consultation with industry regulators, associations, and the Aviation IRC.

AIS, on behalf of the Aviation IRC, will promote the opportunity to contribute through stakeholder webinars, the AIS website, EDM's, AIS newsletter and public notifications. Stakeholders will also be notified of key milestones throughout the life of the project, including requests for feedback on draft materials.

Stakeholder engagement and consultation will occur over the life of the project via a combination of the following methods:

- Direct engagement: Face to face consultations, Site visits, Phone, emails, video/teleconferencing meetings

- Industry forums and conferences

- Webinars

- Online feedback mechanisms

- STA direct engagement

Given the size of Australia and that all stakeholders are not centrally located in major cities, a range of consultation strategies will be used so stakeholders in rural, regional and remote areas, and in smaller jurisdictions have multiple avenues to provide feedback. The project will leverage Australian Association for Unmanned Systems (AAUS) stakeholder network.

AAUS focuses on facilitating awareness, integration and collaboration between industry, academia, government and defence. AAUS offers its members a range of benefits and services.

These include industry advocacy, representation, advice, networking opportunities, business promotional opportunities, and discounted insurance. AAUS serves its membership through every avenue that promotes the adoption and integration of unmanned systems into applications that serve civilian and military needs.

This includes but is not limited to, online/video consultation, email correspondence and promotional activity via targeted communications including social media. A recently developed Engagement hub on the AIS website provides a one stop portal for information about how all stakeholders can participate and inform Training Package development work.

4. Licencing or regulatory linkages

Remote Operator Certificate (ReOC) applicants to CASA require remote aircraft operators to designate a person responsible for the company's operations. This person is known as the Chief Remote Pilot. CASA issue the Chief Remote Pilot (CRP) an example job to prepare a job safety and risk assessment. Once this is complete a phone interview takes place to discuss the safety assessment and explain your responsibilities.

The new qualification will fill the gap of CRPs being nominated without a standardised national occupational standard for the role.

To obtain a Remote Operators Certificate (ReOC), the organisation will need a:

- Completed Operations Manual and Library
- Nominated Chief Remote Pilot (Must hold a Remote Pilot Licence)
- Company Aviation Reference Number (CASA Form 1170)
- Completed application forms (CASA Form 101-06 and CASA Form 101-08)

5. Project implementation

5.1 Prioritisation category

It is proposed that this review be progressed as a routine project.

In line with the AISC Prioritisation Report and to coordinate the release of updated products, the IRC recommends a routine update and implementation of this project.

5.2 Project milestones

Key project milestones include:
- AISC project approval – June 2021
- Draft 1 consultation – November 2021
- Stakeholder validation – –March 2022
- Quality Assurance – April/May 2022
- Final consultation with states and territories – June 2022
- CfE submitted for approval – 30 June 2022.

5.3 Delivery or implementation issues

Some of the delivery and implementation issues which have been raised by stakeholders include the following:

- Experienced trainers at the level of Chief Remote Pilot are needed to provide the leadership and experience necessary to facilitate effective training

- Consistent training delivery – Consistency in delivery of training and assessment will be essential. It is expected that RTOs will apply the appropriate volume of learning to the courses they deliver
- Training may have challenges to ensure skills are learned and applied in a real work environment
- How training programs impact the organization is challenging in post-training assessments.
- Varied delivery methods are needed for skill development to occur. It is important to identify the desired outcomes when planning each training session.

How issues will be considered as part of the update/review:

Where appropriate advice and suggestions will be provided in the Companion Volume Implementation Guide. In addition, links to key resources will also be included.

6.	Implementing the Skills Minister's Priority reforms for Training Packages (2015 and October 2020)

Training delivery information will be provided within the supporting Companion Volume Implementation Guide.

This new qualification will support recognition of Chief Remote Pilots within multiple sectors.

The proposed new products will be suitable for use by multiple industry sectors and will provide improved opportunities for individuals operating as a Chief Remote Pilot in any sector to transfer acquired skills and knowledge into multiple sectors and/or operating environments.

This Case for Change proposes a new qualification to allow individuals to develop Chief Remote Pilot operator skills and knowledge.

This Case for Change was agreed to by the Aviation IRC

Name of Chair	Stephen Leahy
Signature of Chair	
Date	

Attachment A: Training Package components to change

SSO: Australian Industry Standards

Contact details: David Dixon - Chief Operating Officer

Date submitted: TBA

Project number	Project Name	Qualification/ Unit / Skillset	Code	Title	Details of last review *(endorsement date, nature of this update transition, review, establishment)*	Change Required
2	Remote Pilot: Development of new Diploma Aviation (Chief Remote Pilot)	Qualification	AVI59999Y	Diploma of Aviation (Chief Remote Pilot)	NA	New
2	Remote Pilot: Development of new Diploma Aviation (Chief Remote Pilot)	Unit	AVIG9999Y	Work effectively as a chief remote pilot	NA	New
2	Remote Pilot: Development of new Diploma Aviation (Chief Remote Pilot)	Unit	AVIP9999Y	Manage remote pilot operations applications, approvals, and permissions.	NA	New
2	Remote Pilot: Development of new Diploma Aviation (Chief Remote Pilot)	Unit	AVIN9999Y	Manage RPAS operations in a multi-crew environment	NA	New
2	Remote Pilot: Development of new Diploma Aviation (Chief Remote Pilot)	Unit	AVIH9999Y	Manage RPA flight planning and performance	NA	New

Attachment B: Job role, enrolment information, the number of RTOs currently delivering these qualifications

Please set out the job roles to be supported through the updated qualifications, enrolment data over the past three years in which data is available for each qualification, completion rates for each qualification, and the number of RTOs delivering these qualifications.

Job role	Qualification to be updated to support the job role	Enrolment data (for the past three years)	Completion rates (for the past three years)	Number of RTOs delivering (for the past three years)
2311, Air Transport Professionals	AVI59999Y Diploma of Aviation (Chief Remote Pilot)	NA	NA	0
	AVIG9999Y Work effectively as a chief remote pilot	NA	NA	0
	AVIP9999Y Manage remote pilot operations applications, approvals, and permissions.	NA	NA	0
	AVIN9999Y Manage RPAS operations in a multi-crew environment	NA	NA	0
	AVIH9999Y Manage RPA flight planning and performance	NA	NA	0

Attachment C: List of stakeholders that actively participated in the consultation process of the Case for Change

Active participation has included 41 stakeholders from the following organisations across all states and territories within Australia:

- Industry Reference Committee (IRC) Representatives
- Employers (Non-IRC)
- Peak Industry Bodies
- Unions
- Regulators
- RTOs
- Other/Consultants

Attachment D: Issues Raised by Stakeholders during consultation on the development of the Case for Change

Stakeholder Type	Issues Raised	IRC's Response to Issues Raised
Industry Reference Committee (IRC) Representatives	No issues raised	N/A
Peak Industry Bodies	No issues raised	N/A
Employers (Non-IRC)	How can we ensure that the aviation training package keeps in step with aviation regulations?	The Aviation IRC will ensure that Training Package products align with aviation regulations while they are in the development stage. Technical Advisory committees may consist of a CASA representative or that the project has access to a CASA member.
Regulators	No issues raised at this stage	N/A
Registered Training Organisations (RTOs)	CASA recognition and acceptance of the Cert III and Cert IV RPAS qualification	The Aviation IRC will consider this going forward.
Training Boards/Other	No issues raised	N/A
State and Territory Training Authorities (STAs)	No issues raised	N/A
Unions	No issues raised	N/A
Please add other categories as appropriate	No issues raised	N/A

Attachment E: List of stakeholders to be contacted as part of the development of the Case for Endorsement

The Case for Endorsement development will involve contacting relevant stakeholders from the following organisations across all states and territories within Australia:

- Industry Reference Committee (IRC) Representatives
- Australian Defence College
- Employers (Non-IRC)
- Unions
- Regulators
- State Training Authorities
- RTOs
- Other/Consultants