



Environment Institute
of Australia and
New Zealand Inc.

ENVIRONMENTAL SCIENCE ENVIRONMENTAL MANAGEMENT

Qualifications Accreditation Scheme Manual
December 2020 | v2.2

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ENVIRONMENTAL SCIENCE
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QUALIFICATIONS ACCREDITATION
SCHEME MANUAL

December 2020

VERSION 2.2

ENVIRONMENT INSTITUTE OF AUSTRALIA AND NEW ZEALAND Inc.

EXPLANATORY NOTE 1.

This document relates to 'environmental science' or 'environmental management' **programs/courses** taught in Australian and Aotearoa-New Zealand universities. It specifically deals with the accreditation of qualifications with the descriptors 'environmental science' or 'environmental management' in the title. To be eligible for accreditation a qualification must be achieved through coursework and ranked at **AQF** or **NZQF** levels seven (7), eight (8) and (9). Qualifications achieved through research alone are not eligible for accreditation.

EXPLANATORY NOTE 2.

This document does not set out to create a uniform curriculum for 'environmental science' or 'environmental management' qualifications. Rather, it sets out requirements for the environmental studies programs in which these qualifications are taught, core skills, and specific environmental and enabling proficiencies that are characteristic of environmental practitioners. For a qualification to be accredited, the curriculum leading to an 'environmental science' or 'environmental management' qualification and the environmental studies program within which the qualification is taught, must satisfy these requirements.

EXPLANATORY NOTE 3.

An Accreditation Submission must map the program/course for which accreditation is sought against the relevant AQF or NZQF levels seven (7), eight (8) and (9) requirements; against the **LTAS Statements** for Environment and Sustainability, Science and Biology; and against the core skills, and specific environmental and enabling proficiencies that are characteristic of environmental practitioners. The program/course mapping should be such as to allow a **Visiting Panel** to understand and review the strengths and gaps in a program/course and its constituent **units/papers**.

1. Enabling the environment profession

Leadership and action for a sustainable future require an environment profession that is well educated and capable of catalysing science as the foundation for good practice environmental management.

The skill set required of an environmental professional 'is an unprecedented combination of multi-scale, systems thinking skills, innovative and collaborative research and design capacity, the ability to co-create and share scientific knowledge with the citizenry, and to engage with individuals and institutions that implement solutions.'¹

The US National Science Foundation Advisory Committee on Research and Education identified that, environmental education is necessary both to build the skills of future environmental professionals, and to enhance public literacy. Without a sound and credible education, an environmental professional will be unable to fulfil their key role of applying knowledge and skill for the benefit of the community and the ecosystem services on which human life depends.

Ensuring that the education of environmental professionals is sound and credible is a key role for the profession, just as membership of the professional association and certification of environmental professionals is key to assuring industry, governments and the community of their good standing in the profession. Beaton² says: "It is in a profession's interest to safeguard, regulate and husband their specialised knowledge through establishing training schools and obtaining exclusive licence through the state." Beaton highlights a key characteristic of a profession; among other things, entry to its ranks requires formal and specialised education.

As the member based professional association for environmental practitioners, the **EIANZ** has a recognised Code of Ethics and Professional Conduct, and a well-established **Certified Environmental Practitioner Scheme**. By initiating a Qualifications Accreditation Scheme (**QAS**) for academic **programs/courses** in environmental science or environmental management, the EIANZ is fulfilling both its purposes as the professional association for environmental practitioners, and its role of guiding and nurturing the educational pathways for people entering the environment profession.

¹ "America's Future – Environmental Research and Education for a Thriving Century", NSF Advisory Committee for Environmental Research and Education, National Science Foundation, September 2015, https://www.nsf.gov/geo/ere/ereweb/ac-ere/ac-ere_thriving_century.pdf, (Accessed 21/09/2017)

² "Why professionalism is still relevant", George Beaton, 2010, https://www.psc.gov.au/sites/default/files/Why%20professionalism%20is%20still%20relevant_Beaton.pdf, (Accessed 26/09/2017)

2. Qualification Accreditation Scheme

The QAS is designed to encourage **host institutions** with environmental studies programs that operate under the supervision of the Tertiary Education Quality and Standards Agency (TEQSA) in Australia, or the Tertiary Education Commission (TEC) in Aotearoa-New Zealand, to submit programs/courses in environmental science or environmental management for accreditation by the EIANZ.

An environmental professional is a person whose work involves thinking creatively, analytically and critically; who uses good science and sound knowledge of practice and independent investigations; who communicates effectively; and acts ethically to facilitate the sustainable protection and management of the environment. While programs/courses in environmental science or environmental management are not the only basis, they are a key pathway used by students looking to enter the environment profession.

The EIANZ recognises that environmental professionals work in a broad and diverse field of practice. It recognises that each host institution has different academic strengths and teaching resources on which to draw for the design and delivery of an environmental studies program. While the EIANZ encourages a diversity of programs/courses; accreditation is a mechanism for ensuring that the core knowledge, skills and proficiencies required of an environmental professional are consistently developed by students who graduate from such programs/courses.

Having regard to the regulatory environments in which host institutions deliver environmental studies programs, the QAS is designed to articulate with the AQF or the NZQF, and with relevant *LTAS Statements*. The QAS recognises that bachelor degree programs/courses are foundational, and that graduate certificate, graduate diploma and masters degree (coursework) programs/courses are focussed on professional practice.

The QAS process allows the EIANZ to be satisfied that the environmental studies program of a host institution, and the environmental science or environmental management programs/courses submitted for accreditation meet the EIANZ requirements. The process involves the preparation of an Accreditation Submission that, documents the self-reflection and analysis against the accreditation criteria by the environmental studies program **faculty** and the host institution. It involves the review of the host institution's Accreditation Submission by a **Visiting Panel** which recommends to the Qualifications Accreditation Scheme Board (**QAS Board**) whether a program/course should be accredited.

3. Objectives and Purpose of Accreditation

The objectives of accreditation are to ensure:

- programs/courses in environmental science or environmental management are of an appropriate quality and reflect the environmental skills, knowledge and ethical standards of the environment profession;
- programs/courses in environmental science or environmental management evolve to reflect changes in environmental skills and knowledge necessary to prepare environmental practitioners for diverse roles in industry, government, education and research, and the community; and
- environmental studies programs are accountable for delivering high quality programs/courses in environmental science or environmental management that serve the needs of the environment and society.

The purpose of the QAS is to encourage the development, delivery and recognition of a diverse range of quality programs/courses in environmental science or environmental management that educate students to a consistent standard that is appropriate for entry to and careers in the environment profession.

The range of content and the method of its delivery for a program/course, will be at the discretion of a host institution.

The length of a program/course should be consistent with the expectations set in the AQF and NZQF.

4. Pathways and Relationships

The EIANZ recognises that a host institution for an environmental studies program is subject to a number of regulatory influences that determine the nature and learning outcomes of the programs/courses delivered by the institution.

Principal among these are the AQF and the NZQF. The QAS has been designed to articulate with these frameworks.

A host institution applying for accreditation of a program/course will need to demonstrate how the program/course maps against the AQF or NZQF learning outcome descriptors for purpose, knowledge, skills, application of knowledge and skills, and the volume of learning. For bachelor degree, graduate certificate, graduate diploma and masters degree (coursework) programs/courses the relevant AQF and NZQF levels are seven (7), eight (8) and (9).

Sitting alongside the AQF and NZQF are the LTAS Statements developed in Australia for particular fields of teaching. These operate to give a disciplinary or cross-disciplinary frame to the learning outcomes that graduates from bachelor degree, graduate certificate, graduate diploma, and masters degree programs are expected to demonstrate.

In the field of environmental science or environmental management there are three (3) LTAS Statements that the EIANZ considers are core – Environment and Sustainability³, Science⁴ and Biology⁵. For convenience, the files for these are embedded in the electronic version of this document at Appendix A.

A host institution applying for accreditation of a program/course will be expected to demonstrate how the program/course for which accreditation is sought maps against the LTAS Statements for Environment and Sustainability, Science and Biology. The EIANZ recognises that there is some overlap between these three LTAS Statements, however when taken together they

³ 'Learning and Teaching Academic Standards Statement for Environment and Sustainability', Office for Learning and Teaching, Australian Department of Education, 2015, <http://www.olt.gov.au/resource-learning-and-teaching-academic-standards-statement-environment-and-sustainability-2015> (Accessed 20/09/2017)

⁴ 'Learning and Teaching Academic Standards Statement for Science', Office for Learning and Teaching, Australian Department of Education, 2011, http://www.olt.gov.au/system/files/altc_standards_SCIENCE_240811_v3.pdf (Accessed 20/09/2017)

⁵ 'Learning and Teaching Academic Standards Statement for Biology', Office for Learning and Teaching, Australian Department of Education, 2015, http://www.olt.gov.au/system/files/resources/SI11_2122_Ross_Biology_Standards_Statement_2014%20.pdf (Accessed 20/09/2017)

provide a good indication of the strengths of particular programs/courses and where opportunities for further development might lie.

The EIANZ has developed a set of guidelines for environmental studies programs, core skills, and environmental and enabling proficiencies that it expects accredited environmental science or environmental management programs/courses to follow. It expects that students graduating from an accredited program/course will have had the opportunity to acquire the knowledge and skills that allow them to demonstrate the core skills, and environmental and enabling proficiencies as a basis for entering the environment profession. These proficiencies are particularly aligned to the world of work for environmental professionals. A host institution applying for accreditation of a program/course will need to demonstrate how the program/course maps against these core skills, and environmental and enabling proficiencies.

The primary focus of the QAS is on the accreditation of programs/courses that are appropriate for entry to and careers in the environment profession. A three (3) year bachelor degree stands as a minimum entry standard with graduates having a broad and coherent knowledge and skills suitable for professional work. Host institutions are encouraged to keep under review and maintain the significant volume of learning required to satisfy the knowledge and skills requirements for entry to the environment profession.

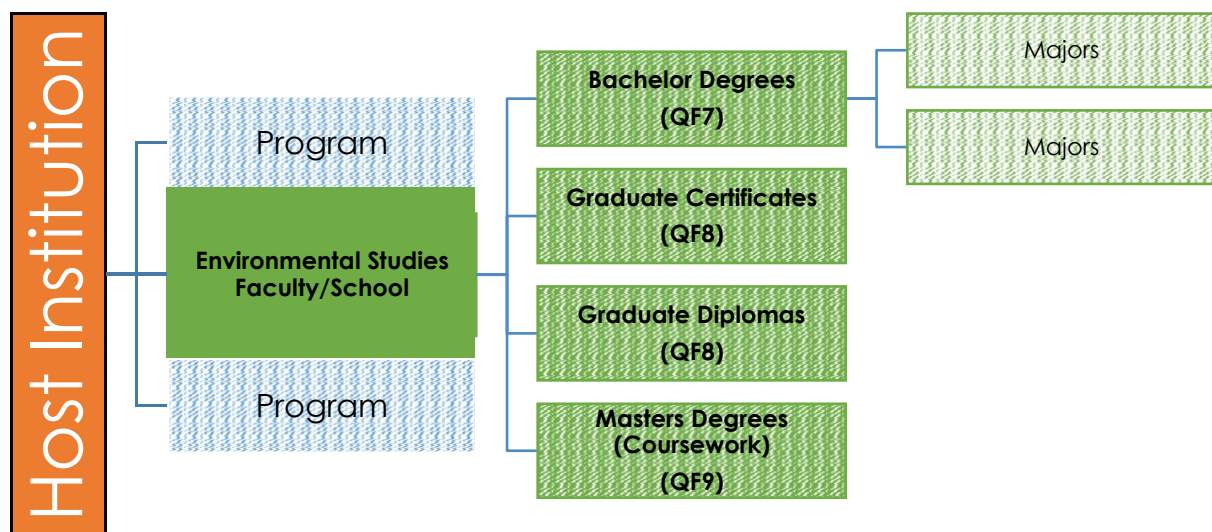
Future pathways for entry to the environment profession are likely to see a requirement for a four (4) year bachelor degree, or a bachelor degree and a graduate certificate/graduate diploma in professional practice or a field of specialised environmental practice.

5. EIANZ Guidelines for Environmental Studies Programs

The EIANZ recognises that host institutions with **environmental studies programs** will each have their own broad educational focus, and will frame their teaching in particular disciplines around the focus of the institutions.

The EIANZ also recognises that bachelor degrees, graduate certificates, graduate diplomas and masters degrees (coursework) in environmental science or environmental management, are delivered in the context of a host institution's environmental studies program.

The EIANZ expects that accredited qualifications in environmental science or environmental management will be taught in an identifiable environmental studies program. The identifiable organisational unit may teach programs/courses in other discipline areas related to environmental studies. These guidelines reflect the EIANZ requirements for environmental studies or similarly focussed organisational units teaching programs/courses in environmental science or environmental management.



5.1 Resourcing

The EIANZ requires an environmental studies program teaching accredited environmental science or environmental management programs/courses to be supported with adequate educational resources.

Adequacy of financial resourcing will be recognised by the allocation of current and forward budgeted funds sufficient to sustain the activities, staffing and facilities of an environmental studies program at a level that does not compromise the quality of its service delivery.

Adequacy of staffing will be recognised by the number and quality of staff relative to the numbers of students participating in an environmental studies program.

An environmental studies program should be supported by a core group of teaching staff sufficient in number to provide an identifiable faculty. The core group of faculty staff should be an appropriately balanced mix of permanent and fixed term/casual appointments. The core group may be complemented by adjunct teaching staff and researchers who teach into courses, and by external environmental practitioners. There should be clearly demonstrated support for staff research activities, and staff continuing professional development activities.

Adequacy of facilities will be recognised by the nature and scope of accommodation and equipment for teaching in an environmental studies program. This will include laboratories and support services, field studies equipment and locations, library services and computing services. Library services should provide access to materials sufficient to support research by environmental studies program, teaching activities and student research. Computing services should support the application of spatial information systems in research by environmental studies program, teaching activities and student research.

Overall the physical facilities, financial and human resources devoted by the host institution to an environmental studies program should be adequate to ensure the objectives of accredited programs/courses are achieved.

5.2 Program identity

The EIANZ requires an environmental studies program with accredited environmental science or environmental management programs/courses to have a clear leadership structure and a physical identity that is reflected in the organisation of the host institution and its physical facilities.

Adequacy of leadership will be recognised by there being a key role (however described) that, as head of the environmental studies program, carries sufficient autonomy to provide academic leadership and direction of all the programs/courses attainable through an environmental studies program.

Adequacy of physical identity will be recognised by there being dedicated physical facilities within which teaching, research and administration of the environmental studies program takes place. Such facilities may carry specific branding that marks their association with environmental studies or noteworthy contributors to environmental science or environmental management.

5.3 Advisory Board

The EIANZ requires an environmental studies program with accredited environmental science or environmental management program/courses to have an advisory board. The advisory board should report to or be chaired by a senior academic leadership position in the host institution, and be comprised of representatives from the local community, the environment profession, the EIANZ, employers of graduates from environmental studies programs, recent graduates and current students. The advisory board should be engaged in ongoing monitoring and the provision of advice to the host institution on the adequacy of the performance of environmental studies programs in achieving their outcomes.

5.4 Methods of delivery

The EIANZ requires a diversity of learning and teaching modes to be used in the delivery of accredited environmental science or environmental management programs/courses.

The adequacy of the diversity of learning and teaching modes will be demonstrated by their relevance to the subject matter of **units/papers** of study, and the achievement by students of the learning outcomes for programs/courses and the overall objectives of the environmental studies program.

The adequacy of the diversity of learning and teaching modes will be demonstrated by the extent to which students are engaged in laboratory and field based activities where they have the opportunity to develop and apply knowledge and skills to the investigation, analysis and synthesis of responses to practical environmental issues. It is desirable that such activities expose students to terrestrial, aquatic and marine environments; rural, urban and industrial activities, and the conservation and extraction of natural resources.

5.5 Work integrated learning

The EIANZ requires academic studies in accredited programs/courses in environmental science or environmental management to be integrated with practical experience gained through studio/workshop and workplace learning.

The adequacy of work integrated learning will be demonstrated by the way in which students are engaged in the structured acquisition of core knowledge and skills through practical work experience. Studio/workshop and workplace learning should demonstrate clear, well-reasoned, structured approaches that develop a student's understanding of environmental policy and practice, project delivery, ethical decision making and communication.

5.6 Cultural engagement

The EIANZ requires accredited programs/courses in environmental science or environmental management to develop a student's understanding of Indigenous Peoples' environmental knowledge and its cultural values.

The adequacy with which students develop their understanding of Indigenous Peoples' environmental knowledge and its cultural values will be demonstrated by the extent to which course work content, field work activities and the engagement of Indigenous Peoples in the delivery of environmental studies programs, results in students being able to demonstrate a sound appreciation of the history and cultural values of **Indigenous communities**, the nexus between environment and culture for Indigenous Peoples, and culturally appropriate forms of engagement.

5.7 Research and collaboration

The EIANZ requires there to be a clear nexus between research and teaching in the delivery of accredited environmental science or environmental management programs/courses.

The adequacy of the nexus will be demonstrated through the extent of the exposure of students to contemporary research, as a foundation for understanding principles and practices associated with environmental science or environmental management. The exposure may take the form of teaching into courses by researchers based on recently published or research that is in progress, or the participation of students in research focussed activities.

The adequacy of the nexus will also be demonstrated by the extent of the participation of teaching faculty in their own research activities, the extent to which researchers teach into courses, and importantly, the research standing of a host institution and its environmental studies program. Assessments such as, the Australian Research Council, '*Excellence in Research for Australia*'⁶ framework, and the Aotearoa-New Zealand Tertiary Education Commission '*Performance-Based Research Fund Quality Evaluation*'⁷ provide important information for establishing research standing at the individual and program levels.

⁶ '*Excellence in Research for Australia*', Australian Research Council, <http://www.arc.gov.au/excellence-research-australia> (Accessed 27/05/2016)

⁷ '*Performance-Based Research Fund – 2018 Quality Evaluation*', Tertiary Education Commission, New Zealand, <http://www.tec.govt.nz/Funding/Fund-finder/Performance-Based-Research-Fund-PBRF-/2018-Quality-Evaluation/> (Accessed 27/05/2016)

5.8 Encouragement of the profession

The EIANZ expects that the academic leader and faculty of environmental studies programs will demonstrate leadership in the environment profession through personal membership of the EIANZ, certification under the Certified Environmental Practitioner Scheme, participation in EIANZ conferences and other professional development activities, and encouragement of students in accredited environmental science or environmental management programs/courses to join the EIANZ as student members.

The adequacy of the encouragement given to the profession will be demonstrated by the extent to which the academic leader and faculty of environmental studies programs are represented in the membership of the EIANZ, are certified environmental practitioners, and are engaged in the activities of the EIANZ.

6. EIANZ Guidelines for Core Skills

In keeping with the roles of environmental professionals, the EIANZ requires that graduates of accredited programs/courses in environmental science or environmental management have the opportunity to acquire and demonstrate skill in:

- recognising the need for, locating and being able to use credible information to develop new skills and knowledge;
- critically analysing and synthesising data/information;
- developing and evaluating hypotheses, propositions, and arguments;
- evaluating and proposing solutions to complex problems;
- thinking and acting strategically;
- writing and presenting accurate, clear, logical, relevant, and coherent material that communicates complex ideas to a variety of audiences;
- working and leading as part of a team;
- operating in a manner that recognises, understands, and values cultural diversity and Indigenous Peoples' traditional knowledge and values; and
- understanding and representing the context of activities at local, regional, and global scales.

The adequacy with which these core skills are acquired will be demonstrated by their representation in the learning outcomes for a program/course and its component units/papers of study.

The adequacy with which these core skills are acquired will also be demonstrated by the responses to targeted feedback from graduates, employers, and the advisory board for an environmental studies program.

7. EIANZ Guidelines for Environmental and Enabling Proficiencies

In keeping with the roles of environmental professionals, the EIANZ requires that graduates of accredited programs/courses in environmental science or environmental management have the opportunity to acquire and demonstrate specific environmental and enabling proficiencies.

The adequacy with which these specific environmental and enabling proficiencies are acquired will be demonstrated by their representation in the learning outcomes for the program/course and its component units/papers of study.

7.1 Environmental Proficiencies

a) Environmental Skills and Knowledge

Proficiency

Environmental professionals have sound knowledge and understanding of the context, scientific concepts, and methods associated with protecting and managing the environment at local, regional and global scales.

Characteristics

- Understands the environmental, political, social, cultural and economic contexts for environmental knowledge and practice
- Understands the importance of maintaining the resilience of natural cycles and biodiversity in achieving ecological sustainability
- Understands and can apply relevant scientific concepts and knowledge to one or more areas of environmental practice including but not limited to fauna, flora and ecosystem management, protected area management, land and catchment management/rehabilitation, pollution control, waste management, climate change, and environmental sustainability
- Identifies, understands and can use one or more appropriate tools to achieve effective environmental outcomes including but not limited to, environmental impact assessment, strategic environmental assessment, environmental risk assessment, environmental management systems, environmental monitoring, environmental auditing, predictive environmental modelling, direct environmental intervention, market based environmental interventions
- Understands and can develop and apply appropriate monitoring/sampling strategies for determining the status of environmental indicators and changes in status over time

b) Environmental Policy and Planning

Proficiency

Environmental professionals have sound knowledge and understanding of the statutory and other regulatory frameworks that inform environmental policy across all jurisdictional levels, and the nature, use and preparation of plans and plan making to inform and direct the implementation of environmental practice and the achievement of environmental outcomes.

Characteristics

- Understands statutory processes, legal interpretation, and regulatory compliance practices associated with environmental management, and complies with environmental law and standards in project planning, implementation and operation
- Uses appropriate environmental policies, systems and frameworks in decision making
- Critically evaluates complex environmental information, applies or modifies good practice environmental management to achieve environmental outcomes
- Prepares environmental policies/plans that demonstrate understanding of relevant scientific concepts and knowledge, analysis and interpretation of environmental data, and the policy/plan making process
- Understands and can develop and apply appropriate frameworks for emergency response and incident management

c) Environmental Analysis and Risk Assessment

Proficiency

Environmental professionals collect, analyse, interpret and display environmental evidence, identify environmental hazards and assess environmental risks, to inform decisions about protecting and managing the environment.

Characteristics

- Collects, evaluates, analyses, interprets and displays environmental evidence/data using appropriate field, laboratory, spatial information system, and statistical methods and technologies
- Understands and competently uses/applies a range of equipment and techniques to the identification and characterisation of the biological, chemical and physical properties of the environment
- Undertakes objective and systematic critical analysis of evidence and draws accurate conclusions about environmental impacts and their associated risks

- Understands and competently applies techniques for the identification of environmental hazards, the assessment of environmental risks, and the avoidance, mitigation and offsetting of such risks
- Understands, uses and interprets the outcomes of environmental impact assessment and strategic environmental assessment tools in decision making about protecting and managing the environment

d) Environmental Ethics

Proficiency

Environmental professionals make decisions and act in an ethical way using lawful, recognised and accepted standards of professional conduct and good practice environmental management.

Characteristics

- Understands the basic principles of environmental ethics standards and common ethical issues associated with environmental science or environmental management
- Resolves ethical issues in line with recognised and accepted standards and practices, and in doing so seeks information, support and advice from others
- Gives accurate, impartial and forthright advice based on sound scientific evidence and good practice environmental standards
- Reflects on and adapts their own knowledge, understanding and practice in the context of new and emergent knowledge, standards and legislation
- Communicates to management where environmental ethical standards are at risk or can be improved

7.2 Enabling Proficiencies

a) Decision Making and Project Management

Proficiency

Environmental professionals are effective and efficient decision makers who apply creative thinking and project management skills to deliver appropriate, innovative, timely, cost effective, and sustainable environmental outcomes.

Characteristics

- Understands and can explain the context for their work
- Analyses problems and identifies effective targeted solutions that deliver environmental outcomes
- Applies sound reasoning and judgement to decision making
- Adapts responses to changing circumstances and operates effectively in uncertain organisational contexts

- Plans and manages projects and work in a systematic, effective and efficient manner

b) Communication

Proficiency

Environmental professionals are effective communicators of the context, scientific concepts, and methods associated with protecting and managing the environment, skilfully using different communication methods to inform and engage stakeholders.

Characteristics

- Identifies and uses appropriate communication methods with skill and accuracy
- Seeks contributions from others and identifies, engages with, and responds to stakeholders
- Recognises the understanding and motivations that others bring and resolves conflict using appropriate methods
- Understands how to write accurately, and report within the delegated authority of an organisation
- Influences decision making

c) Professional Practice

Proficiency

Environmental professionals are effective managers of environmental projects and programs who demonstrate self-direction and creativity, collaborate, and engage with contributing disciplines, identify constraints, and develop solutions, and promote strategic environmental outcomes that go beyond minimum statutory requirements.

Characteristics

- Works effectively in an independent capacity, as part of a team, and in an organisation
- Motivates and influences others in understanding environmental values and applying good practice environmental management standards
- Reflects and learns from personal experience and that of others to improve previous practice
- Has and applies the appropriate technical knowledge and skills to do their job
- Identifies areas of uncertainty and risk and acts to appropriately manage

8. EIANZ Accreditation Process

The accreditation process is an ongoing cycle, which begins with a rigorous assessment and review of the environmental studies program and programs/courses in environmental science or environmental management submitted for accreditation by the host institution. Once accredited, the environmental studies program and accredited programs/courses will be subject to annual reporting requirements throughout the five (5) year term of accreditation. In the fifth year of accreditation, the host institution will be invited to submit the environmental studies program and accredited programs/courses for re-accreditation. If successful, the accreditation will be renewed for a further term of five (5) years, and the annual maintenance reporting process will continue.

8.1 Application Phase

Host institutions are encouraged to submit expressions of interest in having environmental studies programs and programs/courses in environmental science or environmental management accredited at any time. The expression of interest form can be downloaded from the EIANZ web-site.

Based on the expressions of interest and the order in which they are received, the QAS Board will invite host institutions to lodge an application for accreditation.

Applications for accreditation must be submitted, together with the application fee, within thirty (30) days of receipt of an invitation to apply. The application form can be downloaded from the EIANZ website.

Applications for accreditation will be processed in the order that they are received. Host institutions that fail to submit an application may forfeit their place in the application cycle.

Applications for re-accreditation will be invited in a manner that allows for the self-study and accreditation decision phases of the accreditation cycle to be completed before the expiry of the current accreditation.

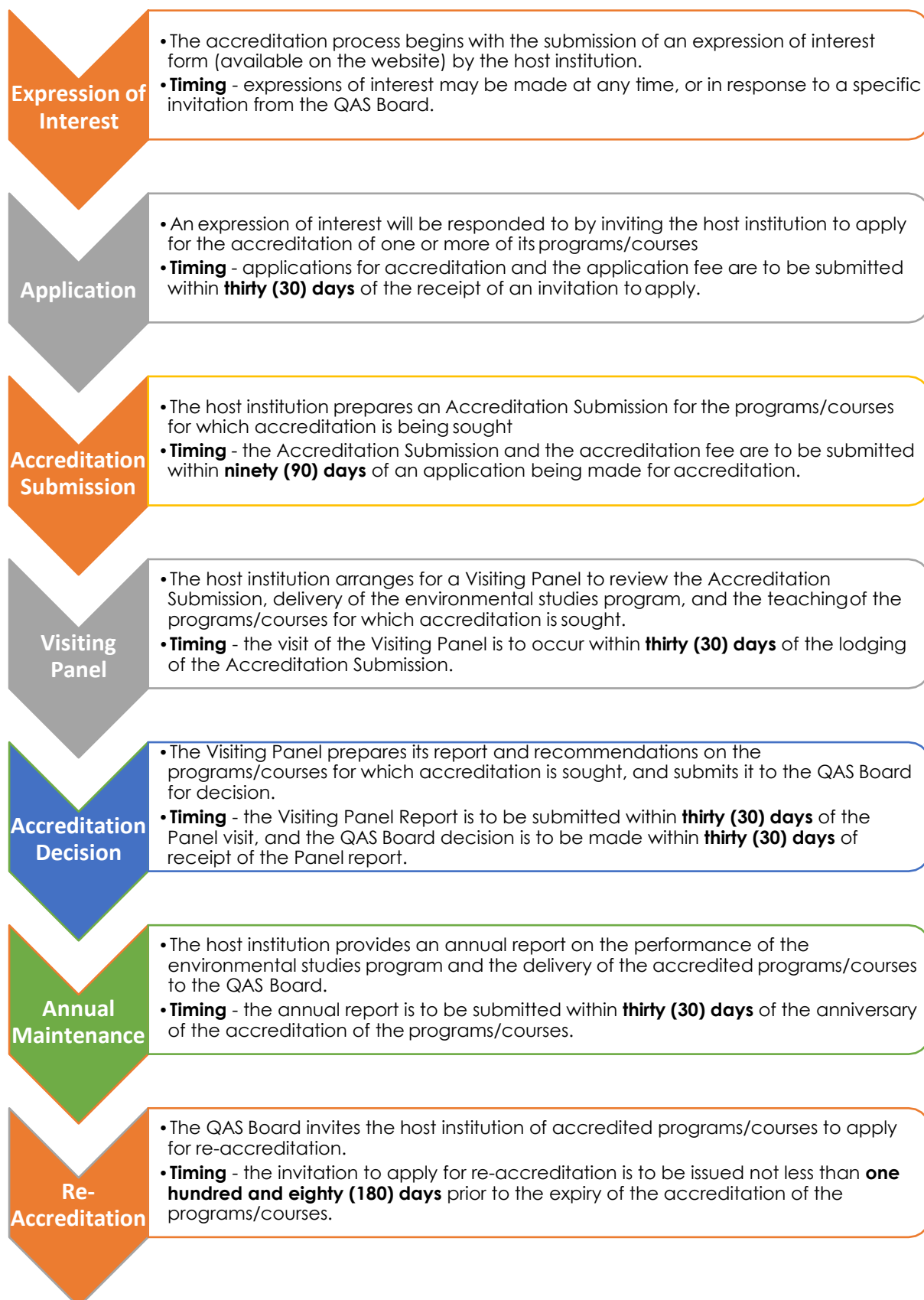
8.2 Self-study Phase

Host institutions are required to prepare a detailed submission that demonstrates how the environmental studies program and programs/courses in environmental science or environmental management satisfy the requirements for accreditation.

The development of the submission is intended to be a reflective process by which host institutions and environmental studies program faculty articulate how the teaching and learning outcomes of the units/papers comprising the programs/courses are mapped against the requirements of the AQF or NZQF;

EIANZ Accreditation Process

This is a schematic of the process only - the preceding pages contain detailed information.



the LTAS Statements for Environment and Sustainability, Science and Biology; and the EIANZ guidelines for environmental studies programs, core skills, and the environmental and enabling proficiencies.

During this phase the QAS Board will advise the host institution of the membership of the Visiting Panel that will review the Accreditation Submission and visit the host institution. See Appendix C for details of the arrangements that need to be made by a host institution for the visit of the Visiting Panel.

The submission must contain all of the information necessary for a Visiting Panel and the QAS Board to form a view as to whether the environmental science or environmental management program/course should be accredited. A submission pro-forma is at Appendix B. One (1) hard copy and one (1) soft copy of the completed submission and supporting documentation, together with the accreditation fee, must be submitted to the QAS Board within **ninety (90) days** of being invited to make an application.

The visit of the Visiting Panel should occur within **thirty (30) days** of the Accreditation Submission being lodged with the QAS Board.

The submission and its supporting documentation will be reviewed against the requirements for accreditation, and any opportunities for improvement will be notified to the host institution through the report of a Visiting Panel.

8.3 Accreditation Decision Phase

The accreditation decision phase begins with a Visiting Panel process (Appendix C). Designed to work in a collaborative and supportive way with the host institution, the Visiting Panel process builds on the self-reflection by the host institution and environmental studies program faculty.

A Visiting Panel will conduct a review of the material submitted by the host institution. The review will seek to validate the material submitted, the delivery of the environmental studies program, and the teaching of the program/course for which accreditation is sought, through interviews with relevant leaders and faculty, support staff, students and graduates, and members of the advisory board. As far as practicable the time set aside for the activities of a Visiting Panel should allow it to:

- observe the environmental studies program and the teaching of the program/course;
- meet with relevant leaders and faculty, support staff, students and graduates, and members of the advisory board; and
- meet to prepare a draft of its report.

It is unlikely that a visit of less than two (2) days duration would enable a Visiting Panel to accomplish these tasks.

The Visiting Panel will prepare a draft report of its findings which will be sent first to the leader of the host institution's environmental studies program for review and comment. The host institution will be invited to correct matters of fact, and to comment on any matters or findings by the Visiting Panel it regards as contentious. The Visiting Panel will finalise its report, having considered the comments from the host institution on the draft report, and recommend whether the program/course should be accredited.

A Visiting Panel may recommend that a program/course be fully accredited for a period of five (5) years, or that it be provisionally accredited for two (2) years subject to the implementation of particular requirements. Where provisional accreditation is recommended, the reports submitted during the annual maintenance phase will be used as the basis for determining whether sufficient progress has been made on the implementation of particular requirements for full accreditation to be granted at the end of two (2) years.

The report of a Visiting Panel will be submitted to the QAS Board for its consideration and decision on whether a program/course should be accredited. A written record of the decision of the QAS Board will be sent to the leader of the host institution's environmental studies program together with a copy of the final report of the Visiting Panel.

8.4 Annual Maintenance Phase

Where a program/course has been accredited, the host institution is required to submit an annual report to the QAS Board on the performance of the environmental studies program and the delivery of the program/course.

Where the QAS Board has given provisional accreditation for a program/course, the annual report is to provide information that demonstrates progress toward satisfying the conditions under which provisional accreditation was granted. In the second year, the annual report must demonstrate that the conditions under which provisional accreditation was granted have been fully satisfied.

In the fifth (5th) year that a program/course has been accredited, the QAS Board will invite the host institution to prepare a submission for re-accreditation of the program/course.

9. Accreditation Costs

The EIANZ charges fees for the accreditation of programs/courses under the QAS. The following table sets out the various fees.

The fees charged by the EIANZ for accreditation are exclusive of the hospitality, travel and accommodation costs associated with a Visiting Panel which are to be met directly by the host institution.

Fee Structure

ITEM	COST**
1. Application Fee (Accreditation and Re-accreditation)*	\$850
2. Initial Accreditation Fee per Program/Course (Includes Year 1 Annual Fee)*	\$4,200
2(a). Plus Accreditation Fee per Major**	\$800
3. Re-accreditation (Lapsed Accreditation) Fee*	\$5,200
3(a). Plus Re-accreditation Fee per Major**	\$900
4. Re-accreditation Fee*	\$4,200
4(a). Plus Re-accreditation Fee per Major**	\$800
5. Annual Fee (1 Accredited Major)	\$3,000
6. Annual Fee (2 – 3 Accredited Majors)	\$3,100
7. Annual Fee (More than 3 Accredited Majors)	\$3,200
8. Annual Fee* (Grad Cert, Grad Dip, Masters)	\$3,200

* Fees are per program/course and set at current dollar values

** Fees are GST inclusive

By way of examples in current dollar values:

Example 1.

A Bachelor of Environmental Science Degree with majors in environmental science or environmental management offered by a host institution would incur the following initial costs payable to the EIANZ for accreditation:

Application Fee	\$850
Accreditation Fee	\$4,200
Plus 2x Majors (2x \$800)	\$1,600
	\$6,650

The host institution would pay directly the costs of hospitality, travel and accommodation associated with a Visiting Panel.

The accreditation fee is inclusive of the first year's annual fee. In subsequent years, an annual fee of \$3,100 is payable.

Annual Fee – Yrs 2 – 5 (4x \$3,100)	\$12,400
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In the fifth year of accreditation the host institution would be invited to apply for re-accreditation with the following cost payable to the EIANZ:

Application Fee	\$850
Accreditation Fee	\$4,200
Plus 2x Majors (2x \$800)	\$1,600
	\$6,650

Example 2.

A Bachelor of Environmental Science Degree with majors in environmental science or environmental management, and a Masters Degree (Coursework) in Environmental Management, offered by a host institution would incur the following initial costs payable to the EIANZ for accreditation:

Application Fee x2	\$1,700
Accreditation Fee (Bachelor degree)	\$4,200
Plus 2x Majors (2x \$800)	\$1,600
Accreditation Fee (Masters degree)	\$4,200
	\$11,700

The host institution would pay directly the costs of hospitality, travel and accommodation associated with a Visiting Panel which would assess both the Bachelor Degree and the Masters Degree.

The accreditation fee is inclusive of the first year's annual fee. In subsequent years, an annual fee of \$3,100 is payable for the Bachelor degree and \$3,200 for the Masters degree (Coursework).

Annual Fee Bachelor degree – Yrs 2 – 5 (4x \$3,100)	\$12,400
Annual Fee Masters degree – Yrs 2 – 5 (4x \$3,200)	\$12,800
	\$36,900

In the fifth year of accreditation the host institution would be invited to apply for re-accreditation with the following cost payable to the EIANZ:

Application Fee x2	\$1,700
Re-accreditation Fee (Bachelor degree)	\$4,200
Plus 2x Majors (2x \$800)	\$1,600
Re-accreditation Fee (Masters degree)	\$4,200
	\$11,700

10. Accreditation Benefits

The EIANZ will provide the following benefits to host institutions with one or more accredited programs/courses:

ITEM
1. Approval Letter
2. Accreditation Testamur
3. Accreditation marketing kit including a licence to use the EIANZ Accreditation Mark
4. Listing in the EIANZ Directory of Accredited Courses
5. Advertising on the EIANZ website by arrangement for a fee
6. Exclusive invitations for academic leaders of environmental studies programs to EIANZ events

Definitions

AQF – Australian Qualifications Framework which describes the underpinning skills, knowledge and attributes needed by students, completing programs/courses at various levels, to perform a range of roles across a broad context.

Australian Council of Environmental Deans and Directors - an association of people from universities with line responsibility for environmental science and/or environmental studies programs.

Certified Environmental Practitioner Scheme – the EIANZ Certified Environmental Practitioner Scheme.

EIANZ – the Environment Institute of Australia and New Zealand Inc.

environmental studies program – the host institution organisational unit within which programs/courses in environmental science or environmental management that lead to the award of bachelor degrees, graduate certificates, graduate diplomas, masters degrees (coursework) and doctoral degrees, are delivered.

faculty – the full-time, part-time and adjunct staff who teach or teach into courses in a host institution's environmental studies program.

host institutions – organisations, generally universities, that operate under the supervision of the Tertiary Education Quality and Standards Agency (TEQSA) in Australia, or the Tertiary Education Commission (TEC) in Aotearoa-New Zealand.

Indigenous communities – specifically Aboriginal and Torres Strait Islander communities in Australia and Māori and Moriori in Aotearoa-New Zealand. Includes Indigenous people and Indigenous Peoples' environmental knowledge.

LTAS Statements – Learning and Teaching Academic Standards Statements that describe the minimum threshold learning outcomes to be achieved by graduates in particular disciplines.

NZQF – New Zealand Qualifications Framework which describes the underpinning skills, knowledge and attributes needed by students, completing qualifications at various levels, to perform a range of roles across a broad context.

programs/courses – the combined units/papers of study in environmental science or environmental management that lead to the award of bachelor degrees, graduate certificates, graduate diplomas, and masters degrees (coursework).

QAS – the EIANZ Qualification Accreditation Scheme as described in this document.

QAS Board – the five (5) person Qualification Assessment Board appointed by the EIANZ Board to make independent decisions about the accreditation of programs/courses and maintain and develop the Qualification Accreditation Scheme.

units/papers – units of study that contribute to a program/course which leads to the award of bachelor degrees, graduate certificates, graduate diplomas, and masters degrees (coursework).

Visiting Panel – teams of three (3) persons appointed by the QAS Board to review applications for accreditation of programs/courses, visit the host institution to observe the delivery of its environmental studies program and the programs/courses for which accreditation is being sought, and report to the QAS Board on whether the programs/courses should be accredited, provisionally accredited, or refused accreditation.

LTAS Statements

Environment and Sustainability

Web Page Reference: <http://www.olt.gov.au/project-learning-and-teaching-academic-standards-ltas-environment-and-environmental-sustainability-2>



ES_LTAS_Statement_Final.pdf

Science

Web Page Reference: <http://www.olt.gov.au/resource-learning-and-teaching-academic-standards-science-2011>



altc_standards_SCIE
NCE_240811_v3.pdf

Biology

Web Page Reference: <http://www.olt.gov.au/project-discipline-networkvision-and-innovation-biology-education-vibenet-2011>



S111_2122_Ross_Biology_Standards_State

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Accreditation Submission Pro-forma

An Accreditation Submission is the core of an application for accreditation or re-accreditation.

Preparation of the submission is to be led by the academic leader of the environmental studies program on behalf of the host institution.

The submission must be made with the approval of a senior academic leader on behalf of the host institution, as indicated by their signature on a covering letter to the submission.

The expectation is that the submission will be a succinct document supported by relevant material that makes the case for accreditation of the nominated program/course by reference to:

- the profile of the host institution;
- the attributes of the environmental studies program and its academic success;
- the curriculum of the qualification(s);
- how the environmental studies program and programs/courses deliver the requirements for accreditation, especially the environmental and enabling proficiencies sought for entry to the environment profession; and
- the self-reflection of the environmental studies program faculty on the programs/courses and opportunities for their further development as a basis for entry to the environment profession.

Host Institution

Brief background on the host institution that provides context for the environmental studies program and the programs/courses for which accreditation is being sought.

History of the Qualification

A brief description of the history of the programs/courses for which accreditation is sought.

Organisational Arrangements

A description of the organisational arrangements above and below the academic leader of the environmental studies program, that allow an understanding of the status and authority of the academic leader position; the relationships between the environmental studies program and other

programs conducted by the host institution; the responsibilities and status of program faculty; and the role and function of the Program Advisory Committee.

Aims and Objectives

A statement of the educational philosophy of the environmental studies program, the knowledge, skills, and proficiencies that it seeks to develop in students, and how these relate to the education of entrants to the environment profession.

Academic Program/Course Descriptions

A detailed description of the programs/courses for which accreditation is sought including a map of its curriculum against the AQF or NZQF, the LTAS Statements for Environment and Sustainability, Science and Biology; and at the level of units/papers of study, the EIANZ core skills, and environmental and enabling proficiencies that form the basis of accreditation.

The mapping of the program/course should indicate the extent of the congruence, between the learning outcomes for the program/course/units/papers of study and the LTAS Statement learning outcomes and the EIANZ core skills and proficiencies, using the descriptors – aligned, partially aligned, not aligned.

This section of the submission will generally be supported with program/course and unit/paper outlines, details of contact hours, recommended reading materials and program/course handbooks, assessment methods and standards for successful completion.

The description of the program/course and its mapping should be sufficient to allow a Visiting Panel to understand the learning outcomes and content of every major and each of the units/papers of study that contribute to the award of a qualification in the particular program/course.

Teaching and Research

A statement that sets out the approach to teaching the program/course for which accreditation is sought, the various modes of delivery employed, the ways in which learning is supported by laboratory and field studies, and the ways in which learning is integrated with the world of work. The statement should indicate how teaching practices are evaluated for effectiveness and the assessed performance in relation to the qualification for which accreditation is sought.

The advanced standing arrangements for students entering the program/course for which accreditation is sought should be explained in this part of the submission.

There should, in this section of the submission, be a statement setting out the key areas of research and how they support the environmental studies program and the teaching of the program/course for which accreditation is sought. The statement should indicate the research standing of the host institution and its environmental studies program.

Student Characteristics

There should, in this section of the submission, be an analysis of student numbers, enrolment trends, and retention rates. There should be information on the characteristics of students (age, gender, nationality, qualifications on entry) and an explanation of the implications for teaching strategies.

Faculty

A statement that summarises the academic faculty profiles that is sufficient for the teaching and non-teaching activities and other duties of individuals associated with the delivery of the qualification to be understood. The profiles should demonstrate the involvement of faculty in research, publications, and community activities. The profiles should include faculty and environment professionals who teach into courses that are the basis of the qualification.

Physical Facilities

This statement should be a description of the laboratories and support services, field studies equipment and locations, library services and computing services that underpin the delivery of the qualification.

External Feedback

The submission should reference the sources and findings of external reviews that have been conducted of the environmental studies program and the qualifications in environmental science or environmental management for which accreditation is sought.

Self-Appraisal Statement

The submission should contain a self-appraisal statement developed by the academic leader and faculty of the environmental studies program and the qualification for which accreditation is sought. The statement should show how the qualification satisfies the LTAS Statements for Environment and Sustainability, Science, and Biology; and the EIANZ core skills and proficiencies required for EIANZ accreditation.

The self-appraisal statement should be developed through an evidence-based process of peer analysis and review that leads to the identification of specific aspects of the environmental studies program or qualification where the host institution may be seeking advice from a Visiting Panel.

Proposed Arrangements for a Visiting Panel

The submission must contain a description of the proposed arrangements that have been made for the Visiting Panel, that has regard to the matters set out in Appendix C.

Arrangements for Visiting Panels

Arrangements

The host institution seeking accreditation of an environmental science or environmental management program/course is responsible for making suitable arrangements for a Visiting Panel to review the delivery of the program/course.

These arrangements, in the form of a visit program, should be set out in the host institution's Accreditation Submission. The EIANZ will notify the host institution of the membership and contact details for the Visiting Panel during the preparation of the Accreditation Submission and in sufficient time for a visit program to be arranged by the host institution.

As far as practicable the time set aside for the activities of a Visiting Panel should allow it to:

- observe the environmental studies program and the teaching of the program/course;
- meet with relevant leaders and faculty, support staff, students and graduates, and members of the advisory board; and
- meet to prepare a draft of its report.

It is unlikely that a visit of less than two (2) days duration would enable a Visiting Panel to accomplish these tasks. See note 'Draft Program' below.

Objective

A Visiting Panel's objective will be to review and validate the material submitted by the host institution on the delivery of the environmental studies program, and the teaching of the program/course for which accreditation is sought, through interviews with relevant academic leaders and faculty, support staff, students and, where practical, recent graduates, and members of the environmental studies program advisory board.

Composition and Selection

A Visiting Panel will be composed of three (3) persons; two (2) senior members of the EIANZ from the locality of the host institution, and one (1) other person who is a senior academic from another jurisdiction, who is experienced in the design and delivery of environmental studies programs.

The QAS Board will determine the membership of a Visiting Panel and appoint the chair of the panel.

The QAS Board will use an open and transparent process to invite senior members of the EIANZ to participate in Visiting Panels.

The QAS Board will consult with the **Australian Council of Environmental Deans and Directors**, to establish a roster of suitably qualified and experienced senior academics to participate in Visiting Panels.

Cost

The costs associated with hospitality, travel and accommodation for a Visiting Panel are the responsibility of the host institution. These costs are additional to the qualification accreditation fees payable to the EIANZ.

Costs for travel and accommodation will generally be limited to the cost of the member of a panel from outside the jurisdiction where the host institution is located. There may however be occasions when there will be travel and accommodation costs associated with bringing members of a Visiting Panel together within a jurisdiction.

Draft Program

A Visiting Panel draft program should include:

- detailed discussions with the academic leader of the environmental studies program at the beginning of the visit;
- discussions with faculty and support staff responsible for teaching, teaching facilities and field studies sites;
- discussion with students and, where practical, recent graduates;
- discussion with the environmental studies program advisory board;
- a close-out briefing with the academic leader and senior faculty of the environmental studies program; and
- a close-out briefing with a senior representative of the host institution and the academic leader of the environmental studies program.

A draft program must provide uncommitted time for a Visiting Panel to deliberate on the material that it is presented with and begin to formulate its report and recommendations.

A draft program must provide a Visiting Panel with the opportunity to inspect teaching facilities, laboratories and support services, field studies equipment and locations, library services and computing services. The inspection should be guided by a senior member of the environmental studies program faculty and be purposeful in demonstrating the connection between the learning outcomes for the qualification and its courses and the facilities.

A Visiting Panel will review the host institution submission, and two (2) weeks prior to the scheduled visit, will advise the host institution of any particular matters that it wishes to have addressed through the program for the visit.

Duration

A period of two (2) full working days will generally be sufficient for a Visiting Panel to conduct its activities. Where there is more than one program/course for which accreditation is being sought, or a particular program/course contains a number of majors, it may be appropriate to conduct the visit program over more than two (2) days.

Administrative Support

The host institution should provide administrative support to coordinate and assist the Visiting Panel with respect to its visit.

Working Facilities

The host institution is responsible for providing suitable facilities where a Visiting Panel can meet privately and with faculty, support staff, students and recent graduates, and members of the advisory board.

Transport

The host institution is responsible for providing suitable transport for members of a Visiting Panel to get to and from the host institution and to inspect its various teaching facilities including field studies sites.

Hospitality

Hospitality for a Visiting Panel should be such that it will not be seen to compromise the independent review role of the Panel. Morning and afternoon tea and working lunches that facilitate the review work of the Visiting Panel are appropriate. Evening functions that allow a Visiting Panel, over non-extravagant food, and beverages, to engage with leaders of the host institution and the environmental studies program, students and, where practical, recent graduates and members of the environmental studies program advisory board are appropriate.

Reporting

A Visiting Panel will prepare a draft report of its findings which will be sent first to the academic leader of the host institution's environmental studies program for review and comment. The host institution will be invited to correct matters of fact, and to comment on any matters or findings by the Visiting Panel it regards as contentious.

A Visiting Panel will finalise its report, having considered the comments from the host institution on the draft report, and recommend whether the qualification should be accredited, provisionally accredited, or refused accreditation.

A Visiting Panel may recommend that a qualification be:

- fully accredited for a period of five (5) years;
- provisionally accredited for two (2) years subject to the implementation of particular requirements; or
- not accredited.

The report of a Visiting Panel will be submitted to the QAS Board for its consideration and decision on whether a qualification should be accredited, provisionally accredited, or refused accreditation.



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