

International Association for Impact Assessment

Research Innovation Grant 2017

Compendium of National IA Professional Recognition Schemes: Individual Environmental Impact Assessment (EIA) Practitioners

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Disclaimer

Regarding the various programs outlined in this report, IAIA takes no position on the value of impact assessment accreditation processes, as a whole, nor does it endorse any specific program or approach.

Further, the opinions expressed in this report are not necessarily those of the International Association for Impact Assessment. Any errors of fact or interpretation are those of the authors alone.

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1. The Project

1.1 Introduction

The link between practitioner competence and quality of output is as strong in impact assessment (IA) as it is in any other profession. Competence, however, can be developed in many ways and in relation to IA is often considered to be something most effectively developed through practice in the field. The link between quality and competence in the field of Environmental Impact Assessment (EIA) has been brought into focus in recent years by the European Commission, whose aim of improving the quality of EIA across Europe was strongly linked a new legal requirement for developers to employ competent experts to produce the EIA Report (EIS) and decision-makers to have sufficient expertise to examine it¹. As a result, on 16 May 2017, 28 countries in Europe had to place a greater focus on how they judge competence and expertise within their EIA systems.

Alongside this European trend is a much broader trend across the international finance institutions (IFIs), who have for some years been pursuing a desire to move gradually toward placing greater trust in country safeguard systems. This was brought into sharp focus at IAIA's 2016 conference in Nagoya, Japan, where an agreement, "The Principles of Collaboration for Country Safeguard Systems," was signed in front of conference delegates. The signatories in the session included the Asian Development Bank (ADB), World Bank, Japan International Cooperation Agency (JICA), and other members of the Development Partners Safeguard Coordination Committee. The move to country safeguards will place a greater need for lenders to trust in the competence of ESIA professionals around the globe. Such emphasis on competence is also seen in the World Bank's new Environmental and Social Framework (ESF) with the first standard indicating that future environmental and social assessments must be prepared by "qualified and suitably experienced persons," and further regular reference to competent professionals and organizational competency across standards 4, 5, 6 and 9.

Despite this growing trend in IA professional competency and a series of papers on competency at IAIA conferences over recent years, the authors of this report (IAIA members Josh Fothergill and Ross Marshall) could not find a clear source that had attempted to chart the approach to IA competency recognition around the world. The authors had discussed this gap and identified a number of key questions that in their view needed answering to help the IA community better understand its approach to competency. The questions were:

- What IA competency requirements exist around the world?
- Do common criteria exist between such systems?
- How are IA related competency such systems are developing?

In February 2017, the authors put forward a bid to the IAIA's new Innovation Grant scheme to undertake research that aimed to review national systems for recognizing the competence of individual EIA practitioners. The grant proposal was entitled "An International IA Competency Standard – Establishing the Baseline and Examining the Foundation."

¹ Article 5(3)(a) and (b) of 2014/92/EU in amending 2011/52/EU (the European Union's EIA Directive)

The grant proposal was approved and this report provides an overview of the resulting research project and its findings, including an initial compendium of 24 EIA professional recognition schemes from around the globe (Appendix A).

1.2 Project Objective

The project set out the objective of identifying Environmental Impact Assessment (EIA)-related competency requirements across a range of national and institutional actors, facilitating improved knowledge sharing in this area, and establishing the foundations to enable IAIA to explore the opportunity of greater coordination of IA competency around the globe, in line with the aims of its strategic direction.

1.3 Research Approach

IAIA Innovation Grants are designed to fund activities that advance the IA community and can be delivered within a six- to nine-month period. The project's program was therefore set out in four key stages: Scoping, Data Gathering, Assessment, and Reporting. To help drive IAIA member value through debate and engagement, and to build momentum behind the project, an early decision was made to use the IAIA 2017 conference in Montreal, Canada, as the key launch platform for data gathering. The timing of the IAIA conference in early April thus helped define the following project timetable:

- March – April: Project Scoping
- May – August: Data Gathering
- September: Assessment
- October & November: Reporting to IAIA Headquarters and Board

The scoping phases of the project centered on identifying a series of core characteristics of national EIA recognition systems from a small number of countries around the world. The initial review of EIA professional recognition systems looked at the existing systems in the UK, China, and South Africa, alongside IAIA's existing over-arching IA competency framework². These four approaches were compared to identify common criteria used to apply for, examine, award, and renew professional recognition, as recognition schemes exist for individuals and organizations and for various types of IA and for topic specialists in different parts of the world. From the initial stages of the review, it became clear that there was benefit in focusing the research around a more defined group. Therefore, to enable an effective and valuable comparison between the schemes identified, the project focused on schemes related to the recognition of individual professionals working on project EIA.

The findings from the scoping phase enabled the project to develop an effective engagement plan, which included discussions with delegates at IAIA17, communications with the authors own extensive professional networks, and an online survey sent to IAIA members. The survey not only sought data on national EIA recognition schemes, but also those used within national and

² IAIA (2010) Guideline Standards for IA Professionals, accessible online:
http://www.iaia.org/uploads/pdf/Guideline_Standard_IA%20Professionals.pdf

multinational institutions, to help identify how far the IFI, MFI and international development community had progressed competency recognition related to IA.

The survey was live from June through to mid-July and received 89 responses, which were analysed alongside data gathered from personal correspondence with other IA professionals and online web-based research. The collected findings identified far more national systems than institutional examples of EIA competency recognition schemes around the world. The analysis was then developed into two project outcomes:

1. A project report providing an initial IAIA review of EIA competency best practice, including a table of the global EIA recognition systems identified, and a blank data entry template to enable IAIA members to produce future updates to the compendium.
2. A strategic paper, for the IAIA Board of Directors, focused on the key commonalities and global trends identified across the EIA recognition schemes identified.

Further details about the project's four phases can be found in Table 1, below.

Table 1: Project Activity Plan and Timeline

No.	Activity	Output	Date
1	Scoping		March-April
1a	Desk-based review of keystone requirements of a number of known IA-related accreditation systems to enable initial comparison criteria to be developed that allow members to effectively engage in data sharing (stage 2)	Review document and draft criteria	24 March
1b	IAIA strategic alignment , finalization of stage 1a criteria, through discussion with senior IAIA staff/Board members, to help ensure that the criteria will produce both a valuable knowledge-sharing resource for members and information that is of value to IAIA's strategic goals.	Finalized criteria	Held during IAIA17 in Montreal
1c	Design of engagement plan: schedule data gathering activities online and in person (e.g., blogs, online survey, interviews at IAIA17).	Engagement plan	March & April
2	Data Gathering		April-August
2a	Online research. Identify known leading IA accreditation systems, through engaging blog pieces about the subject providing project contact details (IAIA Connect, LinkedIn, etc.). Undertake broader online IA competency survey and follow-up as relevant.	Project blogs Online survey	March-August June - July
2b	Discursive research. At IAIA17, use opportunities related to Fothergill's paper on E&S Competency (Abstract 638), Q&A in other relevant sessions, and networking to create a more detailed understanding of user experiences of different IA-related accreditation systems. Alongside this, the	IAIA17 discussions Wider contacts	4-7 April April - August

	project team will use its extensive network of IA contacts to gather information.		
3	Assessment		September
3a	Assessment. Phase one will identify the core requirements of systems identified in 2a&b, coding the findings against criteria from stage 1 (e.g., existing in-country provider? Mandatory/voluntary accreditation? Types of practitioners accredited? Experience/competency based? Etc.). Phase two will identify commonalities between the IA accreditations systems.	Analysis tables: i) Coding of IA systems ii) Commonalities across systems	September
4	Reporting		September-November
4a	Best practice note, strategic paper, and article Produce an initial IAIA best practice note consisting of a table of the global IA accreditation systems set against the review criteria. Where systems do not currently exist/data was not forthcoming, outline entries will be included to enable members to produce future updates. The strategic paper, for the IAIA Board, will focus on commonalities in IA accreditation systems and outline opportunities for a global standard.	Best practice note Strategic paper	31 October 31 October
4b	IAIA Board presentation and discussion. If appropriate, the project team would present findings to the Board and discuss its potential uses.	Presentation	16 November

Note: The IAIA Board's review and approval process enabled Josh Fothergill to gather additional research data to supplement the original findings during IAIA18 held in Durban, South Africa. Information was gathered on three additional countries through delegate interaction with a poster at the conference. This additional data was integrated into the report in February 2019, during the finalization process to enable the report's launch before IAIA19.

2. Context for the research

2.1 Introduction

Building on the trends identified by the researchers as discussed in Section 1.1, this Section explores the background to competency, recognition, and registration and its relationship to the EIA profession. While this project is not a direct follow-up to previous research in this area, we would like to recognize the previous work undertaken by IAIA Past President Miguel Coutinho and the Netherlands Commission for Environmental Assessment.

In November of 2013, Miguel Coutinho initiated an online discussion on EIA accreditation within the IAIAConnect forum. He used this to compile and tabulate a brief overview of EIA accreditation systems that were identified by participants, and initial data regarding which countries had a system in place, whether accreditation was compulsory or voluntary, and whether individuals or companies were accredited to these systems³ (NCEA, 2014). The NCEA report, part of a wider body of work in support of EIA system discussions within the Netherlands and in support of their own international capacity development work, concluded that there was no publication that gives an overview of EIA accreditation or its arrangements worldwide.

2.2 Why is certification important

The origins of certification can be traced back to at least 2200 BC when the Emperor of China started to examine his officials every third year to determine their fitness for office; since then, individuals and organizations have sought to validate competency to perform specific public-facing tasks.

Validation, recognition, and education are just a few characteristics of a quality professional certification scheme that distinguish organizations or individuals who have demonstrated particular knowledge or skills required for a specific role or profession. Today a multitude of industries confer professional certifications covering hundreds of disciplines. In some professions, certification is mandatory and regulated by government as fitness to operate, e.g., in law, medicine, to work as a pilot. At its heart, professional certification seeks to assure stakeholders, and in particular members of the public, that the person holding the certification is competent and professional. Of course, not all certifications are mandatory. Increasingly, voluntary certifications are being developed and adopted by employers and professionals across a broad mix of industries which focus on training, skills, and experience criteria as well as assessments from which to determine eligibility and acceptance.

The underlying drive behind the reason why certification has found its way into almost every industry is that it helps advance the profession. Certification helps employers evaluate potential new hires, analyse job performance, evaluate employees, select contractors, market services, and motivate employees to enhance their skills and knowledge. For the certificate holder, there are clear benefits in helping give rise to their specific professional competency, showing their commitment to the profession, and helping with job advancement.

³ NCEA. "EIA Accreditation: what and how?" Environmental assessment building block series, draft version, November 2014, accessed online at http://api.commissieemer.nl/docs/mer/diversen/ncea_eia_accreditation_building_block_draft_nov_2014.pdf

In reviewing the specific advantages of certification programs, five themes emerged in the aims and objectives behind for most professional bodies offering professional schemes:

1. Hiring employers or procurement agents use certifications (and other key words) to include or exclude resumes and tender documents. This isn't necessarily a good practice in specific cases, but technical people aren't usually in charge of hiring technical people.
2. Once past the first line of filtering, certifications can both help in demonstrating that the individual or organization possesses a desired degree of knowledge or skill (IT system certifications), or who have likely gained a desired level of experience in that profession through their recognition and qualification for that certification scheme.
3. Once employed within a specific field or profession, certifications can be used to identify to others in the organization what sort of abilities an employee possesses.
4. For individuals, certifications can help maintain and keep track of their technical development and allow decisions to be made regarding their desired technical or management career path.
5. The process of certificate maintenance through continuing education and training helps lend credibility to the profession in legislative and policy arenas.

2.3 Characteristics of a valued certification

The strength of a professional certification is based on a fundamental trust that a person who receives a credential (the certificant) has proven he or she possesses the required experience, knowledge, or skills of a particular profession or practice. This credibility is paramount in order for the credential to maintain value for individual stakeholders, the profession, and the public. The Institute on Credentialing Excellence (ICE) in their report "A Look at the Value of Professional Certification"⁴ (ICE, 2004) described the five characteristics of valued certifications:

1. **Built on demonstrated market need** - There must be perceived value in distinguishing those who have proven competency and those who have not.
2. **Objectivity** - Qualified and independent subject matter experts, third-party endorsement, and autonomy in governing the certification program are essential in developing and maintaining a valid and legally-defensible credential.
3. **Rigor** - A certification that requires little effort or knowledge or one that everyone can earn is typically of lower value than one that demands great effort, experience, knowledge, and skill. A rigorous regimen of training and assessment is essential to a successful certification program, which by its nature is often perceived as a competitive advantage.
4. **Emphasis on ethics** - Ethical conduct covers a broad range of topics, from protecting the certification process from fraud to ensuring the ethical practice of the profession.
5. **Re-certification** - Because all industries and organizations grow and change, professionals that serve them must adapt to the changing needs of their profession.

⁴ ICE - Institute for Credentialing Excellence. (2012, May). A Look at the Value of Professional Certification. Washington, DC: ICE.

2.4 What relationship does certification have to EIA?

Certification within the environmental and social sciences has been an established element within many disciplines, and over the last decade has spread further into the professional certification of environmental and social professions. It is universally regarded as one of the best and most effective mechanisms to assess the knowledge, skills, and experience needed to perform a specific role or task. In many countries, certifications can have a direct effect on hiring consultants or organizations to conduct EIA and the confidence that government bodies may have in the review of reports.

In the technically-demanding and complex area of EIA, where development may give rise to a multitude of significant environmental or social impacts, developing a reputable voluntary certification program requires the overseeing body to expect expertise in several technical, legislative, and procedural areas. One such means is the certification of the individuals or organizations that undertake key tasks within EIA.

While a central tenet of EIA legislation and process is to ensure that environmental and social issues are highlighted early in the preliminary stages of a developmental proposal, and that any subsequent concerns are addressed as the scheme gains momentum towards seeking final regulatory consent, experience has taught practitioners that few schemes are uncontroversial or attract no interest from members of the public, stakeholders, or consultees. The quality of the findings contained within the environmental impact statement (EIS), the technical or consultative approaches adopted, or its adherence to national legislation are often challenged during the processes involved in EIS submission and review. The EIA consulting organization, the individual EIA professionals, and EIA administrators will often become the visible focus for any environmental or social disputes that arise. Their professional standing, knowledge, and ability to practice on occasion being called into question.

Awareness of the need for, at best, minimum levels of quality in EIA practice has led to a number of countries investing in statutory or voluntary schemes that seek to uphold a baseline level of performance and practice that organizations and individuals must meet or seek accreditation or certification to. Accreditation by an independent body is recommended by ICE to affirm that the credentialing body is capable of carrying out certification. The term "accredited" also gives stakeholders, including certificants and the public, confidence that the certifier has been independently validated and that the program operates according to a predefined set of national or international standards.

Many industries and professions now look increasingly towards professionals who can demonstrate their knowledge in specialized areas through a combination of work experience, formal training, and education gained -- and confirmed -- during the certification process. As indicated in Section 1.1, recent trends in IA in both Europe and the IFI community indicate that we are likely to see even more value placed on professional recognition schemes as a means of differentiating effective service providers in the future.

3. Data Gathering

3.1 Introduction

The project's data gathering was split across three methods: an online survey issued via IAIA headquarters, personal communications with IA professionals at IAIA17, and from the researchers' personal networks and online research. This Section sets out information related to each of these three approaches to data gathering.

3.2 IAIA Online Survey

Given the global scope of the research, an online survey was selected as a core approach to data gathering. The survey was drafted by the researchers and input into Survey Monkey with the kind assistance of Bridget John at IAIA Headquarters. The survey included questions developed from the project's initial analysis of the Chinese, UK, South African, and IAIA EIA recognition schemes. This included identifying whether a scheme existed in the nation/institution, whether it was voluntary, who was responsible for administering it, and the requirements for making an application, completing a competency assessment, and remaining registered.

The open survey was launched on 7th June 2017 and closed on 11 July, generating the following scale of response:

- 84 completed surveys submitted
- 40 respondents indicated awareness of at least one EIA recognition scheme
- 33 responses provided details related to national EIA recognition schemes
- 1 response provided details of an institutional EIA recognition scheme

Respondents to the survey identified that national recognition systems for individuals undertaking EIA were present in the following 15 locations: Australia*, Belgium, China, China – Hong Kong SAR, Czech Republic, Estonia, India*, Japan, Kenya, Nigeria*, Philippines*, South Africa*, Uganda, UK*, Zambia. [* = multiple survey responses related to the country]

Three additional responses to the survey identified that national recognition systems for individuals undertaking EIA did not exist in the following countries: Azerbaijan, Mexico*, Mongolia.

It is notable that of the 22 country data sheets developed through this research, two-thirds (14) were developed from data initially provided via the survey. It is clear that the depth of knowledge—about the detailed requirements and opportunities for EIA professionals within national systems—held by IAIA's membership is a crucial and underutilized source of information on the global status and progress of IA as a professional practice.

3.3 Personal communications and survey follow-up

The presence/absence of EIA professional recognition schemes for a further 16 nations was confirmed through personal communications between the researchers and either their personal professional IA networks, or follow-up with individuals identified via the survey. This aspect of the research directly led to the development of three of the 22 national data sheets included in Appendix A, confirming the presence of recognition schemes in an additional three nations. This

aspect of the research was effective in rapidly identifying where EIA recognition schemes do not exist, identifying 10 nations where the researchers are led to believe that no national schemes is present.

3.4 Online research

Web research was found to be the most effective way to confirm the presence/absence of individual EIA recognition schemes within countries around the world, with over half of the countries included in the report identified through this component of the research. However, the depth of information that was accessible about details of such scheme was often limited. In some cases, this may have been down to the research focusing on documentation available in English, or accessible via Google's translation functionality, due to limitations of the research team's language proficiencies(!).

In many cases, however, there simply did not appear to be an online source setting out the specific requirements of EIA recognition/registration schemes that were highlighted in national legislation. As a result, despite this aspect of the research's generating 54% of the country presence/absence data presented in this report, detailed information on scheme requirements could only be extracted for five additional nations via the online research.

A key finding for future IA studies is that the power of IAIA's membership to deliver in-depth information about national and regional EIA (and wider IA) schemes is a far more efficient approach to detailed data collection. However, caution needs to be taken to attempt to verify such information to avoid misinterpretation in the information provided by the respondent as it is recorded and interpreted by the researcher.

Note – 2019 update: Information on three additional countries was gathered via an interactive poster exhibition at IAIA18. The use of blank country data sheets enabled information on Peru, South Korea, and Thailand to be added into the study, with these new findings added into the report analysis in February 2019, as part of pre-launch finalization. A further poster will be presented at IAIA19 in Brisbane, with the opportunity to provide/update information, in addition to the ability to download blank accreditation system data sheets from the IAIA website.

4. Findings and Analysis

4.1 Introduction

This Section presents the research findings in relation to countries, and in some cases regions within country, where the information available indicated that a system for recognizing individual EIA professionals was present or absent. The study has been able to identify the presence of 41 individual professional recognition schemes for EIA across 40 countries (China has different systems on the mainland compared to Hong Kong SAR).

Alongside this, the data available to the project team has provided confidence that individual professional recognition schemes for EIA are not present in 35 locations around the world. This reflects a further 33 countries, as regions within Belgium (Flanders and Wallonia) and Macau SAR within China do not have schemes focused on individual EIA practitioners.

Overall, the research has been able to provide confidence over whether schemes are present/absent in over a third of the world's nations (73 of the 195 nations⁵). The project has also been able to gather sufficient information on 24 of the 41 individual EIA recognition schemes to include a country data sheet within this report, providing key information and a summary of the scheme, including web links (Appendix A). The aim of the data sheets is to enable IAIA to provide members and stakeholders with a resource on EIA (and eventually other IA) competency recognition schemes around the world. A blank data sheet template is included (Appendix B) to enable IAIA members to build upon the strong foundations this project has set up, by updating existing national data sheets and providing data sheets for national systems that were not able to be identified within the scope of this study.

Finally, Appendix C, provided as a separate PDF file, contains the complete data report produced as a result of the 89 responses to the online survey undertaken during the project's data gathering stage (Section 3.2).

4.2 Countries with individual EIA professional recognition schemes

The evidence gathered by the research identified that individual EIA recognition schemes are likely to exist in at least the following 39 national systems (plus the Flanders region of Belgium and Hong Kong SAR, within China). In the case of entries highlighted yellow, evidence suggested the presence of a scheme; however, insufficient information could be identified by the researchers to enable the scheme's details to be included as a national data sheet in Appendix A.

The research found evidence for the existence of individual EIA registration schemes in the following 41 locations around the globe, as set out in Table 2.

⁵ 193 nations are members of the UN, with a further two having observer status – the Holy See and State of Palestine.

Table 2: Locations identified as having individual EIA recognition schemes

Countries where the research found sufficient detail to include a project data sheet detailing the scheme's requirements (Appendix A)	Countries where the research found sufficient evidence to be confident a scheme/legislative requirement for a scheme exists
<ul style="list-style-type: none"> - Australia[†] - Belgium – Flanders[†] - China[†] - China – Hong Kong SAR[†] - Czech Republic[†] - El Salvador - Estonia[†] - India[†] - Indonesia - Japan[†] - Kenya[†] - Malaysia - Mozambique - Myanmar - New Zealand - Nigeria[†] - Philippines[†] - Peru - South Africa[†] - Tanzania - Thailand - Uganda[†] - United Kingdom[†] - Vietnam 	<ul style="list-style-type: none"> - Albania - Belize – No live scheme, but Reg 2 (SI 24, 2007) specifies <i>suitably qualified</i> persons must deliver EIA - Bolivia - Botswana - Burundi – sourced from NCEA country EIA profile data - Cameroon – sourced from NCEA country EIA profile data - Congo Brazzaville - Egypt – legislation in place, but scheme does not appear to have been implemented - Ethiopia - Fiji - Guatemala - Macedonia - Namibia - Peru - Rwanda - Zambia - Zanzibar

[[†] = Initial information detailing the scheme provided via responses to the research survey].

4.3 Countries without a national EIA recognition schemes for individuals

Our research was also able to gather evidence to identify those nations around the globe that do not appear to have a scheme for recognising individual EIA practitioners. Where the evidence gathered by the project indicated that either an organizational/consultancy EIA recognition scheme was in place, or the government maintained an informal list of EIA professionals, this is noted in the list below.

The research identified 36 locations where the evidence gathered infers that no individual EIA registration scheme is present:

1. Azerbaijan
2. Belgium (Brussels) – Registration scheme appears to be for EIA consultancy organizations
3. Belgium (Wallonia) – Registration scheme appears to be for EIA consultancy organizations
4. Brazil
5. Brunei Darussalam
6. Canada – ECO Canada offers national environmental scheme, but not EIA specific
7. China – Macau SAR
8. Columbia
9. Costa Rica – Registration scheme appears to be for EIA consultancy organizations
10. Denmark
11. Ecuador
12. Finland
13. Georgia – Registration scheme appears to be for EIA consultancy organizations
14. Germany
15. Ghana – No scheme, but EPA maintains list of all consultants it has trained in EIA
16. Honduras – Registration scheme appears to be for EIA consultancy organizations
17. Iceland
18. Ireland – UK's voluntary registration occasionally applied (see: Table 4 & Apdx 1)
19. Italy
20. Kuwait – Registration scheme appears to be for EIA consultancy organizations
21. Laos
22. Mexico
23. Mongolia
24. Nepal
25. Netherlands
26. Norway
27. Pakistan
28. Portugal
29. Qatar
30. South Korea
31. Spain
32. Sri Lanka
33. Sweden
34. Tunisia
35. USA – No national EIA scheme; voluntary environmental professional schemes
36. Yemen – No scheme, but EPA maintains list of EIA consultants & consulting firms

4.4 Comparative Analysis

The first column of Table 2 identifies 24 countries and sub-regions/SARs where the project team could gather sufficient data to undertake a more analysis of the EIA recognition scheme and produce a data sheet included in Appendix A. The project team analyzed each scheme against the criteria developed in the project's scoping phase and included in the online survey.

A comparison of the presence/absence of seven key features of EIA recognition schemes are presented in Table 3 (legally required schemes) and Table 4 (voluntary registration schemes), over the next two pages. The seven criteria to compare the schemes included in Tables 3 and 4:

- A requirement for applicants to have *Demonstrable EIA Experience*
- The need to provide *Evidenced of Academic Qualifications* during application
- A requirement to undertake a *Pre-registration Exam/Training* course
- The need for applications to undergo *Verification/References Required*
- The presence of a *Renewal Period of less than five (5) years*
- A requirement for those registered to *Follow EIA Code of Practice*
- Whether registrants need to *Provide Evidence of On-going CPD* (Continuing Professional Development)

Table 3: Comparison of core requirements between locations with legal EIA professional recognition schemes

Location	Demonstrable EIA Experience	Evidenced Academic Qualifications	Pre-registration Exam / Training	Verification / References Required	Renewal Period <5 years	Follow EIA Code of Practice	Provide Evidence of On-going CPD	Notes [- = further data needed]
Malaysia	*	*	*	*	*	*	*	
China	*	*	*		*	*	*	
Czech Republic	*	*	*		*	-	-	
Philippines	*	*	*		-	-	-	
South Africa	*	*		*	-	*	*	Update Required
Vietnam	*	*	-	-	-	-	-	Incomplete data
Myanmar	*	*		*	*	*		
Tanzania	*	*		*	*	*		
Estonia	*	*			*	-	-	
Kenya	*	*			-	*		
El Salvador	*	*			-	-	-	
Nigeria	*	*			-	-	-	
Begium (Flanders)	*	*				-	*	
Thailand	*	-		*	*	*	*	
Mozambique	*	-	-	-	-	-	-	Incomplete data
India	*				*		*	
Indonesia	-	-	*	-	-	-	-	Incomplete data
Peru	*	-						Incomplete data
Japan	-	-	*			-	-	Incomplete data
Uganda	-	-	-	-	-	-	-	Incomplete data

Key:

* = Present in the scheme

= Absence from the scheme

- = A lack of clarity from the data available; further verification required

Table 4: Comparison of requirements between locations with voluntary EIA professional registration schemes

Location	Demonstrable EIA Experience	Evidenced Academic Qualifications	Pre-registration Exam / Training	Verification / References Required	Renewal Period <5 years	Follow EIA Code of Practice	Provide Evidence of On-going CPD	Notes (- = further verification needed)
Australia	*	*	*	*		*	*	
New Zealand	*	*	*	*		*	*	
China (HK SAR)	*	*	*	*		*	-	
United Kingdom	*	*	+	*		*	*	+ Interview @ Snr Grade

Key:

* = Presence within the scheme

- = Absence from the scheme

- = A lack of clarity from the data available, further verification required.

Note: Australia and New Zealand share the same voluntary registration scheme—Certified Environmental Practitioner (CEnv)—with the opportunity for CEnvs to then seek an additional specialist recognition in Impact Assessment.

4.5 Analysis of Individual EIA Recognition Schemes

Of the 24 schemes where sufficient data was available to enable analysis, over 80% are legislatively based, with the remaining schemes being conducted through voluntary approaches.

In terms of the legislatively-based schemes (Table 3), the majority (16 of 19) are managed by central government. In a small number of cases, however, regional bodies undertake accreditation (Belgium - Flemish) and in India the evidence gathered indicated an affiliated body managed the scheme (the National Accreditation Board for Education & Training – Environment). By contrast, all the voluntary schemes identified were found to be run by professional bodies, independent of their respective governments.

Who can apply?

In most cases the evidence available indicated that schemes do not tend to restrict who may apply for registration. As such, in most cases anyone is eligible to apply (academics, private citizens, topic specialists, etc); however, the scheme in mainland China appears to only allow an individual to be registered while working within a consultancy, registered through a separate organizational EIA accreditation scheme, and linked to sectoral experience.

In terms of the type of roles within an EIA team that can gain registration, the majority of schemes where data was available are linked to recognizing those activities most closely involved in delivering an EIA for a developer, e.g., EIA coordinators/managers and topic specialists.

Single or multiple recognition levels

All the voluntary schemes (five) identified in the research include multiple levels of registration, with the majority having two levels of recognition. The UK scheme has three levels and Hong Kong SAR's broader QEP scheme has four (Student, Associate, Professional, Fellow). In contrast, nearly all of the legislatively-based schemes (16/17) have a single level of registration, the exception being India where respondents indicated multiple levels of registration exist; however, no further details were forthcoming to the researchers.

Registration Criteria

Analysis of the information gathered by the study indicated that registration criteria tend to focus on the following core elements:

- Years of experience
- Academic qualifications
- Payment of a fee
- EIA knowledge
- EIA skills

Beyond this, it is notable that 30% of legislative schemes include the need to pass a pre-qualification exam. In addition, the researchers were told that the Philippines scheme requires registrants to have attended two training courses—on climate change adaptation and disaster risk management—prior to application. The only case of a similar mandatory requirement in the voluntary schemes was within the most senior grade of the UK's IEMA EIA specialist register, where applicants for the Principal grade are required to undertake and pass an interview with two existing Principal registrants.

A number of schemes (<25%) require the applicant to demonstrate sector specific experience, before being able to register/to become registered to work in the related sector.

Application Process:

Analysis across the schemes identified commonalities in the application process between schemes, with a focus around the following core requirements:

- Completion of a scheme application form
- Payment of the application fee (generally non-refundable)
- Production of a written statement of relevant EIA related experience
- Copy of academic qualifications (and less frequently other qualifications)

In addition, it is not uncommon for the registration process to also require the applicant to include a copy of his/her CV as part of the formal process.

Beyond this, around 25% of schemes require references/verification of the information provided by peers. It is, however, notable that voluntary schemes (Table 4) expect verification and/or references far more frequently than legally-based registration schemes. In fact, legislatively-based schemes generally appear to be far less reliant/involving of other experienced EIA professional in the oversight of the scheme and the approval of individual applicants.

Finally, a small number of schemes (<15%) require the applicant to provide proof of their identity; this is most commonly associated with schemes that involve an element of pre-qualification examination/training.

Requirements placed on the individual once registered

It proved far more difficult to identify information about requirements/responsibilities placed on individual EIA professionals after they become registered, in particular in relation to legally-based schemes (see Table 3). This may indicate that this component of EIA registration schemes is generally less developed than the registration criteria and application process, or it may simply be that such information is only provided to registrants once successful, rather than being clearly displayed on web pages.

The study found that around 40% of schemes required those registered to sign up to and abide by a code of professional practice. Alongside this a very similar proportion require registrants to demonstrate they are maintaining their professional knowledge by regularly (often annually) submitting a Continuing Professional Development (CPD)/ongoing training and experience record.

Unfortunately, the research has to report that very few schemes place a requirement on registered EIA professionals to give back to practice via mentoring/sharing their experience through case studies, etc.

Length of registration

The study found that around half of schemes have a fixed period of registration, after which the individual is required to go through a renewal process. Time periods for registration within these schemes periods range from between one and five years, with the majority requiring renewal at least every three years.

It was however, notable that all voluntary schemes allowed individuals to remain registered indefinitely, so long as they pay an annual renewal fee and meet CPD requirements (see above).

Withdrawal of registration

All of the 24 schemes identified include the potential to withdraw EIA recognition from an individual; however, some respondents raised concerns that these systems are not often applied.

Anecdotal evidence from several countries indicated that withdrawal of an individual's EIA registration is very rare, even when evidence of very poor and inadequate EIA practice is provided to authorities. Some respondents to the survey indicated they were unaware of anyone's ever having been removed from the registration scheme in their country, despite requests for such actions to be taken.

Influence registration has on the quality of individuals/EIA systems:

The survey asked respondents to provide their own perspective on the influence a scheme had on the quality of work delivered by individuals undertaking EIA and the overall national system. This data is very subjective and from a limited sample of around 20 individuals, representing just 13 of the country-based systems. This is an area where future research may be of value.

Survey respondents provided a range of views, reflective of the individual perspectives and in-country circumstances of the respondents; as such, the findings should not be seen as a representative sample. The average scores for the influence of EIA professional recognition schemes on both quality of the EIA work undertaken by individuals and across the country's system, indicates they are perceived to have moderately positive influence (2.5/5). Some respondents were more positive with respondents related to the systems in Belgium, Estonia, and Japan of the view that they had a more significant positive impact on quality in these nations.

Around half of the respondents who provided information on scheme influence were responding in relation to a voluntary scheme, a higher representation than the <25% of the 24 schemes in the sample. This perhaps indicates that professionals take more interest in the value of voluntary schemes to practice, when compared to legislative schemes that have to be complied with. Interestingly, voluntary schemes were perceived to have a smaller positive influence on the quality of EIA practice. Comments provided by respondents tended to indicate their view was the result of the scheme not having the backing of government/legislation to enable it to have a greater impact.

Evidence suggests the majority of voluntary schemes are continuing to proactively seek legislative recognition for their EIA accreditation scheme. South Africa's long-standing voluntary scheme underwent a transition to becoming a formalized (legislative) scheme in early 2018. Hong Kong SAR would appear to be the next location where there may be the most potential for the voluntary EIA recognition schemes to gain official legislative backing in the future.

The role of the EIA registration body in supporting CPD

Respondents indicated that just under 40% of the organizations that operate the EIA professional recognition schemes also offer some form of ongoing continuing professional development related to EIA for those who gain registration. Notably, half of the organizations that offer ongoing CPD are voluntary registration schemes. This may indicate that the lack of legislative backing for a scheme drives the organization running the scheme to provide alternative benefits to those who seek registration.

4.6 Analysis of Organizational EIA Recognition Schemes

Beyond the registration of individual EIA professionals, the project also identified countries and regions that operate schemes that recognise organizations. Several countries appear to operate EIA registration schemes that only apply to organizational entities/consultancies. Generally, requirements for organizational registration schemes appear to have similar requirements to individual registration schemes with evidence of previous experience of EIA projects and evidence of employing EIA co-ordination and topic specialist staff. Organizational schemes also

include the need to pay a fee, although organizational fees are considerably higher than those for individuals.

5. Discussion

5.1 Key Findings

The study has been able to identify information that helps to demonstrate the current situation in relation to the registration of individual EIA professionals in 73 countries around the world. It has found that:

- There is viable evidence for the existence of a system for the professional recognition of individual EIA practitioners in 40 countries around the world.
- Over 30 countries do not appear to have an individual recognition scheme for individual practitioners, although organizational accreditations do exist in some of these countries.

The study identified full/partial data for 24 country-based individual EIA recognition systems. The study was unable to find significant evidence of similar systems in national/international development/financial institutions. The only detailed evidence found in relation to an institutional scheme related to the UK's Department for International Development (DfID), which has recently undertaken a significant upgrade of its existing ESIA-related competency system. The information from this example has been used to supplement the trends analysis related to the country-based systems, presented in Section 5.2, below.

5.2 Trends in registration schemes for individual EIA professionals

The number of EIA legislative systems with an expectation related to professional expertise has risen considerably in the past five years. This has been heavily driven by the 2014 amendment to the European Union's EIA Directive, which now includes an expectation that project proponents ensure the EIA report (EIS)—submitted alongside their application for consent—be produced by competent experts (Article 5(3)(a)). Alongside this, the review of the EIS by the consenting body must be undertaken by those with "sufficient expertise" (Article 5(3)(b)).

It should, however, be noted that there does not appear to have been an equivalent growth in the number of countries operating professional recognition schemes, although this project has found evidence of a small increase in schemes across the globe. The project also uncovered anecdotal evidence that a number of European countries, (governmental organizations, academics and professional bodies) are investigating the potential to develop professional EIA recognition schemes as a result of the 2014 amendments to the European EIA Directive.

The most common type of scheme remains a legislative led scheme that requires a relatively basic form of registration before an individual can be officially responsible for undertaking EIA work in that country.

Newer schemes are emerging that move their focus away from core EIA knowledge, although this remains a key feature, to recognition of the skills and behaviors needed to deliver EIA effectively. Schemes such as these appear to have their origins in wider recognition schemes for environmental professionals. This can be seen in both the Australia- and New Zealand-based Certified Environmental (CEnv) professional scheme and, confusingly, the UK-based Chartered Environmentalist (CEnv) scheme. Both schemes were launched in 2004 and have had steady growth in general environmental professionals seeking membership over the past 13 years. The Australian and New Zealand scheme has around 650 CEnv registered to it, while the UK-based scheme, operated by the Society for the Environment, has registered over 9,000 CEnv to date. It

should be noted that in both cases the registrations schemes include many other types of environmental practitioners beyond those involved in EIA, including:

- Environmental Managers
- Corporate Sustainability Officers
- Auditors
- Lifecycle Assessors
- Waste Managers
- Carbon foot-printing specialists
- Etc.

In the last few years, more advanced versions of such competency-based registration schemes have emerged related to EIA professionals, with perhaps the most significant development being made by DFID in the UK. DFID's approach to embedding environmental, social, and climate change capabilities has enabled it to explore the opportunity to remove the mandatory requirement for IA, and instead allow appropriate scales of IA approaches to be applied in a devolved basis by staff on the ground, drawing on their own knowledge and that of the accredited ESIA individuals spread across the organizations operations. The system is the most advanced identified within the study, although similar competence/criteria-based systems exist in the UK and USA, and another is being developed for an internal system due to be implemented by a respected multi-lateral financial institution.

The IEMA system—designed for a broad suite of environmental and sustainability professionals, including those undertaking EIA—is based around a Skills Map, which sets out core knowledge areas, skills capabilities, and professional behaviors (<https://www.iema.net/skills-map>). The same system is applied to professionals from the start of their career (Students/Affiliates) through practitioner and managerial levels (Full Membership), to those thought leaders at the top end of each area of the environment and sustainability profession. This approach is certainly the most wide-reaching competency scheme, linked to EIA professional recognition, that the research identified, although other environment and sustainability schemes, perhaps linked to the corporate sustainability, are also emerging, such as the UK-based Institute of Corporate Responsibility and Sustainability (<https://icrs.info/>) and the US-based International Society for Sustainability Professionals (<https://www.sustainabilityprofessionals.org/>).

The most encouraging example of EIA professionals and others championing and developing their own recognition scheme was identified within the Hong Kong SAR of China, where a broad group of dedicated environmental professionals came together to develop a new voluntary recognition system off their own back. The Hong Kong Qualified Environmental Professional scheme (<http://hkqep.org/>) is an amazing example of what dedicated volunteers can deliver. The organization by five institutional partners:

- Chartered Institution of Water and Environmental Management (CIWEM HK)
- Environmental Management Association of Hong Kong (EMAHK)
- Hong Kong Institute of Acoustics (HKIOA)
- Hong Kong Institute of Environmental Impact Assessment (HKIEIA)
- Hong Kong Institute of Environmental Protection Officers (HKIEPO)

Even more impressively, the initial suite of examination questions for the central registration level (Environmental Professional) were developed through the hard work of the Institute's founding Fellows, who each developed questions for part of the examination to create the breadth and depth required without the need for significant financial start-up capital. The researchers felt this was a great example of using the knowledge capital of EIA, and wider environmental

practitioners, to create and launch a professional recognition scheme from scratch in less than three years.

6. Conclusions & Next Steps

6.1 Introduction

This Section of the report draws together the project team's key conclusions and sets out their thoughts on the next steps to carry the research forward and enable its dissemination to IAIA's membership.

6.2 Research Conclusions

- Overall, the research has been able to provide confidence over whether schemes are present/absent in over a third of the world's nations (73 of the 195 nations).
- The project has gathered sufficient information on 24 of the 41 individual EIA recognition schemes identified to develop a country data sheet, which provides key information and a summary of each scheme, including web links (Appendix A).
- The data sheets provide a crucial first step in enabling IAIA to maintain an up-to-date record of IA related professional recognition schemes across the world. The blank template in Appendix B provides the basis to enable IAIA members and other stakeholders with a format to provide data on the remaining 122 countries in the world, as well as a format that can be adapted to register information about other IA-related competency recognition schemes around the world (organizational EIA-related schemes, or recognition schemes beyond project EIA)
- While the project was unable to gather any significant information on the systems used to recognize ESIA competency within many international financial/development institutions, the project team is aware more systems exist beyond DFID in the UK. The project team sees there would be benefit in future work to explore the approaches taken to recognize and develop IA competence within such institutions.
- A key finding for future IA studies is that the power of IAIA's membership to deliver in-depth information about national and regional EIA (and wider IA) schemes is unsurpassed and provides a far more efficient approach to detailed data collection than online searches, or the limited reach of an individual's professional network. However, caution must always be taken to attempt to verify data gathered in this way, to avoid misinterpretation between the information being provided by the respondent and its recording and interpretation by the researcher.
- The IAIA Board may wish to consider whether the opportunity exists to expand the organization's Affiliation activities by exploring links with those countries that have well-developed individual EIA registration schemes, but don't currently have an IAIA Affiliate/Branch within their jurisdiction (e.g., Malaysia, Estonia, India, etc).
- It is important to recognize that this project did not attempt to test of the efficacy of the EIA recognition schemes it identified. However, such research would be a useful follow-up to this project, but would require more in-depth analysis and considerable thought

put into the criteria to be used to judge the efficacy of such professional recognition schemes, due to the subjective nature of quality and effectiveness judgements, as highlighted in a recent article by IAIA members (Bond, et al, 2017).⁶

6.3 Next Steps

IAIA's innovation grant funding has enabled a project that has made a significant first step toward developing a comprehensive register of IA related professional recognition schemes around the world. While this project has drawn to a close, the opportunity exists for further development of its findings—to discuss the findings and act accordingly with for IAIA Affiliates, Sections, and individual members—to continue to develop the national sheets and for the IA community to discuss and further develop IA competence and professionalism worldwide. The project team has identified the following activities as appropriate next steps for the project findings:

- **16 November:** Presentation of findings to IAIA Board
Following the presentation, the IAIA Board can consider the project's findings in its strategic planning and decision-making.
- **November 2017 – December 2018:** Decision on materials to be released to IAIA members, work undertaken by IAIA to adapt this report (if required).
Project team members are happy to help, as appropriate.
- **March 2019:** Report launch on www.iaia.org and accompanied by an IAIA member webinar (28 March) to discuss the project approach and its findings
- **April/May 2019:** Highlighting the compendium's launch via IAIA19 poster sessions providing:
 - a. Information on the study findings.
 - b. Opportunity for IAIA member data input via blank data sheets.
 - c. Advice on how to access this compendium and the related individual accreditation data sheets via www.iaia.org.

⁶ Bond, Retief, Cave, Fundingsland, Duinker, Verheem and Brown (2017) A contribution to the conceptualisation of quality in impact assessment, *EIA Review*, Vol. 68 January 2018 Pp 49-58
<http://www.sciencedirect.com/science/article/pii/S0195925517302627>

Appendix A:

Data Sheets for National Professional Recognition Schemes for Individual EIA Practitioners

Appendix A is provided as a series of 24 separate PDF documents on the IAIA web site.

Appendix B:

Blank Data Input Sheet Template

Enabling IAIA Members to update existing/complete new entries into the *Compendium of National Professional Recognition Schemes: Individual EIA Practitioners*.

Appendix B is provided as a separate Word document on the IAIA web site.

Appendix C:

Results from the Online Survey 7/6/17 to 11/7/17

Appendix C is provided as a separate PDF document on the IAIA web site.

IAIA Research Innovation Grant 2017

Compendium of National IA Professional Recognition Schemes:

Individual Environmental Impact Assessment (EIA) Practitioners

October 2017 [Updated February 2019]