





# Submit by Monday 1 December 2008

# DARWIN INITIATIVE APPLICATION FOR GRANT FOR ROUND 16: STAGE 2

Please read the Guidance Notes before completing this form. Where no word limits are given, the size of the box is a guide to the amount of information required. Information to be extracted to the database is highlighted blue.

1. Name and address of organisation (NB: Notification of results will be by post)

Name:	Address:
TRACE Wildlife Forensics Network	c/o The Animal Conservation and Education Department
	Royal Zoological Society of Scotland
	134 Corstorphine Road
	Edinburgh
	EH12 6TS

2. Project title (not exceeding 10 words)

Developing wildlife forensic capacity for ASEAN biodiversity conservation

3. Project dates, duration and total Darwin Initiative Grant requested

Proposed start d	ate: 01/08/09	Duration of project: 3 years End date: 31/07/12			
Darwin funding		2010/11	2011/2012	2012/13	Total
requested	£44,875	£56,950	£61,250	£42,675	£205,750

4. Define the purpose of the project (extracted from logframe)

To provide the ability for ASEAN countries to undertake coordinated wildlife forensic analysis for CITES enforcement operations and to deter further wildlife crime in the ASEAN region.

5. Principals in project. Please provide a one page CV for each of these named individuals. You may copy and paste this table if you need to provide details of more than one overseas project partner.

Details	Project Leader	Main project partner and co- ordinator in host country/ies
Surname	McEwing	Abdullah
Forename (s)	Ross	Azrina
Post held	Director	Director
<b>Institution</b> (if different to above)		TRAFFIC South East Asia
Department		
Telephone		
Email		

- 6. Has your organisation received funding under the Darwin Initiative before? NO.
- 7. IF YOU ANSWERED 'NO' TO QUESTION 6 describe briefly the aims, activities and achievements of your organisation. (Large institutions please note that this should describe your unit or department)

#### Aims (50 words)

Our Mission

"To reduce illegal trafficking and persecution of fauna and flora through the coordinated application of scientific techniques in support of wildlife crime investigation."

This is implemented through a series of objectives (see cover letter) that describe the promotion, capacity building, implementation and coordination of wildlife forensic science internationally.

# **Activities (50 words)**

Provision of Information

TRACE provides a platform for delivery and exchange of information for wildlife forensic practitioners and enforcers.

#### Training and Capacity Building

TRACE works to develop the skills and infrastructure required to meet enforcement needs.

#### Directed R&D

TRACE supports the development and validation of new forensic enforcement tools.

# **Achievements (50 words)**

- Run international wildlife forensic training courses
- Established and sourced funding for the UK PAW Forensic Analysis Fund
- Collaborated on R&D projects developing novel forensic techniques
- Provided wildlife forensic advice to the European Commission, Defra and TRAFFIC
- Participated in CITES CoP and Scientific Committee meetings

Please list the UK/collaborative (where there are partners in addition to the applicant organisation) and host country partners that will be involved, and explain their roles and responsibilities in the project. Describe the extent of their involvement at all stages, including project development. This section should illustrate the capacity of host country partners to be involved in the project. Please provide written evidence of partnerships. Please copy/delete boxes for more or fewer partnerships.

**Partner Name:** 

**Project Involvement** 

Royal Zoological Society of Scotland (RZSS)

During development: Offered project support During project: Financial support throughout

Match funding: £55,000

**UK** partner

The RZSS is providing a considerable amount of match funding to the project over the three years. Although it has no direct involvement in the management or implementation of the award, it is anticipated that the project will also benefit from the experience of the RZSS in running large overseas projects, as well as some indirect administrative support in the UK.

Letter of support attached

**Partner Name:** 

#### **Project Involvement**

TRAFFIC International

During development: Provided advice and information

During project: Promotion/publicity of project & DI for 3 years

Estimated in-kind contribution: £4,000

**UK** partner

TRAFFIC International is the world's primary wildlife trade monitoring organization, overseeing a global network of regional TRAFFIC programmes, providing research and data to government agencies and advising on international conservation policy. It acts as an information hub, running a high impact website, generating large numbers of reports and actively promoting its activities in the press. In this role it is uniquely placed to support the current TRACE Darwin Initiative project in terms of project publicity and dissemination of outputs. It has offered in-kind support from its communications team and will therefore be responsible for helping to promote the project throughout its full duration.

Letter of support attached

**Partner Name:** 

# **Project Involvement**

# **Bangor University**

During development: Offered project support

During project:

Facility provision in year 2, hosting trainees

Estimated in-kind contribution: £5,000

**UK** partner

The School of Biological Sciences at Bangor University possesses state-of-the-art laboratory facilities and equipment, allowing a range of wildlife forensic identification techniques to be researched and developed. It is already actively involved in the application of immunological and genetic tests to control the illegal trade in fish, bear products and rhinoceros horn. The school's role in the Darwin project will be to host visiting scientists from the ASEAN region for an extended This will include the provision of equipment and training project. laboratory time at no cost.

Letter of support attached

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# Partner Name: ASEAN-Wildlife Enforcement Network (ASEAN-WEN)

(www.asean-wen.org and

www.traffic.org/aseanwen)

### **Host Country Partner**

### **Project Involvement**

During development: Communication with members

During project: Facility provision for training courses & seminars

(Malaysia and Thailand)

Staff salaries and part funding for travel and

subsistence during training (All countries).

Laboratory facilities (All countries)

Hosting of website and database beyond project

(ASEAN-WEN)

Estimated in-kind contribution: £24,000

As a project partner ASEAN-WEN represents the ten ASEAN member states and their governments' commitment to regional wildlife crime enforcement. ASEAN-WEN forms the basic structure on which the forensic network developed in this project will reside. Its role is therefore to coordinate the involvement of ASEAN CITES Management Authorities and wildlife enforcement authorities, to communicate the specific forensic capacity and training needs of its members and to eventually integrate the project outputs (forensic network, databases and information) into its larger framework. Through its Programme Coordination Unit, it will also assist in the involvement of high level officials to highlight the importance of the project. This will focus on developing ASEAN's forensic capacity which will enhance their efforts in combating wildlife crime, and working with the region's media to ensure the activities are publicised.

Two ASEAN states, Malaysia and Thailand, will have specific responsibility for hosting training courses and seminars throughout the project. Each individual ASEAN country will be responsible for sending participants to training events and seminars, and for the commitment of laboratory and staff time for the development of forensic facilities at a national level.

Letter of support attached

# Partner Name: TRAFFIC SE ASIA (TSEA)

#### **Host Country Partner**

### **Project Involvement**

During development: Project planning, liaising with ASEAN-WEN

During project: Organization of project activities

Local project management Primary contact for TRACE

Estimated in-kind contribution: £34,300

TSEA is the lead partner for project management in the ASEAN region, responsible for the organization of host country project activities and liasing with ASEAN enforcement agencies. TSEA has offices in Bangkok, Jakarta, Kuala Lumpur and Ha Noi, which will be fully involved in ensuring the success of this project. These offices have already conducted over 50 capacity building activities in the region, specifically for government agencies, with over 1200 participants so are well-placed to assist. TSEA has worked in partnership with the ASEAN Wildlife Enforcement Network (ASEAN-WEN) to facilitate the development of the network since 2005, and has contributed financial and technical assistance to the network. TSEA's director, Azrina Abdullah, is the named host country project partner on this application. TSEA are providing match-funding in terms of staff, administration and associated overheads.

Letter of support attached

# 9a. Have you consulted stakeholders not already mentioned above? If yes, please give details:

YES

### **World Wildlife Fund (WWF)**

See attached letter of support.

Royal Botanic Gardens Kew – Conventions and Policy Section – UK CITES (Plants) SA See attached letter of support

#### **European Commission – CITES Enforcement Group**

Not permitted to provide a direct letter of support, but discussions highlighted concordance of the project aims with Commission Recommendation of 13th June 2007, identifying a set of actions for the enforcement of Council Regulation (EC) No 338/97 on the protection of species of wild fauna and flora by regulating trade therein (specifically, Recommendations 1d,e and 3b,h,k,l,m,n). These relate to information sharing and capacity building for CITES implementation in range states.

# CITES Secretariat – Anti-smuggling, fraud and organized crime

Not permitted to provide a direct letter of support, but verbally endorsed the project.

# 9b. Do you intend to consult other stakeholders? If yes, please give details:

YES

Large international NGO organisations already involved in biodiversity programmes in South East Asia, including Conservation International, the Wildlife Conservation Society and the World Wildlife Fund (Indochina programme) will be contacted to discuss possible financial support and existing project synergies.

The ITTO (International Timber Trade Organization) has recently invited TRACE and TSEA to apply for funding to further develop forensic identification methods for ramin and to hold a workshop on the subject. Funds are available and a proposal is in preparation. This is likely to constitute an additional source of project match-funding (minimum £10k, see budget).

The Wildlife Alliance (a funding partner for ASEAN-WEN) will also be consulted as they have previously provided intelligence-based investigative training for Southeast Asian wildlife law enforcement.

# 9c. Have you had any (other) contact with the government not already stated?

YES

#### **Host country/participant governments:**

A project meeting was held by TRACE and TRAFFIC SE Asia at CITES CoP14 (the Hague, 2007), attended by the CITES Management Authorities of nine ASEAN countries; all members of ASEAN-WEN. The proposal was discussed and letters of support from three MAs were received, as well as emails indicating participation from three more before Darwin funding was suspended last year (letters attached). As ASEAN-WEN formally represents the MAs of each member state on wildlife forensic issues, it was decided this year to include ASEAN-WEN as a project partner, rather than including every country individually.

#### **UK Government**

A letter of support for the project has been provided by the UK High Commission in Malaysia (attached)

# 9d. Is any liaison proposed with the CBD/CMS/CITES focal point in the host country? YES If ves. please give details:

The project has already been discussed directly with national CITES Management Authority representatives (see 9c) and the project managers will continue to work closely with these bodies via the ASEAN-WEN Programme Coordination Unit. In Malaysia and Thailand, direct partnership with the CITES MAs is being developed to assist with the hosting of training courses and seminars.

#### **PROJECT DETAILS**

# 10. Please provide a Concept note (Max 1,000 words) (repeat from Stage 1, with changes highlighted)

Changes: Target species details added, partner roles deleted

**Problem:** The illegal trade in flora and fauna is one of the greatest threats to biodiversity in the South East Asian region and is in direct contravention to CITES. ASEAN (Association of Southeast Asian Nations) member states have demonstrated their commitment to both national wildlife conservation and implementation of CITES through the establishment of the ASEAN-Wildlife Enforcement Network (ASEAN-WEN), however practical enforcement of wildlife trade legislation is seriously hampered by a lack of experience and capacity in wildlife crime investigation. Despite improvements in enforcement efforts in recent years, gathering evidence for successful prosecutions remains problematic. One key issue is the accurate, robust identification of illegally traded animal and plant parts, derivatives, or trace evidence.

Analysis: Identification of whole organisms in trade is achieved via reference to morphological keys or local expertise. However in situations where most diagnostic morphological characters have been lost (e.g. processed meat, traditional medicines, worked ivory or timber products), it is often impossible to determine the species of origin and therefore prove an offence has occurred. Forensic analysis is now an established wildlife law enforcement tool in the UK for the identification of CITES-controlled products. The opportunity exists to transfer relevant expertise to the ASEAN region where its need is arguably much greater. While analytical techniques and equipment used in wildlife forensics already exist in a number of ASEAN countries, there is a need for these to be supplemented through additional research and implemented within a coordinated forensic framework, to ensure their successful application to CITES enforcement. Specific requests for assistance in this area have been received from government authorities in Malaysia and Thailand and the need for practical enforcement techniques is explicitly highlighted as a priority in the ASEAN-WEN Strategic Plan of Action (2007-2012; attached).

**Overall strategy:** This project aims to develop capacity for wildlife forensic investigations within ASEAN countries and foster collaborative CITES enforcement amongst them. In doing so, it will improve the ability of ASEAN nations to enforce national conservation legislation and thereby comply with CITES and CBD obligations. These goals will be met through the implementation of a series of Capacity Building, Training and Research measures, undertaken to support the long-term ASEAN-WEN commitment to the development of wildlife law enforcement in the region.

#### Capacity Building:

- 1. Implementation of management systems and accredited protocols within selected existing facilities modelled on current UK wildlife forensic systems, modified to meet in-country needs.
- 2. Development of cross-departmental co-operation among wildlife, police, customs and forensic departments within each host country, through annual seminars and workshops for stakeholders.
- 3. Establishment of an online web resource to network all wildlife forensic centres throughout the region thereby facilitating the reciprocal transfer of techniques, reference samples and data.

#### Training:

- 1. Provision of a number of specialist training courses in host countries on evidence collection and analysis, for ASEAN wildlife enforcement officers and laboratory staff.
- 2. Training of host-country laboratory research staff in the UK in methods for the development of new techniques, to enable regional laboratories to meet future needs.

#### Research:

- 1. Identification of specific current needs in the ASEAN region and the subsequent development of forensic species identification tools to compliment monitoring tools being designed by the ASEAN-WEN support programme.
- 2. Creation of a species reference sample collection allowing shared access among partners. The collection will be maintained in separate host countries, but managed and accessed via a web portal.
- 3. Implementation and supervision of O/S country R&D projects to develop forensic ID systems.

Contribution of project partners: details moved to section 8

### **Specific species targets**

An initial project activity is to undertake a needs analysis of species requiring the development of forensic tests (Activity 3.1). However from recent communications with ASEAN-WEN, three species groups have already been selected as immediate priorities:

### 1. Pangolins

In October 2008 the IUCN changed the status of the Malayan and the Chinese pangolins from 'near-threatened' to 'endangered' due to their popularity in the illegal wildlife trade in Southeast Asia. Pangolins are the most commonly seized mammal in Southeast Asia; typically captured in Malaysia or Indonesia then shipped to the black market in China for use in food or traditional medicines. Because wild traded pangolins often die in captivity, rapid repatriation to their original habitat represents their best hope for survival, and accurate determination of their origin is necessary to return them to their native habitats. The TRACE project will therefore work to trace geographic origin of seized animals, as well as producing methods for identifying pangolin meat.

#### 2. Turtles and Tortoises

Many species of turtles and tortoise are listed on CITES and are the victims of illegal trade from or via SE Asian states. As with pangolins, there are issues of repatriation relating to the seizure of live specimens. These have begun to be addressed through forensic means, such as tracing Indian star tortoises back to their region of origin use DNA analysis. At the same time, the identification of processed turtle shells and gelled products to species level remains problematic, although forensic genetic research in Taiwan is making progress in this area. Our project will synthesize and transfer existing technologies, whilst developing novel, necessary tools for tackling the illegal trade in turtles and tortoises.

# 3. Ramin Timber (*Gonystylus* spp.)

The identification of trees to species level is necessary in order to demonstrate illegal trade, however this is difficult to achieve for processed timbers and wood products. Ramin is distributed throughout much of SE Asia and was listed on CITES Appendix II in 2004. The EU and USA are major importers of ramin, usually in the form of large numbers of finished products. TRACE has recently been involved in the development of a forensic DNA method for ramin identification that requires transfer to laboratories in SE Asia. TRAFFIC SEA has also run as initial training course on anatomical ramin identification in Singapore (see Section 11a). There is an immediate need to increase capacity for these techniques throughout the region and to enable species level identification in Malaysia.

# 11a. Is this a new initiative or a development of existing work (funded through any source)? Please give details:

This is a new initiative, however it builds on previous small-scale projects and training programmes that have aimed to introduce wildlife forensic analysis to individual SE Asian countries. Such projects have tended to provide species-specific support (e.g. ramin timber identification workshop, Singapore, 2007; organized by TRAFFIC and US Forest Service) or support to individual national authorities (e.g. Department of Wildlife and National Parks (Peninsular Malaysia) training course, Kuala Lumpur, 2005; organized by TRACE staff). The current project has been designed with an awareness of these previous initiatives, in order to learn from past experience and to build on existing foundations.

# 11b. Are you aware of any other individuals/organisations/Darwin Initiative projects carrying out similar work? NO

Wildlife forensics is a specialist niche and there are relatively few practitioners worldwide. TRACE has comprehensive contacts within this field and is therefore in touch with groups in the USA, Australia and Germany who support overseas wildlife forensic activity. The US Forest and Fisheries & Wildlife Services have previously undertaken some work in South East Asia (see above), although this has generally been targeted at individual identification problems, rather than broader capacity building. At the present time, we are not aware of any similar projects being carried out.

# 12. Please indicate which of the following biodiversity conventions your project will contribute to: - At least one must be selected.

- Only indicate the conventions that your project is directly contributing to.
- No additional significance will be ascribed for projects that report contributions to more than one convention

Convention on Biological Diversity (CBD)	Yes	
CITES	Yes	
Convention on Migratory Species (CMS)	No	

# What problem is this project addressing and how was it identified? (150 words)

Analysis, investigation and prosecution of wildlife crime rely on the ability to identify the species, origin or familial relationships of animal and plant parts and derivatives. The production of forensic evidence is often a critical part of any enforcement action; however at present in South East Asia, the skills, techniques and coordination required for this are not available. This project addresses the need for capacity to employ forensic identification techniques in wildlife crime investigations throughout the ASEAN region.

The problem was identified through calls for assistance in this area from government authorities in Malaysia and Thailand to TRACE and TRAFFIC SE Asia. The need for practical enforcement techniques is explicitly highlighted as a priority in the ASEAN-WEN Strategic Action Plan (2007-2012). At the recent Third Regional ASEAN-WEN Meeting (Lao, May 2008), the enforcement officers again raised the urgent need for forensic investigations training to be conducted for all member countries.

# What will change as a result of this project? (150 words)

This project will deliver a package of measures that, taken together, will enable individual countries to employ forensic analysis in wildlife crime investigations; an ability that is currently non-existent or severely limited. Field officers will understand the potential and requirements for collecting evidence, laboratories will have the capacity to develop and apply forensic techniques and enforcement officers will be able to plan and implement investigations more effectively. This will have a direct effect on the success of CITES enforcement activity and, crucially, act as a deterrent to criminals who currently run little risk of prosecution. The establishment of a regional network will change the way wildlife forensic issues are addressed, with forensic scientists able to exchange methods, data and reference samples among countries. As a whole, the project will build belief within the ASEAN region that the current catastrophic levels of biodiversity loss through illegal exploitation can be tackled.

# Why is the project important for the conservation of biodiversity? (150 words)

Alongside population expansion and human development, the illegal removal of plants and animals for profit poses one of the greatest threats to the conservation of biodiversity in the ASEAN region. Addressing this requires action on three fronts: reduction in demand from end-user nations, replacement of collection/logging with alternative sources of local income and disruption of the chain of criminal activity from species origin to final destination. This project will provide a comprehensive tool kit for the investigation and prosecution of illegal exploitation and trade in all forms of wildlife, directly targeting the lucrative black market. It therefore represents an important contribution to reducing a major cause of biodiversity loss in South East Asia and will assist range states in their efforts to implement the CBD and CITES.

# How does this relate to one or more of the biodiversity conventions? (150 words)

The success of this project will greatly improve capacity for future investigations of the illegal wildlife trade in South-East Asia and hence the ASEAN-WEN's ability to effectively enforce CITES regulations and implement the CBD. At a national level, it will instil the necessary knowledge and techniques to establish wildlife forensics capabilities for the long-term, as well as promote inter-

agency cooperation. This is in direct support of CBD articles regarding the transfer of technology (Art. 16), providing support to regulatory provisions (Art. 8.k) and in supporting sustainable use by deterring unsustainable use (Art. 10.e). Regionally, the project will enhance the development of collaborative relationships among ASEAN countries that are essential for tackling such highly international wildlife trade and conservation issues. The project is closely aligned with the CITES Strategic Vision 2008-13 (Goal 1, Objectives 1.7 and 1.8) stipulating the need for Parties to have sufficient capacity to enforce the convention.

# 13. How will the results of the project be disseminated; how will the project be advertised as a Darwin project and in what ways will the Darwin name and logo be used? (max 200 words)

Project publicity and the dissemination of results are key parts of the proposed work programme. A primary project activity is to develop a communications network among ASEAN forensic scientists to allow results and techniques to be disseminated. Peer-reviewed publication is an essential aspect of forensic validation and work will therefore be submitted to international journals. A publicity plan will be drawn up at the outset (Activity 5.1) which will be implemented with the assistance and resources of TRAFFIC International's communications team. This will include a linked public access website providing information and updates.

To strongly promote the Darwin name, it is proposed to incorporate it into the headline project name, subject to DI approval, as follows, "The ASEAN-WEN Wildlife Forensics Project – a Darwin Initiative". The Darwin logo will be promoted on all literature and web pages and at workshop events. Web pages will link through to the Darwin Initiative and project literature will have a specific DI information box, explaining the role and ethos of the project's primary sponsor. This will not only ensure recognition of DI funding, but will also raise the profile of the project, providing an internationally recognized source of match funding for associated future project initiatives.

# 14. What will be the long term benefits of the project in the host country or region and have you identified any potential problems to achieving these benefits? (max 200 words)

The benefits to the region will be the establishment of a network of trained government officials and scientists capable of employing forensic identification techniques in wildlife crime investigations. This will strengthen the regional collaborations and resources provided through ASEAN-WEN and increase the ability of individual governments to enforce wildlife law. The long-term effect of these benefits should be to reduce organized crime which in turn will begin to change the dependency of local economies on the illegal wildlife trade.

Intellectual property and samples generated through the project will be shared by project partners, under agreed terms, in line with CBD Art. 15, establishing a resource for future investigations and thereby benefiting the region. However partners will also be encouraged to publicly release relevant data onto international databases and publish methodologies under peer review, following scientific practice.

Achieving long-term benefits will rely on ongoing government commitments to tackle wildlife crime, uphold CITES and the CBD, and reduce localized corruption. It will also require the continued support and engagement of the broader international scientific and legal communities, NGOs and overseas governments. Given recent progress, of which the formation of ASEAN-WEN is one example, we believe that such benefits can be realised.

15. State whether or not the project will reach a stable and sustainable end point. If the project is not discrete, but is part of a progressive approach, give details of the exit strategy and show how relevant activities will be continued to secure the benefits from the project.

# Where individuals receive advanced training, for example, what will happen should that individual leave? (Max 200 words)

The project is part of a progressive approach to the development of wildlife forensic capacity among ASEAN states. While many of the individual activities will be discrete, with tightly defined end points, the overall programme is designed to roll-on beyond the cessation of DI project funding.

By constructing a forensic network upon the existing ASEAN-WEN framework, the continuation of project outputs including the databases, sample collections and web-based information is assured. Method development and training will be accompanied by manuals and Standard Operating Procedures to provide ongoing reference material; publications will also contribute to project legacy. Advanced UK training is scheduled for Year 2 in order for participants to spend time in home countries sharing newly acquired skills.

The project will form a platform for further funding applications by the participants. This goal will be realized through a dedicated period of proposal preparation in year 3 (Activity 3.3), under guidance from TRACE and TSEA. The project will conclude with the organisation of an ASEAN conference on wildlife forensics to disseminate work achieved to date and plan future strategy.

A natural exit for Darwin funding will be achieved while TRACE and TSEA maintain participation in the programme.

# 16. If your project includes training and development, please indicate how you will assess the training needs in relation to the overall purpose of the project. Who are the target groups? How will the training be delivered? What skills and knowledge to you expect the beneficiaries to obtain. How will you measure training effectiveness. (max 300 words)

#### Training needs

An understanding of training needs has already been gained from previous work by TRACE who has run courses in this field for participants from over a dozen countries, including a one-week course in Malaysia for wildlife officers and forensic laboratory staff. The ASEAN-WEN strategic plan 2007-12 also explicitly describes training needs for each ASEAN country. To further assess detailed requirements, Activity 1.1 focuses on an evaluation of current resources and skills and will develop the training programme accordingly.

#### **Target groups**

Target groups fall into three categories: i) field officers from police, customs and other wildlife enforcement agencies; ii) forensic scientists from national laboratories; iii) management authorities and national wildlife enforcement coordinators (inter-agency).

#### Training delivery

Field officers and laboratory scientists will attend separate training courses in Thailand and Malaysia, with participants visiting from other ASEAN states. These courses will provide both theory and practical experience of performing wildlife forensic investigative techniques. Additionally, scientists from Thailand and Malaysia will be in invited to the UK to undertake a research training programme at Bangor University for a minimum of three months. During this time they will undertake an R&D project and gain skills required to develop novel forensic techniques independently. Awareness and strategy training will be provided to MAs and enforcement coordinators through a number of one day seminars, held at existing project events.

#### **Benefits**

The aims of the training are to provide participants with the skills required to independently address their own wildlife crime issues, access global forensic resources and to provide a platform for the development of regional networks and information sharing.

### **Measuring training effectiveness**

Training effectiveness will be measured directly during course activities, through feedback from participants and via the project's Measurable Indicators (logframe) relating to the use of forensic methods in future enforcement activity (see Section 20).

#### LOGICAL FRAMEWORK

17. Please enter the details of your project onto the matrix using the note at Annex 3 of the Guidance Note. This should not have substantially changed from the Logical Framework submitted with your Stage 1 application. Please highlight any changes.

Changes: New output inserted (output 3) to describe research outputs and activities from the project – accidentally omitted in Stage 1

Project summary	Measurable Indicators	Means of verification	Important Assumptions						
Species (CITES), and the Convention	Goal:  Effective contribution in support of the implementation of the objectives of the Convention on Biological Diversity (CBD), the Convention on Trade in Endangered Species (CITES), and the Convention on the Conservation of Migratory Species (CMS), as well as related targets set by countries rich in biodiversity but constrained in resources.								
Sub-Goal:  An effective, coordinated regional network of wildlife forensic expertise exists to support enforcement of CITES regulations through a combination of quality assured investigative processes and the capacity to develop and apply new identification tools.	Ongoing production of reference data and identification tools during the three year period after project end.  Inclusion of wildlife forensic approaches, where relevant, in CITES enforcement investigations.  Continued provision of regional wildlife forensic services three years after project end.	Access to information databases created during the project.  Monitoring of publication/reports in the field of wildlife forensics.  Documenting reports of wildlife law enforcement activities (via TRAFFIC).  Assessment of forensic capabilities via service evaluation of project participants.							
Purpose									
To provide the ability for host countries to undertake coordinated wildlife forensic analysis for CITES	utilise forensic techniques.	Monitoring host country enforcement activity.	enforcement initiatives.						
enforcement operations in the ASEAN region.	Increased number of illegal wildlife trade prosecutions.	Quantifying change in investigation effort and success	Maintenance of ASEAN country cooperation.						
Outputs									
National wildlife forensic units following approved forensic protocols.	Laboratory facility operational in each country with trained staff in place.	Physical existence of forensic units and staff. Auditing of procedures.	Continued commitment to maintain laboratory standards.						
2. Trained wildlife forensic technicians, researchers and field officers.	A minimum of 3 national wildlife staff & 3 lab staff trained in each country.	Course certificates obtained by trainees.  Trainee feedback.	Trained staff retained by agencies and can pass on experience.						

3. A body of research highlighting regional forensic needs and delivering scientific resources for applied use.	<ul><li>a. The production of a needs analysis report.</li><li>b. A series of forensic analysis protocols addressing key issues.</li></ul>	Scientific publications concerning forensic capacity and techniques relevant to the ASEAN region.	Project participants happy to share research outcomes and to collaborate on the preparation of joint publications.
4. A framework of inter-agency cooperation for incorporating forensic analysis into illegal trade investigations.	Attendance at inter-agency seminars and development of multiagency approaches.	Seminar reports. Documented agreements between agencies.	Sufficient willingness of all agencies to cooperate, minimal ulterior interests.
5. A regional network of wildlife forensic expertise for sharing protocols, samples and data.	<ul><li>a. Central, accessible online forum for sharing information.</li><li>b. Electronic database of available reference samples in the region.</li></ul>	Access and number of hits to online forum and database.	Continued contribution by network members, willingness to share. Maintenance of database beyond project.
6. Broad dissemination of project results	Publication of project case study and conference proceedings. Peer- reviewed research publications. National press coverage -O/S & UK	Published documents and press releases. Online information.	

#### Activities (details in workplan)

- 1.1 Capacity Building: Assessment of current facilities and staff in each country
- 1.2 Capacity Building: Implementation of laboratory systems for supporting forensic analysis
- 1.3 Capacity Building: Joint preparation of funding applications for ongoing support
- 2.1 Training: Provision of specialist training in collection and identification of evidence
- 2.2 Training: Provision of specialist training in laboratory methods
- 2.3 Training: Training of host-country staff in the UK
- 3.1 Research: Needs analysis (by species and problem) for wildlife forensic identification tools
- 3.2 Research: Development of key forensic tools to address identified priorities
- 3.3 Research: Creation of a species reference collection of DNA samples for shared use
- 4.1 Inter-Agency Cooperation: Seminar attendance and networking at key project meetings
- 5.1 Network Coordination: Identification of all regional stakeholders
- 5.2 Network Coordination: Establishment of online networking forum
- 5.3 Network Coordination: Project launch and interim workshops
- 5.4 Network Coordination: Regional conference on wildlife forensics
- 6.1 Press and Publicity: Design of a three year publicity plan
- 6.2 Press and Publicity: Coverage of project workshops and regional conference
- 6.3 Press and Publicity: Incidental press releases

### Monitoring

During project

Monitoring will be undertaken using feedback questionnaires and independent partner reports to measure progress against the Measurable Indicators (see Sect. 20) Post-project monitoring

- Ongoing production of reference data and identification tools during the three year period after project end.
- Inclusion of wildlife forensic approaches, where relevant, in CITES enforcement investigations.
- Continued provision of regional wildlife forensic services three years after project end.
- Future illegal trade investigations utilise forensic techniques.
- Increased number of illegal wildlife trade prosecutions.

# 18. Provide a project implementation timetable that shows the key milestones in project activities. Complete the following table as appropriate to describe the intended workplan for your project.

'Months' indicates the total number of months contributing to the activity. Gantt chart shows distribution of activities through time. Please note, as multiple staff will be contributing to many activities, 'Months' do not equate to 'Person Months'

	Activity	Months		Year 1		Year 2				Year 3				
			1	2	3	4	1	2	3	4	1	2	3	4
1.1	Capacity Building: Assessment of current facilities and staff in each country	3												
1.2	Capacity Building: Implementation of laboratory systems for supporting forensic analysis	6												
1.3	Capacity Building: Joint preparation of funding applications for ongoing support	3												
2.1	Training: Provision of specialist training in collection & identification of evidence (Thailand)	1												
2.2	Training: Provision of specialist training in laboratory methods (Malaysia)	1												
2.3	Training: Training of host-country staff in the UK	4									,			
3.1	Research: Needs analysis (by species and problem) for wildlife forensic identification tools	3												
3.2	Research: Development of key forensic tools to address identified priorities	12												
3.3	Research: Creation of a species reference collection of DNA samples for shared use	12												
4.1	Inter-Agency Cooperation: Seminar attendance at key project meetings	1												
5.1	Network Coordination: Identification of all regional stakeholders	1												
5.2	Network Coordination: Establishment of online networking forum and website	2												
5.3	Network Coordination: Project launch workshop, interim workshop	2												
5.4	Network Coordination: Regional conference on wildlife forensics	1												
6.1	Press and Publicity: Design of a three year plan	0.2												
6.2	Press and Publicity: Coverage of project workshops and regional conference	1	,											
6.3	Press and Publicity: Incidental press releases	0.5												

**19. Please indicate which of the following Standard Measures you are likely to report against.** You will not necessarily plan to cover all these Standard Measures in your project.

Standard	Description	Tick if
Measure No		Relevant
1A	Number of people to submit thesis for PhD qualification (in host country)	
1B	Number of people to attain PhD qualification (in host country)	
2	Number of people to attain Masters qualification (MSc, MPhil etc)	
3	Number of people to attain other qualifications (ie. Not outputs 1 or 2 above)	
4A	Number of undergraduate students to receive training	
4B	Number of training weeks to be provided	
4C	Number of postgraduate students to receive training	X
4D	Number of training weeks to be provided	X
5	Number of people to receive at least one year of training (which does not fall into	
	categories 1-4 above)	1
6A	Number of people to receive other forms of education/training (which does not fall into	Х
	categories 1-5 above)	
6B	Number of training weeks to be provided	X
7	Number of (ie different types - not volume - of material produced) training materials to	Х
	be produced for use by host country	
8	Number of weeks to be spent by UK project staff on project work in the host country	X
9	Number of species/habitat management plans (or action plans) to be produced for	
40	Governments, public authorities, or other implementing agencies in the host country	V
10	Number of individual field guides/manuals to be produced to assist work related to	X
	species identification, classification and recording	
11A	Number of papers to be published in peer reviewed journals	X
11B	Number of papers to be submitted to peer reviewed journals	X
12A	Number of computer based databases to be <b>established</b> and handed over to host	Х
	country	
12B	Number of computer based databases to be <b>enhanced</b> and handed over to host	
	country	
13A	Number of species reference collections to be <b>established</b> and handed over to host	Х
	country(ies)	
13B	Number of species reference collections to be <b>enhanced</b> and handed over to host	
	country(ies)	
14A	Number of conferences/seminars/ workshops to be <b>organised</b> to present/disseminate	X
	findings	1
14B	Number of conferences/seminars/ workshops attended at which findings from Darwin	Х
	project work will be presented/ disseminated.	
15A	Number of national press releases in host country(ies)	Х
15B	Number of local press releases in host country(ies)	
15C	Number of national press releases in UK	Х
15D	Number of local press releases in UK	
16A	Number of newsletters to be produced	
16B	Estimated circulation of each newsletter in the host country(ies)	
16C	Estimated circulation of each newsletter in the UK	
17A	Number of dissemination networks to be <b>established</b>	X
17B	Number of dissemination networks to be enhanced/ extended	
18A	Number of national TV programmes/features in host country(ies)	X
18B	Number of national TV programmes/features in UK	
18C	Number of local TV programmes/features in host country(ies)	
18D	Number of local TV programmes/features in UK	
19A	Number of national radio interviews/features in host county(ies)	
19B	Number of national radio interviews/features in UK	Х
19C	Number of local radio interviews/features in host country(ies)	
19D	Number of local radio interviews/features in UK	
20	Estimated value (£'s) of physical assets to be handed over to host country(ies)	
21	Number of permanent educational/training/research facilities or organisations to be	
	established and then continued after Darwin funding has ceased	
22	Number of permanent field plots to be established during the project and continued	
- <del>-</del>	after Darwin funding has ceased	
	1	1
23	Value of resources raised from other sources (ie in addition to Darwin funding) for	Х

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#### PROJECT BASED MONITORING AND EVALUATION

20. Describe, referring to the Indicators in the Logical Framework, how the progress of the project will be monitored and evaluated, including towards delivery of its outputs and in terms of achieving its overall purpose. This should be during the lifetime of the project and at its conclusion. Please include information on how host country partners will be included in the monitoring and evaluation.

### Ongoing monitoring

At a coarse level the project coordinator will assess progress against the workplan to ensure that activities are staying on schedule and to appropriately manage any changes that are forced upon the programme. At a detailed level, the Logical Framework Indicators will be used to assess each of the six project activity groups during the lifetime of the project. This will include host country feedback from each training activity and a short annual report prepared by the host country partners, TRAFFIC SEA and ASEAN-WEN, assessing whether or not the project is meeting their needs.

#### Final Evaluation

The Logical Framework Indicators are aimed at defining an end point for specific project activities and assessment against these criteria will be the primary mechanism for evaluating project success. Independent evaluations will be undertaken by TRACE, TRAFFIC SEA and ASEAN-WEN, to ensure that the two principal host country partners are given the opportunity to objectively comment on the effectiveness and relevance of the project to their needs. These evaluations will be in the form of a written report, responding to each Indicator. It is expected that as part of its report, ASEAN-WEN will summarize feedback from each participating ASEAN state through the use of a questionnaire, enabling a comprehensive review of all aspects of the project from all participants.

#### Post-Project Evaluation

Several Indicators refer to measures of project success made up to three years after the end of the DI award. Such measures are important for two reasons. First, for the project to be judged as a success, ongoing activity at three years post-project should be regarded as a requirement. Second, in terms of both publications and prosecutions, it will take up to three years for many project outputs to come to fruition. We have therefore planned a final review in 2015 as a measure of the impact of DI funding and will likely apply for modest post-project support to enable this.

#### **FUNDING AND BUDGET**

Please complete the separate Excel spreadsheet which will provide the Budget information for this application. Some of the questions below refer to the information in this spreadsheet.

NB: Please state all costs by financial year (April to March). Use current prices – and include anticipated inflation, as appropriate up to 3% per annum. The Darwin Initiative will not be able to agree increases in grants to cover inflation on UK costs once grants are awarded.

21. How is your organisation currently funded? (max 100 words)

The TRACE Wildlife Forensics Network was established as a non-profit company (company limited by guarantee) in 2006. It received seed funding from Defra (Global Wildlife) and has since been funded through income from international wildlife forensic training courses and donations from non-governmental organizations and trusts. It seeks support from any organization committed to the reduction of wildlife crime in all forms throughout the world.

22. Provide details of all <u>confirmed</u> funding sources identified in the Budget that will be put towards the costs of the project, including any income from other public bodies, private sponsorship, donations, trusts, fees or trading activity. Please include any additional <u>unconfirmed</u> funding the project will attract to carry out addition work during or beyond the project lifetime. Indicate those funding sources which are confirmed.

Confirmed:				
United Kingdom: Royal Zoological Society of Sc	otland £55	k cash		
World Wildlife Fund		k cash		
Bangor University			Facilities and equipr	
TRAFFIC International			(Publicity and Comm	
TRACE Wildlife Forensics Netv	work £ 3	k in kind (	(Website developme	nt/hosting)
Host Countries:				
ASEAN-WEN	£24	k in kind (	staff, training & conf	. facilities)
TRAFFIC Southeast Asia	£ 34	I.3k in kind(	(staff, admin costs, o	verheads)
Unconfirmed:				
International Timber Trade Org	ganization £10	k cash (	(see Section 9b)	
23. Please give details of any function host country partner (s) or of Question 22. This will include words per box)  Financial resources:	hers for this project that	are not alr	ready detailed in the	Budget or
Funding in kind:				
FCO NOTIFICATIONS				
FCO NOTIFICATIONS				
Please check the box if you Commonwealth Office will nee success in the Darwin competit	d to be aware of should			
Please indicate whether you had discuss security issues (see Gu				
Yes (no written advice)	Yes, advice atta	ched	No	
CERTIFICATION 2009/10				
On behalf of the company	TRACE Wildl	ife Forensi	cs Network	
(*delete as appropriate)				
I apply for a grant of £ year ending 31 March 2010 on				I
I certify that, to the best of our known and the information provided is comproject schedule should this applicant authorised by the lead UK institute.	orrect. I am aware that this a cation be successful. (This f	pplication fo orm should b	orm will form the basis be signed by an individ	of the
I enclose a copy of the organisa project principals and letters of		d accounts a	and annual report, C\	s for
Name (block capitals)	ROB OGDEN			
Position in the organisation	DIRECTOR			
Signed 2. Oglen		Date:	01/12/2008	

# Stage 2 Application - Checklist for submission

	Check
Have you provided actual start and end dates for your project?	Yes
Have you provided your budget based on UK government financial years ie 1 April – 31 March?	Yes
Have you checked that your budget is complete, correctly adds up and that you have included the correct final total on the top page of the application?	Yes
Is the concept note within 1,000 words?	Yes
Is the logframe no longer than 2 pages and have you highlighted any changes since Stage 1?	Yes
Has your application been signed by a suitably authorised individual? (clear electronic or scanned signatures are acceptable)	Yes
Have you included a 1 page CV for the Project Leader, any other UK staff working 50%+ on this project, and for a main individual in each overseas partner organisation?	Yes
Have you included a letter of support from the main overseas partner organisations?	Yes
Have you checked with the FCO in the project country/ies and have you included any evidence of this?	Yes
Have you included a copy of your most recent annual report and accounts? An electronic link to a website is acceptable.	Yes
Have you read the Guidance Notes ?	Yes

Once you have answered Yes to the questions above, please submit the application, not later than midnight GMT on **Monday 1 December 2008** to <u>Darwin-Applications@ltsi.co.uk</u> using the application number (from your Stage 1 feedback letter) and the first few words of the project title **as the subject of your email**. However, if you are e-mailing supporting documentation separately please include in the subject line an indication of the number of e-mails you are sending (eg whether the e-mail is 1 of 2, 2 of 3 etc). **In addition**, a hard copy of the application and any supporting documents not available electronically should be submitted to the Darwin Applications Management Unit, c/o ECTF, Pentlands Science Park, Bush Loan, Penicuik EH26 0PL **postmarked** not later than **Tuesday 2 December 2008**.

DATA PROTECTION ACT 1998: Applicants for grant funding must agree to any disclosure or exchange of information supplied on the application form (including the content of a declaration or undertaking) which the Department considers necessary for the administration, evaluation, monitoring and publicising of the Darwin Initiative. Application form data will also be held by contractors dealing with Darwin Initiative monitoring and evaluation. It is the responsibility of applicants to ensure that personal data can be supplied to the Department for the uses described in this paragraph. A completed application form will be taken as an agreement by the applicant and the grant/award recipient also to the following:- putting certain details (ie name, contact details and location of project work) on the Darwin Initiative and Defra websites(details relating to financial awards will not be put on the websites if requested in writing by the grant/award recipient); using personal data for the Darwin Initiative postal circulation list; and sending data to Foreign and Commonwealth Office posts outside the United Kingdom, including posts outside the European Economic Area. Confidential information relating to the project or its results and any personal data may be released on request, including under the Environmental Information Regulations, the code of Practice on Access to Government Information and the Freedom of Information Act 2000.