17-020

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: School of Biological Sciences, University of Reading	Address: Quantitative Biology and Applied Statistics, Philip Lyle Building, Whiteknights, Reading, RG6 6BX, UK

2. Project title (not exceeding 10 words)

Enhancing the Elephant Trade Information System to guide CITES policy

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

Proposed start date: 1 September 2009   Duration of project: 3 years   End date: 31 August 2012

Darwin funding requested	2009/10 £32,071	2010/11 £77,395	2011/2012 £99,156	2012/13 £30,777	Total £239,399

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

Development of ETIS Phase 2: Enhanced and sustainable collection, management, analysis and reporting of seizure data for the Elephant Trade Information System (ETIS) to monitor illicit trade in ivory as mandated by CITES.

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	Other UK personnel (working more than 50% of their time on project)	Main project partner and co-ordinator in host country/ies
Surname	Underwood	Burn	Milliken
Forename (s)	Fiona	Robert	Tom
Post held	Lecturer in Applied Statistics	Principal Statistician (independent consultant from Oct 2009)	Director, TRAFFIC East/Southern Africa
Institution (if different to above)			TRAFFIC International
Department	Quantitative Biology and Applied Statistics	Statistical Services Centre	TESA
Telephone	0118 378 7927	0118 378 6731	+263 (4) 252 532/3/4
Email	f.m.underwood@ reading.ac.uk	r.w.burn@reading.ac.uk	milliken@wwfsarpo.org

1. Has your organisation received funding under the Darwin Initiative before? If so, give details.

Reference No	Project Leader	Title
15021	Dr Simon Potts	Strengthening the National Biodiversity Strategy in Congo Brazzaville
14059	Dr J Hawkins	Certification to Support Conservation of Endangered Mexican Desert Cacti
14039	Professor K Norris	Large-scale Habitat Mapping and Local Conservation Initiatives for Jerdon's Courser, India
10029	Professor R Ellis	Training of Vietnamese Scientists in Tree Seed Science and Technology
10028	Dr S Jury	Inventory of Moroccan plants and the conservation of priority species
9018	Professor K Norris	Conservation of the endangered Jerdon's courser in India
8064	Mr R Burn	Information System for Biodiversity and Conservation Management in Mauritius
The University has received funding for the Darwin Initiative for many projects including those listed above		

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)

Activities (50 words)

Achievements (50 words)

8. 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:	Details (including roles and responsibilities and capacity to engage with the project):
TRAFFIC East and Southern Africa (TESA)	TRAFFIC East/Southern Africa (TESA) was established in 1991 and is currently located in Harare, Zimbabwe. From its inception, it has been actively engaged in elephant conservation issues, especially their interface with CITES. In 1997, the CITES Parties, in Resolution Conf. 10.10 (Rev. CoP 14), mandated TRAFFIC to monitor and report on illegal trade in ivory. In response, TESA, working with statisticians from the University of Reading, set up ETIS to monitor trade through law enforcement data, and this collaboration continues. Among other outputs, the collaboration has produced three comprehensive

	assessments of ETIS data for CITES Conference of the Parties (CoP). This project proposal is a further result of the Reading – TESA collaboration.
	TESA's responsibilities in the proposed project will be: management of the operational aspects of the design of the new system; implementation of the system; training of data collection operatives in selected countries in participation in the monitoring system; liaison with CITES Parties and the CITES Secretariat; dissemination of results.

Partner Name:	Details (including roles and responsibilities and capacity to engage with the project):
Robert W. Burn (RWB)	Although currently on the staff of the Statistical Services Centre, University of Reading, from October 2009 RWB will be an independent consultant. He is therefore considered as a "UK partner" for this project proposal. He has been collaborating with TESA since the inception of ETIS in 1997 and is largely responsible for its design. He was responsible, together with Dr Fiona Underwood and Tom Milliken, for the development of the analytical framework underlying the CITES CoP reports. He is a co-opted member of the ETIS Technical Advisory Group (TAG).
	RWB's main responsibility will be the design and coordination of the programming of the ETIS Phase 2 database and associated programs for analysis and reporting. Additionally, he will have an oversight and coordinating role for the collaboration with TESA during the project, and will assist in the development of the Phase 2 analytical framework.

9a. Have you consulted stakeholders not already mentioned above? ☒ Yes ☐ No **If yes, please give details:**	

The CITES Secretariat has been consulted and strongly supports this Darwin Initiative application. The sister monitoring programme to ETIS, Monitoring Illegal Killing of Elephants (MIKE), also supports this initiative (see letter from the MIKE Coordinator). In addition, TRAFFIC has informed the MIKE-ETIS Subgroup of the CITES Standing Committee – the Convention's leading oversight body for the elephant monitoring systems under CITES between Conferences of the Parties – about this Darwin Initiative application.

9b. Do you intend to consult other stakeholders? ☒ Yes ☐ No **If yes, please give details:**	

The CITES Parties themselves, especially those which are elephant range States (of which there are 37 in Africa and 13 in Asia), are recognised as the primary beneficiaries of an enhanced ETIS. Whilst it is not possible to undertake one-on-one consultation with all CITES Parties at this time, there are a number of mechanisms by which these Parties have been, and will be, consulted on future ETIS developments both within the context of CITES (i.e. African Elephant range State Dialogue meetings) and other elephant conservation bodies (i.e. IUCN/SSC African Elephant Specialist Group meetings). Furthermore, the provision of ETIS country reports has already generated feedback from CITES Parties, including suggestions for enhancing the programme for national purposes. This will continue to be an important mechanism for receiving feedback in this project.

9c. Have you had any (other) contact with the government not already stated? ☒ Yes ☐ No **If yes, please give details:**	

The Zimbabwe Parks and Wildlife Management Authority (ZPWMA), which functions as the CITES Management Authority in Zimbabwe, continues to recognise TRAFFIC as a valuable NGO in the

country and hosts the TESA regional office. Further, the ZPWMA has been a strong supporter of ETIS specifically. TESA has similar relations with the CITES Management Authorities in both South Africa and Tanzania, where TESA also has offices.

9d. Is any liaison proposed with the CBD/CMS/CITES focal point in the host country? ☒ Yes ☐ No If yes, please give details:

As mentioned, ETIS functions through a process of continuous engagement with CITES Management Authorities around the world. TRAFFIC, as the ETIS manager, engages in frequent correspondence with the CITES Parties in terms of data collection, verification and entry issue. This is also the case in Zimbabwe and the region as a whole, which have, so far, unhesitatingly provided strong and ongoing support for the monitoring system.

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

This project aims to enhance one of the two global monitoring systems for elephants under CITES. Both African and Asian Elephants remain threatened by continuing illegal trade in ivory. Found in 37 African and 13 Asian countries, elephants hold important socio-economic and cultural values throughout their distribution, and are recognised as 'keystone species' for their role in structuring the ecological communities of a wide range of habitats. CITES lists all Asian Elephants and all but four African Elephant populations in Appendix I, prohibiting any international commercial trade in their products. Only the Botswana, Namibia, South Africa and Zimbabwe populations are currently in Appendix II, but under restrictive annotations that have only sanctioned two conditional one-off sales of raw ivory over the last two decades. Revenues from such trade have been exclusively directed into elephant protection and management programmes, or used for rural development schemes that generate long-term incentives for elephant conservation. The dilemma before CITES is how to support the legitimate aspirations of developing countries seeking legal, sustainable trade options for nationally-abundant elephant populations, without jeopardizing the status of the species elsewhere in its range.

In 1997, CITES mandated a monitoring programme -- the Elephant Trade Information System (ETIS) managed by TRAFFIC -- to assess illicit trade in ivory, establish trends over time and determine whether or not such trends are related to CITES decisions. To provide expert and transparent specialized oversight, a Technical Advisory Group (TAG) for ETIS was established. Through the collection and analysis of global law enforcement records on elephant product seizures, ETIS aims to provide a solid platform for evidence-based decision making within CITES. Successive comprehensive analyses of these data have, since 2002, served to guide CITES policy for elephants, and have assisted elephant range States in combating illegal ivory trade with strategic insight.

Despite these achievements, the development of ETIS has been hampered by inadequate and irregular funding since its conception. Beyond considerable investment in the initial design of the monitoring system, only limited resources have been available for further evolutionary development that promotes long-term sustainability and best practices in data collection, management, analysis and reporting. For example, examination of ETIS data has proceeded sporadically in response to the CITES event cycle, so that scarce resources have been primarily utilised in the production of one-off reports rather than the stepwise development of a robust analytical framework. This project seeks to build a firm foundation and framework for sustaining ETIS by focusing on the following three issues:

Strengthening structural elements, operational procedures and analytical capabilities: The central component of ETIS is a database of seizure records. The existing database software was developed in a framework that is now obsolete, and its successful operation, including the production of analytical reports, depends on a small number of key personnel with inadequate tools to promote long-term sustainability. Furthermore, the suite of subsidiary databases do not include and process all of the information that is now understood to be of relevance, calling for further refinements of the basic structure.

Communicating technical results: For effective evidence-based policy formulation within CITES,

ETIS needs to translate statistically complex findings into simple language and concepts that can be communicated to an essentially non-technical decision-making audience. The key challenge in taking 'science to sound bite' at the international policy level is to derive indicators that are both simple and bias-adjusted for highlighting the salient findings of ETIS and promoting responsive policy under CITES. However, there are no off-the-shelf statistical tools available for this purpose. The use of secondary data sources for bias-correction has been highlighted by the TAG, but these require further development, assessment and distillation before they can be employed and communicated effectively.

Building capacity for participation: Currently, reporting of seizure records is sporadic and uneven in quantity and quality, giving rise to a major source of bias in the data. The CITES Parties are obliged to report elephant product seizures to ETIS within 90 days of their occurrence. In Africa and Asia, however, many elephant range States almost never report making ivory seizures themselves, but are regularly implicated in thousands of seizures made elsewhere in the world.

The overall strategy for addressing the above issues is to develop an improved methodological framework and tools for collecting, recording and using seizure records to underpin CITES policy. Phase 2 database software will be developed and installed on a new computer system. A manual of standard operating procedures will be produced. Novel statistical analysis of existing records will explore bias-adjustment methods, leading to recommendations of simple yet robust indicators that address the CITES objectives for monitoring elephant product trade. Automated software tools for producing these indicators will be developed. Finally, recommendations for country-specific indicators will be made and built into the database so that rapid feedback can be given to the CITES Parties. This will help identify those countries where data collection effort is inadequate, so that training materials can be deployed using the EU matching funding.

This project directly supports TESA in meeting its mandate to manage one of CITES' only species-specific monitoring systems. Since 1997, University of Reading statisticians have been working in close collaboration with TRAFFIC on the design, operation and analysis of ETIS. This partnership will continue with UK partners placing a particular emphasis on project management and data analysis, providing technical oversight and supervising consultants on software development. The integration and implementation of Darwin outputs will be managed by TESA. This project also safeguards the interests of a range of host countries who are elephant range States. CITES Authorities in these countries will be the principal beneficiaries of ETIS training provided by TRAFFIC's global network of staff. Building capacity to fully participate in ETIS is a critical step in the process of combating illicit trafficking in ivory.

In conclusion, investment in ETIS is a priority because objective, data-rich, science-based assessments are necessary to support sound decision-making by the Parties so that evidence, rather than hyperbole, and adaptive management, rather than polarised gridlock, shape conservation policy for elephants under CITES.

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

This project builds on the existing ETIS monitoring system that was originally developed by TESA and the University of Reading in 1997. Much of the earlier ETIS work was funded by DEFRA, the United States Fish and Wildlife Service, WWF and the CITES Secretariat. Over the last four years, DEFRA has been the principal donor to ETIS and these funds have been used to support the daily operation of the monitoring system, the compilation of ETIS Country Reports to the CITES Parties and the production of the analytical reports to CITES Conferences of the Parties. Since 2007, additional funding from the EU-funded project "Long Term System for Monitoring the Illegal Killing of Elephants MIKE) Phase II" with the CITES Secretariat has served to support ivory market survey work and training initiatives in elephant range States. It should be noted, however, that the funding sought with this application to the Darwin Initiative will support activities that are not covered by the present funding arrangements for ETIS.

11b. Are you aware of any other individuals/organisations/Darwin Initiative projects carrying out similar work? ☒ **Yes** ☐ **No**
If yes, please give details explaining similarities and differences, and explaining how your work will be additional to this work and what attempts have been/will be made to co-operate with and learn

lessons from such work for mutual benefits:

ETIS is the unique and definitive system for monitoring illegal ivory trade under CITES, but there are other activities of a complementary nature. One such parallel activity is the other CITES monitoring system for elephants MIKE, the sister project to ETIS. MIKE is a site-based system that monitors the illegal killing of elephants in range States in Africa and Asia. Whilst ETIS and MIKE have evolved independently in terms of structure and operational characteristics, at the same time clear linkages to promote synergy and close co-operation have been promoted. For example, ETIS is represented on the MIKE Technical Advisory Group, and vice versa, and a key aim of the MIKE Data Analysis Strategy is to develop an analytical synthesis of the two systems to provide a comprehensive picture of trends in elephant poaching and trade.

Other work that links with ETIS are efforts by a range of independent researchers (such as the work done by Dr. Esmond Martin and Mr. Daniel Stiles) or other credible NGOs to survey domestic ivory markets in Africa and Asia. Data from these efforts are used in the analysis of ETIS data to provide a country-specific index of ivory market activity. Such surveys are typically conducted on an irregular ad hoc basis, but efforts are being made to assist and encourage more regular monitoring of key ivory markets. While ETIS strives to infer patterns and trends in illicit ivory trade from data on seizures, information from ivory markets can provide valuable additional insights. Dr Esmond Martin is a member of the ETIS TAG and assists with inputs into the ETIS process.

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** ☐ **No**
CITES	☒ **Yes** ☐ **No**
Convention on Migratory Species (CMS)	☐ **Yes** ☐ **No**

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

Problems identified by TESA at ETIS operational level:

(1) ETIS is heavily dependent on key individuals with no clear mechanisms in place to ensure continuity should they leave.

(2) The database software is programmed in an obsolete framework which is unlikely to be supported for long.

(3) Certain key range states are frequently implicated in seizures reported elsewhere and yet their participation in the ETIS process is weak and sporadic.

Problems identified in the CITES reporting process:

(4) Deducing facts about global trends in illegal ivory trade from seizures data is difficult and requires careful statistical reasoning. Methods currently used in ETIS are ad hoc, not peer-reviewed and only partially deal with bias in seizures data.

(5) ETIS is perceived by policy makers and the media as too complex because its reporting procedures lack simple indicators and, because it has not been peer-reviewed, include technical justifications of the methodology.

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

(1) ETIS will have Standard Operating Procedures to facilitate continuity of operation and ensure sustainability.

(2) ETIS database software, including documentation, will be re-programmed in the light of

experience gained from the first version, and TESA staff trained in its use.

(3) Data collection and reporting from key range states will be improved by targeted training in those countries.

(4) State-of-the-art statistical methods for bias reduction will be applied to seizures data and an analysis methodology synthesising data from all sources will be developed. The methodology will be submitted for publication and peer review.

(5) Guidelines will be produced for accurately reporting ETIS findings using simple indicators in a non-technical way to CITES and in country reports to individual CITES Parties. Software tools will be written to allow the production of these bias-reduced indicators of illicit ivory trade, trends over time and trade routes, by operators with minimal statistical knowledge.

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

(1) Providing a sustainable framework for the monitoring of illicit trade in products of the two species of elephants will undoubtedly make a significant contribution to elephant conservation. Both species play pivotal roles in structuring the ecological communities in a wide range of habitats, including semi-arid deserts, woodlands, savannahs and tropical forests. As mega-fauna, elephants also exhibit a range of cultural and economic values that are deemed to be important by most range States.

(2) The proposed system is unique and could serve as a model for monitoring systems for other illegal wildlife trade. Key features addressed by ETIS Phase 2 include statistically sound methods for dealing with the inherent biases in law enforcement data as a means of monitoring illicit trade. Examples where there has already been interest in the conservation community include the trade in bushmeat, rhinoceros products, tiger products, wild birds.

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

(1) In 1997, the CITES Parties adopted Resolution Conf. 10.10 which mandated the creation of a long-term monitoring programme for tracking trade in ivory. ETIS was specifically developed for this purpose. The aim of this proposal is to ensure its long-term sustainability.

(2) The findings of ETIS contribute to the development of CITES policy for elephants, as detailed in the revision of Conf. 10.10, adopted in CoP14. This proposal seeks to improve how ETIS findings are communicated and interpreted by the development of simple indicators to accurately describe trends in the illegal ivory trade.

(3) Furthermore, the resolution requires that relevant CITES Parties are provided with training in data collection and information management and this proposal will assist in the identification and training of such Parties.

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)

ETIS already has a section on the CITES website which will be updated with news and the results of this Darwin project. ETIS Phase 2 will benefit from the TRAFFIC communications machine: on-line reports, press releases, bulletins and website.

Technical aspects of the methodology, specifically the development of statistically robust indicators and their application to ETIS data, will be submitted to appropriate peer-reviewed scientific journals. The methodology will be presented in seminars at Reading University. The publications will provide generic methodologies applicable to other wildlife trade monitoring.

A formal requirement of ETIS under resolution 10.10 (rev. CoP14) is a report by TRAFFIC to each CITES CoP (a high-profile event). This is part of ETIS' regular reporting framework which includes reports to Standing Committee meetings, the MIKE-ETIS Subgroup and Country Reports to each CITES Party. Reports will describe progress during the project's lifetime and after completion, all reports will use the improved ETIS system to produce bias-adjusted indicators of illegal ivory trade.

All outputs, including presentations, training materials, CITES Reports, press releases and reports produced by the project will clearly acknowledge the support of the Darwin Initiative and carry the Darwin name and logo wherever possible, including CITES reports.

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)

Benefits:

(1) *Sustainability of ETIS*: Ensuring that this monitoring system continues to function optimally at the operational, technical and scientific levels, addresses a key threat to the survival of elephants. The most immediate beneficiaries will be the 50 elephant range States in Africa and Asia which regard the conservation of this charismatic animal as a national priority.

(2) Because ETIS is a global monitoring system, there will be beneficiaries in the broader international community. Within CITES, an important benefit will be the fact that decisions for elephants, including any controlled trade options, will be subjected to an ongoing, 'best practice' monitoring effort so that evidence-based decision-making characterises the Convention's interventions for elephants.

(3) Key countries will benefit further from the project's training component. This will enhance the capability of the law enforcement and wildlife authorities in those countries to participate effectively in ETIS, and will contribute towards a culture of careful data recording and reporting as well as greater cooperation and sharing of information. The overall effect should be to encourage more effective wildlife trade monitoring in general.

Potential problem:
We assume that a political climate prevails that enables the countries in (3) to continue to participate fully.

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)

A motivation for the project is that the current ETIS is not sustainable; this is addressed by:

(1) Standard operating procedures, which detail the process by which information on seizures is managed and assessed for quality, will ensure continuity when a change-over of staff occurs. Training for ETIS operators will be included in the SOPs.

(2) The database system will be designed so that it does not require great technical expertise for its operation. Although complex methods will be used for producing statistically robust indicators, these complexities will be hidden from operators by being programmed in user-friendly computer software. In addition to training in the use of the database system, an on-line help system will be provided.

(3) A major criterion for the choice of programming framework for the database software will be its prospects for long-term ease of maintenance and support. The source code will be given to TESA and a programmers' guide will be written documenting the system to assist any future updating of the software.

(4) The training for CITES parties will include training of trainers. Key personnel will be identified and training materials developed so that a self-perpetuating training system is in place.

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)
You should address each of these points.

(1) *Training of TESA staff*: Only 2-3 staff are involved and these constitute the target group. Training needs will be assessed by their performance in the current system. Part of the training will involve them in the development of the SOPs themselves. Training in the new ETIS will consist of practical sessions in problem-solving with the new ETIS. This includes the process of data collection, assessment of data quality and data entry and the use of ETIS software to produce reports. The staff will gain confidence and familiarity with operating the new system and in assisting the production of reports. Training effectiveness will be judged by direct observation of performance in working independently with ETIS to producing reports.

(2) *Training in key data-providing countries*: Matching funding from an EU-funded programme with the CITES Secretariat will support this component until March 2011, after which funding is sought from this project to continue the training. The countries with sporadic participation in ETIS will be identified by using current ETIS indicators of law enforcement effectiveness and rates of reporting. Target groups will include wildlife, police, customs, and port authority officials who all have powers to seize illegal contraband, including ivory. The training will use the 'ETIS Action Toolkit', a prototype training package developed using EU funding, to bring together representatives from target groups to develop cooperative strategies and mechanisms to support effective law enforcement and reporting to ETIS for wildlife trade at the national level. A measure of the effectiveness of this training will be improved reporting rates of elephant product seizures to ETIS. As a contribution to the sustainability of this training effort, at least one key member of staff will be sought in each country to be offered training as future trainers using the Action Toolkit.

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. (Use no smaller than Arial 10 pt)

Project summary	Measurable Indicators	Means of verification	Important Assumptions
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: CITES policy is effective in significantly reducing global illicit trade in African and Asian elephant ivory.	a) Vulnerable elephant populations stabilised. b) Declining trend in illegal trade in ivory. c) Reduction in illegal killing of elephants for ivory.	a) African Elephant Database (IUCN/SSC African Elephant Specialist Group); National elephant status reports in elephant range States. b) ETIS reports (TRAFFIC). c) MIKE reports (CITES Secretariat).	
Purpose Development of ETIS Phase 2: Enhanced and sustainable collection, management, analysis and reporting of seizure data for the Elephant Trade Information System (ETIS) to monitor illicit trade in ivory as mandated by CITES.	a) Phase 2 ETIS database operational by end of project. b) Analytical framework is in place. c) Standard Operating Procedures adopted by TESA. d) Improved reporting of seizures in majority of targeted countries.	a) Validation and approval of ETIS Phase 2, database, analysis and reporting, by TAG. b) Comprehensive ETIS analyses presented and accepted at CITES Conference of the Parties. c) Changes in staff do not inhibit operation of ETIS. d) Seizure reporting rates to ETIS improved and gaps in historical data filled.	The mandate for ETIS remains in effect. CITES support for ETIS TAG continues CITES Management Authorities remain engaged and strive to improve performance
Outputs 1. Phase 2 ETIS software program developed, installed and in use.	1a. New database designed and functional specification written. 1b. Available software platforms reviewed and evaluated. 1c. Software developed. 1d. Software installed and in use. 1e. Train TESA staff in use of software.	1a. Functional spec. reviewed by TESA and accepted by TAG. 1b. Report on likely sustainability of each option. 1c/d. Installation tested; report on its use prepared by ETIS operator and validated by TAG members. 1e. TESA staff independently using software.	

2. Improved analytical framework for assessing and reporting trends of illicit trade in ivory adopted and implemented.	2a. Methodology for future analysis to produce bias-adjusted indicators of illegal ivory trade developed and tested. 2b. Recommendations drafted for a reporting framework and indicators to assist CITES in policy making. 2c. Recommendations for country specific reports developed. 2d. Software tools for reporting developed. 2e. TESA staff trained in use of reporting tools.	2a. Methodology approved by TAG and paper submitted for publication. 2b. Recommendations accepted by TAG 2c. Recommendations accepted by TAG and positive feedback from elephant range states. 2d. Software installed and tested. 2e. TESA staff produce CITES and country reports.	TAG accepts the recommendations on methodology.
3. Enhanced measures for supporting the long-term operational sustainability of ETIS in place and functioning.	3a. Standard Operating Procedures (SOPs) for use of ETIS framework. 3b.TESA staff trained in use of ETIS SOPs.	3a. SOP manual approved by TAG and used by TRAFFIC. 3b. Performance evaluation of staff demonstrate effective use of SOPs.	
4. National CITES Management Authorities capacity for tracking and reporting illegal trade in elephant products in fulfilment of CITES requirements for participation in ETIS enhanced.	4a. Priority elephant range States where training most needed identified. 4b. Review and update existing training materials. 4c. Training programmes undertaken. ==4d. Report on training written and submitted to TAG.==	4a. Assessment reports from ETIS highlight elephant range States and other key countries with poor law enforcement effort ratios. 4b. Final training materials produced in appropriate languages. 4c. Rate of reporting seizures to ETIS by target countries improves following training; law enforcement effort ratio improves; backlog elephant seizure data submitted to ETIS. ==4d. Training Report accepted by TAG.==	4a. CITES Management Authorities embrace training and include cross-sectoral law enforcement authorities as participants. 4b. Suitable trainers with requisite language skills identified and engaged for training events.

Activities (details in workplan)

1.1 Review existing database software.
1.2 Prepare functional specification of new database.
1.3 Evaluate available software platforms.
1.4 Design and produce the software.
1.5 Install and test the software.
1.6 Revise the software.
1.7 Train TESA staff in using the new software.
2.1 Identify indicators and data required for them.
2.2 Analyse existing data to evaluate statistical methods for producing bias-adjusted indicators.
2.3 Design the new ETIS reporting framework.
2.4 Write two papers on methodology to submit to peer-reviewed journals.
2.5 Write software for producing the indicators.
3.1 Analyse and review all ETIS operations.
3.2 Draft a Manual of Standard Operating Procedures (SOPs).
3.3 Revise the Manual in the light of Output 1.
3.4 Submit SOPs to TAG and revise as required.
3.5 Train TESA staff in use of SOPs.
4.1 Identify range states with greatest need of training.
4.2 Review existing training materials.
4.3 Produce training materials.
4.4 Undertake training in key countries.
4.5 Prepare training report and present to TAG.

Monitoring activities:
Indicator 1: Visits by UK partners to work with host region partners in assessing (a) the new system, and (b) the effectiveness of staff.
Indicator 2: Presentation of methodological ideas for scrutiny in scientific and other technical forums, both in UK and the host region.
Indicator 3: On-going monitoring by TESA Director of development and adoption of SOPs by TESA staff.
Indicator 4: Feedback from trainees after each training event; regular recording of ETIS indicators that measure participation and law enforcement effort.

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.

	Activity	Months	Year 1				Year 2				Year 3			
			1	2	3	4	1	2	3	4	1	2	3	4
1.1	Review of existing database system and identification of additional (and redundant) requirements.	1		X										
1.2	Prepare detailed functional specification for new database system.	3			XXX									
1.3	Review and evaluate available software platforms for the new database system.	1				X								
1.4	Design the database and write the software.	18				XX	XXX	XXX	XXX	XXX	XXX	X		
1.5	Install, test and debug the database software.	3										XX	X	
1.6	Revise database software in the light of Output 2.	2											XX	
1.7	Train TESA staff in use of the new software.	2										X	X	X
2.1	Choose indicators and summary measures for ETIS outputs and identify variables (both in the ETIS database and from secondary sources) that contain information about them; identify sources of bias.	2	XX											
2.2	Using existing ETIS data, implement and evaluate potential statistical models for producing bias-adjusted indicators; make recommendations on methodology to TAG.	18		XXX	XXX	XXX	XXX	XXX	XXX					
2.3	Produce a new reporting framework for ETIS, to include reports to CITES and country reports; make recommendations to TAG and to Elephant Range State meeting.	4							X	XXX				
2.4	Write two papers on methodology and submit for publication in peer-reviewed journals - one in applied statistics, the other in conservation.	6									XXX	XXX		
2.5	Write user-friendly software for producing bias-adjusted indicators; train TESA staff to use the software.	6										XX	XXX	X
3.1	Carry out review and detailed analysis of ETIS operations from data collection to reporting.	6	XXX	XXX										
3.2	Draft Manual of Standard Operating Procedures (SOPs).	9			XXX	XXX	XXX							
3.3	Revise and finalise SOP Manual in the light of Output 1 & Activity 3.5.	2											XX	
3.4	Present Manual of SOPs to TAG; revise as required.	1											X	
3.5	Train TESA staff in use of SOPs.	4						XXX						X
4.1	Identify and prioritise elephant range states with the greatest need for training.	2	XX											
4.2	Review and update existing training materials; produce new materials as required.	3	XXX											
4.3	Produce final training materials, translated into suitable languages.	7	X	XXX	X	X	X							
4.4	Undertake training programmes in selected countries.	20		XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	
4.5	Report on training written and presented to TAG.	2												XX

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 Measure No	Description	Tick if 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	
4D	Number of training weeks to be provided	
5	Number of people to receive at least one year of training (which does not fall into categories 1-4 above)	
6A	Number of people to receive other forms of education/training (which does not fall into categories 1-5 above)	✓
6B	Number of training weeks to be provided	✓
7	Number of (ie different types - not volume - of material produced) training materials to 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	✓
9	Number of species/habitat management plans (or action plans) to be produced for Governments, public authorities, or other implementing agencies in the host country	
10	Number of individual field guides/manuals to be produced to assist work related to species identification, classification and recording	
11A	Number of papers to be published in peer reviewed journals	✓
11B	Number of papers to be submitted to peer reviewed journals	✓
12A	Number of computer based databases to be **established** and handed over to host country	
12B	Number of computer based databases to be **enhanced** and handed over to host country	✓
13A	Number of species reference collections to be **established** and handed over to host country(ies)	
13B	Number of species reference collections to be **enhanced** and handed over to host country(ies)	
14A	Number of conferences/seminars/ workshops to be **organised** to present/disseminate findings	✓
14B	Number of conferences/seminars/ workshops **attended** at which findings from Darwin project work will be presented/ disseminated.	✓
15A	Number of national press releases in host country(ies)	✓
15B	Number of local press releases in host country(ies)	✓
15C	Number of national press releases in UK	✓
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 **established**	
17B	Number of dissemination networks to be **enhanced/ extended**	✓
18A	Number of national TV programmes/features in host country(ies)	
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	✓
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 after Darwin funding has ceased	
23	Value of resources raised from other sources (ie in addition to Darwin funding) for project work	✓

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.

The mode of verification for many of the indicators in the logical framework is approval by the ETIS TAG. Specifically, these are the Phase 2 ETIS software functional specification and program, the methodology for the analytical framework, recommendations to produce bias-adjusted indicators, SOP manual and the training report. These issues will be discussed at TAG meetings as they arise. Furthermore an annual project report will be submitted by the project to the TAG. All project partners, UK and host region, will participate equally in the monitoring and evaluation process.

In addition to this, an independent *Project Monitoring Group* (PMG) will be set up. Unlike the TAG, which ensures the project fits within the ETIS remit, the PMG will monitor the progress of the project itself and will provide an entirely independent view of the project – both the director of TESA and RWB sit on the ETIS TAG. The PMG will consist of experts on elephant trade related issues. Prof. E.J. Milner-Gulland – Professor of Conservation Biology, Imperial College UK – has agreed to head the PMG; two other members will be appointed before the start of the project. In the first instance, the PMG will be asked to review the targets for the first year of the project. A report will be submitted to the PMG at the end of each project year and targets for the following year agreed. The PMG will ensure that the project is on target and will be invited to submit a report to the ETIS TAG. Again, *all* project partners will take an equal part in the PMG dialogue.

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 University of Reading is a UK Higher Education Institution. Funding is predominantly via HEFCE, research grants and other forms of sponsorship.

22. Provide details of all _confirmed_ 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 _unconfirmed_ funding the project will attract to carry out addition work during or beyond the project lifetime. Indicate those funding sources which are confirmed.

Confirmed:
The EU-funded project "Long Term System for Monitoring the Illegal Killing of Elephants (MIKE) Phase II" grant with the CITES Secretariat includes a component to support capacity building and training for ETIS. This four-year programme has already commenced, with years three and four (April 2009 to March 2011) falling within the scope of this Darwin Initiative project application. During that time period, the EU funding that is available through the CITES Secretariat will be linked to the training component of this application. In that regard, approximately GBP75,000 will be used as matching funds for the Darwin Initiative project. Final contracting arrangements are presently taking place and these funds can be regarded as confirmed.

Unconfirmed:

23. Please give details of any further funding resources (confirmed or unconfirmed) sought from the host country partner (s) or others for this project that are not already detailed in the Budget or Question 22. This will include donations in kind or un-costed support eg accommodation. (max 50 words per box)

Financial resources:
Funding in kind:
TESA will fund the establishment costs associated with this project (i.e. rent, rates, utilities, etc.) from its core operational budget. Some staff time, will also be covered in this manner.

FCO NOTIFICATIONS

Please check the box if you think that there are sensitivities that the Foreign and Commonwealth Office will need to be aware of should they want to publicise the project's success in the Darwin competition in the host country. ☐

Please indicate whether you have contacted the local UK embassy or High Commission directly to discuss security issues (see Guidance Notes) and attach any advice you have received from them.

Yes (no written advice) ☒ ==Please see accompanying documents.==   **Yes, advice attached** ☐   **No** ☐

CERTIFICATION 2009/10

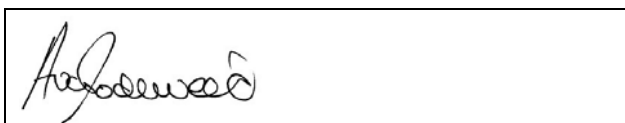On behalf of the University of Reading

I apply for a grant of £32,071 in respect of expenditure to be incurred in the financial year ending 31 March 2010 on the activities specified in the above application.

I certify that, to the best of our knowledge and belief, the statements made by us in this application are true and the information provided is correct. I am aware that this application form will form the basis of the project schedule should this application be successful. (This form should be signed by an individual authorised by the lead UK institution to submit applications and sign contracts on their behalf.)

I enclose a copy of the organisation's most recent audited accounts and annual report, CVs for project principals and letters of support. ==Please go to:== ==http://www.rdg.ac.uk/finance/accounts/index.htm for accounts and annual report==

Name (block capitals)	Dr Anne-Marie van Dodeweerd
Position in the organisation	Head of Research Support

Signed *[signature]*   **Date:** 1st December 2008

Stage 2 Application - Checklist for submission

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

Once you have answered Yes to the questions above, please submit the application, not later than midnight GMT on **Monday 1 December 2008** to Darwin-Applications@ltsi.co.uk 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.**