EC Project No. 9 ACP RPR 42EC

Long Term System for Monitoring the Illegal Killing of Elephant (MIKE): Phase 2

Progress Evaluation

Report to the MIKE Central Coordination Unit (CCU) of the CITES Secretariat

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Acronyms

AfESG	African Elephant Specialist Group
AU	African Union
CITES	Convention on the International Trade in Endangered Species
COMIFAC	Commission des Forets d'Afrique Centrale
CoP	Conference of the Parties (to CITES)
EAC	East African Community
ECOWAS	Economic Community of West African States
IGAD	Intergovernmental Authority for Development
IUCN	International Union for the Conservation of Nature and natural Resources
NWMA	National Wildlife Management Agency
SADC	Southern African Development Community
UNEP	United Nations Environment Programme
CCU	Central Coordination Unit (of MIKE)
ETIS	Elephant Trade Information System
LEM	Law Enforcement Monitoring
MIKE	Monitoring the Illegal Killing of Elephant
NO	MIKE National Officer
NSC	MIKE National Steering Committee
SSC	MIKE Sub-Regional Steering Committee
SSO	MIKE Sub-Regional Support Officer
SSU	MIKE Sub-Regional Support Unit
TAG	MIKE Technical and Advisory Group
MIST	Management Information System (for law Enforcement Monitoring)
PIKE	Proportion of Illegally Killed Elephant

Executive Summary and Recommendations

1. Overview of the MIKE Programme Phase 2

1. The MIKE Central Coordination Unit (CCU) provides essential Secretariat, oversight and management functions to the entire MIKE programme and is embedded within the Division of Environmental Law and Conventions (DELC) of UNEP in Nairobi. The CCU consists of four staff, the MIKE Coordinator, the Data Analyst and two support staff.
2. The MIKE CCU was able to re-energise the MIKE programme at sub-regional, National and Site levels along with all aspects of MIKE data collection, validation, integration and transmission.
3. In general terms the MIKE Phase 2 has seen a controlled growth in its activities, actions and outputs, with no programme areas or activities being specifically developed at the expense of others, or specifically ignored, and with little evidence of "mission creep".
4. An important achievement was the appointment of the Central Data Analyst to the CCU which led directly to the establishment of the MIKE baseline against which future trends of elephant populations and illegal killing will be assessed, and to the full analysis of the MIKE/PIKE data for CoP15.
5. The sub-regional programmes and coordination are working well, targets are being met and there are strong signs of improving performance in the course of Phase 2.
6. At the national level, National Wildlife Management Agencies (NWMA) are in general achieving their targets in terms of appointing National Officers and National Steering Committees, with data compilation, storage and analysis, and with liaison with SSOs.
7. At the level of the MIKE sites, NWMAs are meeting their targets of appointing MIKE Site Officers with a strong improvement during the course of Phase 2. Mike National Officers are also improving their rate of visits to MIKE sites.
8. Other positive achievements of the MIKE programme are shown by:-
    - The number of range States asking to join the MIKE programme;
    - The number of Sites being considered by the NWMAs to bring into the MIKE programme - some range States have expressed their intention to bring all their protected areas into the MIKE programme;
    - The gradual evolution of the MIKE from monitoring within very specific Site areas to monitoring at the level of elephant ranges, ecosystems or areas of "community involvement";
    - The growth in cross-border cooperation between neighbouring MIKE Sites: for example between Tsavo East NP (Kenya) and Mkomasi GR (Tanzania), between Burkina Faso, Benin and Niger who share the Park W Site, and between Virunga NP (DRC) and Queen Elizabeth NP (Uganda), a case of sub-regional cooperation; and

- The rate at which the MIST programme is being adopted as the preferred method for patrol based LEM (49% of MIKE Sites now use the MIST programme compared with 11% of MIKE sites in Phase 1).

9. MIST is an altogether more flexible data acquisition, data base and data analysis system than the original MIKE system, and one which can deliver both MIKE/PIKE data and the all-important data on patrol effort. This adoption of MIST at the MIKE site level has other implications which will enhance the application of MIKE/MIST at the national level.

    - First, MIST can accommodate comprehensive data on all species, not just elephant, including other endangered species (and plants), which makes the system more useful at Site and National levels.
    - Second, MIST can more easily integrate "alternative" and "unofficial" sources of data, information and intelligence on illegal killing and trade, which may form the basis of an early warning system.
    - Third, MIST has greater capabilities to provide information for protected area management, both Site and National.

10. MIST will meet all the formal requirements of MIKE data, but being more flexible may well be able to provide a route both to Site level and National level early warning systems while contributing positively to both Site level and National level protected area management.

11. The MIKE programme has a number of significant partners who contribute on a major scale to the programme. They include the IUCN who host the MIKE sub-regional programme activities, the Technical Advisory Group (TAG) who provide scientific and technical inputs to the MIKE programme, the African Elephant Specialist Group (AfESG) who, among many activities, monitor the status and trend of elephant populations throughout Africa; and ETIS, the elephant trade information system. All co-operate closely with the MIKE programme and receive in turn significant funding.

12. MIKE is currently achieving all four of the CITES monitoring objectives; it is providing the CITES community with scientifically objective and robust data and analyses; and it is becoming well institutionalised with the African range States, with relatively smoothly operating infrastructure, good information flows and outputs, increasing activity in capacity building, and strong partnerships

2. The MIKE Programme at International and Continental Levels

13. At the International level, the MIKE programme is seen to provide neutral and unbiased data on the status and trends of elephant populations, on the trends in illegal killing and how these trends respond to external events such as the sale of ivory stockpiles or changes in demand in consuming countries.

14. Maintaining the neutrality of MIKE will be a major factor towards achieving its Overall Project Objective, namely:-

Elephant populations in Africa and Asia are managed sustainably by using the monitoring information to assist in making appropriate management and trade decisions.

Recommendation 1

15. To achieve this, it is very important that the MIKE CCU submits as soon as possible the MIKE/PIKE analyses for publication in fully peer reviewed, international journals. Once this is achieved, MIKE/PIKE cannot be challenged by innuendo and insinuation but only by equally peer reviewed work.

16. Furthermore, so long as agreement can be obtain from the range States, the MIKE Site data should be put into the public domain on the CITES/MIKE website.

3. The MIKE Programme at Sub-Regional and National Levels

3.1 Sub-Regional Buy-In

17. At the sub-regional level, range States continue to demonstrate their major buy-in to the MIKE programme. This is evidenced by the number of range States requesting to join the MIKE programme, by the resources allocated by National Wildlife Management Authorities to law enforcement in their protected areas, including their MIKE sites, and by the number of range States where many NWMAs are considering bringing new sites and areas into the MIKE programme.

18. Range States demonstrate a strong feeling of ownership of the MIKE programme. They appreciate the way in which MIKE builds on and enhances existing national capabilities and supports Protected Area management; the consistent approach of the MIKE programme; and the opportunities offered by the Sub-Regional Steering Committees to harmonize approaches to actions and policy while accommodating national objectives. Range States particularly appreciate the ownership of data through the National and sub-regional verification processes.

19. This buy-in by the range States will be a major factor in achieving the Project Purpose of MIKE, namely:-

> *A standardized system of field data collection and a statistically robust method of analysis provided to the African Elephant Range States on a long term sustainable basis, with information in regard to changes in their elephant populations and the factors influencing these changes, and through which the impact of CITES decisions can be assessed.*

20. Currently, potential new range States are invited to MIKE sub-regional meetings so they can become familiar with the MIKE programme, but apart from some provisional criteria for MIKE Sites drawn up the TAG there seem to be no agreed criteria or procedures for new range States to join the MIKE programme.

Recommendation 2

21. The TAG should be tasked as a matter of urgency to draw up criteria and procedures for new range States to join the MIKE programme. These criteria should be discussed and adopted at a meeting of the African Elephant Range States.

22. These criteria could also form the basis of a re-evaluation of the commitment shown by current range States to the MIKE programme (see Recommendation 7A, Para 40 below).

3.2 Cost Implications of New Range States

23. There are of course significant cost implications in any eventual MIKE Phase 3 to welcoming new range States as MIKE members and new MIKE sites. MIKE is in a way becoming as victim of its own success and is raising expectations among elephant range States as to the possible scope and quantity of support it can offer. Some range States, for example, consider that MIKE should provide direct support for the field costs of LEM, and even vehicles.

24. At the moment MIKE is financed to service the elephant range States and MIKE Sites set out in the financing agreement between the EC and CITES, and MIKE simply cannot become some sort of general donor to support law enforcement in all protected areas in Africa. This would be mission creep *par excellence*.

Recommendation 3

25. MIKE can, and should, use its good offices and sub-regional contacts to encourage donors and NGOs to continue and/or enhance their support to new MIKE range States and to new MIKE Sites.

4. Mike Programme Activities

4.1 The Central Coordination Unit

26. The Central Coordination Unit (CCU) is now embedded within the Division of Environmental Law and Conventions of UNEP. This has led to some negative comments concerning higher administrative costs, to the detriment of other programme activities, and to a lowered efficiency in the face of higher bureaucracy.

27. There is no doubt that the costs of the CCU are indeed higher embedded within UNEP than within IUCN and adjustments did have to be made in budget allocations. But the adjustments were minor and not enough seriously to compromise other programme areas.

28. Similarly, there is no doubt that the bureaucratic load sits more heavily on the shoulders of the CCU embedded within UNEP than within IUCN. The MIKE programme is a field and site based, real time monitoring programme and programme managers must be able to respond swiftly and appropriately to changing conditions. But it is a moot point whether "fortress" UNEP really constrains the efficiency with which the CCU can act and respond.

Recommendation 4

29. When a new financing agreement for MIKE Phase 3 is designed, it would be worth while to revisit the reasons for locating the CCU within UNEP rather than elsewhere.

4.2 Short and Medium Term Funding Requirements

30. An area of much greater concern is with the medium to long term funding of the MIKE programme, especially in view of the decisions and resolutions of the CoPs which, among others, state that the MIKE programme should "continue and be expanded" (Resolution Conf. 10.10 (Rev. CoP15)); that the MIKE Secretariat should provide two additional updated MIKE analyses in 2011 and 2012 (Decision 14.78 (Rev. CoP15)); that a decision-making mechanism for the ivory trade, under the auspices of the CoP, to be developed by the Standing Committee requires MIKE data (Decision 14.77 (Rev. CoP15)); and that the Standing Committee (Decision 15.74) will, in consultation with the range States, review, re-examine or improve the scope, purpose, organizational set-up and technical design of MIKE and report recommendations to CoP16.

Recommendation 5

31. In the short term, additional funding must be found for the MIKE programme to continue operations so it can participate fully in the forthcoming CoP16. It would be a great setback for elephant conservation, and compromise the significant funds invested thus far, if MIKE had to cease operations so prematurely.

32. In the longer term, negotiations should be put in place as soon as possible to fund a MIKE Phase 3 project.

4.3 Sub-Regional Concerns

33. There are concerns about the planning and coordination of the SSO activities, specifically with respect to visits by the SSOs to their National Officers and to individual MIKE sites. National Officers are adamant about the importance of visits from "their" SSO and how isolated they can feel if these visits break down.

34. As examples, over the 4-year course of MIKE Phase 2:-

- Two of the range States were never visited at all by the relevant SSO;
- Of the range States that were visited, 50% received an average of two visits each and 50% received an average of 7 visits each; and
- In the East Africa sub-region, 88% of the site visits by the SSO were made in Kenya and Tanzania which between them had only 55% of the MIKE sites.

35. Clearly, the numbers of visits made by the individual SSOs to their National Officers and MIKE sites must reflect in some way the actual requirements for support and capacity building. Equally clearly, one would not want to create an over-managed project where tight and unrealistic targets were needlessly set up and enforced by the CCU.

Recommendation 6

36. In the light of experience in Phases 1 and 2, in Phase 3 the TORs for the SSOs should be re-evaluated and performance criteria drawn up against which SSO activities could be monitored by the CCU. These new TORs should be discussed and adopted at a meeting attended by all Sub-Regional Steering Committees.

4.4 National Level Concerns

37. The appointment of the National Steering Committee, the National Officer and the MIKE Site Officers, and the extent and intensity of LEM within MIKE sites and other protected areas, are the prerogative of the National Wildlife Management Authorities and outside the formal management control of the MIKE programme.

38. Nonetheless, there are areas of concern which need to be addressed. Specifically:-

- There is much variation in the number of visits made to MIKE Sites by MIKE National Officers in different range States. While this must reflect both the requirements of individual MIKE Sites as well as the overall support given to the MIKE programme by the specific NWMA. , the SSO should perhaps monitor more closely the reasons underlying these discrepancies.
- Sustainability: some 68% of MIKE sites still rely on partial or complete support from donors and NGOs;
- Population Surveys: surveys of elephant populations at 45% of the MIKE sites are now carried out at intervals of >5 years;
- Intensity of LEM cover: in 21% of the MIKE sites, the intensity of LEM cover is classified by National Officers and Sub-Regional Support Officers alike as "poor"; and
- Some MIKE Sites have lost all their elephant since they were established.

39. There remain a number of other overarching concerns, traceable back even to the 2004 review of MIKE Phase 1.

- In some range States, inter-departmental conflicts within government make the successful implementation of the MIKE programme extremely difficult, and in some cases effectively impossible.
- SSOs continue to report much frustration in the turnover rate of MIKE National Officers and especially MIKE Site Officers in some range States. This high turnover creates endless demand for retraining, often to the detriment of other MIKE Sites and range States.
- LEM for the MIKE programme is still regarded in some range States as an additional burden rather than part and parcel of normal law enforcement and patrolling activities.

Recommendation 7

40. In the light of the experience gained throughout Phases 1 and 2:-

- **7A:** The agreements and protocols under which individual range States commit themselves to the MIKE programme should be revisited, especially with respect to conflicts between Government Departments and Ministries, and turnover among MIKE National Officers and Site Officers (see Recommendation 2, Para 22 above).
- **7B:** The TORs for MIKE Officers and Site Officers should be revisited and stricter performance criteria drawn up.

- **7C:** The criteria for MIKE Site management should be revisited, specifically with respect to LEM intensity, the frequency of population censuses and the presence of elephants. To remain in the MIKE programme, each existing MIKE Site should be reassessed against these criteria. Similarly, newly proposed MIKE Sites should be assessed against these criteria for suitability.
- **7D:** The new initiative of the CCU to develop a standardised ranger curriculum which includes LEM as a normal activity for a patrolling officer along with other ranger activities such a anti-poaching should be promoted and expanded. The objective is to introduce this curriculum into every national and sub-regional ranger training institution so that rangers emerge with the mindset that LEM is part of their normal activities.

41. While it is envisaged that the TAG will take the lead in redrafting all these protocols, other important partners in drawing up and adopting these recommendations will be the range States, the Sub-Regional Steering Committees, the SSOs and the CCU.

5. MIKE as an Early Warning System

42. Range States continually ask whether MIKE could ever serve as an early warning system at Site, National or sub-regional levels . While the "early warning of what?" is often poorly specified it is usually implied to mean flagging in some way any sudden change in the rates of illegal hunting of elephant or in the volumes and flows of illegal ivory or bushmeat.

43. MIKE is designed to analyse the status of elephant populations, the trends in illegal killing and the dynamics which influence them at a sub-regional and continental level. As a site-based monitoring programme, neither the primary data collected nor the reporting cycle lend it to early warning applications or to direct application at Site and National levels.

44. However, participants from elephant range States to the 3rd African Elephant Meeting at Gigiri (November 2010) recognized the potential value of information on illegal elephant activities from "unofficial sources", and the potential value of other information and intelligence arising from, for example, IUCN species specialist groups, field based NGOs, other field based experts and organisations – especially the NWMA themselves, and organisations such as the police, customs, perhaps even the Lusaka Agreement and the media.

45. The wide adoption of MIST is very relevant here as it can more easily accommodate such "alternative" and "unofficial" sources of data on illegal killing and trade. This kind of information and intelligence could form the basis for the early warning system at the MIKE Site and National level which many range States are looking for.

Recommendation 7

46. The TAG should revisit the use of "alternative" and "unofficial" data on illegal killing and trade and advise on how they can be built up into an early warning system.

6. Mike Partners

6.1 IUCN

47. The IUCN has been a major partner to the MIKE programme since its inception and in MIKE Phase 1 all MIKE activities were hosted by the IUCN. However, in MIKE Phase 2 the decision was taken to embed the Central Coordination Unit (CCU) of MIKE within the Division of Environmental Law and Conventions of UNEP, leaving the IUCN to host the MIKE sub-regional elements (SSCs and SSOs) within their sub-regional structure

48. This arrangement is not proving to be particularly satisfactory for either side. IUCN feels that as an international institution with strong sub-regional and national identity throughout the MIKE range States it could provide better support to MIKE if it were involved programmatically as well as administratively. In turn, MIKE is missing some major opportunities by not making better use of the IUCN network, for programme work, for national and sub-regional contacts, and for fund raising.

Recommendation 8

49. CITES and IUCN need a new headquarters agreement in which IUCN will be much more involved with MIKE at a programmatic level and the MIKE programme will make more use of the IUCN sub-regional and national networks.

50. CITES and IUCN have already exchanged letters of intent to develop such a new approach.

51. In principal, IUCN could manage on behalf of the MIKE Programme all the "non site-based monitoring" activities, including hosting as at present the SSOs and their sub-regional activities; HEC, bush meat studies and the African Elephant Database (all through AfESG); and coordination between ETIS and the MIKE sub-regional committees and range States. IUCN could also implement early warning systems for the MIKE programme (so long as the TAG comes up with a useful design).

52. A full and mutually beneficial partnership between MIKE and IUCN will be to an important aspect of Phase 3.

6.2 The Technical and Advisory Group (TAG)

53. The TAG was set up to provide advice on all relevant scientific and technical aspects arising from the design and implementation of the MIKE programme, and as such has been very successful. The endorsement of specific techniques and methodology by the TAG is very important for MIKE SSOs and National Officers and assists in their acceptance and implementation at National and sub-regional levels.

54. However, the TAG membership is somewhat static with some members being there since the very beginnings of MIKE. The newly created joint MIKE-ETIS TAG might provide the incentive to initiate a review of TAG membership.

55. The MIKE programme is evolving, and specific regional technical issues are now emerging. Range States feel that the TAG is not sensitive to such regional issues and remains too much focused on "MIKE wide" issues.

Recommendation 9

56. **9A:** The TAG should consider revolving its membership so that new expertise and fresh ideas are brought in; and it should also develop a greater sensitivity towards sub-regional issues and problems.

57. **9B:** The TAG should as a matter of urgency address the following technical issues:-

- Redraft the Aerial Survey Standards along the lines set out in Annex 7.
- Revisit the Dung Count Standards which appear to be unnecessarily complex, and reconsider alternative methods of population census in forested areas..
- Draw up criteria and procedures for welcoming new range States to the MIKE programme, and for re-assessing the commitment of current range States to the MIKE programme.
- Draw up criteria and procedures for adding new MIKE Sites to the MIKE programme, and to re-assess the suitability of existing MIKE Sites to continue in the MIKE programme.
- Draw up, design and implement a MIKE based "early warning system", specifying exactly what it is that early warning is being given about, and how alternative and unofficial sources of data are integrated into the system along with MIKE and other appropriate data.

6.3 The African Elephant Specialist Group (AfESG)

58. The IUCN/African Elephant Specialist Group has had a long, close and successful involvement with the MIKE programme. In Phase 2 of MIKE, AfESG was contracted by MIKE to carry out studies on HEC; to undertake a comprehensive study on the impact of trade in elephant meat; to integrate MIKE population survey data in the African Elephant Database; to support annual meetings of African elephant range States; and to help disseminate MIKE information, principally through the journal *Pachyderm*.

Recommendation 10

59. The role of the AfESG in these important MIKE activities, especially in Phase 3, should be continued.

6.4 The Elephant Trade Information System (ETIS)

60. ETIS monitors international trade in illegal ivory, providing a global picture of the trade itself and where elephant products are coming from and going to.

61. At the most recent meeting of the elephant range States at Gigiri, Kenya (November 2010) the ETIS Director presented an update of the Elephant Trade Information System, highlighting areas of concern, particularly those countries with poor law enforcement effort scores as calculated by ETIS on the basis of ivory seizures involving these countries.

62. In response, the elephant range States tabled their perception of a lack of "ownership" of ETIS data, analyses and reports. Specifically, range States would like to see reports and analyses before they are presented to conferences, so they have a chance to discuss and validate the data in the reports.

63. The newly established joint MIKE/ETIS TAG should go some way towards addressing these problems. The ETIS team is now invited as a matter of course to all sub-regional and regional meetings organised by the MIKE programme, offering opportunities to the elephant range States to interact with, and learn about, both of these monitoring systems. Similarly, in capacity building activities organised by MIKE, both MIKE and ETIS teach about each others' data-gathering routines and approaches.

64. But by its very nature ETIS produces data of a very different kind and scale to MIKE and simply cannot emulate the data flows and data validations that take place within the MIKE programme. Furthermore, ETIS is a child of TRAFFIC rather than of CITES, though it reports to the same Standing Committee as does MIKE.

Recommendation 11

65. These concerns of the range States at National and sub-regional levels about the ETIS data and reports are justified and should be addressed by MIKE and ETIS. However, it is not clear just at this stage exactly how this might be achieved.

66. MIKE and ETIS must continue to work closely together and to integrate their data within their reporting structures.

7. General Thoughts and Recommendations for Phase 3

7.1 MIKE Phases 1 and 2

67. While the Phase 1 of MIKE set the project up, established its infrastructure, solved initial technical problems and generally got things moving, Phase 2 has essentially made the project work, especially with respect to establishing the MIKE baseline, analysing the importance of Site characteristics and establishing the MIKE/PIKE index as the preferred method for monitoring the illegal killing of elephants.

68. Phase 3 should be one of consolidation and institutionalisation, in which the very significant gains made throughout Phases 1 and 2 become fully embedded both within the protected area management activities of the range States and within CITES.

7.2 General Goals for Phase 3

69. Drawing on the experience and momentum of Phases 1 and 2, MIKE should evolve towards being as simple, sustainable and above all as <u>useful</u> as possible to participating range States. Specifically, MIKE should:-

- evolve into a tool that contributes to the protection of all biodiversity, not just elephants, both *in situ* and nationally;
- enhance the capacity within the range States to collect and utilize MIKE data to conserve sites and their keystone species;

- ensure effective MIKE structures so they remain well coordinated and mutually supportive;
- provide scientifically robust outputs for range States, Governments and CITES to make well informed decisions on elephant conservation and management, and on trade in elephant products;
- assist CITES in meeting its obligations to range States to further develop MIKE; and
- develop strong partnerships at local, national and international levels to ensure sustainability and uptake of the MIKE programme.

7.3 Endorsement from Sub-Regional Organisations

70. The MIKE programme is embedded within the Division of Environmental Law and Conventions of UNEP. From this position of advantage the MIKE secretariat should be able to engage with a range of regional and sub-regional organisations throughout Africa, such as SADC, EAC, IGAD, ECOWAS, COMIFAC and the AU itself, with the objective of strengthening the sub-regional influence of MIKE.

71. The political support and endorsement of MIKE by these sub-regional organisations, especially at Ministerial level, might confer further advantages. Specifically:-

- Policy differences between elephant range States with respect to the ivory trade could perhaps be settled amicably before, rather than during, the CoPs. At the moment, policy discussions on matters of trade in elephant products at the CoPs are too influenced by small, self-selecting groups and take place in an atmosphere of confrontation rather than one of compromise.
- The meetings of the African elephant Range States hosted by MIKE at UNEP might now become a forum for the producers of elephants to meet with the consumers of elephants to discuss shared objectives. Both producers and consumers want the same things – namely abundant and stable populations of elephant throughout Africa and an open, legal, transparent and well regulated trade in elephant products. This can be achieved only by getting the two sides to talk to each other.
- Fund raising from major donors and other players in the field in support of national wildlife management authorities might also become easier.

SECTION 1

INTRODUCTION

1.1 Monitoring The Illegal Killing Of Elephants (MIKE)

Background

72. The Convention on Illegal Trade in Endangered Species of wild fauna and flora (CITES) regulates the international trade in a large number of wild plants and animals and their products, including trade in the two extant elephant species, *Loxodonta africana* and *Elephas maximus*. For nearly two decades, international trade in elephant products and management of elephant populations has been subject of extensive debate amongst CITES Parties and in various CITES fora. CITES decision-making has shown the great need for robust, reliable information on elephant numbers, mortality rates, threats, and factors influencing the status of elephants, including [and most importantly] CITES decisions on trade in elephant specimens. It was agreed that this needed to be achieved through a routine and standardized monitoring system.

73. At the 10th meeting of the Conference of the Parties to CITES (CoP10; Gigiri, 1997), the Parties therefore adopted a Resolution regarding trade in elephant specimens that included a recommendation calling for the establishment, under the supervision and direction of the Standing Committee, of a comprehensive international system to monitor the illegal killing of elephants. The objectives, structures and *modus operandi* of this programme, commonly known as MIKE (Monitoring the Illegal Killing of Elephants), were endorsed by the CITES Standing Committee in 1999.

74. MIKE was established throughout the range States of African and Asian elephants since early 2000, and has been growing in scope and importance ever since. MIKE monitors *in situ* the conservation status of and threats to a representative sample of African and Asian elephants. MIKE is designed to *inter alia* provide data on trends in levels of illegal killing of elephants, and their relationship with a resumption of legal ivory trade.

75. The MIKE programme is governed by CITES Resolution Conf. 10.10 (Rev. CoP15) on *Trade in elephant specimens* [Ref 01].

Objectives and operation of MIKE

76. The overall aim of MIKE is to provide information needed for elephant range States and CITES Parties to make appropriate management and enforcement decisions concerning elephants, and to build institutional capacity within the range States for the long-term management of their elephant populations by improving their ability to monitor elephant populations, detect changes in levels of illegal killing, and use this information to improve elephant management and provide more effective law enforcement.

77. Resolution Conf. 10.10 (Rev. CoP15) specifies that the Conference of the Parties agree that the systems known as Monitoring the Illegal Killing of Elephants (MIKE) and the Elephant Trade Information System (ETIS), established under the supervision of the Standing Committee, shall continue and be expanded with the following objectives:

- measuring and recording levels and trends, and changes in levels and trends, of illegal hunting and trade in ivory in elephant range States, and in trade entrepôts;
- assessing whether and to what extent observed trends are related to changes in the listing of elephant populations in the CITES Appendices and/or the resumption of legal international trade in ivory;
- establishing an information base to support the making of decisions on appropriate management, protection and enforcement needs; and
- building capacity in range States.

78. With regard to the *modus operandi*, structure and overall operation, the Conference of the Parties agreed in Resolution Conf. 10.10 (Rev. CoP15) that:
    - this monitoring system shall be in accordance with the framework outlined in Annex 2 for monitoring of illegal hunting in elephant range States;
    - information on illegal killing of elephants and trade in their products from other credible law enforcement and professional resource management bodies, should also be taken into consideration; and
    - technical oversight will be provided to both MIKE and ETIS through an independent technical advisory group to be established by the Secretariat.

The implementation of MIKE in Africa

79. The pilot and initial stages of the CITES MIKE programme, Phase 1, were implemented from 2001 to 2006 with the principal assistance of EC funding and bridging funds from various donors. During Phase 1, the MIKE programme was set up in 29 range States of the African elephant with a total of 45 sites and 10 alternate (or additional) sites.

80. Each country nominated a national MIKE Officer and each site a MIKE Site Officer to undertake the monitoring routines. The countries were grouped into the four sub-regions of Central, East, Southern and West Africa. Four Sub-Regional Steering Committees (SSC) were established to oversee the implementation if the monitoring programme in each sub-region with the support and facilitation of a MIKE Sub-Regional Support Unit (MIKE SSU), led by a Sub-Regional Support Officer (SSO). The MIKE programme and the SSOs were coordinated by a MIKE Central Coordination Unit (MIKE CCU), based in Nairobi, Kenya.

81. The main role of the SSO was to provide capacity building and site visit training on Law Enforcement Monitoring (LEM) and database management, using a database specifically designed for MIKE purposes. The SSO also encouraged and assisted in conducting elephant population surveys, using aerial techniques in savannah ecosystems and line transect dung count techniques in forest ecosystems. These were the major activities undertaken during Phase 1 between 2001 and 2005.

82. A transition phase of the MIKE programme was organized to provide continuity and allow for the institutional arrangements required under Phase 2 to get fully underway. In any monitoring programme, it is important to establish a baseline. At its 49th meeting (Geneva, April 2003), the Standing Committee adopted a baseline definition for MIKE

which was further clarified at its 53rd meeting (Geneva, June-July 2005) [Ref 02: SC49 Doc. 11.2 (Rev. 1) and Ref 03 SC53 Doc. 20.2]. Following this definition, the emphasis of MIKE activities during 2003 to 2006 was on getting the necessary data and information to establish a baseline.

83. Phase 2 (2007-12) is being implemented in order to continue building the MIKE programme into a long-term routine on a self sufficient funding basis. Since 2010 and as reported to the 15th meeting of the Conference of the Parties (CoP15, Doha, 2010), the programme meets all of its objectives [Ref 01].

1.2 Mike Phase 2 In Africa - EC PROJECT NO. 9 ACP RPR 42 - Implementation

84. The core problem that the project seeks to address is that national decision makers in Africa, in conjunction with all other CITES Parties, do not have reliable information on elephants on which to base their decisions and evaluate the impacts of CITES trade decisions. Nor do the majority of the African elephant range States have the capacity or information for taking fitting measures regarding elephant management, enforcement and human-elephant conflict reduction.

85. The project is designed to promote ownership of the MIKE programme and facilitate the empowerment of range States of African elephants on a long-term sustainable basis. It provides the data and information needed for elephant range States to make appropriate management and enforcement decisions and to build institutional capacity within the range States for the long-term management of their elephant populations and their habitats.

86. The project's main benefits include: increased knowledge of numbers and distribution of African elephants; better perceptions of the threats to their survival and of the required conservation measures; enhanced capacity in the range States for monitoring elephant populations and other wildlife, and elephant habitats generally; the development of synergies with complementary ecological monitoring and with research on bio-resources; a better understanding of the impact, or lack of impact, of CITES decisions on trade in specimens of elephants or on elephant management and conservation so that the CITES community can become more responsive to the identified impacts or consequences of such decisions. Overall, the main aspects of this project pertain to institutional capacity building, sustainable management of natural resources, biodiversity conservation and monitoring, and international cooperation and decision-making.

87. The project builds on the lessons learnt from implementing Phase 1 of the MIKE programme, and has incorporated recommendations from an independent evaluation of the EC funded components thereof [Ref 04]. The supervisory and advisory structures that were developed for the programme and tested during Phase 1 are to be enhanced at all stages from the MIKE sites to the MIKE Central Coordinating Unit, and formal partnerships with the IUCN/SSC African Elephant Specialist Group and TRAFFIC/ETIS should allow a stronger pooling of technical resources and a higher degree of coherence, where appropriate.

88. Also strengthened are the roles of the MIKE Technical Advisory Group and of the Sub-Regional Steering Committees, which respectively ensure a robust scientific backing and a strong support from national wildlife agencies. The project underscores the role of the

CITES Secretariat in coordinating, advising and servicing the Parties to CITES, and in undertaking activities and developing programmes as decided by the Conference of the Parties and reflected in its agreed working programmes. The project contributes significantly to the implementation of the provisions in Resolution Conf. 10.10 (Rev. CoP15) that relate to the MIKE programme. However, it also addresses regional and global issues that go beyond the implementation of decisions taken by CITES Parties.

1.3 Mike Phase 2 In Africa - EC PROJECT NO. 9 ACP RPR 42 [Ref 05] – Project Objectives

Overall project objective and project purpose

89. The stated Overall project objective to which the project contributes is that:

Elephant populations in Africa and Asia are managed sustainably by using the monitoring information to assist in making appropriate management and trade decisions.

90. The Project purpose is:

A standardized system of field data collection and a statistically robust method of analysis provided to the African Elephant Range States on a long term sustainable basis, with information in regard to changes in their elephant populations and the factors influencing these changes, and through which the impact of CITES decisions can be assessed.

Project objectives, results and outputs

91. The specific project objectives are to:

- Build capacity of range States of African elephants to ensure that the flow of primary monitoring data is sustainable in the long term;
- Adopt standard routines for the collection, handling and quality control of data;
- Undertake and report routine analysis and integration of primary and secondary data; and
- Manage, coordinate and monitor the MIKE programme efficiently and effectively.

92. To reach these specific objectives, 31 distinct activities are planned which should achieve the following major Project results:

- Capacity built to ensure that the flow of primary monitoring data is sustainable in the long term;
- Standard routines adopted for the collection, handling and quality control of data;
- Robust analysis and integration of primary and secondary data routinely undertaken and reported on; and
- MIKE implementation efficiently and effectively managed, coordinated and monitored.

93. The expected Project outputs are as follows:

- All MIKE sites in Africa routinely carry out monitoring activities with the regular provision of reports.

- Appropriate monitoring methods adapted to different site conditions are identified and applied, and suitable approaches for measuring efforts are tested and used.
- A training manual is available, and its use in national and regional wildlife training institutes and universities is promoted.
- Reports on African elephant population surveys are regularly produced on a 2 to 3-year cycle.
- Advanced and improved integrated databases are used at site, national, sub-regional and international levels.
- Appropriate spatial and statistical analyses are undertaken at least annually, and the results are disseminated to decision makers and other stakeholders.
- Improved information on the trade in elephant meat and ivory is available.
- Regional, sub-regional and Technical Advisory Group meetings occur on a routine and regular basis.
- The MIKE information is used in effective decision-making at the site, national, sub-regional and global level.

SECTION 2

PROGRESS EVALUATION OF EC PROJECT NO. 9 ACP RPR 42: LONG TERM SYSTEM FOR MONITORING THE ILLEGAL KILLING OF ELEPHANT (MIKE) PHASE 2

2.1 Terms of Reference

94. The origins and overall objectives of the programme Monitoring the Illegal Killing of Elephants (MIKE) as contained in Resolution Conf. 10.10 (Rev. CoP15) [Ref 01), as well as a general description and the objectives of EC Project No. 9 ACP RPR 42 [Ref 05], are presented in Annex 1.

2.2 Available Documentation

95. The MIKE CCU made available to the consultant in digital format a wide range of documents relevant to the MIKE programme which are listed in Annex 2.

96. The total of ≈400 documents included:

- The 2004 review of Phase I and the financing proposal for Phase II;
- The MIKE Phase II project documents including the EC-CITES finance agreement and the various CITES-IUCN agreements;
- Documents for CoP 13, 14 and 15;
- Standing Committee documents for 55, 56, 57, 58 and 59;
- MIKE work programmes for 2008, 2009, 2010 and 2011;
- MIKE progress reports for Apr06-Apr08, Ap08-Apr09 and Ap09-Sep09;
- African Elephant Specialist Group meetings for 2008, 2009 and 2010;
- MIKE-ETIS sub-group documentation;
- TAG meeting documents for TAG06, 07, 08 and 09;
- The results of the Effort Workshop in December 2009; and
- Extensive documentation on workshops and training courses.

2.3 Interviews and On-Line Surveys

97. In view of the somewhat restricted time frame for the evaluation, a rather limited number of interviews were held in person with MIKE CCU personnel and with others associated with the MIKE programme who lived in and around Nairobi (Table 1).

98. Each MIKE Sub-Regional and National Officer was contacted by email by the MIKE CCU and asked to complete an on-line questionnaire. The questionnaire was designed by the MIKE CCU to reflect the specific Terms of Reference and Job Descriptions of the SSOs and NOs (Annex 4).

99. All four SSOs replied to their questionnaires (Table 1) and of the 22 NOs who completed the questionnaire, only 20 could be used – representing some 70% of all NOs.

100. Two SSOs and three NOs were interviewed further by telephone, and one NO (Kenya) in person.

Table 1

Individual	Position	Interview		
		Personal	Telephone	On-Line Survey
Ali Kaka	Regional Representative, IUCN, Kenya	+		
Diane Skinner	Project Officer,, AfESG, Kenya	+		
Holly Dublin	TAG member	+		
Iain Douglas-Hamilton	Founder, Save the Elephants, Kenya and TAG member	+		
John Scanlon	Secretary-General, CITES, Switzerland	+		
Julian Blanc	Data Analyst, MIKE CCU, Kenya	+		
Nigel Hunter	CEO, East African Wildlife Society	+		
Pat Owori	Kenya Elephant Forum, Kenya	+		
Philip Murithi	Chief Scientist, AWF, Kenya	+		
Robert Malpas	CEO, Conservation Development Centre, Kenya	+		
Solomon N. Kyalo	Senior Scientist, Biodiversity Conventions / Agreements, KWS, Kenya	+		
Tom de Muelenaer	Coordinator, MIKE CCU, Kenya	+		
Alex Tumushabe	MIKE Sub-regional Support Officer, EA			+
Massalatchi Mahamam Sani	MIKE Sub-regional Support Officer, WA		+	+
Sebastian Luhunu	MIKE Sub-regional Support Officer, CA			+
Tapera Chimuti	MIKE Sub-regional Support Officer, SA		+	+
Aggrey Rwetsiba	MIKE National Officer, Uganda			+
Antoine Mudakikwa	MIKE National Officer, Rwanda		+	+
Daniel Idiata Mambounga	MIKE National Officer, Gabon			+
Edward Phiri	MIKE National Officer, Zambia			+
Ferdinand Claude Kidjo	Mike National Office, Benin			+
Fracisco Augusto Pariela	MIKE National Officer, Mozambique			+
Gregoire Bonassidi	Mike National Officer, Congo			+
Jeremie Ndallot Olobanda	MIKE National Officer, CAR			+
Joseph Tiebou	MIKE National Officer, Cameroon			+
Kotchikpe Okoumassou	MIKE National Officer, Togo			+
Lowaeli S. Damalu	MIKE National Officer, Tanzania		+	+
Mailly (nee Zouzou) Elevire Joelle	Mike National Officer, Cote d'Ivoire			+
Moses Kofi Sam	MIKE National Officer, Ghana		+	+
Mtsvakiwa Tariona	MIKE National Officer, Zimbabwe			+
Patrick Omondi	MIKE National Officer, Kenya	+		+
Paul N'lemvo Budiongo	MIKE National Officer, DRC			+
Sonja Meintjes	MIKE National Officer, South Africa			+
Urbain Belemsobgo	MIKE National Officer, Burkina Faso			+
Yacob Yohannes Ifter	MIKE National Officer, Eritrea			+
Zeinabou Ibrahim	MIKE National Officer, Niger			+

SECTION 3

EVALUATION OF THE PROGRESS OF MIKE PHASE 2

3.1 The MIKE Central Coordination Unit (CCU)

101. The MIKE Central Coordination Unit (CCU) provides essential Secretariat, oversight and management functions to the entire MIKE programme. Now embedded within UNEP's Division of Environmental Law and Conventions (DELC) in Nairobi, the CCU consists of four staff, the MIKE Coordinator, the Data Analyst and two support staff (see Annex 6 for their TORs).

102. The most immediate and important task of the CCU after the "transition phase" (2005-2006) was to re-energise the entire MIKE programme at sub-regional, National and Site levels along with all aspects of MIKE data collection, validation, integration and transmission to the SSUs and the CCU.

103. Central to this was the identification and recruitment of the Central Data Analyst in April 2007 which had not been achieved under MIKE Phase 1.

104. This appointment led to what is perhaps the most important successes of the CCU in MIKE Phase 2, namely to establish the formal baseline against which future trends in elephant mortality and illegal poaching will be assessed.

105. The initial effort to establish the MIKE baseline in 2006 [Ref 06] was referred back to the CCU by the MIKE Standing Committee for further evaluation and clarification. This was undertaken by the newly constituted MIKE CCU in 2007 and accepted by the Standing Committee [Ref 07].

106. The CCU later formalised the PIKE (Proportion of Illegally Killed Elephants) concept and presented to CoP 15 a more comprehensive analysis of the MIKE/PIKE data [Ref 08, 09, 24].

107. To evaluate the implementation of MIKE as a programme, reference has been made to a series of linked documents relating to the evaluation of Phase 1; the feasibility study for Phase 2; the final report on Phase 1 from the MIKE CCU to UNEP; the financing proposal between the EC and CITES, Geneva, for Phase 2; the headquarters agreement between CITES, Geneva, and UNEP (Nairobi) for Phase 2; the MIKE work plans for 2008 – 2011; the MIKE progress reports for 2006 – 2009; and associated documents and reports (Annex 2).

108. The common theme throughout these documents are the four major Project results that the MIKE programme must deliver. Specifically:-

- Result 1: Capacity of Range States built to ensure the flow of primary monitoring data is sustainable in the long term;
- Result 2: Standard routines adopted for the collection, handling and quality control of data;
- Result 3: Robust analysis and integration of primary and secondary data routinely undertaken and reported on; and

- Result 4: MIKE structure efficiently and effectively managed, coordinated and monitored.

109. To achieve these results the Phase 2 logical framework (Logframe) specifies some 28 – 32 Activities, each associated with a specific Result and each with quite specific Actions, Outputs, Indicators, Sources of Verification and Assumptions [Ref 05].

110. The approach adopted here was to take in turn each bundle of activities for each Result, and then trace the evolution, so to speak, of each individual activity (or at least a good sample of them) through the entire chain of documents, cross-checking at each stage the Actions, Outputs and Indicators specified in the Logframes (aka annual work plans) first against the original Logframes in the financing / grant agreements, and second against progress reports, SSU and SO reports, independent reports of meetings, TAG and AfESG reports etc.

111. What is being checked here is that an activity mentioned in an annual workplan should also appear in the annual progress report and in other documentation. For example, if a sub-regional meeting is held to promote the use of MIST for LEM in MIKE sites and other protected areas, then the same meeting should also appear in the SSOs reports and in the reports of any NOs who were attending. If TAG members were specifically involved then the meeting should turn up in the appropriate TAG documentation.

112. The typical pattern found in these analyses is that as the programme develops, Activities generate more actions, outputs and indicators. For example, the Activity "…Provide sub-regional and site based training events…" under Result 1 (Capacity Building) demonstrates this pattern quite clearly (Tables 2a and 2b).

113. Tables 3a and 3b show a different pattern in the evolution of an Activity – "Approaches for measuring effort in patrol based LEM" which can be traced back to the original Phase 1 Logframe and the earliest TAG meetings, culminating in the Law Enforcement and Detection Effort Workshop in December 2009 [Ref 10]. This demonstrates a consistency of purpose and determination across both Phases of MIKE.

114. Another key item to assess is "mission drift" where new activities creep into a programme in response to external pressures. This was done by checking individual activities in current Logframes (i.e. in current work plans) back against the original Project Logframes as set out in the feasibility studies and, more importantly, in the financial and grant agreements.

115. These procedures are intensely convoluted, time consuming and stunningly dull, and very difficult to quantify. Nonetheless, the consistent patterns in the evolution of Activities in the course of Phase 2 support the general thesis that the MIKE programme is being implemented and developed in a well managed and coordinated manner as set out in the Phase 2 Logframe. Specifically:-

- As Phase 2 has progressed, Activities have generated more actions, outputs, indicators and verifiable results in what appears to be a coordinated manner;
- No programme areas or Activities seem to have been specifically promoted in importance at the expenses of others, or specifically ignored; and
- If there is "mission creep" then it is very well hidden.

116. The one area of quiet concern is with an aspect of Result 4 dealing with the efficient management and coordination of the MIKE programme. While in Phase 1 the entire MIKE project, including the MIKE CCU, was embedded within the IUCN in Phase 2 the CCU was embedded within the Division of Environmental Law and Conventions of UNEP [Ref 11] leaving the SSOs embedded within IUCN [Ref 12].

117. This arrangement has generated some negative comments on the grounds that the costs of the CCU "must be higher" when embedded within UNEP compared with IUCN (to the detriment of field activities), and that the added bureaucracy in UNEP makes it more difficult for the CCU to respond quickly and effectively to changing programme requirements.

118. Another noticeable difference between the activities of the CCU in Phase 1 and Phase 2 concerns fundraising for it would appear that some 35% of the total funding for MIKE Phase 1 was raised by the MIKE CCU itself [Ref 13]. Such fundraising activities seem absent in Phase 2.

3.2 Sub-Regional Activities

Background

119. The 29 range States who are members of the MIKE Africa programme are grouped into the four sub-regions of West, Central, East and Southern Africa. Four sub-regional Steering Committees (SSC) were established to oversee the implementation of the monitoring programme in each sub-region with the support of a MIKE sub-regional Support Unit (MIKE SSU) led by a Sub-Regional Support Officer (SSO).

120. The main role of each SSO (see full TORs in Annex 3) is to provide capacity building and site visit training on Law Enforcement Monitoring (LEM) and database management, using initially a database specifically designed for MIKE purposes by the MIKE Technical Advisory Group (TAG).

121. The SSOs also assist in conducting population surveys of elephant numbers in the MIKE sites, using aerial techniques in savannah ecosystems and line transect dung count methods in forest ecosystems [Ref: 14, 15].

122. The SSOs are hosted in the regional offices of the IUCN who provided office, administrative and other logistical support for their work. While the SSOs are in fact employed by the IUCN they are answerable to the MIKE CCU for all programme activities [Ref 12].

123. The implementation of these sub-regional activities were evaluated by on-line surveys sent to each SSO (Annex 4), the surveys being designed to reflect their formal TORs and job descriptions (Annex 3). Survey results were cross checked against other SSO reports.

124. In general, the results from these February 2011 on-line surveys of both SSOs and NOs confirm the initial analysis of an earlier but much more detailed survey of programme implementation (in both Africa and Asia) carried out by the CCU in early 2009 [Ref 16].

Sub-regional activities

125. During the four years of Phase 2 (2007 – 2010) the SSCs and SSOs were in place and operational for all regions (Table 4, Q3, Q4) except Southern Africa where there was no SSU or SSO until January 2009.

126. NOTE: There had in fact been no SSU or SSO since 2005 or 2006 as IUCN was in transition at the time and it was difficult to negotiate the establishment of the SSU in Pretoria. This negotiation, and the recruitment of an SSO to man the SSU, were completed only in late 2008. Prior to that, the CCU visited the national officers and site officers in Mozambique, Zambia, Zimbabwe and South Africa to collect data (Namibia submitted their data by email). In 2008 the East African SSO and the CCU conducted a database training workshop in Gaborone with participants from the Chobe site and other non-MIKE sites around Botswana.

127. 29 out of the 37 range States in Africa belong to these four sub-regions (Table 4, Q7) and a further 10 range States have indicated an intention to join. While this is a clear endorsement of the importance of the MIKE programme to the elephant range States, no clear guidelines, qualifications or procedures seem to exist for admitting new range States to the MIKE programme. To date only one new country, Ethiopia, has been formally admitted.

128. Specific activities for SSOs set out in their formal TORs include technical assistance to the SSCs and the annual reporting and data transfer to the CCU Nairobi. All sub-regions report they have fulfilled these functions (Table 4, Q13) with the same exception of the Southern Africa SSO who was in place and operational only in 2009 and 2010.

Support to national officers

129. An important part of the SSOs activities is to support the MIKE National Officers in their sub-region. Although a target number of visits is not specified in their TORs, a reasonable target might be one visit per National Officer per year. On this basis the SSOs achieved 98% of the target (Table 4, Q11A), ranging from a low of 73% in the West African sub-region to a high of 208% in the Southern Africa sub-region – clearly the SSO was making up for lost time. However, 2 of the 29 range States were not visited in the course of Phase 2.

130. While it is clear that the number of national visits increases throughout Phase 2, from some 10-15 per year in 2006/07 to ≈ 35 per year in 2009/10, the distribution of visits between range States within sub-regions is worryingly skewed. 50% of the range states were visited on average twice in the course of the four years of Phase 2 and the other 50% were visited on average 7 times. There seems to be no specific strategy or guidelines on how many visits should be made to each range State or whether the number and frequency of visits should reflect in some way the national requirements for capacity building.

131. The primary purpose of the SSO visits to National Officers was capacity building in data management and data base training (53% of all visits - Table 4, Q11B), followed by Law Enforcement Monitoring (15%).

132. These visits to National Officers are extremely important, and from interviews with National Officers it was clear that strong support from the SSOs is absolutely essential for the successful implementation of the MIKE programme. The programme suffers wherever National Officers loose contact with their SSO or receive "poor service".

Support to MIKE sites

133. SSOs are also tasked with visiting individual MIKE sites in their sub-region for capacity building. As with the visits to the National Officers no formal targets have been set, but using again a target of one visit to each site per year shows that the SSOs achieved an 81% success rate (Table 4, Q12A), from a low of 28% in the West African region to a high of 148% in the East African region. Site visits demonstrated strong growth throughout Phase 2, from ≈ 20 per year in 2007 to ≈ 60 a year in 2010.

134. However, the distribution of visits to individual sites within the range States was also very skewed with 70% of the sites receiving 3 visits on average compared with 30% of the sites receiving 12 visits. Furthermore, in the East African sub-region two countries, Kenya and Tanzania, received 80% of the site visits by the SSO though they held only 55% of the sites. Again, there seems to be no guidelines or strategy concerning the distribution of visits to individual range States and sites.

135. As with the capacity building visits to the NOs, the majority of visits (70%) were directed at data management and data base training (Table 4, Q12B), followed by LEM (18%).

Other site characteristics

136. An important part of the MIKE programme is the regular monitoring of the elephant population at each site. Although initially the MIKE design looked to population surveys every three years this soon proved to be impracticable, mainly from the point of view of costs, and a lower frequency of monitoring was adopted.

137. Returns from the SSOs (Table 4, Q14) suggest that elephant populations at some 40% of the sites are now monitored at a ≈ 3-5 year frequency and some 45% of sites are monitored "less frequently".

138. The SSOs were also asked to asses the intensity of LEM coverage at each of their sites (Table 4, Q15). In general terms, ≈ 30% of the sites had "high" coverage, ≈ 55% of sites had "moderate" coverage and the remaining ≈ 15% of sites had poor, or no, LEM coverage.

139. The "sustainability" of LEM activities at MIKE sites is a constant cause of concern, for technically they should be part of the routine work of the national wildlife management authorities (NWMA) with the MIKE programme providing mainly capacity building, hardware and software.

140. The data demonstrate (Table 5, Q16,17) that although only a small proportion (≈ 15%) of MIKE Sites are supported entirely by the National Wildlife Management Agencies, a further ≈ 65% receive significant donor/NGO support in addition to the NWMA while ≈ 20% rely primarily on donor/NGO support.

141. While a gradual transition to full NWMA support at each MIKE Site is a longer term objective, the current involvement of donors and NGO lends great strength and stability to the MIKE programme and there is little evidence of donor fatigue. Indeed, it is one of the strengths of the MIKE programme that support to MIKE Sites is attractive to these outside agencies.

3.3 National Level Activities

Background

142. Under the MIKE programme, the National Wildlife Management Agencies agree to establish a National Steering Committee (NSC), appoint a MIKE National Officer and, at each MIKE site, appoint a MIKE Site Officer (see formal Terms of Reference, Annex 3).

143. An on-line survey (Annex 5), designed to reflect these TORs, was sent to each MIKE National Officer. A total of 22 responses were received of which only 20 (≈ 70% of all NOs) were complete and able to be used (Table 5). These 20 MIKE National Officers were responsible for overseeing 47 (77%, Table 5, Q9) of the 61 sites currently in the MIKE system (Table 5, Q8).

National level activities

144. Overall, 89% of the target of one MIKE National Officer in each range State per year was achieved (Table 5, Q4) ranging from a high of 90% to 100% in western and central Africa to a low of 75% in southern Africa.

145. Similarly, 91% of the target of one operational National Steering Committee (NSC) per range State per year was achieved, ranging from 100% in west and central Africa to a low of 75% in southern Africa.

146. The MIKE National Officers had a range of activities concerned with data compilation, storage and analysis (Table 5, Q6). Their returns suggest they achieved an overall success rate of 75%.

147. MIKE NOs also had to liaise with their SSOs to identify requirements and implement LEM and data base training, as well as the MIKE programme (Table 5, Q7). Their returns suggest an overall achievement rate of 79%, with the same pattern of higher levels of achievement in western and central Africa compared with eastern and southern Africa.

148. With both these sets of activities (Table 5, Q6 & 7) there was a modest trend of improvement in the course of Phase 2.

3.4 Site Level Activities

Site management

149. The MIKE National Officers report an overall success of 89% in having a full time MIKE Site Officer at each site (Table 5, Q10). There was a strong trend of improvement throughout Phase 2, and the same pattern of higher achievement in the west and central sub-regions than in the east and southern sub-regions. Nonetheless, in

interviews the MIKE NOs and SSOs commented on the high rate of turnover at the site level (which in turn necessitates endless retraining exercises).

150. A total of 377 site visits were made by the 20 MIKE National Officers (Table 5, Q19A & 19B). While there was a marked improvement throughout Phase 2, from 61 site visits in 2007 to 119 in 2010, marked regional differences were clear. The most active NOs were in West and East Africa with 2.8 and 3.1 visits per site per year respectively. Southern Africa was intermediate, 1.8 visits per site per year, while Central Africa lagged far behind. However, it must be clearly acknowledged that operational conditions are very poor in Central Africa compared with the other sub-regions.

151. The primary purpose of the site visits was the general co-ordination of site activities (45%) followed by training in data compilation and database management (18%).

152. The National Officers are very well aware of the importance of site visits to keep the MIKE programme running smoothly and the data flowing.

The number of MIKE sites

153. A real point of interest is that the number of MIKE sites (47) currently managed by these 20 National Officers is only slightly less than the 51 sites recognized in the Phase 2 financing document. Furthermore, these 20 National Officers report a further 34 sites that are being considered for bringing into the MIKE system (Table 5, Q8 & 9).

154. This would indicate a growth of MIKE sites from 51 at the start of Phase 2 to the current number of 61 to a potential of 81 by the end of Phase 2. This can be seen only as a very positive achievement of the MIKE programme.

155. The TAG have drawn up a set of Site criteria against which potential Sites can be assessed for inclusion into the MIKE programme [Ref 17].

Other site characteristics

156. The NOs were also asked to comment on the status of their MIKE sites in terms of whether the boundaries had been, or were planned to be, expanded (Table 5, Q11). This was the case with 10 (21%) of the sites.

157. This confirms the generally expressed view by the CCU, SSOs and NOs that the whole nature of the MIKE programme is evolving from monitoring within very specific site areas to monitoring at the level of elephant ranges, ecosystems or areas of "community involvement". This again must be seen as a very positive trend and one that is promoted and encouraged by the CCU [MIKE progress reports, Annex 2].

158. In parallel with this is seen a growth in cross-border cooperation between neighbouring MIKE Sites: for example between Tsavo East NP (Kenya) and Mkomasi GR (Tanzania), between Burkina Faso, Benin and Niger who share the Park W Site, and between Virunga NP (DRC) and Queen Elizabeth NP (Uganda), a case of sub-regional cooperation.

159. Another important and positive trend confirmed by the survey of MIKE NOs was the rate at which the MIST programme is being adopted as the preferred method for patrol based LEM. In Phase 1 of MIKE, 60% of the sites used the original MIKE methodology for

LEM while only 11% used the MIST programme (Table 5, Q17 & 14). These proportions have greatly improved in Phase 2 with 49% USING mist AND only 40% of the sites still using the original MIKE methodology. This adoption of MIST at the MIKE site level is a main focus for the CCU [Ref 10, and MIKE progress reports, Annex 2].

160. The sustainability of site level activities remains a cause of concern (see Para 140 above), for fully 68% of the sites rely on the partial (or total) support of donors and NGOs (Table 5, Q16).

161. The frequency of population surveys at the MIKE sites reflects the opinions of the SSOs (see Para 137 above), with 34% of the sites reported to being surveyed at intervals of 3 years – 5 years and 45% of the sites being surveyed "less frequently" (see Para 138 above). Given the extraordinary efforts to obtain population data for each MIKE site for the baseline analysis, this fall off in frequency of population surveys may give cause for concern and reappraisal.

162. The intensity of LEM cover at the MIKE sites (Table 5, Q18) is encouraging with some 39% of the Sites classified as "high" cover while only 21% are classified as "poor" and no sites were classified as having "no LEM coverage".

163. Although no trends for an increasing intensity of LEM cover can be determined between Phase 1 and 2, or within Phase 2, the number of carcasses found in the course of the LEM patrols suggest that the efficiency of the LEM is increasing.

164. Table 6 compares for Phase 1 and Phase 2 the proportion of the potential elephant carcasses found at all MIKE Sites under two assumptions. First, a natural elephant mortality of 5% per annum and second, that these carcasses disappear over a five year period.

165. Under both assumptions, the efficiency of the LEM patrols at the MIKE Sites has increased from Phase 1 to Phase 2. Total carcasses found (per Site per year) increased by 26% (from 15 to 19), while the proportion found increased from 6% to 8% (under Assumption 1) and from 5% to 6% (under Assumption 2).

166. The "MIKE sample" of carcasses is therefore between 6% and 8% of the potential carcasses to be found. In statistical terms this is very robust indeed.

3.5 MIKE as an Early Warning System

167. At the third African elephant meeting Gigiri, Kenya, November 2010 [Ref 18], there were many questions as to whether MIKE could ever serve as an early warning system at Site, National or sub-regional levels. While the "early warning of what?" is often poorly specified it is usually implied to mean flagging in some way any sudden change in the rates of illegal hunting of elephant or in the volumes and flows of illegal ivory or bushmeat.

168. MIKE is designed to analyse the status of elephant populations, the trends in illegal killing and the dynamics which influence them at a sub-regional and continental level. As a site-based monitoring programme, neither the primary data collected nor the reporting cycle lend it to early warning applications [minutes of TAG07 and TAG08, Annex 2] or to direct application for elephant management at Site and National levels.

169. The TAG09 [Ref 19] acknowledged that although MIKE was formally not mandated to operate as an early-warning system, it could potentially become a more pro-active tool to help countries determine circumstances and situations that might encourage elephant poaching, and a system to quickly asses the seriousness of illegal killing or the impact of remedial measures. It was agreed that the MIKE-ETIS Research Network should examine the extent to which MIKE could be speedily reactive or 'predictive', and the conditions under which it could operate as such.

170. Meanwhile, important trends in the current evolution of the MIKE programme might support such a programme:-

- First, the numbers of new range States wishing to join the MIKE programme;
- Second, the number of new MIKE sites being proposed;
- Third, the extension of MIKE towards monitoring at the elephant range, ecosystem and community levels, and the growing cross-border cooperation; and
- Fourth, the adoption of MIST (or equivalent) as the methodology / data base of choice for LEM.

171. There are currently three levels of information flow from the "MIKE data complex" to the MIKE CCU. Specifically:-

- The formal, site based monitoring of trends in illegal elephant deaths and elephant populations coordinated and managed by the MIKE CCU itself;
- The status and trends of elephant populations throughout Africa at national, sub-regional and continental levels managed by the AfESG through their African Elephant Data Base; and studies contracted by MIKE to the AfESG such as HEC and bushmeat studies; and
- The Elephant Trade Information System (ETIS) - the world wide monitoring of ivory seizures but now with emerging significant implications at national and sub-regional levels.

172. But there is a growing interest in a fourth level of information flow. At the 3rd African Elephant Meeting at Gigiri, November 2010 [Ref 18, 19], members recognized the potential value of information on illegal elephant activities from "unofficial sources" and the potential value of other information and intelligence arising from, for example, IUCN species specialist groups, field based NGOs, other field based experts and organisations – especially the NWMA themselves, and organisations such as the police, customs, perhaps even the Lusaka Agreement and the media. [Ref 19].

173. This kind of information and intelligence could form the basis for an early warning system at the MIKE Site and National level which many range States are looking for. It could be designed by the TAG [Ref 19] and managed and coordinated through the IUCN sub-regional and national networks.

174. MIST is the most interesting development for early warning as it can more easily accommodate more general data on law enforcement and "alternative" and "unofficial" sources of data on illegal killing and trade. MIST may therefore provide the route to both better MIKE data for the strictly site based monitoring and analysis, and to early

warning and Site/National data using a much wider range of sources, information and intelligence.

3.6 Mike Partners

175. The MIKE programme has a number of significant partners who contribute on a major scale to the programme. They include the IUCN who host the MIKE sub-regional programme activities, the Technical Advisory Group (TAG) who provide scientific and technical inputs to the MIKE programme, the African Elephant Specialist Group (AfESG) who, among many activities, monitor the status and trend of elephant populations throughout Africa; and ETIS, the elephant trade information system. All co-operate closely with the MIKE programme and receive significant funding from the MIKE programme.

IUCN

176. The IUCN has been a major partner to the MIKE programme since its inception and in MIKE Phase 1 all MIKE activities were hosted by the IUCN. However, in MIKE Phase 2 the decision was taken to embed the Central Coordination Unit (CCU) of MIKE within the Division of Environmental Law and Conventions of UNEP, leaving the IUCN to host the MIKE sub-regional elements (SSCs and SSOs) within their sub-regional structure. This arrangement is governed by a CITES—IUCN Headquarters Agreement [Ref: 12] and separate agreements with each IUCN sub-regional office.

177. This arrangement is not proving to be particularly satisfactory for either side. Some of the IUCN regional offices provide excellent service to the SSOs, others less so, and there were significant delays (now overcome) in providing support to the Southern Africa SSO.

178. IUCN feels that as an international institution with strong sub-regional and national identity throughout the MIKE range States it could provide better support to MIKE if it were involved programmatically as well as administratively (e.g. hosting the MIKE SSOs and their sub-regional programmes). In turn, MIKE is missing some major opportunities by not making better use of the IUCN network, for programme work, for national and sub-regional contacts, and even for fund raising.

179. Indeed, IUCN could manage on behalf of the MIKE programme all sub-regional and national activities and programmes that are not "site based monitoring".

180. Both IUCN and CITES are keen to renegotiate new Headquarter agreements, especially for Phase 3, and letters of intent have been exchanged.

The Technical and Advisory Group (TAG)

181. The TAG was set up to provide advice on all relevant scientific and technical aspects arising from the design and implementation of the MIKE programme, and as such has been very successful. Important topics covered by the TAG include selection of suitable hardware and software solutions for MIKE data collection, storage and analysis; better analytical and statistical approaches for handling MIKE data; the development of a

Standardised Analytical and Reporting Framework (SARF) for MIKE; methods for elephant population census; and quantifying law enforcement effort at MIKE Sites (Table 7).

182. The evaluation and endorsement of specific techniques and methodologies by the TAG is very important for MIKE SSOs and National Officers and assists in their acceptance and implementation at both sub-regional and National levels.

183. An equally important role for the TAG is to review and endorse the scientific output of the MIKE programme. This is vitally important so the range States can feel comfortable with MIKE reports.

184. As the MIKE programme has evolved from Phase 1 to Phase 2 the nature of the "problems" to be solved by the TAG have also evolved from "MIKE wide" to more regional and local. Even though the SSOs attend TAG meeting, and make presentations, there is now a growing feeling at National and sub-Regional levels that the TAG is perhaps not sensitive enough to this change.

185. The newly created joint MIKE-ETIS TAG [Ref 20] is tasked with ensuring the technical soundness of the MIKE and ETIS monitoring systems; the consistency and scientific robustness of the implementation of MIKE across the six sub-regions in Africa and Asia, and globally for ETIS; reviewing MIKE and ETIS data capture, storage, analysis and reporting protocols; and advising on the analysis and interpretation of MIKE and ETIS data to the Parties or relevant bodies established by the parties.

186. While these new broad and comprehensive terms of reference should enervate and initiate a review of MIKE-ETIS TAG programmes it is clear that the membership of the TAG is somewhat static (Table 8). Some members have been on the TAG since the very beginnings of MIKE and there is a marked overlap (4/6) between the Global Experts of the MIKE TAG and the ETIS TAG. While institutional memory is very important, a revolving membership could be considered for both TAGs to bring in new and fresh ideas, especially as MIKE and ETIS continue to evolve.

187. There are a number of technical matters which the TAG have already considered but which may well become more important with the future evolution of MIKE and which may therefore need to be revisited. Specifically:-

- The TAG/CITES Aerial Survey Standards [Ref 14]have been reviewed and appear to be seriously out of date and no longer reflect current technology or methodology. Furthermore, they ignore one of the most important aspects of aerial survey implementation, namely Data Validation. These standards now require a comprehensive revision (see Annex 7). An undertaking had been given to update these aerial survey standards by 2010 [Annex 2, TAG08], but there seems to be no progress to date.
- In contrast to the aerial survey standards, the TAG/CITES Dung Survey Standards [Ref 15] appear to be of great complexity and must surely present a major barrier to implementation by anyone other than a professional research biologist. Simpler solutions must be sought.
- Discussions on building an "early warning" component into MIKE have often occupied TAG Agendas [Ref 19, Para 173 above] and will require revisiting.

- The TAG have drawn up some initial criteria for selecting "new" Sites into the MIKE system, [Ref 17]. These may need revisiting, both to assess new MIKE Sites and to re-assess existing MIKE Sites.
- The TAG should also draw up criteria and protocols for new range States to join the MIKE programme. These criteria can also be used to reconfirm the commitment of current range States to the MIKE programme.

The African Elephant Specialist Group (AfESG)

188. The IUCN/African Elephant Specialist Group has had a long and close involvement with the MIKE programme. In Phase 2 of MIKE, AfESG was contracted to carry out studies on HEC; undertake a comprehensive study on the impact of trade in elephant meat; integrate MIKE population survey data in the African Elephant Database; support annual meetings of African elephant range States; and help disseminate MIKE information, principally through the journal *Pachyderm*.

189. HEC is a complex problem that threatens the livelihoods of individuals and local communities in Africa and the survival of African elephants and their habitats. To date, efforts to tackle HEC have focused mainly on short-term, field-based mitigation measures which have had limited success. For long-term management of this problem, mutually beneficial strategies for people and elephants, coordinated at national, local and site levels need to be developed and implemented. Embedding such studies specifically within the IUCN national and sub-regional framework would be of great advantage.

190. By integrating MIKE data into the African Elephant Data Base, AfESG has been able to track status and trends of African elephant populations at National, Sub-Regional and Continental levels [Ref 21].

191. In their support to the annual meetings of the African elephant range States AfESG has also been very involved with the development of the African Elephant Action Plan [Ref 22].

192. Three research projects in Central Africa had been identified to which the AfESG studies could contribute or be linked with:

- Collaborating with IUCN and TRAFFIC in an ongoing Law Enforcement and Forest Governance initiative.
- Linking up with other research initiatives concerning bushmeat (3 ongoing major projects lead by WWF Germany, CIFOR and ZSL).
- Conducting pilot studies in a few MIKE site and their environs, particularly those surrounded by logging concessions.

193. The TAG has encouraged the AfESG to collaborate with these initiatives. The bushmeat trade, including meat from elephants, might actually be on the increase as a consequence of the global economic downturn, sharp declines in timber exports from Central Africa and unemployed forest workers turning into hunters.

194. The TAG have recommended that the MIKE CCU and the AfESG needed to agree on a new approach to move the elephant meat trade study forward.

195. In general, the AfESG work for MIKE has been exemplary and of a high standard.

The Elephant Trade Information System (ETIS)

196. ETIS monitors international trade in illegal ivory, providing a picture of the ivory trade and where elephant products are coming from and going to.

197. While ETIS has very much the same overall objectives as MIKE it works on a completely different scale. MIKE collects data from ≈ 51 Sites in 29 African elephant range States: in contrast, ETIS collects data from some 200 countries worldwide. Furthermore, ETIS relies on cooperating agencies (e.g. customs, police, Interpol etc) for its data while MIKE relies on Site based monitoring data collected by National Wildlife Management Agencies.

198. These two approaches produce data that are very different in nature and scale, yet in the MIKE/PIKE submission to CoP15 [Ref 08:] the two data sets were successfully drawn together and were shown to be very complimentary. This demonstrates major progress for both MIKE and ETIS.

199. At the most recent, meeting of the elephant range States at Gigiri, Kenya, November 2010 the ETIS Director presented an update of the Elephant Trade Information System, highlighting areas of concern, particularly those countries with poor law enforcement effort scores as calculated by ETIS on the basis of ivory seizures involving these countries. Those African elephant range States present received a country report with relevant ETIS data, collated until June 2010.

200. In response [Ref 23] there were criticisms from the elephant range States of a lack of "ownership" of ETIS data, analyses and reports. Specifically, range States would like to see reports and analyses before they are presented to conferences, so they have a chance to discuss and validate the data in the reports. Furthermore, participants urged ETIS both to communicate better and more frequently with African elephant range States and to work bilaterally with individual African elephant range States to address the challenges and problems identified in the country analyses.

201. The newly established joint MIKE/ETIS TAG should go some way towards addressing these problems. The ETIS team is now invited as a matter of course to all sub-regional and regional meetings organised by the MIKE programme, offering opportunities to the elephant range States to interact with, and learn about, both of these monitoring systems. Similarly, in capacity building activities organised by MIKE, both MIKE and ETIS teach about each others' data-gathering routines and approaches.

3.7 Strengths of the MIKE Programme

202. There is much to be positive about with MIKE Phase 2, at Site, National, Sub-Regional, Continental and International levels.

International and Continental levels

203. At the International level, the MIKE programme is seen to present neutral and unbiased data on the status and trends of elephant populations, on the trends in illegal killing and

how these trends respond to external events such as the sale of ivory stockpiles or changes in demand in consuming countries.

204. This position of neutrality was enhanced by the unseemly spat at CoP15 when range States came to appreciate the value of independent science. This has strengthened the reputation of MIKE among the range States, witness the number of countries still expressing interest in joining the MIKE programme, and has in turn weakened the influence of more openly partisan groups such as the African Elephant Coalition.

205. Maintaining the neutrality of MIKE will be a major factor towards achieving its Overall Project Objective, namely:-

> *Elephant populations in Africa and Asia are managed sustainably by using the monitoring information to assist in making appropriate management and trade decisions.*

Sub-regional and national levels

206. At the sub-regional level, range States demonstrate major buy-in to the MIKE programme, evidenced by the resources allocated by National Wildlife Management Authorities to law enforcement in their protected areas, including their MIKE sites, and the number of range States where a number of NWMAs are considering bringing new sties and areas into the MIKE programme.

207. Range States demonstrate a strong feeling of ownership of the MIKE programme. At the national level, range States appreciate the way in which MIKE builds on and enhances existing national capabilities and supports Protected Area management. At the sub-regional level, range States appreciate the consistent approach of the MIKE programme and the opportunities offered by the Sub-Regional Steering Committees to harmonize approaches to actions and policy while accommodating national objectives. Range States particularly appreciate the ownership of data through the National and sub-regional verification processes.

208. This buy-in by the range States will be a major factor in achieving the Project Purpose of MIKE, namely:-

> *A standardized system of field data collection and a statistically robust method of analysis provided to the African Elephant Range States on a long term sustainable basis, with information in regard to changes in their elephant populations and the factors influencing these changes, and through which the impact of CITES decisions can be assessed.*

The MIKE programme

209. There is also much to be positive about in the evolution of the MIKE programme, both within Phase 2 and between Phases 1 and 2.

210. The most important task of the Central Coordination Unit in Phase 2 was to re-energise the entire MIKE programme at Sub-Regional, National and Site levels along with all aspects of MIKE data collection, validation, integration and transmission to the SSUs and the CCU.

211. This has been achieved, and in general terms the MIKE programme has shown controlled growth in Activities, actions and outputs, with no programme areas or Activities being specifically developed at the expense of others, or specifically ignored. Furthermore, there is little evidence of "mission creep".

212. An important achievement was the appointment of the Central Data Analyst to the CCU (not achieved in Phase 1) which led directly to the establishment of the formal baseline against which future trends will be assessed, and to the further analysis of MIKE/PIKE data prepared for CoP 15 [Ref 08].

213. The sub-regional programmes and coordination are working well, targets are being met and there are strong signs of improving performance in the course of Phase 2, for example, in the number of visits made by the SSOs to National Officers and to MIKE Sites.

214. National level activities are staffed and funded by the NWMA with MIKE providing capacity building and equipment. The NWMAs are in general achieving their targets in terms of appointing National Officers and National Steering Committees, with data compilation, storage and analysis, and with liaison with SSOs.

215. Another positive achievement of the MIKE programme is seen in the number of sites being considered by the NWMAs to bring into MIKE. Indeed, some range States have expressed their intention to bring all Protected Areas into the MIKE programme.

216. At the level of the MIKE sites, NWMAs are meeting their targets of appointing MIKE Site Officers with a strong improvement during the course of Phase 2. Mike National Officers are also improving their rate of visits to MIKE sites.

217. There are a number of other very promising trends in the MIKE programme. Specifically:-

- First, the MIKE programme is becoming more institutionalised at sub-regional and National levels, and is in general becoming more client-oriented, simple to use and useful to the range States.
- Second, the nature of the MIKE programme is evolving from monitoring within very specific site areas to monitoring at the level of elephant ranges, ecosystems or areas of "community involvement" [Ref 09], while cross-border and even cross-sub-Regional cooperation between shared MIKE Sites is improving.
- Third, is the rate at which the MIST programme is being adopted as the preferred method for patrol based LEM. In Phase 1 of MIKE only 11% of MIKE sites used the MIST programme compared with 49% in Phase 2.

218. MIST is an altogether more flexible data acquisition, data base and data analysis system than the original MIKE system, and one which can deliver both MIKE/PIKE data and the all-important data on patrol effort. This adoption of MIST at the MIKE site level has other implications which will enhance the application of MIKE/MIST at the national level.

- First, MIST can accommodate comprehensive data on all species, not just elephant, including other endangered species (and plants), which makes the system more useful at Site and National levels.

- Second, MIST can more easily integrate "alternative" and "unofficial" sources of data, information and intelligence on illegal killing and trade, which may form the basis of an early warning system.
- Third, MIST has greater capabilities to provide information for protected area management, both Site and National.

219. MIST will meet all the formal requirements of MIKE data, but being more flexible may well be able to provide a route both to Site level and National level early warning systems while contributing positively to both Site level and National level protected area management.

220. MIKE is currently achieving all four of the CITES monitoring objectives; it is providing the CITES community with scientifically objective and robust data and analyses; and it is becoming well institutionalised with the African range States, with relatively smoothly operating infrastructure, good information flows and outputs, increasing activity in capacity building, and strong partnerships.

3.8 Areas of Concern

The central coordination unit

221. An area of modest concern about the CCU is the wisdom of embedding the unit within UNEP. Negative comments involve the probably higher costs, to the detriment of other programme activities, and a lowered efficiency in the face of higher bureaucracy.

222. There is no doubt that the costs of the CCU are indeed higher embedded within UNEP than within IUCN and adjustments did have to be made in budget allocations [Ref 11]. But the adjustments were minor and not enough seriously to compromise other programme areas.

223. Similarly, there is no doubt that the bureaucratic load sits more heavily on the shoulders of the CCU embedded within UNEP than within IUCN. The MIKE programme is a field and site based, real time monitoring programme and programme managers must be able to respond swiftly and appropriately to changing conditions. But it is a moot point whether "fortress" UNEP really constrains the efficiency with which the CCU can act and respond.

224. An area of much greater concern is with the medium to long term funding of the MIKE programme, especially in view of the decisions and resolutions of the CoPs which, among others, state that:-

- The MIKE programme should "continue and be expanded" (Resolution Conf. 10.10 (Rev. CoP15));
- The MIKE Secretariat should provide two additional updated MIKE analyses in 2011 and 2012 (Decision 14.78 (Rev. CoP15));
- The decision-making mechanism for the ivory trade which is to be developed by the Standing Committee under the auspices of the CoP requires MIKE data (Decision 14.77 (Rev. CoP15)); and that

- The Standing Committee will, in consultation with the range States, review, re-examine or improve the scope, purpose, organizational set-up and technical design of MIKE and report recommendations to CoP16 (Decision 15.74).

225. Clearly MIKE requires secure funding if these aspirations are to be fulfilled.

CCU – SSO coordination

226. There are concerns about the planning and coordination of the SSO activities, specifically with respect to visits by the SSOs to their National Officers and to individual MIKE sites. National Officers are adamant about the importance of visits from "their" SSO and how isolated they can feel if these visits break down.

227. As examples, over the 4-year course of MIKE Phase 2:-

- Two of the range States were never visited at all by the relevant SSO;
- Of the range States that were visited, 50% received an average of two visits each and 50% received an average of 7 visits each; and
- In the East Africa sub-region, 88% of the site visits by the SSO were made in Kenya and Tanzania which between them had only 55% of the MIKE sites.

228. Clearly, the numbers of visits made by the individual SSOs to their National Officers and MIKE sites must reflect in some way the actual requirements for support and capacity building. Equally clearly, one would not want to create an over-managed project where tight and unrealistic targets were needlessly set up and enforced by the CCU.

229. However, the SSOs are in effect both recruited by the CCU, though embedded within IUCN regional offices, and report to them. Performance criteria could be developed from which a closer monitoring of their performance would be feasible.

National and MIKE site activities

230. The activities at National level, especially the appointment of the National Steering Committee, the National Officer and the MIKE Site Officers, and the extent and intensity of LEM within MIKE sites and other protected areas, are the prerogative of the National Wildlife Management Authorities and outside the formal management control of the MIKE programme. Nonetheless, there are areas of concern which should be addressed by the CCU.

231. There is too much variation in the number of visits made to MIKE Sites by MIKE National Officers in different range States. While this must reflect both the requirements of individual MIKE Sites as well as the overall support given to the MIKE programme by the specific NWMA, performance criteria for the NOs should be developed so that the SSOs can monitor this more closely.

232. Other national characteristics of MIKE sites that give cause for concern include:-

- Sustainability: some 68% of MIKE sites still rely on partial or complete support from donors and NGOs;

- Population Surveys: surveys of elephant populations at 45% of the MIKE sites are now carried out at intervals of >5 years; and
- Intensity of LEM cover: in 21% of the MIKE sites, the intensity of LEM cover is classified by National Officers and Sub-Regional Support Officers alike as "poor".

Overarching Concerns

233. There remain a number of overarching concerns, traceable back even to the 2004 review of MIKE Phase 1.

    - SSOs continue to report much frustration in the turnover rate of MIKE National Officers and especially MIKE Site Officers in some range States. This high turnover creates endless demand for retraining, often to the detriment of other MIKE Sites and range States.
    - In some range States, conflict between government Departments and Ministries make the successful implementation of the MIKE programme extremely difficult and in cases effectively impossible.
    - LEM for the MIKE programme is still looked upon at in some range States as an additional burden rather than part and parcel of normal law enforcement and patrolling.

234. The adoption of MIST is definitely helping with the acceptance of LEM as a normal law enforcement activity , for the advantages of using the MIST system soon becomes clear at both Site and National level.

235. The CCU has also adopted a new initiative in Phase 2 which is to develop a standardised ranger curriculum which includes LEM as a normal activity for a patrolling officer along with other ranger activities such a anti-poaching. The objective is to promote this curriculum in every national and sub-regional ranger training institution so that rangers emerge with the mindset that LEM is part of their normal duties.

236. To this end, workshops were held in Tsavo, Kenya, attended by the MIKE SSOs and KWS, and in the Southern African College of Wildlife Management. Further presentations have been made at the University of Ouagadougou, the University of Ibadan and at the Garoua Wildlife College, Cameroon.

SECTION 4

RECOMMENDATIONS

4.1 Project Financing

237. In view of the decisions and resolutions of the CoP with respect to the future activities of the MIKE programme, in the short term additional funding must be found for the MIKE programme to continue operations so it can participate fully in the forthcoming CoP16. It would be a great setback for elephant conservation, and compromise the significant funds invested thus far, if MIKE had to cease operations so prematurely.

238. In the longer term, negotiations should be put in place as soon as possible to fund a MIKE Phase 3 project.

4.2 Achieving the MIKE Project Objective

239. The stated Overall Project Objective of the MIKE programme is:-

> *Elephant populations in Africa and Asia are managed sustainably by using the monitoring information to assist in making appropriate management and trade decisions.*

240. The debate on the future of the international trade in ivory is becoming even more polarised and acrimonious and in many respects has come to share a number of (unpleasant) characteristics with the debate on global warming. In both cases belief systems seem to be displacing rational argument and under these conditions it is difficult for science to make itself heard above the general babble.

241. It is therefore essential that the MIKE programme data and analyses maintains its deserved reputation for neutrality, objectivity and transparency. To achieve this, it is very important that the MIKE CCU submits as soon as possible the MIKE/PIKE analyses for publication in fully peer reviewed, international journals. Once this is achieved, MIKE/PIKE cannot be challenged by innuendo and insinuation but only by equally peer reviewed work.

242. Furthermore, so long as agreement can be obtain from the range states, the MIKE data should be put into the public domain on the CITES/MIKE website.

4.3 Achieving the MIKE Project Purpose

243. The stated Project Purpose of the MIKE programme is:-

> *A standardized system of field data collection and a statistically robust method of analysis provided to the African Elephant Range States on a long term sustainable basis, with information in regard to changes in their elephant populations and the factors influencing these changes, and through which the impact of CITES decisions can be assessed.*

244. MIKE is achieving this by the significant buy-in to the MIKE project by the elephant range States. This is evidenced by the number of range-States requesting to join the MIKE programme, by the resources allocated by National Wildlife Management Authorities to law enforcement in their protected areas, including their MIKE sites, and by the number of range States where many NWMAs are considering bringing new sites and areas into the MIKE programme.

245. Range States demonstrate a strong feeling of ownership of the MIKE programme. They appreciate the way in which MIKE builds on and enhances existing national capabilities and supports Protected Area management; the consistent approach of the MIKE programme; and the opportunities offered by the Sub-Regional Steering Committees to harmonize approaches to actions and policy while accommodating national objectives. Range States particularly appreciate the ownership of data through the National and sub-regional verification processes.

246. The TAG should be tasked as a matter of urgency to draw up such criteria and procedures to admit new range States as full participants in the MIKE Programme.

4.4 Cost Implications of New Range States

247. There are of course significant cost implications to welcoming new range States as MIKE members and new MIKE sites in any eventual MIKE Phase 3. MIKE is in a way becoming as victim of its own success and is raising expectations among elephant range States as to the possible scope and quantity of support it can offer (some range States consider that MIKE should provide direct support for the field costs of LEM, and even vehicles).

248. At the moment, MIKE is financed to service the elephant range States and MIKE Sites set out in the financing agreement between the EC and CITES [Ref 05]. Currently, potential new range State members are invited to MIKE sub-regional meetings so they can become familiar with the MIKE programme; and while additional MIKE Sites are accommodated by inviting their personnel to training courses and other capacity building exercises, the capacity to provide software and hardware is very limited.

249. The MIKE programme simply cannot become some sort of general donor to support law enforcement in all protected areas in Africa. This would be mission creep *par excellence*.

250. However, MIKE can, and should, use its good offices and sub-regional contacts to encourage donors and NGOs to continue and/or enlarge their support to new MIKE members and to new MIKE Sites.

4.5 MIKE Programme Management – the CCU

251. Embedding the Central Coordination Unit (CCU) within the Division of Environmental Law and Conventions of UNEP has led to some negative comments concerning higher administrative costs, to the detriment of other programme activities, and to a lowered efficiency in the face of higher bureaucracy.

252. While there is no doubt that the costs of the CCU are indeed higher embedded within UNEP than within IUCN and adjustments did have to be made in budget allocations, the

adjustments were minor and not enough seriously to compromise other programme areas.

253. Similarly, there is no doubt that the bureaucratic load sits more heavily on the shoulders of the CCU embedded within UNEP than within IUCN. The MIKE programme is a field and site based, real time monitoring programme and programme managers must be able to respond swiftly and appropriately to changing conditions. But it is a moot point whether "fortress" UNEP really constrains the efficiency with which the CCU can act and respond.

254. When a new financing agreement is drawn up for MIKE Phase 3, it would be worth revisiting the question as to where the CCU should be embedded.

4.6 MIKE Programme Management – Sub-Regional

255. At the sub-regional level, the scheduling and management of SSO involvement with the range States should be formalised and monitored, especially with respect to the visits of the SSO to individual range States and to MIKE sites. MIKE support to range States through the SSOs should be based at least in the first instance on the perceived requirements of the individual range States.

256. Specifically, the TORs for the SSOs should be reviewed and performance criteria drawn up against which SSO activities can be monitored and assessed by the CCU.

4.7 MIKE Programme Management – National Level

257. The appointment of the National Steering Committee, the National Officer and the MIKE Site Officers, and the extent and intensity of LEM within MIKE sites and other protected areas, are the prerogative of the National Wildlife Management Authorities and are thus outside the formal management control of the MIKE programme.

258. A number of perennial problems are still found with the management of the MIKE Sites, some of which can be traced right back to the 2004 evaluation of MIKE Phase 1. In no specific order of importance:-

- High turnover of MIKE National Officers and MIKE Site Officers;
- The falling frequency of population surveys, which should aim for a minimum of one survey every five years;
- The frequency of visits by the MIKE National Officers to MIKE Sites should in the first instance reflect the requirements for capacity building at each Site;
- Sustainability of the Sites – some 68% still rely on partial or complete support from NGOs or donors;
- The intensity of LEM cover which is classified as "poor" in 21% of MIKE Sites;
- In some range States conflicts between Government Departments makes it effectively impossible to implement the MIKE programme;
- In many range States, LEM in MIKE Sites is still looked upon as an additional burden rather than part of normal patrol activities;

- Some MIKE Sites have lost all their elephants – so should they continue as MIKE sites?

259. Not all sites in all range States suffer from even a few of these problems, but their persistence calls for a reevaluation of some MIKE management procedures. Specifically:-

- The protocols and agreements under which individual range States commit themselves to the MIKE programme should be reviewed, especially with respect to inter-departmental spats and high turnover of National and Site Officers. Such a review can also feed into the criteria for new range States to join the MIKE programme (see Para 246 above).
- The TORs for MIKE National Officers and Site Officers should be reviewed and performance criteria developed to allow better performance monitoring by SSOs.
- Acting with the SSOs and the Sub-Regional Steering Committees, a new set of criteria for the management of MIKE sites should be drawn up with the National Wildlife Management Authorities. These new criteria should address as a matter of priority the intensity of LEM, the frequency of population surveys, and even the continuing presence of elephants. All existing MIKE Sites should be assessed against these criteria, and should any new site put forward to join the programme.

260. There are other very positive trends in the evolution of the MIKE programme which the MIKE CCU should continue to promote and encourage in Phase 3. Specifically:-

- The adoption of MIST as the data capture, storage and analysis system of choice at MIKE sites and in other protected areas ;
- The expansion of Site boundaries to take in elephant range, ecosystems and/or community level monitoring;
- The development of cross-border (and even cross-sub-regional) cooperation between neighbouring Sites; and
- The initiative by the CCU to develop a standard LEM training module to be introduced into every National and sub-regional ranger training institution. This will kick start the process of embedding LEM as a normal part of ranger duties..

4.8 MIKE as an Early Warning System

261. Range States continually ask whether MIKE could ever serve as an early warning system at Site, National or sub-regional levels . While the "early warning of what?" is often poorly specified it is usually implied to mean flagging in some way any sudden change in the rates of illegal hunting of elephant or in the volumes and flows of illegal ivory or bushmeat.

262. MIKE is a site-based monitoring programme and neither the primary data collected nor the reporting cycle lend it to early warning applications or to direct applications at Site and National levels.

263. However, participants from elephant range States to the 3rd African Elephant Meeting at Gigiri (November 2010) did recognize the potential value of information on illegal elephant activities from "unofficial sources", and the potential value of other information and intelligence arising from, for example, IUCN species specialist groups, field based NGOs, other field based experts and organisations – especially the NWMA themselves, and organisations such as the police, customs and the media.

264. The wider adoption of MIST is very relevant here as it can more easily accommodate such "alternative" and "unofficial" sources of data on illegal killing and trade. This kind of information and intelligence could form the basis for the early warning system at the MIKE Site and National level which many range States are looking for.

265. The TAG should be able to revisit the use of "alternative" and "unofficial" data on illegal killing and trade and advise on how they can be built up into an early warning system [Ref 19].

4.9 MIKE Partners - IUCN

266. A new approach to the IUCN – CITES headquarters agreement should be negotiated because the current one is not really satisfactory to either party. IUCN, as an international organisation with a strong sub-regional and national presence throughout Africa, should be much more involved with MIKE at a programmatic level and the MIKE programme should make more use of the IUCN sub-regional and national networks.

267. In principal, IUCN could manage for the MIKE Programme all the "non site-based monitoring" activities, including hosting the SSOs as at present; the HEC, bush meat studies and the African Elephant Database (all through AfESG); the coordination between ETIS and the MIKE sub-regional committees and range States; and the early warning systems for the MIKE programme (so long as the TAG comes up with a useful design).

268. CITES and IUCN have recently exchanged letters of intent to proceed along such lines.

4.10 MIKE Partners - the TAG

269. The TAG provides the MIKE programme with advice on all relevant scientific and technical aspects arising from its design and implementation and as such has been very successful.

270. The endorsement of specific techniques and methodologies by the TAG is very important for MIKE SSOs and National Officers and assists in their acceptance and implementation at National and Sub-Regional levels.

271. The technical review of MIKE output is also extremely important and reassures range States that their data have not been misrepresented or abused in any way.

272. However, the TAG membership is really very static with some members being there since the very beginnings of MIKE. While the newly created joint MIKE-ETIS TAG might provide the incentive to initiate a review of TAG membership, there is already a >60% overlap [4/6 experts, Ref 20] between the global experts belonging to each TAG.

273. Furthermore, the MIKE programme is evolving, and specific regional technical issues are now emerging. Range States feel that the TAG is not sensitive enough to such regional concerns and remains too much focused on the "MIKE-wide" issues.

274. Following from this evaluation there are a number of technical issues that the TAG should address as a matter of importance. Specifically:-

- Redraft the Aerial Survey Standards along the lines set out in Annex 7.
- Revisit the Dung Count Standards which appear to be unnecessarily complex, and reconsider alternative methods of population census in forested areas..
- Draw up criteria and procedures for welcoming new range States to the MIKE programme, and for re-assessing the commitment of current range States to the MIKE programme.
- Draw up criteria and procedures for adding new MIKE Sites to the MIKE programme, and to re-assess the suitability of existing MIKE Sites to continue in the MIKE programme [Ref 17].
- Draw up, design and implement a MIKE based "early warning system", specifying exactly what it is that early warning is being given about, and how alternative and unofficial sources of data will be integrated into the MIST along with MIKE and other appropriate data [Ref 19].

4.11 MIKE Partners – the African Elephant Specialist Group (AfESG)

275. The IUCN/African Elephant Specialist Group has had a long, close and very successful involvement with the MIKE programme. In Phase 2 of MIKE, AfESG was contracted to carry out studies on HEC; to undertake a comprehensive study on the impact of trade in elephant meat; to integrate MIKE population survey data into the African Elephant Database; to support annual meetings of African elephant range States; and to help disseminate MIKE information, principally through the journal *Pachyderm*.

276. This mutually advantageous relationship between the MIKE programme and AfESG should continue throughout Phase 3.

4.12 ETIS

277. ETIS monitors international trade in illegal ivory, providing a global picture of the trade itself and where elephant products are coming from and going to.

278. At the most recent meeting of the elephant range States at Gigiri, Kenya (November 2010) the ETIS Director presented an update of the Elephant Trade Information System, highlighting areas of concern, particularly those countries with poor law enforcement effort scores as calculated by ETIS on the basis of ivory seizures involving these countries.

279. In response, the elephant range States tabled their perception of a lack of "ownership" of ETIS data, analyses and reports. Specifically, range States would like to see reports and analyses before they are presented to conferences, so they have a chance to discuss and validate the data in the reports.

280. By its very nature ETIS produces data of a very different kind and scale to MIKE and simply cannot emulate the data flows and data validations that take place within the MIKE programme. Furthermore, ETIS is a child of TRAFFIC rather than of CITES, though it reports to the same Standing Committee as does MIKE.

281. The newly established joint MIKE/ETIS TAG should go some way towards addressing these problems. The ETIS team is now invited as a matter of course to all sub-regional and regional meetings organised by the MIKE programme, offering opportunities to the elephant range States to interact with, and learn about, both of these monitoring systems. Similarly, in capacity building activities organised by MIKE, both MIKE and ETIS teach about each others' data-gathering routines and approaches.

282. MIKE and ETIS are also working closely together to integrate their data within the MIKE reporting structure.

283. Nonetheless, these National and sub-regional concerns of the range States about the ETIS data and reports are justified and should be addressed by MIKE and ETIS. However, it is not clear just at this stage exactly how this might be achieved.

4.13 Sub-Regional Endorsement

284. The MIKE programme is embedded within the Division of Environmental Law and Conventions of UNEP. From here, and using the good offices of UNEP/DELC, the MIKE CCU should be able to engage with a range of Regional and Sub-Regional organisations throughout Africa, such as SADCC, EAC, IGAD, ECOWAS, COMIFAC and the AU itself.

285. The political endorsement of MIKE by these sub-regional organisations, especially at the Ministerial level, will strengthen the sub-regional influence of MIKE and might confer further advantages. Specifically:-

- Policy differences between elephant range States with respect to the ivory trade could perhaps be settled amicably before, rather than during, the CoPs. At the moment, policy discussions on elephant matters at the CoPs are too influenced by small, self selecting groups and take place in an atmosphere of confrontation rather than one of compromise.
- The meetings of the African Elephant Range States might now become a forum for the producers of elephants to sit down with the consumers of elephants to discuss their shared objectives. Both consumers and producers want the same things – lots of elephants and an open, legal and well regulated trade. Given there will never be enough resources to protect elephants against the rising demand for their products, this can be achieved only by getting the two sides to sit down and talk to each other.
- Fund raising (from serious donors) in support of national wildlife management authorities might also become easier.

Annex 1: Terms of Reference

EC Project No. 9 ACP RPR 42
Long Term system for Monitoring the Illegal Killing of Elephant (MIKE): Phase II
Progress evaluation

1. Background

The origins and overall objectives of the programme Monitoring the Illegal Killing of Elephants (MIKE) as contained in Resolution Conf. 10.10 (Rev. CoP15), as well as a general description and the objectives of EC Project No. 9 ACP RPR 42, are presented in Annex 2.

2. Project evaluation

Result 4 of the Project states: "MIKE structure efficiently and effectively managed, coordinated and monitored". Under this overall result, Activity 4 indicates: "Undertake regular audits, mid-project evaluation and end-project evaluation." The rational for including this activity in the project is formulated as follows: "It is good practice to submit any programme or project to regular audit and evaluation. The MIKE programme should be no exception and this is provided for."

Additionally, it would greatly facilitate the provision of longer-term funding from the European Commission and other donors if an independent evaluation of the current project could provide an assessment of how well the project is undertaking the expected activities and thus moving forward to achieving the desired results, and what improvements, where necessary, should be envisaged.

3. Activities

In consultation with the MIKE Central Coordination Unit (CCU), the consultant will undertake the following activities in accordance with the time schedule bellow:

1. Become familiarized with the MIKE programme objectives and the activities supported by the EC Project No. 9 ACP RPR 42EC.

2. Examine relevant progress, meeting and activity reports, analyses and other outputs that the MIKE programme produced in the context of the implementation of EC Project No. 9 ACP RPR 42EC.

3. Visit the MIKE CCU in order to undertake interviews, inspect documents and other materials, and generally assess the status to the project. If possible within the allocated timeframe, arrange to conduct interviews with one or more MIKE Subregional Support Officers, members of the MIKE Technical Advisory Group and national MIKE Officers.

4. Evaluate and inform to what extent project activities have helped to address the objectives of the project and the MIKE programme in general, and are meeting expectations.

5. Highlight observed strengths and weaknesses, and provide recommendations for assisting to improve the delivery of the project and the MIKE programme in general, with particular reference to the project objectives and its log frame. Issues that may be examined include:

    - Effectiveness of the MIKE Central Coordination Unit
    - Effectiveness of Subregional Support Units
    - Effectiveness of programme development and project implementation
    - Usefulness/adequacy of capacity building activities and training
    - Adequacy of implementation monitoring and reporting

6. Provide an evaluation report that assesses fairly and objectively the extent to which project activities have been undertaken and the extent to which the project is meeting its objectives, and moving the MIKE programme towards achieving the anticipated results and purpose of MIKE.

7. If feasible, provide a general appreciation of how the range States perceive the MIKE programme.

8. Highlight the lessons learnt and provide recommendations for overcoming the weaknesses identified.

9. Formulate recommendations concerning the priorities that need to be addressed during the remaining period of the project.

10. Provide suggestions for the further development of the MIKE programme in Africa, and recommend activities that could be undertaken during the following phase of the MIKE programme, scheduled for 2012-2014.

4. Time frame

The consultant will undertake the evaluation within 2 weeks and provide a final report within a further week.

The time schedule for the outputs is as follows:

a) Week 1 and 2 (1-16 February): Examination of documents and reports; interviews; background research

b) Week 3 (17-22 February): Submission of a draft evaluation report to the MIKE CCU for review. The contractee will then make any changes or additions required in regard to accuracy of information after such review and will submit a final report by the end of the contract period.

5. Outputs

a) A written draft report to the MIKE CCU for comments on accuracy of information.

b) A written final report to the MIKE CCU.

6. Budget

The budget is presented in Annex 3.

EC PROJECT NO. 9 ACP RPR 42
LONG TERM SYSTEM FOR MONITORING THE ILLEGAL KILLING OF ELEPHANT (MIKE): PHASE II

1. THE MIKE PROGRAMME

1.1 Monitoring the Illegal Killing of Elephants (MIKE)

The Convention on Illegal Trade in Endangered Species of wild fauna and flora (CITES) regulates the international trade in a large number of wild plants and animals and their products, including trade in the two extant elephant species, *Loxodonta africana* and *Elephas maximus*. For nearly two decades, international trade in elephant products and management of elephant populations has been subject of extensive debate amongst CITES Parties and in various CITES fora. CITES decision-making has shown the great need for robust, reliable information on elephant numbers, mortality rates, threats, and factors influencing the status of elephants, including [and most importantly] CITES decisions on trade in elephant specimens. It was agreed that this needed to be achieved through a routine and standardized monitoring system. At the 10th meeting of the Conference of the Parties to CITES (CoP10; Gigiri, 1997), the Parties therefore adopted a Resolution regarding trade in elephant specimens that included a recommendation calling for the establishment, under the supervision and direction of the Standing Committee, of a comprehensive international system to monitor the illegal killing of elephants. The objectives, structures and *modus operandi* of this programme, commonly known as MIKE (Monitoring the Illegal Killing of Elephants), were endorsed by the CITES Standing Committee in 1999.

MIKE was established throughout the range States of African and Asian elephants since early 2000, and has been growing in scope and importance ever since. MIKE monitors *in situ* the conservation status of and threats to a representative sample of African and Asian elephants. MIKE is designed to *inter alia* provide data on trends in levels of illegal killing of elephants, and their relationship with a resumption of legal ivory trade.

The MIKE programme is governed by CITES Resolution Conf. 10.10 (Rev. CoP15) on *Trade in elephant specimens*.

1.2 Objectives and operation of MIKE

The overall aim of MIKE is to provide information needed for elephant range States and CITES Parties to make appropriate management and enforcement decisions concerning elephants, and to build institutional capacity within the range States for the long-term management of their elephant populations by improving their ability to monitor elephant populations, detect changes in levels of illegal killing, and use this information to improve elephant management and provide more effective law enforcement.

Resolution Conf. 10.10 (Rev. CoP15) specifies that the Conference of the Parties agree that:

a) the systems known as Monitoring the Illegal Killing of Elephants (MIKE) and the Elephant Trade Information System (ETIS), established under the supervision of the Standing Committee, shall continue and be expanded with the following objectives:

i) measuring and recording levels and trends, and changes in levels and trends, of illegal hunting and trade in ivory in elephant range States, and in trade entrepots;

ii) assessing whether and to what extent observed trends are related to changes in the listing of elephant populations in the CITES Appendices and/or the resumption of legal international trade in ivory;

iii) establishing an information base to support the making of decisions on appropriate management, protection and enforcement needs; and

iv) building capacity in range States.

With regard to the *modus operandi*, structure and overall operation, the Conference of the Parties agree in Resolution Conf. 10.10 (Rev. CoP15) that:

b) this monitoring system shall be in accordance with the framework outlined in Annex 2 for monitoring of illegal hunting in elephant range States;

c) *information on illegal killing of elephants and trade in their products from other credible law enforcement and professional resource management bodies, should also be taken into consideration; and;*

d) *technical oversight will be provided to both MIKE and ETIS through an independent technical advisory group to be established by the Secretariat.*

1.3 The implementation of MIKE in Africa

The pilot and initial stages of the CITES MIKE programme, Phase I, were implemented from 2001 to 2006 with the principal assistance of EC funding and bridging funds from various donors. During Phase I, the MIKE programme was set up in 29 range States of the African elephant with a total of 45 sites and 10 alternate (or additional) sites.

The MIKE sites for the African elephant range State that participate at the start of Phase II project in the monitoring programme are shown in the table bellow.

Geographical scope of MIKE in Africa

Range State	MIKE site	Alternate/additional MIKE sites
Central Africa: 7 range States; 13 sites (2 alternate/additional sites)		
Cameroon (CM)	Boumba-Bek	
	Waza	
Central African Republic (CF)	Bangassou	Salonga (CD)
	Dzangha-Sangha	Virunga (CD)
	Sangba	
Chad (TD)	Zakouma	
Congo (CG)	Nouabable Ndoki	
	Odzala	
Democratic Republic of the Congo (CD)	Garamba	
	Kahuzi Biega	
	Okapi	
Equatorial Guinea (GQ)	Monte Alén	
Gabon (GA)	Minkebe	
	Lope	
East Africa: 5 range States; 8 sites (5 alternate/additional sites)		
Eritrea (ER)	Gash-Setit	Meru (KE)
Kenya (KE)	Elgon	Tsavo East and West (KE)
	Samburu	Katavi (TZ)
Rwanda (RW)	Akagera	Tarangire Manyara (TZ)
United Republic of Tanzania (TZ)	Ruaha	Elgon (UG)
	Selous	
Uganda (UG)	Murchison Falls	
	Queen Elizabeth	
Southern Africa: 6 range States; 8 sites (1 alternate/additional site)		
Botswana (BW)	Chobe	
Mozambique (MZ)	Cabora-Bassa	
	Niassa	
Namibia (NA)	Caprivi Conservancy	Etosha
South Africa (ZA)	Kruger	
Zambia (ZM)	South Luangwa	
Zimbabwe (ZW)	Chewore	
	Nyami Nyami	
West Africa: 11 range States; 16 sites (2 alternate/additional sites)		
Benin (BJ)	Pendjari	Parc W (BJ)
Burkina Fasso (BF)	Parc W	Parc W (NE)
	Nazinga	
Cote d'Ivoire (CI)	Comoe	

	Tai	
	Marahoue	
Ghana (GH)	Kakum	
	Mole	
Guinea (GN)	Ziama	
Liberia (LR)	Sapo	
Mali (ML)	Gourma	
Niger (NE)	Baban Rafi	
Nigeria (NG)	Sambisa	
	Yankari	
Senegal (SN)	Niokolo Koba	
Togo (TG)	Keran	

It should be noted that in the course of Phase II, several site modifications and additions have been agreed upon.

Each country nominated a national MIKE Officer and each site a MIKE Site Officer to undertake the monitoring routines. The countries were grouped into the four sub-regions of Central, East, Southern and West Africa. Four Sub-regional Steering Committees (SSC) were established to oversee the implementation if the monitoring programme in each sub-region with the support and facilitation of a MIKE Sub-regional Support Unit (MIKE SSU), led by a Sub-regional Support Officer (SSO). The MIKE programme and the SSOs were coordinated by a MIKE Central Coordination Unit (MIKE CCU), based in Nairobi, Kenya. The main role of the SSO was to provide capacity building and site visit training on Law Enforcement Monitoring (LEM) and database management, using a database specifically designed for MIKE purposes. The SSO also encouraged and assisted in conducting elephant population surveys, using aerial techniques in savannah ecosystems and line transect dung count techniques in forest ecosystems. These were the major activities undertaken during Phase I between 2001 and 2005. A transition phase of the MIKE programme was organized to provide continuity and allow for the institutional arrangements required under Phase II to get fully underway. In any monitoring programme, it is important to establish a baseline. At its 49th meeting (Geneva, April 2003), the Standing Committee adopted a baseline definition for MIKE which was further clarified at its 53rd meeting (Geneva, June-July 2005) (see documents SC49 Doc. 11.2 (Rev. 1) and SC53 Doc. 20.2). Following this definition, the emphasis of MIKE activities during 2003 to 2006 was on getting the necessary data and information to establish a baseline.

Phase II (2007-12) is being implemented in order to continue building the MIKE programme into a long-term routine on a self sufficient funding basis. Since 2010 and as reported to the 15th meeting of the Conference of the Parties (CoP15, Doha, 2010, the programme meets all of its objectives as contained in Resolution Conf. 10.10 (Rev. CoP15).

2. MIKE PHASE II IN AFRICA

2.1 Project description

The core problem that the project seeks to address is that national decision makers in Africa, in conjunction with all other CITES Parties, do not have reliable information on elephants on which to base their decisions and evaluate the impacts of CITES trade decisions. Nor do the majority of the African elephant range States have the capacity or information for taking fitting measures regarding elephant management, enforcement and human-elephant conflict reduction.

The project is designed to promote ownership of the MIKE programme and facilitate the empowerment of range States of African elephants on a long-term sustainable basis. It provides the data and information needed for elephant range States to make appropriate management and enforcement decisions and to build institutional capacity within the range States for the long-term management of their elephant populations and their habitats.

The project's main benefits include: increased knowledge of numbers and distribution of African elephants; better perceptions of the threats to their survival and of the required conservation measures; enhanced capacity in the range States for monitoring elephant populations and other wildlife, and elephant habitats generally; the development of synergies with complementary ecological monitoring and with research on bio-resources; a better understanding of the impact, or lack of impact, of CITES

decisions on trade in specimens of elephants or on elephant management and conservation so that the CITES community can become more responsive to the identified impacts or consequences of such decisions. Overall, the main aspects of this project pertain to institutional capacity building, sustainable management of natural resources, biodiversity conservation and monitoring, and international cooperation and decision-making.

The project builds on the lessons learnt from implementing Phase I of the MIKE programme, and has incorporated recommendations from an independent evaluation of the EC funded components thereof (see *Long term system for Monitoring the Illegal Killing of Elephants (MIKE)*. EC Project No. B7-6200/00-18/DEV/ENV. Ecosystems consultants, September 2004). The supervisory and advisory structures that were developed for the programme and tested during Phase I are to be enhanced at all stages from the MIKE sites to the MIKE Central Coordinating Unit, and formal partnerships with the IUCN/SSC African Elephant Specialist Group and TRAFFIC/ETIS should allow a stronger pooling of technical resources and a higher degree of coherence, where appropriate. Also strengthened are the roles of MIKE's Technical Advisory Group and of the Sub-regional Steering Committees, which respectively ensure a robust scientific backing and a strong support from national wildlife agencies. The project underscores the role of the CITES Secretariat in coordinating, advising and servicing the Parties to CITES, and in undertaking activities and developing programmes as decided by the Conference of the Parties and reflected in its agreed working programmes. The project contributes significantly to the implementation of the provisions in Resolution Conf. 10.10 (Rev. CoP15) that relate to the MIKE programme. However, it also addresses regional and global issues that go beyond the implementation of decisions taken by CITES Parties.

2.2 Project objectives

2.2.1 Overall objective and Project purpose

The stated Overall objective to which the project contributes is that ***Elephant populations in Africa and Asia are managed sustainably by using the monitoring information to assist in making appropriate management and trade decisions.***

The Project purpose is ***A standardized system of field data collection and a statistically robust method of analysis provided to the African Elephant Range States on a long term sustainable basis, with information in regard to changes in their elephant populations and the factors influencing these changes, and through which the impact of CITES decisions can be assessed.***

2.2.2 Project objectives, results and outputs

The specific project objectives are to:

1. Build capacity of range States of African elephants to ensure that the flow of primary monitoring data is sustainable in the long term;
2. Adopt standard routines for the collection, handling and quality control of data;
3. Undertake and report routine analysis and integration of primary and secondary data; and
4. Manage, coordinate and monitor the MIKE programme efficiently and effectively.

To reach these specific objectives, 31 distinct activities are planned which should achieve the following major Project results:

1. Capacity built to ensure that the flow of primary monitoring data is sustainable in the long term;
2. Standard routines adopted for the collection, handling and quality control of data;
3. Robust analysis and integration of primary and secondary data routinely undertaken and reported on; and
4. MIKE implementation efficiently and effectively managed, coordinated and monitored.

The expected Project outputs are as follows:

1. All MIKE sites in Africa routinely carry out monitoring activities with the regular provision of reports.
2. Appropriate monitoring methods adapted to different site conditions are identified and applied, and suitable approaches for measuring efforts are tested and used.

3. A training manual is available, and its use in national and regional wildlife training institutes and universities is promoted.
4. Reports on African elephant population surveys are regularly produced on a 2 to 3-year cycle.
5. Advanced and improved integrated databases are used at site, national, sub-regional and international levels.
6. Appropriate spatial and statistical analyses are undertaken at least annually, and the results are disseminated to decision makers and other stakeholders.
7. Improved information on the trade in elephant meat and ivory is available.
8. Regional, sub-regional and Technical Advisory Group meetings occur on a routine and regular basis.
9. The MIKE information is used in effective decision-making at the site, national, sub-regional and global level.

Annex 2: General and Specific Documentation

General Documentation

Document	Dates	Files
African elephant meetings	08, 09, 10	241
CoP documents	14, 15	8
ETIS Traffic reports		4
Evaluation of MIKE Phase 1 and Feasibility Study for Phase 2	2004/05	10
Law enforcement and detection effort workshop	2009	8
MIKE ETIS subgroup		65
MIKE progress reports	06/08, 08/09, 09	68
MIKE work programmes	08, 09, 10, 11	5
Phase 2 Project documents		2
Standing committee documents	53 – 59	18
TAG meetings	06 -- 09	158
Workshops		54

Specific Documentation

Document	Reference
1	Resolution Conf 10.10 (Rev. CoP15): *Trade in elephant specimens* (Amended at the 11th, 12th, 13th, 14th and 15th CoP)
2	SC49 Doc 11.2 (Rev 1): April 2003: *Baseline Information for MIKE*
3	SC53 Doc. 20.2 *Reports of the MIKE and ETIS sub goups*
4	EC Project No. B7-6200/00-18 Dev/Env *Long term system for Monitoring the Illegal Killing of Elephants (MIKE), Ecosystems Consultants September 2004*
5	EC Project No. 9ACP RPR 42 *European Community Contribution Agreement for the Implementation of the Action Titled: Monitoring the Illegal Killing of Elephants (MIKE)*
6	SC54 Doc 26.2 (Rev.1) *MIKE Baseline Information*
7	SC55 Doc 10.2 (Rev.1) *MIKE Baseline Information*
8	CoP15 Doc. 44.2 (Rev.1) *Monitoring of Illegal Hunting in Elephant Range States*
9	CoP15 Inf.40 (Rev.1) *Levels of Illegal Killing of Elephant in the Laikipia-Samburu MIKE Site*
10	*MIKE Workshop on Law Enforcement and Detection Effort. December 2009, Kenya*
11	United Nations Environment Programme / Environmental Conventions: Project XT/6020-06-01 *Long term system for Monitoring the Illegal Killing of Elephants (MIKE)*
12	AGREEMENT between the CITES Secretariat and the IUCN *Regarding the placement and logistical support for the MIKE sub-regional support units and the provision technical services to the MIKE programme*
13	UNEP/DEC/CITES Project XT/6020-06-01 *Long term system for Monitoring the Illegal Killing of Elephants (MIKE): Final report*
14	CITES/MIKE: *Aerial Survey Standards for the MIKE Programme*
15	CITES/MIKE: *Dung Survey Standards for the MIKE programme*
16	TAG08 Doc 13 *Status of MIKE implementation questionnaire*

Specific Documentation (continued)

Document	Reference
17	TAG06 Doc 12.3 *Validation of MIKE sample: criteria for MIKE sites*
18	3rd African Elephant Meeting, Gigiri, Kenya, November 2010: *Decision 15.74: revision of Res. Conf. 10.10 (Rev CoP15) on Trade in Elephant Specimens*
19	TAG09 Doc. 10 (Annex) prepared by AfESG: 3rd African Elephant Meeting, Gigiri, Kenya, November 2010: *Compiling and utilising data on illegal killing of elephants from a variety of unofficial sources and the potential for integration with MIKE*
20	Notification to the Parties No. 2009/049 *Terms of reference for a technical advisory group for Monitoring the Illegal Killing of Elephants (MIKE) and the Elephant Trade Information System (ETIS), January 2009*
21	2nd African Elephant Meeting, Mombassa, Kenya, 2008 *The status of Africa's elephants: emerging challenges and opportunities for their conservation and management* (AfESG)
22	CoP15 Inf. 68 *African Elephant Action Plan*
23	3rd African Elephant Meeting, Gigiri, Kenya, November 2010 *Inputs from African range states for the revision of Resolution Conf. 10.10 (Rev. CoP15)* [Ref: 01]
24	CoP15 Inf. 41 march 2010 *Trends and factors associated with the illegal killing of elephants*

Annex 3

Terms of Reference for MIKE Sub-regional Support Officers
And
MIKE National Officers

SUB-REGIONAL SUPPORT OFFICER

The Sub-regional Support Officer is responsible for coordinating all actions required for the effective implementation of MIKE programme in the sub-region by:

1. providing technical assistance to the Sub-Regional Steering Committee (SSC), and technical assistance to the National Officers and the Site Officers within the sub-region;

2. working at the site level in order to facilitate the full functioning of that site in its use of the data collection protocols approved by the MIKE Technical Advisory Group (TAG);

3. working at national levels in relation to population surveys, etc.;

4. facilitating the storage, analysis, management and onward flow of site data at national levels;

5. coordinate the storage, analysis, management and onward flow of the national information at sub-regional levels;

6. overseeing the delivery of training required in the sub-region;

7. reporting on regular basis on progress with the implementation of MIKE to the Chairman of the Sub-Regional Steering Committee and providing necessary support for arranging SSC meetings and assist the implementation of actions agreed by the SSC;

8. providing progress reports to the MIKE Coordinator n accordance with the agreed reporting procedures.

Qualifications and experience

1. Sub-regional Support Officer (SSO) should have a university degree, preferably a higher degree, in a subject matter that directly relates to the experience and technical skills required by the duties listed above.
2. SSO must have the technical competence to fully understand and provide training in the methodologies required by MIKE as well as competence in the analysis and management of the information collected.
3. SSO should have a minimum of five years experience in elephant population survey work, law enforcement monitoring (LEM), anti-poaching efforts, etc. related to the ecosystems relevant to Africa and Asia.
4. Familiarity with Microsoft Office (especially Access) and GIS applications (especially Arcview) will be desirable.

SITE OFFICER

- Oversee collection of data as agreed under MIKE protocols;
- Oversee compilation of data into monitoring and annual report;
- Manage the data compilation and analysis at site level and transit to national level;
- Provide and maintain the support for keeping the site teams and equipment operational;
- Assist in identifying training needs and in arranging training opportunities;
- Provide feedback on protocol deficiencies and other constraints and bottlenecks;
- Liaise with the National Officer.

NATIONAL OFFICER

- Co-ordinate and support efforts of Site Officer(s) and their teams;
- Ensure harmonisation of site operations;
- Liaise with Sub-regional Support Officer on MIKE training, implementation and data transmission;
- Manage data compilation and analysis at and from the national level;
- Keep their National Steering Committee member informed.

ANNEX 4

Questionnaire for MIKE Sub-Regional Support Officers

Default Question Block

Your name

Your sub-region: please select your sub-region from the choices below

- Central Africa
- Eastern Africa
- Southern Africa
- West Africa

SSU Operations: Select all the years in which the SSU was in place and operational

2007	2008	2009	2010
☐	☐	☐	☐

SSC Operations: Select all the years in which the sub-regional steering committee was in place and operational

2007	2008	2009	2010
☐	☐	☐	☐

Participating countries: List the names of the countries officially participating in MIKE programme in your sub-region.
Please enter each country in a different line. Eleven boxes are provided. If your sub-region has fewer than 11 countries, leave the extra boxes blank.

Country 1	
Country 2	
Country 3	
Country 4	
Country 5	
Country 6	
Country 7	
Country 8	
Country 9	
Country 10	
Country 11	

National Office operation: For each of the countries in your sub-region, and for each year in Phase II, select the years in which a National Officer was in place and operational

	2007	2008	2009	2010
» Country 1	☐	☐	☐	☐
» Country 2	☐	☐	☐	☐
» Country 3	☐	☐	☐	☐
» Country 4	☐	☐	☐	☐
» Country 5	☐	☐	☐	☐
» Country 6	☐	☐	☐	☐
» Country 7	☐	☐	☐	☐
» Country 8	☐	☐	☐	☐
» Country 9	☐	☐	☐	☐
» Country 10	☐	☐	☐	☐
» Country 11	☐	☐	☐	☐

Countries requesting to join MIKE: Please enter the countries in your sub-region that were not originally in the MIKE system AND have requested to participate (if none, leave this question blank).

Country 1	
Country 2	
Country 3	

For each of the countries that has requested to join, indicate status of the request

	Request withdrawn	Not joined yet	Joined
» Country 1	☐	☐	☐
» Country 2	☐	☐	☐
» Country 3	☐	☐	☐

Sites in your sub-region: please provide a list of ALL the MIKE sites in your sub-region, including those that have been added or dropped during Phase II. Twenty spaces are provided. If your sub-region has fewer than 20 sites, please leave the remaining boxes blank.

Site 1	
Site 2	
Site 3	
Site 4	
Site 5	
Site 6	
Site 7	
Site 8	
Site 9	
Site 10	
Site 11	
Site 12	
Site 13	
Site 14	
Site 15	
Site 16	
Site 17	
Site 18	
Site 19	
Site 20	

Have any changes to the site list or extent of operations taken place in your sub-region in the course of MIKE Phase II? Tick all that apply.

		Site dropped	Newly added in phase II	Added in phase II to replace a dropped site	Original Boundary Expanded	Expansion of boundary planned	Original boundary contracted	No change
» Site 1		☐	☐	☐	☐	☐	☐	☐
» Site 2		☐	☐	☐	☐	☐	☐	☐
» Site 3		☐	☐	☐	☐	☐	☐	☐
» Site 4		☐	☐	☐	☐	☐	☐	☐
» Site 5		☐	☐	☐	☐	☐	☐	☐
» Site 6		☐	☐	☐	☐	☐	☐	☐

	Site dropped	Newly added in phase II	Added in phase II to replace a dropped site	Original Boundary Expanded	Expansion of boundary planned	Original boundary contracted	No change
» Site 7	☐	☐	☐	☐	☐	☐	☐
» Site 8	☐	☐	☐	☐	☐	☐	☐
» Site 9	☐	☐	☐	☐	☐	☐	☐
» Site 10	☐	☐	☐	☐	☐	☐	☐
» Site 11	☐	☐	☐	☐	☐	☐	☐
» Site 12	☐	☐	☐	☐	☐	☐	☐
» Site 13	☐	☐	☐	☐	☐	☐	☐
» Site 14	☐	☐	☐	☐	☐	☐	☐
» Site 15	☐	☐	☐	☐	☐	☐	☐
» Site 16	☐	☐	☐	☐	☐	☐	☐
» Site 17	☐	☐	☐	☐	☐	☐	☐
» Site 18	☐	☐	☐	☐	☐	☐	☐
» Site 19	☐	☐	☐	☐	☐	☐	☐
» Site 20	☐	☐	☐	☐	☐	☐	☐

List of National Office visits: Please provide details of all the visits you made to National Officers in the course of MIKE Phase II. For each visit, please enter the year, country and primary purpose of the visit. Use ONLY the following choices for purpose of visit: LEM training; database training; hardware deployment; population survey; data management; MIKE expansion; attend meeting.
40 spaces are provided. If you conducted more than 40 site visits in the course of Phase II, pls inform Julian and more spaces will be added.

	Year	Country	Purpose of visit
Visit 1			
Visit 2			
Visit 3			
Visit 4			
Visit 5			
Visit 6			
Visit 7			
Visit 8			
Visit 9			
Visit 10			
Visit 11			
Visit 12			
Visit 13			
Visit 14			
Visit 15			
Visit 16			
Visit 17			
Visit 18			
Visit 19			
Visit 20			
Visit 21			
Visit 22			
Visit 23			

	Year	Country	Purpose of visit
Visit 24			
Visit 25			
Visit 26			
Visit 27			
Visit 28			
Visit 29			
Visit 30			
Visit 31			
Visit 32			
Visit 33			
Visit 34			
Visit 35			
Visit 36			
Visit 37			
Visit 38			
Visit 39			
Visit 40			
Visit 41			
Visit 42			
Visit 43			
Visit 44			
Visit 45			
Visit 46			
Visit 47			
Visit 48			
Visit 49			
Visit 50			

List of site visits: Please provide details of all the visits you made to National Officers in the course of MIKE Phase II. For each visit, please enter the year, country and primary purpose of the visit.
Use ONLY the following choices for purpose of visit: LEM training; database training; hardware deployment; population survey; data management; MIKE expansion; attend meeting
40 spaces are provided. If you conducted more than 40 site visits in the course of Phase II, pls inform Julian and more spaces will be added.

	Year	Site	Purpose of visit
Visit 1			
Visit 2			
Visit 3			
Visit 4			
Visit 5			
Visit 6			
Visit 7			
Visit 8			
Visit 9			
Visit 10			

	Year	Site	Purpose of visit
Visit 11			
Visit 12			
Visit 13			
Visit 14			
Visit 15			
Visit 16			
Visit 17			
Visit 18			
Visit 19			
Visit 20			
Visit 21			
Visit 22			
Visit 23			
Visit 24			
Visit 25			
Visit 26			
Visit 27			
Visit 28			
Visit 29			
Visit 30			
Visit 31			
Visit 32			
Visit 33			
Visit 34			
Visit 35			
Visit 36			
Visit 37			
Visit 38			
Visit 39			
Visit 40			
Visit 41			
Visit 42			
Visit 43			
Visit 44			
Visit 45			
Visit 46			
Visit 47			
Visit 48			
Visit 49			
Visit 50			

Other SSO activities: for every year on the table, select the additional activities you carried out

	2007	2008	2009	2010

	2007	2008	2009	2010
Technical assistance to SSC	☐	☐	☐	☐
Support SSC meetings	☐	☐	☐	☐
Assist implementation of SSC actions	☐	☐	☐	☐
Coordination, management and storage of national data at sub-regional level	☐	☐	☐	☐
Annual reporting and data transfer to CCU	☐	☐	☐	☐

Assess the frequency of population surveys at each of your sites during Phase II (2007-2010)

	Annual	Biennial	Triennial	Quinquennial (every 5 years)	Less frequent/irregular
» Site 1	○	○	○	○	○
» Site 2	○	○	○	○	○
» Site 3	○	○	○	○	○
» Site 4	○	○	○	○	○
» Site 5	○	○	○	○	○
» Site 6	○	○	○	○	○
» Site 7	○	○	○	○	○
» Site 8	○	○	○	○	○
» Site 9	○	○	○	○	○
» Site 10	○	○	○	○	○
» Site 11	○	○	○	○	○
» Site 12	○	○	○	○	○
» Site 13	○	○	○	○	○
» Site 14	○	○	○	○	○
» Site 15	○	○	○	○	○
» Site 16	○	○	○	○	○
» Site 17	○	○	○	○	○
» Site 18	○	○	○	○	○
» Site 19	○	○	○	○	○
» Site 20	○	○	○	○	○

Assess the level of patrol effort (LEM cover) for the Phase II period (2007-2010) as set out in the MIKE Baseline (SC 55 Doc 10.2) at each of your sites.

	1: High uniform cover	2: high cover, but patchy	3: Moderate cover	4: poor cover	5: No cover
» Site 1	○	○	○	○	○
» Site 2	○	○	○	○	○
» Site 3	○	○	○	○	○
» Site 4	○	○	○	○	○
» Site 5	○	○	○	○	○
» Site 6	○	○	○	○	○
» Site 7	○	○	○	○	○
» Site 8	○	○	○	○	○
» Site 9	○	○	○	○	○
» Site 10	○	○	○	○	○
» Site 11	○	○	○	○	○
» Site 12	○	○	○	○	○
» Site 13	○	○	○	○	○
» Site 14	○	○	○	○	○
» Site 15	○	○	○	○	○
» Site 16	○	○	○	○	○
» Site 17	○	○	○	○	○
» Site 18	○	○	○	○	○

	1: High uniform cover	2: high cover, but patchy	3: Moderate cover	4: poor cover	5: No cover
» Site 19	○	○	○	○	○
» Site 20	○	○	○	○	○

Donor/NGO support for site activities: for every site in your sub-region, assess the extent of donor/NGO support for funding site activities.

	MIKE Phase I (2001-2005)			MIKE Phase II (2007-2010)		
	Primarily NGO/donor support	Both Donor/NGO support and national wildlife authority support	Primarily national wildlife authority support	Primarily NGO/donor support	Both Donor/NGO support and national wildlife authority support	Primarily national wildlife authority support
» Site 1	○	○	○	○	○	○
» Site 2	○	○	○	○	○	○
» Site 3	○	○	○	○	○	○
» Site 4	○	○	○	○	○	○
» Site 5	○	○	○	○	○	○
» Site 6	○	○	○	○	○	○
» Site 7	○	○	○	○	○	○
» Site 8	○	○	○	○	○	○
» Site 9	○	○	○	○	○	○
» Site 10	○	○	○	○	○	○
» Site 11	○	○	○	○	○	○
» Site 12	○	○	○	○	○	○
» Site 13	○	○	○	○	○	○
» Site 14	○	○	○	○	○	○
» Site 15	○	○	○	○	○	○
» Site 16	○	○	○	○	○	○
» Site 17	○	○	○	○	○	○
» Site 18	○	○	○	○	○	○
» Site 19	○	○	○	○	○	○
» Site 20	○	○	○	○	○	○

Thank you for completing the questionnaire.

○ Click on here and press the ">>" button to submit the questionnaire.

ANNEX 5

Questionnaire for MIKE National Officers

Default Question Block

Please enter your name

Please select your subregion from the choices below

- Central Africa
- Eastern Africa
- Southern Africa
- West Africa

Please select your country from the drop-down list below

National Office Operations: Select all the years in which the National Officer was in place and operational

2007	2008	2009	2010
☐	☐	☐	☐

Steering Committee Member: Select all the years in which the subregional steering committee member was in place and operational

2007	2008	2009	2010
☐	☐	☐	☐

National level MIKE data management: select all the years in which data compilation, storage and analysis took place at the national officer level

	2007	2008	2009	2010
Data compilation	☐	☐	☐	☐
Data storage	☐	☐	☐	☐
Data analysis	☐	☐	☐	☐

Liaison with SSO: Select all the years in which the subregional support officer liaised with the National Officer for training, MIKE implementation and flow of data

	2007	2008	2009	2010
Training	☐	☐	☐	☐
MIKE Implementation	☐	☐	☐	☐
Data transfer	☐	☐	☐	☐

Sites in your country: please provide a list of ALL the MIKE sites in your country, including any that have been added or dropped during MIKE Phase II (2007-2010). Five spaces are provided. If your country has fewer than 5 sites, please leave the remaining boxes blank.

Site 1
Site 2
Site 3
Site 4
Site 5

Planned site additions: Please list any sites not currently in the MIKE system in which your government plans to apply MIKE protocols in the future (if none, leave this question blank).

Site 1
Site 2
Site 3
Site 4

Site 5

Site Officer Operations: For each of the sites in your country, tick on all the years in which a MIKE Site Officer has been in place and operational.

	2007	2008	2009	2010
» Site 1	☐	☐	☐	☐
» Site 2	☐	☐	☐	☐
» Site 3	☐	☐	☐	☐
» Site 4	☐	☐	☐	☐
» Site 5	☐	☐	☐	☐

Have any changes to the site list or extent of operations taken place in your subregion in the course of MIKE Phase II? Tick all that apply.

	Site dropped	Newly added in phase II	Added in phase II to replace a dropped site	Original Boundary Expanded	Expansion of boundary planned	Original boundary contracted	No change
» Site 1	☐	☐	☐	☐	☐	☐	☐
» Site 2	☐	☐	☐	☐	☐	☐	☐
» Site 3	☐	☐	☐	☐	☐	☐	☐
» Site 4	☐	☐	☐	☐	☐	☐	☐
» Site 5	☐	☐	☐	☐	☐	☐	☐

Primary method of LEM: For each site in your country, please tick on the primary method of law enforcement monitoring *currently* being applied

	CURRENT LEM Methodology used					If you have selected "other"
	Original MIKE Methodology	MIST	MOMS or derivative	None	Other (describe in box on the right)	describe the method below
» Site 1	○	○	○	○	○	
» Site 2	○	○	○	○	○	
» Site 3	○	○	○	○	○	
» Site 4	○	○	○	○	○	
» Site 5	○	○	○	○	○	

Primary method of LEM: For each site in your country, please tick on the primary method of law enforcement monitoring that was being used *at the start of MIKE Phase II in 2007*.

	LEM Methodology used prior to 2007					If you have selected "other"
	Original MIKE Methodology	MIST	MOMS or derivative	None	Other (describe in box on the right)	describe the method below
» Site 1	○	○	○	○	○	
» Site 2	○	○	○	○	○	
» Site 3	○	○	○	○	○	
» Site 4	○	○	○	○	○	
» Site 5	○	○	○	○	○	

Donor/NGO support for site activities: for every site in your country, assess the extent of donor/NGO

support for funding site activities.

	Primarily NGO/donor support	Both NGO/donor support AND support from the national wildlife authority	Primarily national Wildlife Authority support
» Site 1	○	○	○
» Site 2	○	○	○
» Site 3	○	○	○
» Site 4	○	○	○
» Site 5	○	○	○

Assess the frequency of systematic elephant population surveys at each of your sites during Phase II (2007-2010)

	Annual	Biennial	Triennial	Quinquennial (every 5 years)	Less frequent/irregular
» Site 1	○	○	○	○	○
» Site 2	○	○	○	○	○
» Site 3	○	○	○	○	○
» Site 4	○	○	○	○	○
» Site 5	○	○	○	○	○

Assess the level of patrol effort (LEM cover) at each of your sites.

	1: High uniform cover	2: high cover, but patchy	3: Moderate cover	4: poor cover	5: No cover
» Site 1	○	○	○	○	○
» Site 2	○	○	○	○	○
» Site 3	○	○	○	○	○
» Site 4	○	○	○	○	○
» Site 5	○	○	○	○	○

Site visits by MIKE National Officer: For every year between 2007 and 2010, please enter the number of MIKE site visits conducted by the MIKE National Office for the each of the primary reasons listed in the first column. Only numbers are allowed in your responses to this question. If no visits were conducted in a given year for any of the reasons listed, enter a zero.

	2007	2008	2009	2010
Co-ordinate Site Officer and patrol teams				
Harmonise site operations				
MIKE data compilation and management				
Implement LEM and Database Training				
Conducting population surveys				
Other (specify)				

Thank you for completing the questionnaire.

○ Click on here and press the ">>" button to submit the questionnaire.

Annex 6

JOB DESCRIPTION OF THE CENTRAL COORDINATING UNIT

MIKE COORDINATOR (L-5)

The MIKE Coordinator works under the supervision of the Deputy Secretary-General of the CITES Secretariat and is responsible for the following duties:

1. Direct, coordinate and supervise all actions required for the effective implementation of MIKE programme by:

(a) monitoring project implementation at all stages, analyzing of implementation difficulties and proposing corrective actions;

(b) monitoring project budget allocations and expenditures;

(c) requesting actions for recruitment of experts and ensuring satisfactory and expeditious completion of services and outputs;

(d) ensuring that the MIKE data are analyzed, reports are developed and results are communicated to the participating national governments;

(e) organizing workshops for developing standard and analytical framework, including preparation of background documents;

(f) providing national/site-based training in survey methodology, data management and data analysis;

(g) providing guidance for the preparation of training materials;

(h) communicating with national governments and monitoring performance of the MIKE activities at the national level; providing scientific and technical assistance as necessary;

(i) reporting on a regular basis on progress with the implementation of the project to the CITES Secretariat;

2. Communicating regularly with the MIKE Sub-Regional Steering Committee and Technical Advisory Group (TAG) and convening Sub-Regional Steering Committee and TAG meetings;

3. Preparing technical reports related to the MIKE programme required for meetings of the Conference of the Parties and the Standing Committee MIKE and ETIS Sub-Group;

4. Representing the CITES Secretariat at workshops/meetings related to the MIKE programme;

5. Any other activities related to the implementation of the project.

Qualifications

Education: Advanced university degree in business administration, management, economics, or the equivalent combination of education and experience in a related area.

Experience: 10 years of progressively responsible professional experience, including management experience, in the programme area associated with the post.

Languages: Fluency in oral and written English is essential and a good working knowledge of at least another official language of the Convention (French and/or Spanish) will be desirable.

Other skills: Extensive experience in research, evaluation and policy development. Working experience with developing countries, management and negotiations skills. Knowledge of relevant institutions, mandates, policies, guidelines. Knowledge of the UN system.

DATA ANALYST (L-3)

The Data Analyst works under the supervision of the MIKE Coordinator and is responsible for the following duties:

1. Developing and facilitating the implementation of the data management system and overseeing the data analyses at the site, national and the sub-regional levels;

(a) Coordinating and supervising any commissioned inputs required to assist such development, testing and implementation;

(b) Harmonizing the provision of digitized maps, the data collection protocols, data management, data analysis (including the management and operation of the computer hardware and software) and data flow;

(c) Overseeing the quality control and integration of data sets on population surveys, law enforcement effort, causes of mortality, relevant measurable external factors, other qualitative data and spatial information in the system;

(d) Overseeing the storing, management and analysis of MIKE data in the CCU and Sub-regional Support Units;

(e) Facilitating the exchange of data between the Elephant Trade Information System (ETIS) monitoring programme and MIKE and developing good analytical links with ETIS;

(f) Liaising with the IUCN/SSC African Elephant Specialist Group Database Manager to ensure maximum collaborative benefits;

(g) Preparing analytical reports as required;

2. Overseeing the development and delivery of training required to develop adequate capacity in the range states and MIKE staff with regard to data management and analysis;

3. Perform any other related duties, as required.

Qualifications and experience

Education: University degree in Computer or Information Systems, Mathematics, Statistics or other related fields or equivalent combination of education, certification and experience in relevant area.

Experience: At least five years of progressively responsible professional experience in relevant area including experience in the collection compilation and analysis of statistical data..

Languages: Fluency in English is essential and a good working knowledge of another official language of the Convention (French and/or Spanish) will be desirable

Other skills: Knowledge of at least two programming languages, basic system analysis and design techniques, database design, storage and internal systems. Demonstrated skills in designing and implementing applications within database. Good analytical and problem solving skills and ability to handle a range of systems-related issues.

PROGRAMME ASSISTANT - HR (GS-5)

The Programme Assistant works under the supervision of the MIKE Coordinator and is responsible for the following duties:

Human resources

1. Initiate, process, monitor and follow-up on actions related to the administration of the project's personnel including initiation of IMIS personnel actions for processing through HRMS/UNON;

2. Enter, maintain and certify administrative data for time and attendance, and performance appraisal in electronic information systems;

3. Provide advice and guidance to the project's staff with respect to administrative procedures, processes and practices, liaising with central administrative services, as necessary.

Budget and Finance

1. Monitor status of project's expenditures and allotments through IMIS;

2. Verify accuracy of input data.

General administration

1. Prepare, process and follow up on administrative arrangements and forms related to the official travel of staff;

2. Prepare, process and follow-up on administrative arrangements and forms related to the procurement of goods and services;

3. Initiate and monitor payments to vendors and individual contractors;

4. Draft routine correspondence;

5. Maintain files of rules, regulations, administrative instructions and other related documentation;

6. Maintain up-to-date work files (both paper and electronic);

7. Maintain inventory of non-expendable equipment;

8. Perform other related administrative duties, as required.

Qualifications

Education: High school or equivalent diploma

Experience**:** A minimum of 5 years of progressively responsible experience within the UN system in the field of finance, accounting administrative services, or other related fields

Languages: Fluency in English is essential and a good working knowledge of another official language of the Convention (French and/or Spanish) will be desirable

Other skills**:** Fully proficient computer skills and use of advanced functions on UN standard applications such as Lotus Notes, Word, Excel, IMIS.
Knowledge of ACCESS and other relevant software packages is an advantage.

PROGRAMME ASSISTANT (GS-5)

The Programme Assistant works under the supervision of the MIKE Coordinator and is responsible for a full range of project management/implementation assistance including the following:

1. Monitoring and controlling the flow of correspondence and other communications in the MIKE CCU and developing an efficient tracking system to ensure that timely and appropriate action is taken on all pending matters within deadlines and priorities;.

2. Making logistical/organizational arrangements for meetings, workshops and training courses;

3. Coordinating the collection of background papers, agenda, proposals, reports, policy papers, training information and other materials required for the meetings and workshops ;

4. Providing secretarial services during meetings, drafting and circulating agenda notes to members/participants, assembling background documentation, drafting minutes of meetings ; monitoring follow-up actions;

5. Drafting and monitoring of the cooperation agreements, memorandums of understanding, terms of reference for technical consultants and population survey teams, procurement contracts and any other documentation;

6. Monitoring the flow of information between the CCU and sub-regional offices especially with regard to monthly and annual LEM forms;

7. Acting as document control focal point and liaising with the MIKE Coordinator and Sub-Regional Support Officers on issuance, distribution, translation and reproduction of MIKE reports and documentations.

8. Performing any other related duties, as required.

Qualifications and experience

Education: Completion of secondary education; supplemental courses/training in accounting, project management or other relevant field is an advantage; relevant university degree is an asset.

Experience: A minimum of 5 years of UN experience, including progressively responsible experience in project operation and administration; training and practical experience in report drafting is desirable

Languages: Fluency in English is essential and a good working knowledge of another official language of the Convention (French and/or Spanish) will be desirable

Other skills: Fully proficient computer skills and use of advanced functions on UN standard applications such as Lotus Notes, Word, Excel, IMIS.
Experience in database and GIS applications such as Microsoft Access and ArcView would be an advantage.

Annex 7: CITES/MIKE Aerial Survey Standards

1. These standards need comprehensive revision as they no longer reflect the state-of-the-art of aerial census and, if continued to be used, will lead to unreliable census results. The whole technology surrounding aerial census has changed hugely over the last few years, and this should be reflected in a new set of standards.

Total Counts

2. The treatment of Total Counts is particularly weak and it simply wrong to present a Total Count as a 100% sample count with accordingly no sampling error or bias. This is very misleading. The hypothesis that the outer boundary of any given transect ends exactly at the centre line of the last transect is difficult to test -- which is why this was never relied on when the specifications for self-regulating and self-correcting total counts were drawn up. And in practice, rarely will the dead zone under the aircraft be completely counted along the next transect.

3. Discussions of Total Counts should always be accompanied with a severe health warning as they are open to excessive bias and errors unless there is extreme attention to small details. Counting error and bias in a total count simply cannot be ignored, especially since it can be so easily measured by counting a number of blocks more than once. e.g. all blocks are counted to the census design, then a sample of blocks is recounted at, say, half the intensity. Are the observed densities the same?

4. Within and between block variance can be estimated by treating each transect in a total count as a sampling unit and each block as a stratum. The terms N(N-n)/n are effectively zero, but it still gives an indication of the potential uncertainty in the total count estimate.

Census plan

5. The concept of a Census Plan presented by these CITES/MIKE standards is weak. A strong mental model is required to inspire and guide the entire census operation.

6. There are five parts to an efficient Census Plan:-

   - **Objective:** the objective of a census is to carry out an experiment into quantifying the numbers and distribution of wildlife in a specific area at a specific time. The data must be strictly comparable with previous surveys in the same area, and with surveys of the same wildlife in other areas.

   - **Census Design**: all the usual stuff about selection of census method, transect orientation, selection of aircraft, crew experience, height above ground and ground speed etc, but stress that the objective here is to use the census design to minimise sources of errors and bias and keep them constant both within a census and between censuses. Good census design also minimises many of the problems encountered with Data Validation.

   - **Data Capture**: at low, medium and high levels of technology -- to suit the abilities and training of the pilot and census crew.

- **Data Validation**: completely missing in the current CITES/MIKE standards – but absolutely essential to create confidence in the data. Many of the problems revealed by Data Validation can be minimised by good census design.
- **Data Analysis**: all the usual stuff on calculating numbers and distribution -- but only once the data are validated.

Data Validation

7. The key objective to data validation is to first find out if there is a problem and if there is one then to fix it. Specifically:-
   - **Pilot performance:** How is the pilot performing against the selected targets, and how does pilot performance change throughout the day and throughout the census? To answer this, height agl, ground speed, cross track error and elapsed time must all be monitored within each transect/block. Pilot performance must be analysed both within and between transects/blocks/elapsed time -- transect/block totals do not give enough information.
   - **Observer performance:**
     - Are the observers counting more/less as the pilot flies slower/faster, higher/lower, uphill/downhill -- i.e. is the pilot influencing observer performance? If so, the bias must be fixed.
     - Are the observers (on either side of the aircraft) seeing the same number/groups of animals, are they equally good at estimating/counting/photographing: i.e. are there differences in performance between observers. If so, the bias must be fixed, or in extreme case one observer's data rejected.
     - Are the observers seeing the same numbers of animals at different times of the day, or upsun/downsun etc: i.e. is there a problem? If so, the bias must be fixed.
   - **Pilot and observer fatigue:** Pilot and observer fatigue are revealed as a fall off in performance (flying standards, numbers counted) as the census progresses:
     - Type 1 fatigue shows during the course of a census, from Day 1 to Day n: observers tend to count fewer animals towards the end of a long census than at the beginning.
     - Type 2 fatigue shows as the day progresses: observers tend to count fewer animals later in the day than earlier.
     - Type 3 fatigue shows within individual transects/blocks: observers tend to count fewer animals towards the end of a long transect, or a long block, than at the beginning.
   - **Differences between aircraft:** if more than one aircraft is used on the same census then data must be validated both within and between aircraft.
8. Good census design minimises these problems, but they must always be checked before data are analysed.