

## **CITES MIKE PROGRAMME**

### **MINUTES OF THE 2nd TECHNICAL ADVISORY GROUP (TAG) MEETING**

**HELD IN FARNHAM, UK, ON THE 27<sup>th</sup> & 28<sup>th</sup> MAY 2002**

In Attendance :	Richard Barnes, TAG Specialist member Kenneth Burnham, TAG Specialist member Colin Craig, TAG member for S. Africa Iain Douglas Hamilton, TAG member for E. Africa Holly Dublin, TAG Specialist member Nigel Hunter, MIKE Director and Chair of the Meeting Hugo Jachmann, TAG Specialist member Moses Kofi Sam, TAG member for W. Africa  Philippe Bouché, MIKE Support Officer for W. Africa Sani Massalatchi, MIKE Support Officer for W. Africa Philip Stander, MIKE Support Officer for S. Africa
Absent with Apologies :	Martin Tchamba, TAG member for C. Africa Zhang Yue, TAG member for S.E. Asia Sebastien Luhunu, MIKE Support Officer for C. Africa Edison Nuwamanya, MIKE Support Officer for E. Africa Geoffrey Howard, IUCN EARO Programme Coordinator
Absent but Invited :	Rahman Sukumar, TAG member for S. Asia
Invitees:	Rene Beyers, Resource Specialist Bob Burn, Resource Specialist Ian Dale, Resource Specialist John Hart, WCS Steve Blake, WCS
Rapporteur :	Linda Yeo

#### **1. Minutes of the last meeting**

Since no member had flagged any comments on the minutes of the last meeting when previously requested, they were duly tabled.

The Chair informed that the minutes are posted on the CITES MIKE website.

#### **2. Matters Arising**

##### **2.1 Terms of Reference for TAG**

A copy of the Notification to the Parties No. 2000/025 dated 23 March 2002, as issued by the Secretariat, setting out the terms of reference for the TAG to assist the Secretariat with the MIKE programme was provided to the members.

## 2.2 Progress Reports on MIKE Implementation

### 2.2.1 Africa

An account of the progress of MIKE implementation was given by the Sub-regional Support Officers (SSOs) for their respective regions, Mr Philip Stander, Mr Philippe Bouché and Mr Sani Massalatchi.

On behalf of the SSOs for East and Central Africa, who had been unable to attend this meeting due to immigration visa issues, the Director presented an account of the progress of MIKE implementation in these two sub-regions.

From the various GPS and LEM training workshops that have taken place in each sub-regions since January, the following issues were flagged:

- i. In Southern Africa sub-region, GPS training is now underway in all the Range states, except the sites in Zambia and Zimbabwe where there is a lack of ready communication between site and the MIKE SSOs;
- ii. In relation to the lack of contact with the relevant wildlife authorities in Nigeria to kick-start on MIKE implementation, Mr Moses Kofi-Sam offered to link the Ghana focal point in the Nigerian wildlife authority with Mr Philip Bouché and Mr Sani Massalatchi (West Africa sub-region);
- iii. The need to obtain further funding to increase the number of GPS equipment available to the field rangers (currently at 2 GPS per site), particular in sites where patrol contingents are large; and
- iv. The pros and cons of the Garmin e-Trex compared with the Garmin 12 were discussed. Two operational limitations vis-à-vis the protocols required in the LEM forms were highlighted. These were the lack of being able to set a time frequency for getting way points automatically on the track-log as well as the inability to record the time of each way-point log in the e-Trexes and when downloading.

It was decided that the SSOs should report the technical limitations of the e-Trexes to the Central Co-ordinating Unit (CCU). The Director would then approach the manufacturer on suggested technical modifications to the e-Trex, as well as investigating sponsorship possibilities for further purchases.

In the context of forest patrols, it was agreed that the current e-Trexes should be used by turning on the GPS at the outset, keeping it on, and getting a track way point every half-hour.

The SSOs are currently conducting in-depth training sessions at individual sites in the Range states. With the procurement of equipment in place\*, the next step would be for the SSOs in the various sub-regions to commence the Data Management Process once the monthly LEM reports flow.

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\* The procurement of computer hardware, software and power supply equipment for distribution to the sites is currently underway and this tender process is assisted by Wildlife Conservation Society (WCS) in the United States.

A Regional meeting has been scheduled for September 2002 in Nairobi, to be attended by the Directors and National Officers of the Range states, with the aim of presenting a draft progress report in preparation for CoP 12. The focus of this meeting will be on implementation progress, rather than technical issues or trends. As such, the TAG members are not expected but are welcomed to attend this Regional meeting.

### 2.2.2 *Asia*

The Director reported on the results of his recent visit to the United States with the Deputy Secretary General of the CITES Secretariat (Dr Jim Armstrong).

"In-principle" agreements have been reached with WCS and Conservation International (CI) to partner MIKE in Asia, as well as in Africa. A funding proposal is scheduled for submission in June 2002 to the Asian Elephant Conservation Fund and CEPF fund for implementing MIKE in S. E. Asia.

In the context of South-east Asia, sites have been discussed but no pilot project is planned. The funding proposal to the USFWS presents a real possibility of having funds secured to enable a 2 year phase I implementation start-up before the CoP 12. This leaves South Asia (India, Sri Lanka, Nepal, Bhutan and Bangladesh). The plan is for the Director to visit India to discuss MIKE implementation in August or October.

The TAG agreed with the recommendation by Dr Holly Dublin that the representatives of Asia be invited to the Regional meeting scheduled for September in Nairobi, as part of the overall process of engagement in the MIKE process.

## **3. ANALYTICAL FRAMEWORK AND DATA MANAGEMENT**

Mr Rene Beyers gave a progress report on the analytical framework and data management system development.

### **3.1 Data Capture and Data Flow**

In the analysis of Data Capture and Data Flow, the TAG stressed the necessity that all raw data, though it will be captured and a copy maintained at the site (and possibly the national level, as desired), must also be transferred all the way up to the Central Coordination Unit for the purpose of analysis. It is anticipated that data collection, especially in the early stages of the operation of MIKE, will build up over time and that some subsidiary variables will need to be obtained and updated at the national level. The agreements made to date concerning data capture, handling and analysis at each level (site, national, sub-regional, continental) and who is responsible for each, will be reinforced.

### **3.2 MIKE Database Design**

In terms of the MIKE Database Design, it was confirmed that a single, integrated database has been designed which includes data on elephant population estimates, illegal killing (carcasses and other signs), patrol effort, and the factors which may influence illegal activities.

The software used for the database will be Microsoft Access combined with ESRI ArcView 8.1+.

### **3.3 Law Enforcement Effort**

In the Law Enforcement Effort, law enforcement data are to be used for two purposes:

- a. to determine the effectiveness of law enforcement effort at the site level, and
- b. as an independent variable/factor in the analysis of data on the illegal killing of elephants.

In seeking appropriate methods of assessing the effectiveness of law enforcement, the use of "catch-effort" models that have been developed in relation to single sites were examined. It was noted that the existing methods are not easily generalised to deal with the multiple-site design of MIKE, which is characterised by different conditions and enforcement practices in the different sites. Furthermore, to produce combined estimates across sites imposes the need for measures which are standardised for enforcement effort and this in turn implies the need for a generally applicable measure (or index) of effort. The development of this measure requires further investigation and refinement using real data from the sites.

### **3.4 Overall Statistical Analysis of MIKE Data**

In the Overall Statistical Analysis of MIKE Data, the use of spatial modelling has been suggested as a foundation for the analysis of MIKE data, including relating factors such as distance from roads, patrol effort, villages, logging activity, etc. to illegal killing of elephants.

It was further suggested that this approach could be used in the analysis of information from the population surveys as well as the carcass data. The TAG supported this approach and agreed to continue to explore the use of spatio-temporal modelling.

However, since this methodology is under development and requires further refinement, the Director was requested to liaise with those undertaking R & D in this field and to optimise the use of MIKE resources.

It was also recognised that the development of this approach, as it pertains to MIKE, would be greatly aided using real data, including geo-referenced information on various factors.

It was agreed, therefore, that existing data from three MIKE sites will be made available for this purpose.

The TAG encouraged the Director to develop realistic solutions based on the recommendations above, with the objective of providing TAG with a clear framework for their consideration as soon as possible and for enabling the Director to present a clear plan of the framework for the data analysis in his progress report to the next COP.

## **4. LEM FORMS**

The LEM patrol form was raised with the TAG because of further feedback from the Data Analysis process and from the Sub-regional training workshops.

### **4.1 Patrol Form**

In revisiting the Patrol forms, the TAG reconfirmed that the Observation Sheet be retained with the addition of some indirect measures appropriate to the forest patrols that the current form provides for.

Secondly, the TAG reconfirmed that it saw references to Habitat Types in the method of patrolling as significant only in terms of "visibility" and that this variable should be treated as a change of patrol leg issue, rather than as a change of condition within a patrol leg.

It was also confirmed that the Live Animal Form was a voluntary form.

In formulating the LEM forms, the TAG reiterated that the need to strike the balance between simplicity and keeping the right information for analysis was important.

### **4.2 Patrol Debriefing**

On the recommendation of adding a 'quality assessment of information' during the debriefing, a concept that is used in the ETIS Forms, the decision of the TAG was that this would be best left to the assessment by the Site Officers.

## **5. POPULATION SURVEYS**

### **5.1 Survey Standards**

#### *5.1.1 Aerial Survey Standards*

The draft document titled "Aerial Survey Standards" by Dr Colin Craig was presented to the members for discussions.

The TAG tabled various suggestions towards improving the aerial survey standards. A working group comprising Dr Craig, Dr Douglas-Hamilton, Dr Dublin and Mr Philippe Bouché was formed to integrate the various comments and suggestions into a revised draft of the survey standards, which shall be resubmitted to the TAG members by electronic mail for further input.

It was recommended that the existing aerial survey data sheets previously approved by the TAG be incorporated to the draft aerial survey standards, and that the Director should obtain and forward these data sheets to Dr Craig after the meeting.

#### *5.1.2 Forest Survey Standards*

It was noted that Dr Richard Barnes was spearheading the development of similar standards for forest population surveys and the draft of these standards would be circulated to the TAG for comment, as soon as it is received by the Director from Dr Barnes.

## **5.2 Survey Effort**

In the context of the survey effort required in population surveys, the TAG discussed in detail the two appendices which formed part of the draft aerial survey standards (Appendix 1: Required Survey Effort – *Effort to detect population change* and *Power to detect a change in mortality rate* and Appendix 2: Optimal Allocation of Survey Effort).

A presentation was also given by Dr Barnes on the survey effort required in forest population surveys.

The issue of “Effort vs Power” was deliberated at length by the TAG. It was subsequently agreed that this issue should not form part of the survey standards and that appendices 1 and 2 should be removed from the draft aerial survey standards written by Dr Craig.

It was further agreed that the issue of survey effort be discussed separately by a working group comprising Dr Craig, Dr Barnes, Dr Burnham, Dr Hart and Dr Burn. Following the discussions of this working group, it was agreed that revised drafts of the survey effort required in aerial and forest population surveys be submitted by Dr Craig and Dr Barnes to the TAG for review.

## **5.3 Peer Review**

The review of the survey standards and survey effort by the TAG will continue by email dialogue till a unified position is achieved.

It was proposed by Dr Dublin that once these drafts are agreed to by the TAG members, the CCU should make arrangements for these drafts to be posted on the website to facilitate a process for constructive and wider peer review.

## **6. NEW TECHNIQUES AND TECHNOLOGIES**

### **6.1 Distance Sampling Technique**

It was noted that the reports on the work undertaken on distance sampling technique in Botswana were still being awaited. Dr Ken Burnham, however, was able to share with the TAG members, the origins of distance sampling technique used in relation to low frequency sightings of marine mammals in the United States. He went on to explain some of the problems of relating this technique to high frequency situations. He also recognized the advantages and disadvantages which had been flagged by the members at the previous TAG meeting of using this technique in the context of elephant population aerial surveys.

It was concluded that Dr Hugo Jachmann should try and obtain the Botswana reports relating to the use of distance sampling and these data would be examined by both Dr Jachmann and Dr Burnham with the aim of reporting their findings to the TAG members at the next meeting.

## **6.2 Cybertracker**

The Director reported on the desire of the EC to facilitate further development of the Cybertracker under the auspices of an EC project. It was uncertain when the EC funds might become available, however, it was hoped that US\$380,000 might be made available to develop the Cybertracker in the context of the MIKE monitoring programme.

It was also noted that other similar technologies are currently being investigated, eg. in the Southern African rhino work. The TAG supported the suggestion that a small workshop be convened to discuss the other innovations alongside the Cybertracker, with a view to making a recommendation to the members on the feasibility of these technologies.

## **7 CITES MIKE – NGO Dialogue Session**

The Chair tabled the draft responses to the list of questions that were received from the WWF and other NGOs pertaining to the open-dialogue session to be held the following day.

The TAG provided inputs and finalized the formal responses to these questions, a copy of which is attached hereto in Annex I.

## **8 NEXT TAG MEETING**

Proposed that the timing and venue of the next regular TAG Meeting be scheduled in January 2003 in Ghana, with the possibility of an interim meeting to be held in September 2002 in Nairobi to consider any technical issues pertinent to the Progress Report being provided to the Range states at the regional meeting in September 2002.

The Chair concluded the meeting by thanking members of the TAG, MIKE staff and the Resource Specialists for their input to this TAG Meeting.

## ANNEX I

### QUESTIONS FOR THE MIKE TEAM

#### A. MIKE Statistical design

1. Does the TAG judge that the statistical power of the MIKE analytical framework is adequate to assign particular causality to any changes in illegal killing? (WWF Species Programme)

*In interpreting this question it is important to distinguish that the statistical power of the MIKE design and causality are two different issues.*

*It is clear that sufficient power to detect significant change will require data collected over a period of several years. The statisticians feel that tentative estimates of the statistical power of the current sampling design could be obtained using relatively little data, and this is currently under discussion by the TAG.*

*The issue of causality was addressed at the last CoP, when it was agreed that it was an unrealistic expectation because it never was going to be possible for MIKE, or any other system, to establish causality with absolute certainty. However, when sufficient data become available, MIKE will be able to provide robust measures of the strength of evidence for particular causal effects. Indeed resolution 10.10 was amended in recognition of this at CoP11. Instead MIKE will attempt to identify the factors that are influencing any decline and with sufficient collection of data over time, it should get easier to detect the possible influence of any factor, including future CITES decisions. The fact that MIKE was originated in a CITES context to help CoP processes, has masked the potential of MIKE to inform Range States on what is occurring in their countries and Sub-regions, irrespective of any CITES decision. The range states are certainly aware of this and welcome it.*

2. Despite the re-wording of Decision 10.10 at CoP11, a number of CITES, Parties are still saying that they will await the results of MIKE before deciding whether or not the decisions made at CoP10 were damaging to elephant conservation. How confident is MIKE that the Parties are fully aware of MIKE's limitations in terms of identifying a confirmed causal relationship between changes in trends and CITES listing decisions? (Susie Watts)

*In terms of the decisions made at CoP 10, MIKE will not determine whether those decisions were damaging or not, because they predate the start up of MIKE. WE need now to look ahead. The issue therefore is: are parties aware of what MIKE can and can not do in terms of assisting future decisions? Most parties are aware that MIKE will not be in any real position to provide information that might assist any decisions under consideration at CoP12. Nevertheless the feedback we are getting is that the range states, at any rate, do believe that MIKE can provide information that will make a significant contribution to their decision making, be it at the site level, the sub-regional*

level and the CoP level, hopefully from CoPI3 onwards. In the longer term, as MIKE gains enough sites in each range state, it should be possible to assist more usefully at the national level.

## **B. MIKE operational design**

3. When developing implementation protocols, frameworks, and capacity, is attention paid to ensuring MIKE implementation will be sustainable? e.g. not reliant on continued external inputs? Or is this goal unrealistic? (WWF Species Programme)

*It is a fundamental objective of MIKE to help the range states integrate the monitoring system into their own routine, such that they are not dependant on external support in the longer term. A great deal of effort has gone into a dialogue with the range states clarifying this objective and confirming that MIKE will not support a process which requires bonuses, primes, etc. to undertake what they themselves have mandated to be developed as part of their own capability. To be fair, the range states have acknowledged and confirmed this objective. But in this regard, we are also requesting site partners, such as yourselves, who are willing to help with MIKE, to negotiate at the outset of any project, a commitment from the relevant Government that they can and will absorb any incremental staffing and other resources, into their recurrent budget. Because law enforcement monitoring and data analysis can still be very effective, using existing resources, this goal is not believed to be unrealistic. There is a bigger challenge in getting population surveys, particularly forest ones, integrated on a self sufficient basis. However the range states are actively considering a regional approach as part of the solution.*

*If there is a sustainable issue, then it is probably not so much at the range state level, but more the issue of maintaining the Sub-regional Support units and the Central Co-ordinating unit. In considering the future of these units, it will be important to recognise their functions in terms of capacity building, data analysis and co-ordination, sub-regional and global co-ordination, harmonisation and standardisation, etc.*

4. How effective has MIKE implementation been in boosting local capacity for wildlife monitoring and enforcement? (WWF Species Programme)

*It is too early to say. It is important however to distinguish two aspects of local capacity. The first is developing existing capacity to be more effective. MIKE should be able to achieve that. The second is helping capacity to grow to more optimal levels. This is harder because of the reluctance by Governments to increase wildlife sector budgets. This latter aspect is a challenge for all of us, not just MIKE.*

5. What are the procedures for reporting incidents from point of origin to final incident filing, for example regarding:

- consistency between areas and participating parties,
- specialised equipment and personnel required for collating data and reporting,
- generation of centralised results and reports? (Jo Hastie, EIA)

*It is part of the MIKE design that the data collection and analysis should be systematic in terms of methodology and time. Fortunately the range states fully subscribe to this standard, because they want the ability to know how the information was generated, know that it is of an internationally acceptable standard and be able to share it with each other, particularly, where they have cross-border linkages. To achieve this goal, MIKE uses the TAG for harmonising the science and methodology; provides initial training at the Sub-regional level and has the CCU to oversee the maintenance of consistency between Sub-regions.*

*More specifically, this consistency is supported by MIKE forms, and even where some countries have their own forms, there is agreement that they will ensure MIKE data is collected. It is supported by designated National and Site Officers. It is supported by standardised equipment. It is supported by a data management process that starts at the site level and builds up at the National, Sub-regional and Continental levels. Reports at the Sub-regional level have to be agreed with the Sub-regional Steering Committees.*

6. Are there formal systems established for cooperation and exchange of information between MIKE and ETIS? (WWF Species Programme)

*MIKE is an information system capturing data on populations and illegal killing, largely derived from in situ operations, whilst ETIS is an information system capturing data on illegal trade largely derived from ex situ operations. It is not yet clear though where the two exactly start and stop. For example, where do road block activities fit in. There is a need therefor for a formal system to be established. At present that has not been done, but it is an objective to try and achieve such linkages. Obviously where MIKE processes produce information relevant to ETIS, then sending on such information will be encouraged. It is also no accident that we have the Reading University Statistical Unit helping both of us, as we wish to have their help in linking up the information. But it is also useful to see the information from MIKE and ETIS as being one of "checks and balances". So for example, if either one is picking up a trend that the other is not, this can be used as feedback, to help the other review their own process.*

7. What is the current policy on data access, use and ownership? This is a point needing clarification among NGOs, Range Country Authorities, MIKE and the Secretariat.

*Whilst there is an unwritten policy that has been agreed at the implementation meetings, a policy will be properly documented, and it is the intention to formulate a policy on data ownership and dissemination and request approval for it at the MIKE meeting of the Range States scheduled for September. In answering this question it is important to distinguish raw data from partially or fully analysed data, which becomes information. It is worth emphasising however that the Range States have indicated their keenness to have MIKE reviewed information placed in the Public Domain. This unwritten policy is as follows:*

*MIKE is a programme mandated by the range states to systematically collect standardised data that will provide information to help them formulate management and policy decision. The raw data and information therefore belongs in the first instance to the Range States themselves. This is fairly clear cut at the site and national levels, where the collection and site level analysis is undertaken. From the National level, the raw data and information moves onto the Sub-regional Support Office, for Sub-regional co-ordination. The results at this level are provided to the Steering Committees. The raw data and any subsequent information added along the way then carries onto to the Central Co-ordination Unit, who carry out the sub-regional and Continental level analyses, which are again shared with the Range State Directors. The MIKE staff and the TAG members who can and should facilitate in assisting the analysis process, etc. are in no position to release this data and information.*

*The release of raw data and information for a country remains at the discretion of that range state. At a Sub-regional level it is at the discretion of the Steering Committee.*

### **C. MIKE Implementation**

8. In how many field sites is MIKE currently returning reliable data? (WWF Species Programme), and

9. What is the projected time frame for all African sites returning reliable data? (WWF Species Programme)

*For Population surveys, some 15 sites have had a survey in the last year, and it is planned that all sites will have had a survey done before the end of next year. As at the end of May 2002, it remains true that some 5 Southern African sites are currently returning reliable LEM data and 2, possibly 3, sites in Central Africa. This is because those sites have been operational for some 2 years. For the rest MIKE implementation only began in October 2001. All the Sub-regions have now had their LEM training workshop and the Support Officers are following up with individual site visits. Over the next 2-3 months, we hope to see 80% of all sites delivering monthly LEM reports.*

10. How far advanced is MIKE implementation in Asia? (WWF Species Programme)

*Notwithstanding an implementation meeting in S. E. Asia (Burma, Thailand, Malaysia, Indonesia, Laos, Vietnam, Cambodia and China) in 1999, MIKE implementation in Asia has not started, because of lack of funds. Under these circumstances, a fundamental decision was taken to concentrate on getting Africa up and running, before concentrating on Asia. However the DSG, CITES Secretariat and the MIKE Director, recently visited the USA and held discussions with USFWS, CI, WCS and WWF-US, and there is now a real possibility of having funds secured to enable a 2 year phase 1 implementation in S. E. Asia, started before CoP12. This leaves S. Asia (India, Sri Lanka, Nepal, Bhutan and Bangladesh). The plan is for the Director to visit India to discuss MIKE implementation during August or October.*

11. If MIKE were implemented in Asia, would MIKE's statisticians be able to alert us that the Asian elephant has gone extinct in any given year, if less than 60 000 African elephants have died that same year?

- If the answer is yes, has something changed in the statistics of MIKE to enable this to be possible?
- If the answer is no, does it make fiscal or ecological sense to implement MIKE in Asia? (WWF Species Programme)

*Attempting to make such a simple extrapolation from Africa to Asia is misleading. The question implies that if MIKE fails to detect a drop of 60,000 elephants across Africa (i.e. approximately 10% of the continental population) then it would not be able to detect a similar absolute change in Asian elephant numbers. The implication is that the entire population of Asian elephants could go extinct without MIKE detecting it.*

*This is not the case. 60,000 of 600,000 is not the same as 60,000 of 60,000. For example, a 50% decline in the Selous population, from approximately 110,000 to about 55,000 did not go undetected by aerial counts and statistical tests. Today the Selous population is estimated in excess of 60,000 and we estimate that aerial surveys at 10% intensity should be more than adequate to detect a significant population decline between two surveys. For smaller populations, like Addo in South Africa with 300 individuals, even smaller changes in absolute numbers would be detected by annual counts and individual monitoring.*

*Perhaps a more analogous situation to Asia is West Africa with numerous small, pocketed populations numbering in total less than 10,000. We expect MIKE to detect much smaller changes here than that implied by the question.*

*Perhaps the more important question is whether Asia would enjoy the benefits that MIKE is bringing to elephant conservation in Africa. MIKE has a broader remit that may be overlooked.*

- *It is engaging range states in valuing information as a basis for decision making*

- *It is developing their own capacity to collect such information*
- *It is empowering site managers to collect, analyse and use the information for guiding their optimum use of scarce resources.*
- *It is encouraging real cross-border collaboration including a demand for systematic and harmonised approach to data management at different levels including the sub-region*
- *It is a catalyst for harmonising different monitoring systems initiated by different donors because MIKE was mandated by the range states themselves, including the appointment of MIKE officers*
- *It is a catalyst for moving elephants and their conservation centre stage*
- *By encouraging range state ownership of the process in a Sub-regional context, it draws out a greater sense of responsibility and concern over failure to maintain elephant populations.*

12. What level of commitment and enthusiasm has been shown by government regulatory authorities with whom the TAG is working to implement MIKE? (WWF Species Programme)

*First it is important to emphasise that the TAG does not work per se with the Government wildlife authorities. This is largely the responsibility of the MIKE staff. That said, the issue of Government commitment and enthusiasm is pertinent. Whilst MIKE implementation still has a long way to go, the progress that has been achieved so far, would not be possible without range state commitment. Evidence of this can be seen in that each sub-regional workshop has been attended by all participating countries. Since then, we have lost touch with Nigeria (but we are not alone in this). All the range states, except the 1 above, have put in place their National and Site officers. The great majority were regularly complaining about the delay in starting up MIKE. There is constant pressure to extend MIKE to more sites. Obviously this could be a honeymoon period, but if MIKE can continue to foster that this is a range state owned programme, with the potential to benefit each and every range state, as well as fostering cross border collaboration and we do not raise false expectations, then I think the commitment and enthusiasm will stay.*

#### **D. MIKE funding and NGO partnerships**

13. How large is the current shortfall in funding for MIKE and does the Director think that this shortfall will compromise the overall success of MIKE, either in terms of the quality of data/data analysis or in terms of the longevity of the MIKE programme overall? (Susie Watts)

14. What resources does MIKE still require to enable it to become fully functional in both Africa and Asia ? In this regard, how does the Director see partnerships developing with NGOs ? And what do they think NGOs can do to help more, particularly with respect to capacity building within range states and what it thinks NGOs can do to help more, especially in terms of capacity building within range states. (PJ Stephenson, WWF International)

*The current funding is for 18 months and is restricted to Africa. There is now a likelihood that funds can be secured to allow a 2 year phase in S.E. Asia. The estimated requirement to provide a 2 year implementation programme in that Sub-region is approximately US\$700,000. The vision is that we would like to provide support for 10 years so as to remove any risk of the capacity developed falling backwards, whilst ensuring full self sufficiency at the end of that period. At present, the situation is such that there is a real risk that at the end of the initial periods, MIKE will take a nose dive. If that happens, then MIKE is severely compromised. We are therefore urgently trying to secure longer term funding. The DSG and I recently visited Brussels and we believe that the EC want to help sustain MIKE through the longer term. The current situation is that the EC are looking in to which is the most appropriate budget line for assisting MIKE.*

*Whilst donors such as the EC can provide the backbone for supporting MIKE, very real assistance has been provided by some of the NGOs. The potential for this obviously continues and we actively encourage and seek such partnerships. This partnership can take different forms. Many sites have or can have partnerships between the Wildlife Agency and the NGO. Such partnerships could adopt the monitoring process in their project support, with the provision of training, equipment (for example, we now know that GPSs are part and parcel of every day monitoring life, yet MIKE was planned initially on only 2 GPS per site), LEM capacity building, etc. In such a situation, we would request two things, the training, equipment and operational activities are harmonised and that any incremental development of staff, vehicles, etc. are able to be continued and sustained by the wildlife agency, post project. Another approach can be a thematic one, whereby the NGO can contribute, lets say, to population surveys or data management development across sites. One or two NGOs are indicating their enthusiasm by becoming full MIKE partners which broadens the areas of assistance even further.*

*Because MIKE is a range state mandated programme, then it is an opportunity to join forces to help the range states help themselves, but hopefully in the spirit of a family*

rather than “empire carving”. But obviously the NGO needs to believe in MIKE and feel it is worthwhile.

#### **E. MIKE and ivory trade policy**

15. Is MIKE capable of delivering the requisite information to enable the lifting of the ivory ban? Is MIKE not just another case of putting in place a system which will never meet the conditions and thus ensure that there can never be any ivory trade? (Yaa Ntiamoa-Baidu, WWF International)

*Essentially MIKE is a programme for equipping Range States with better information about their elephants and what is happening to them. What MIKE is likely to do is demonstrate that illegal killing is motivated by more factors than the decisions taken by a CoP. The connection or otherwise between what one range state does and its impact on another should also become clearer. This should facilitate each range state to decide more confidently on how it would respond to requests for resuming any ivory trade. MIKE should also facilitate the range states dialoguing with each other, developing trust and changing a decision more speedily, if it proves necessary. Both sides of the ivory trade spectrum have expressed their fear that MIKE is a vehicle for banning the trade for ever or for allowing a resumption of trade, so presumably they cancel each other out. In reality, MIKE should be able to and hopefully will provide information that is transparent, has integrity and is trusted. It is up to the parties on how they use that information to determine their policy. The difference will be that there should be less criticism that such decisions were based on a fear on what might happen, because we should have a better indication of whether that fear was well grounded or otherwise.*

16. Is the MIKE process sufficiently robust/rigorous and neutral to withstand influence from either side of CITES debates? (Rob Little, WWF South Africa)

*Time will tell, but the essence of MIKE is to be a supplier of information that is robust rigorous and neutral. The point has been put to all range states, that if MIKE is to succeed, it has to have objectivity and integrity and that we can not predict what information will come out of MIKE. So far, no range state has disagreed with that, and they all seem aware that MIKE may produce information that does not support their hopes and aspirations, whatever side of the spectrum they happen to be. Lastly we believe MIKE’s neutrality has to be defended to the hilt and we believe everyone supports that position.*

**ACTION PLAN**  
(On issues related to the TAG)

<b>Action Points</b>		<b>Action by</b>
<b>1.0 Minutes of the Last Meeting</b>		
1.1	Posting of minutes on the MIKE website.	MIKE Director
<b>2.0 Matters Arising</b>		
<b>Progress on MIKE Implementation</b>		
2.1	The SSOs to report technical limitations on the e-Trex to the CCU. The Director shall liaise with Garmin on technical modifications to the E-trex, and sponsorship possibilities for further purchases.	MIKE SSOs/Director
<b>3.0 Analytical Framework and Data Management</b>		
3.1	The SSO for Southern Africa to make available data from three MIKE sites to the Data Support Team to enable the test-run analysis of MIKE data.	Philip Stander/Data Support Team (Rene Beyers, Bob Burn, Ian Dale)
3.2	The Director and the Data Support Team to conclude the Data Analysis Framework; to submit this to the TAG by email in time to incorporate it in the draft Progress Report to be presented at the Regional Meeting in September.	MIKE Director/ Data Support Team
<b>5.0 Population Surveys</b>		
<b>5.1 Survey Standards</b>		
5.1.1	Recommended that Director obtain the existing aerial survey data sheets previously approved by the TAG and forward these to Dr Craig for incorporation to the draft aerial survey standards.	Dr Craig / MIKE Director
5.1.2	Dr Craig shall integrate the comments and suggestions of the working group into the revised draft Aerial Survey Standards, which shall be resubmitted to the TAG members by electronic mail for further input.	Dr Craig
5.1.3	Dr Barnes to submit the equivalent draft of Forest Survey Standards which shall be submitted to the TAG by electronic mail for further input.	Dr Barnes
<b>5.2 Survey Effort</b>		
5.2.1	Dr Craig and Dr Barnes to submit the drafts of the survey effort required in aerial and forest population surveys to the TAG for review, following the working group deliberations.	Dr Craig/ Dr Barnes
<b>6.0 New Techniques and Technologies</b>		
<b>6.1 Distance Sampling Technique</b>		
6.1.1	Dr Jachmann to obtain the Botswana reports relating to the use of distance sampling. These data to be examined by both Dr Jachmann and Dr Burnham and to submit their findings to the TAG at the next meeting.	Dr Jachmann/ Dr Burnham
<b>6.2 Cybertracker</b>		
6.2.1	The Director to co-ordinate a small workgroup to investigate the other innovations alongside the Cybertracker, with a view to making a recommendation to the TAG on the feasibility of these technologies at the next meeting.	MIKE Director

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