

**GICHD Evaluation of the German  
Project Co-ordination “National  
Integrated Database” Project in  
Cambodia**

**May 12 – May 18, 2001**

*Geneva  
May 30, 2001*

## **1.0 Introduction**

In late April, the Geneva International Centre for Humanitarian Demining (GICHD) was approached by the German Foreign Ministry in regards to performing a project evaluation on their behalf. A team of two individuals was agreed upon. Mr. Eric M. Filippino of the GICHD and Mr. Mark Yarmoshuk of the Swiss Federal Institute of Technology – Zurich (ETHZ). The intention was to have a mine action and a developmental perspective as well as technical expertise in regards to information systems, the Information Management System for Mine Action – Field Module (IMSMA-FM) in particular. The mission was conducted from May 12 through 18.

After discussion with the German Government the terms of reference were decided to be the following: The evaluation team was to evaluate the German Project Coordination's (GPC) IMSMA FM integration pilot project in Cambodia with an aim to determining two things:

- Were the project goals of value to the mine action process in Cambodia and;
- Was GPC achieving those goals.

We would like to take this opportunity to thank both the German Embassy in Phnom Penh that provided logistical support as well as Mr. Peter Franke, Mr. Ivo Litzenberg and Mr. Ernst-Georg Khrom of GPC who proved to be very gracious and forthcoming hosts.

## **2.0 Itinerary & Interlocutors**

### **Saturday, May 12:**

Almost upon arrival the evaluation team proceeded directly to a meeting with the German Ambassador, Mr. Harald Loeschner and the Economic Affairs Officer, Mr. Robert Strnadl. This meeting was primarily a briefing of the German Embassy's position, the history of involvement in the project and their expectations of the evaluation.

### **Sunday, May 13:**

The evaluation team flew to Battambang accompanied by Mr. Krohm, Project Director of GPC Germany. Upon arrival we were met by the GPC Terrain Management and Training Supervisor, Mr. Franke and proceeded by car to the GPC office/training facility in Sisophon. The rest of the day was spent in general discussion with GPC. In addition, the GPC Information Management and Training Supervisor, Mr. Litzenberg was present.

### **Monday, May 14:**

The first part of the day was spent observing ongoing Terrain Management (TM) and Information Management (IM) classes as well as further discussions on the project in general. In the afternoon the team returned to Battambang with Mr. Krohm and Mr. Litzenberg who had taken the decision to medically evacuate to Germany due to a recurring illness.

In the afternoon the team made a visit to Mr. Mam Neang the Project Manager of CMAC Demining Unit 2 in Battambang for a general brief on their mine clearance as well as survey (Mine Marking Team) activities.

**Tuesday, May 15:**

The evaluation team took the early morning flight back to Phnom Penh. In Phnom Penh the evaluation team met with Mr. Ian Bullpitt, Chief Technical Advisor to CMAC and Mr. Sam Sotha, Director of the CMAA. Mr. Filippino departed Cambodia in the early evening, while Mr. Yarmoshuk remained. Later in the evening, Mr. Yarmoshuk had follow-on discussions with Mr. Reto Gass, a consultant with Geospatial International.

**Wednesday, May 16:**

Mr. Yarmoshuk met with Geospatial International, the organisation currently conducting the Level 1 Impact Survey in Cambodia, and Handicap International who, in conjunction with the Cambodian Red Cross, maintain a database of landmine victim information.

**Thursday, May 17:**

Mr. Yarmoshuk was engaged in non-mission related consultation.

**Friday, May 18:**

Mr. Yarmoshuk met with CMAC's operations and plans personnel, national staff and foreign technical advisors to discuss the way in which they currently manage landmine related data, and how they use this data in the planning process. Details of CMAC's minefield survey procedures and reporting process were also discussed. The Cambodian demonstration data set was presented and used as a starting point for a discussion on their concerns regarding the implementation of IMSMA in Cambodia.

**3.0 Project Background**

The GPC project was originally conceived in June of 2000, with the first concrete steps towards implementation in October of 2000. One of the difficulties the evaluation team faced throughout the mission was the absence of concise project documents. The documents that have been made available to the team are brief and superficial. These are letters between GPC and CMAC or CMAA or are only broadly descriptive proposals. This has led to some confusion as to exactly what the project was intended to do. Briefings with relevant interlocutors before departure as well as with the German Embassy in Phnom Penh reflected the general confusion on exactly what the GPC project's major milestones and eventual goals were.

It should be noted that GPC did meet with the GICHD, in Geneva on December 14, 2000. Dr. Proske and Mr. Krohm of GPC met with Ambassador Martin Dahinden, Mr. Patrick Blagden and Mr. Thomas Bollinger of the GICHD. During this meeting GPC was made aware of the importance to engage in:

- Ongoing co-ordination with CMAC.
- Investigation with CMAC (subsequently CMAA) on exactly what their information management needs were.
- Close liaison with all parties involved in order to avoid the simultaneous development of two parallel systems; one used by the "collector" and one used by the "manager".

Further, A mission from GICHD/ETHZ travelled to Cambodia in November 2000 to support the GPC project. Over a two-week period training was provided to the (then)

GPC Information Management Trainer (this individual has since left the project, and was replaced by Mr. Litzenberg). Preliminary work was also conducted to import existing CMAC data into the IMSMA FM (the country structure files were completely imported).

Over the course of time it appears GPC have changed the focus of their project since the original documents were drafted, therefore leaving no document that adequately describes their project goals and structure. Without recounting the changing history of the project this evaluation report will give a brief overview of what exists today.

#### **4.0 The GPC Project**

The GPC Project is a staff development project in which Cambodian staff are to be trained in various information and TM disciplines. The IM people are intended to fit into an information cell that manages a “National Integrated Database” held and managed by CMAA. The TM personnel, who will eventually serve as part of an overall QA/QC system will ostensibly also fit into a CMAA cell of some type. It is of great importance to note that neither of these two structures, or for that matter any operational structures of the CMAA actually exist yet.

The project breaks down into two major areas Terrain Management and Information Management.

#### **4.1 Terrain Management**

##### **4.1.1 Concept**

Though not commonly used language in mine action what the evaluation team believes GPC means by Terrain Management in this context is essentially Quality Management (quality assurance and quality control).

The GPC project has identified eight individuals that are currently being trained to serve as quality assurance monitors of technical and completion survey. Originally 12 people were identified, but four were deselected after several course examinations, leaving GPC with eight. It is envisioned to re-add four trainees at a later date. As mentioned, it is intended they eventually serve as part of an overall QA Cell within CMAA, though when and in exactly what capacity remains to be defined. It is important to note that the trainees are being trained only to quality assure the reporting of technical and completion survey, not the conduct of the actual surveys as they are not being given the necessary skills to perform field level technical survey in mined areas. They will only be checking the accuracy of the reporting of technical and completion survey: datum points, marking and mapping, etc.

##### **4.1.2 Training**

It is difficult to judge the overall quality of a training programme from observing one morning, some general themes can be noted however. The training itself is a very traditional teacher centred approach with lecture style format complemented with direct student questioning. This is undoubtedly the teaching style the Khmer are most comfortable with, but the absence of true student participation and practical exercises may result in the all too common problem in educating cross-culturally in Asia: strong theoretical skills, but limited ability to put theory into practice. The training has been ongoing for three months.

There is a training plan with specific lessons, overheads and practice sheets that lays out the course and major topics to be covered.

The trainees have made two one-day field trips to active demining operations (CMAC DU 1) in the area. It is the opinion of the evaluators that this is inadequate. One of the stated reasons for basing the project in a remote provincial town such as Sisophon was to afford the trainees the opportunity to liaise with active mine action projects. It appears very little of this has actually taken place. There is also no evidence that GPC has educated themselves as to the current survey practices of CMAC. An important element in quality assurance work is in advising how to resolve deficiencies in observed practices – a process which requires a thorough knowledge of current work practices.

## **4.2 Information Management**

### **4.2.1 Concept**

This aspect of the project is designed to provide a data entry capability to the CMAA when (and if) they adopt IMSMA as its “National Integrated Database”. There are two individuals under training and a third who, though not being trained in IT by this programme, will serve as the database manager in the future CMAA IT Cell. (He is the former database manager at CMAC). Currently he serves as a liaison officer between GPC and CMAA, based in Phnom Penh. The evaluation team was not able to meet with him due to a family emergency.

### **4.2.2 Training**

The two trainees in Sisophon are being trained on computer basics and the generalities of Access and the IMSMA system. They will have data entry capability, but not the necessary skills to perform meaningful analysis. The training methodology appears to be rather haphazard as no formal curriculum exists. The trainer has taken the trouble to re-write the formal Access user manual in a simplified format, but a true training plan and Cambodia specific curriculum remains lacking. In addition, GPC have been using Swiss data from a demo IMSMA copy rather than using relevant Cambodian data from the Sisophon area. This leaves the trainees in very theoretical space with little chance of seeing or understanding the true capabilities of the IMSMA system.

GPC appears not to have made a concerted effort to develop a meaningful training data set for their Information Management Training. The CMAC database and field data entry forms would be available from CMAC with minor co-ordination efforts – in fact Mr Yarmoshuk was able to obtain copies of both of these during the course of this mission.

## **5.0 Observations**

The GPC project is rooted in a genuine concern to develop capacity within the Cambodian mine action structures. GPC fully recognises that any capacity development process is slow and requires a continued investment of both time and effort. The project, though conceptually valid is operationally plagued with a number of flaws, namely insufficient planning, co-ordination and integration as well as what can simply be termed a rather novice approach. The absence of qualified information technology and/or mine database personnel in a project which purports to establish a national mine database is also a serious obstacle to success.

## 5.1 Needs Assessment/Project Planning

One of the underlying problems with the project is the lack of a proper IT needs assessment. It appears no such assessment has been done recently in Cambodia and it has certainly not been done as part of the GPC project foundation. A proper needs assessment and strategy development exercise is absolutely fundamental to a long term development-oriented project and embarking on a long-term capacity development process without a formal needs assessment is a serious omission. The long term strategy and process for IT management is crucial to understand and agree upon if any single process such as the GPC project, or any information project for that matter, is to produce a value added result.

As mentioned previously it appears that no truly descriptive project document exists. The project has changed focus over time and the relevant participants have not kept the documentation in order.

A very important factor that seems to have been ignored by the planners of the GPC project is that CMAA and CMAC have both not formally identified the IMSMA as the database of choice for Cambodia. This could not be more significant. At the end of the day it is likely that CMAA will adopt IMSMA as its database, but as of today this is speculation. The CMAA could well choose to remain with the existing CMAC database (FoxPro based), simply updating it and adapting it to their current needs. Obviously, if CMAA does not decide to use IMSMA the GPC project becomes moot. This is certainly a question that must be answered before the GPC project proceeds.

It is in the interest of mine action in Cambodia that the same database system be used at both CMAC and CMAA. Ideally a collaborative environment would exist where CMAC and CMAA co-operate in the maintenance of the national landmine database. The requirements for the information system at the national authority and the field operator vary sharply, although the IMSMA FM can support both organisations the training requirements will differ.

- CMAA: The national database would be used to assist in the generation of the national mine action strategy, and to serve as a reporting tool on locations of minefields, and clearance activities.
- CMAC: The data in the national database is used during the course of field survey activities. This also serves to improve the quality of the data in the national database. The database is used to store detailed information about survey and clearance activities, and to create reports for CMAA and donors.

The Canadian funded Level 1 Impact Survey currently being conducted by Geospatial International will provide the most important data set for the mine action community when it is complete. There are a wide range of critical issues with respect to use of the data produced by this survey that have not yet been addressed, all of which impact on the GPC project. It does not appear that GPC is aware of these issues.

- The client for the Level 1 project is still officially CMAC, not CMAA;
- The data is not stored in the IMSMA FM, but rather in an IMSMA compatible format. To what extent the resultant IMSMA FM database is “standard” has not been evaluated by personnel external to the Geospatial International project;

- The Level 1 Impact Survey project is solely a field survey project – there is no analysis component. It does not appear either CMAA or CMAC currently have the capacity to perform meaningful analysis of the data, or to use the data in the mine action planning process.

GPC has identified CMAA as the sole client for its activities. While there is a need at CMAA for the skills which the GPC project professes to build, there is currently no capacity at CMAA to integrate the skills being developed into an operational capability. The creation of CMAA has not removed the requirement for a database at CMAC. The same activities being conducted in support of CMAA could be integrated into CMAC operations; however, this appears not to have been considered. The advantage of initially working with CMAC would be that they currently have a capacity to integrate GPC's outputs into their operations.

## **5.2 Project Management/Staffing**

The project appears to have shown prudent financial management and to have been careful with its expenditures. It is to GPC's credit that they have, in the true spirit of a pilot project, restricted their purchasing and staffing to a minimum. They have purchased a minimum of computer equipment, one differential GPS, one vehicle and rented one house that is used communally as living quarters, offices and a training facility. The GPC supplied cost data and expenditures appear to be relatively modest.

The decision to base the project in Sisophon is still a point of some confusion to the evaluators. It was originally explained that by basing the project in Sisophon during its pilot phase would give the trainees a chance to see and co-operate with operational demining as well as provincial government. In addition, as the CMAA premises are not yet completed it was seen as best to place the project in the field. Given GPC's stated goal of working in close co-operation with CMAC's DU 1 and the provincial government, it is hard to understand why after three months of training they have still not integrated any Cambodian data into their training. Data which could be available for their use includes existing CMAC data and new Impact Survey data collected by Geospatial.

The decision to recruit all trainees from the Sisophon area strikes the evaluators as a source of potential problems as the trainees will have to relocate to Phnom Penh during the implementation phase. Naturally all of the participants expressed a willingness to do so, but this is an essentially unnecessary hardship. Granted the TM trainees will operate in a mobile capacity, therefore their point of origin is not as relevant as that of the IM personnel, but nonetheless deciding on Sisophon as the projects' de facto home base provides little foreseeable benefit.

In addition, the relative skill level of those recruited in the province as opposed to those that could be found in Phnom Penh is quite striking. This forces the trainees to undergo much greater basic development training to simply arrive at the basic level available in Phnom Penh.

The evaluation team also believes it was a potential strategic and operational error to not employ CMAC deminers laid off last year. By not employing laid-off deminers or at least those with former mine clearance experience the GPC TM personnel will face a serious lack of credibility in their field operations. Experienced deminers and survey specialists will not take kindly to a group of relative novices evaluating and

certifying their work and these relative novices, with no concrete mine action experience, will be hard pressed to make insightful evaluations of operations.

Further, the stated reason of having closer contact with the field may have been an original intention, but seems not to have materialised. As mentioned, the trainees have made only two short field visits to a demining site and contact with provincial authorities appears to have been only on a general courtesy level, not one of substantive co-operation.

Further plans call for the TM portion of the project to be relocated in Mid-June to the CMAC Training Centre in Khampong Chang (funded by a German Government donation), which is currently underused. This is seen by GPC as a desirable stopgap measure while the CMAA continues to organise its Phnom Penh HQ facilities. Why locating at the training centre in the first place was not chosen is still a mystery and the evaluators see no real benefit in relocating twice. At the same time it is also foreseen that the IM section of the project will be relocated to the CMAA HQ in Phnom Penh which should be ready by this time. Again why individuals slated for IT training were not originally chosen from the Phnom Penh area seems illogical.

Qualifications of the GPC expatriate staff vary. Neither of the two field staff have much relevant background in mine action/humanitarian demining. Nor have they development/relief experience. Cross-cultural, civilian training is another aspect that does not appear to be part of their backgrounds. In terms of base knowledge of the subject, we must express concern over the general skills of the IT Trainer/Supervisor. Though well intentioned, his background and professional training is not appropriate nor is his understanding of the IMSMA system, and its role in mine action, on a level that would give him a master trainer ability.

The Terrain Management and Training Supervisor has more general experience, but also has limited mine action experience. Both are clearly quite new to work in the developing world. This lack of experience working in a developing context, the evaluation team believes, has contributed to some of the other project difficulties.

### **5.3 Co-ordination**

In regards to co-ordination with other mine action entities and local authorities, the GPC project appears to have functioned in relative isolation. There have of course been the customary visits between project directors and senior staff at the Phnom Penh level, but this has not been true co-ordination. There are naturally the necessary letters of agreement with CMAC/CMAA, but these in and of themselves only grant permission to work, but do not establish a framework for co-operation.

The project has isolated itself in a remote province with no operational interface between their efforts and those of the mine action community in Cambodia. There appears to have been little or no substantive contact or interaction between GPC, HALO Trust, MAG, Geospatial International or the HI/CRC projects. As already mentioned the co-ordination with CMAC DU 1 or the provincial authorities has been very limited. In regards to working in conjunction with CMAA there has also been no operational interface as the CMAA does not yet have operational capacity in regards to IM or TM (QA/QC).

GPC's efforts in co-ordination with other mine action operators has been compromised by their lack of experience in mine action. In a program such as Cambodia, which has been in operation for the last decade, experienced operators will not favourably regard a project that is not perceived to be adding value to the process. The lack of a database and GIS related technical background and field experience in the GPC project team leaves them at risk to be perceived in this manner.

This lack of co-ordination has allowed the project to redefine itself wherein as more time goes by the more disconnected from the mine action reality the project becomes. In the end, the evaluators fear that the "product" GPC is trying to produce will not have a market, or more likely arrive at market before there are any buyers.

#### **5.4 Implementation/Integration**

##### **Terrain Management**

It is intended that upon completion of their training these eight (12) trainees will be integrated into the CMAA structure to provide the QA/QC of technical and completion survey. As mentioned there are currently eight trainees with four that will be added later, making the originally desired 12. The potential problems associated with adding four new trainees near the end of a training cycle and then trying to bring them up to the same level as the original eight appears to not have been considered.

Regardless of the final number, the foreseen integration of the TM trainees within the CMAA structure is potentially the biggest challenge facing the GPC project. It is intended that CMAA provide QA/QC services to the mine action operators in Cambodia, but has not yet formalised a structure that will allow for a quality assurance cell. The CMAA is in its infancy and has not even secured funding or established offices, let alone an operational policy.

##### **Information Management**

The individuals being trained are destined to be data entry clerks within an information cell at CMAA. The individual acting as a liaison officer is intended to be the data base manager, though not the head of the information cell. The data entry clerks will complete their course with only the most rudimentary data entry skills and there is no visible provision to provide analysis, QA/QC functions to their mandate.

As with the TM this aspect of the project does not appear to have been fully thought through. Though potentially a valuable service for the CMAA it is simply too early to determine exactly what the CMAA needs will be before certain fundamental decisions and structures are in place.

#### **5.5 Turn-over/Phase-out**

A coherent process of turning over management and control of both of the project components does not appear to be in place. It is assumed by GPC that work will be required as will patience in order for the CMAA to develop the structures and operational capacity to absorb the GPC trained personnel. In the absence of this definition the GPC project has adopted a wait and see attitude with the belief that all will somehow work out.

#### **6.0 Conclusion**

The GPC project, though they have made some minor progress so far does not appear, unfortunately, to present much promise of success. This is certainly not a view shared

by the GPC Team in Cambodia as they believe the obstacles they face are part of the development process and will eventually be overcome.

The evaluation team must be quite frank however, and admit that it believes the project, though well intentioned is based on faulty assumptions. There is no concrete assessment of the current situation, almost non-existent co-ordination, no clear and concise plan for the project implementation, no plan for the project turn-over and not yet any formal plans on the part of CMAA on what the exact nature of the national structures will be.

None of the fundamental questions have been asked and answered or arrangements made to justify starting a project of this type at the present time. That is not to say that the services GPC is trying to provide do not have a potential role in the future, but it is simply too early to tell if they would be appropriate or not.

With all of these serious and fundamental problems in mind the evaluation team cannot in good conscience recommend that the project be continued in its present form. There is no indication from GPC or the other mine action participants in Cambodia that this project will be incorporated effectively into any ongoing processes and therefore add value.

## **7.0 Recommendations**

The evaluation team believes the German Government should continue to show interest in Cambodia and apply resources to viable mine action projects, but the GPC project in its current form should be discontinued for the time being. When and if an institutional decision is made in Cambodia to use IMSMA and when the CMAA is actually operational and has established clearly identifiable operational structures in the QA and IT sectors it is possible that GPC, with expert consultation, would then be in a position to re-initiate their project based on a clearly identified operational need to be filled.

There are undoubtedly information and survey related needs that should be addressed in Cambodia. For example;

- A proper IT needs assessment for mine action in Cambodia, focusing on the requirements at the national authority (CMAA) as well as the field operators (CMAC, HI/CRC, etc)
- A quality assurance exercise of existing CMAC data entry.
- QA exercise of CMAC field data reports.
- Development of a Cambodia specific survey standard for technical and completion surveys.
- Inter-agency training and harmonisation of the technical and completion survey processes, including planning, procedures, equipment, and reporting.
- Emplacement of a survey technical advisor at the CMAA.
- Emplacement of an IT technical advisor at CMAA.

Though all valuable to mine action in Cambodia the evaluation team does not believe that at the present time GPC possess the technical or institutional expertise to provide these services.