Innovation Energie Développement (IED)

CAP-REDEO project

INCEPTION REPORT

MINUTES OF KICK OFF MEETING AND SHORT TERM ACTION PLAN

DELIVERABLE D1



Supported by the Intelligent Energy Europe Agency (IEEA) and French Ministry of Foreign Affairs (MAE)



Intelligent Energy Decrope

Deliverable D1

Contractual References:

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Client:

Intelligent Energy – Europe (IEEA)

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Part I: Minutes of Kick-off meeting

1 Venue:

MEM meeting office, Vientiane 3-4 April 2007

2 Participants:

24 delegations

IED, France	Denis Rambaud-Measson, Anjali Shanker, Tuan Nguyen,								
	Cyrill Perret, Philippe Arnou								
ETC,	René Magermans								
Netherlands									
MEM, Laos	Houmphone Bulyaphol (excused), Hatsady Sisoulath,								
	Anousak Phonsavath, Khanthana Sisamouth, Lamphone								
	Dimanivong,								
EDL, Laos	Boungnong Bouttavong, Alivanh Maugkhaseum,								
	Sengamphone Phanavanh,								
MIME, Cambodia	Heng Kunleang, Chim Thearim								
EDC, Cambodia	Chan Sodavath, Chulasa Praing, Ngin Kanida								
EAC, Cambodia	Theng Marith, Nong Rithya								
REF, Cambodia	Chea Savan								
CDEC,	Ky Chanthan, Has Rany								
Cambodia									
SV Co., Laos	Thiphasone Donekhamyoy								

3 Objectives and Topics for discussion:

- Kick-off meeting with all stakeholders from Laos & Cambodia to establish common understanding of the project conditions, objectives, deliverables, implementation and responsibilities between partners.
- Project conditions are: contract, contexts, partners, stakeholders and associates
- *Methodologies*: brief introduction to the method, inputs and outputs, work organisation
- List of *deliverables* and expected date for delivery, format, and contents.
- *Implementation* plan includes time schedule (planning), interactions between tasks,
- Responsibility must be clearly identified and agreed on.

4 KO meeting progress

After welcome and introduction of the partners and subcontractors, delegations adopted the proposed agenda, and discussed the project objectives. IED presented overview of the work program (see the next section).

General organisation was clarified -

 Role of contractors: have to be European Companies and sign the contract with the EU: IED coordinator and ETC partner

Subcontractors are:

- CDEC (Ky Chanthan) as local coordinator in Cambodia, manage the relations with Cambodian authorities and stakeholders, ensure quality if discussions with stakeholders. Supervise a local expert team, assure logistics and data collections. Details are in "letter of agreement".
- Donekhamyoy Thipasone as local consultant to support data collection and IT work such as data entry, support organisation of workshops and trainings in Laos.
- Sengprasong Prakhonkham (NUOL), who manages relations with local authorities and stakeholders, supervise data collection and ensure dialog with stakeholders at national and local level, participates and ensures successful trainings and WS. Details are in "letter of agreement".

Associates:

- Ministries of energy: MIME, as leading associate in Cambodia, and MEM, as leading associate in Lao PDR_facilitate dialog and discussion with multisector group at national and provincial level as chair member, provides support and introduction letters to local subcontractor for data collection, and participates actively in discussions with IED on objectives and needs of RE planning. Share with project team available data. Participate in WS and trainings organised by IED. Details are in "letter of agreement".
- The utilities in both countries, EDC and EDL, who participates in discussion of multisector groups, provides available data in its possession, participates in WS and training provided by IED, contributes to planning approaches and methodologies of GEOSIM. Details are in MOU.
- EAC Electricity Authority of Cambodia who collaborates with IED and its subcontractors in data collections, particularly on REE and IPP, participates in multisector group discussions, WS & trainings to ensure proper use and understanding of approach.
- o REF Rural Electrification Fund, who participates in multisector group at national and local level, contributes to improve GEOSIM software and adapt its functions to the specific situation of Cambodia, participates in WS and trainings to ensure proper use and understanding of approach, and provides comments on RE planning in Cambodia.

 IED presented "Quick Presentation of GEOSIM" software, a specific tool for rural electrification with GIS database.

Delegations also discussed detailed Work Packages. Deliverables and responsibilities were agreed upon.

Collaboration agreements have been signed with EDC, EDL, MIME, MEM and letters exchanged with REF and EAC in which it is in essence agreed that:

- Manifold and GEOSIM (GIS tool for RE planning) licenses will be provided to the following stakeholders (15 in total):
 - o MIME: 2,
 - o DIME (Kongpong Cham): 1
 - EDC: 2EAC: 1REF: 1
 - o MEM: 2
 - o PDEM (Khammuon): 1
 - o EDL: 1
 - o Lao subcontractors: 2
 - o CDEC: 1
- Data: delegations agreed that they will provide all existing data in their possession and assist subcontractors in data collection from other ministries and organisations (health, education, transport links, rural development, SMEs, banks). See next session for identified sources of data and needed data.
- Participation: Associates (see the list above) agreed to participate in training sessions and different workshops, as well as in multisector stakeholder groups. Each associate designates one focal point as liaison officer and one technical counterpart who work on data, database and running tool.
- MIME and MEM designated one person as chairperson senior expert to ensure integration and consistency with ongoing planning at respective ministries.

5 Overview of the work program, milestone and mission

The delegations discussed the work program and agreed on the tentative work schedule as follow:

- 1. Multisector integration at the National level
 - a. Establish multisector stakeholder group May 07
 - b. To collect and represent multisector interlinkages July 07
 - c. To discuss and agree on planning objectives at national level Sept 07

2. Provincial level Rural elect. and development plan

- a. Establish multisector working group July 07
- b. Data collection and analysis (socio economic & technical) July Dec 07
- c. Develop scenarios and discuss results Nov June 08

3. Training, capacity building, transfer of GEOSIM

- a. Training see below for more details
- b. Install Manifold April CP installs for subcontractors first, then CP will provide a short instruction note on how to install Manifold to subcontractors to install in associates PC by May-June 07
- c. Install GEOSIM Jan 08

4. Final workshop in Phnom Penh Nov 08

An interim meeting will be held in spring 2008 – location to be decided.

A more *detailed* short term action planning <u>(from April to September 2007)</u> is attached

6 Multisectoral stakeholder group

<u>National level:</u> It was decided to have an informal multisector stakeholder group to discuss the objectives, criteria to be taken into rural electrification development program in each country – and collect existing data

MIME in Cambodia and **MEM** in Laos are leaders (chairs) in these working groups and IED local subcontractors (Sengprasong (NUOL) & Chanthan (CDEC)) will be liaison officers to animate (stimulate) the discussion.

Potential stakeholders to invite into Informal Multisector stakeholder group:

- Ministry of Energy
- Under planning : National Statistics
- Ministry of Transport
- Power Utility
- EAC
- · Rural Electrification Fund
- Health
- Education
- Commerce and Industry / MIME
- Min Rural Development / PM Office
- Agriculture and Forests

Provincial level stakeholder group will be set up in the pilot Province with the support of the national level group, with the objective to facilitate the survey and to validate the results of the planning exercise as well as priority investment projects identified.

- more working level, we will need a **survey**.
- Working level for data collection
- Management level to discuss results

It was proposed to have the first group meeting during **JUNE** to discuss preliminary results and finalise the planning approaches in rural electrification.

7 Needed data at the National level

As we work with GIS-based software and database GEOSIM, we need different kinds of data from different ministries and organisations. These data should be in GIS format (GIS coordinates) and updated. The proposed list hereafter includes the required data. Some data are needed to calculate "Potential Development Indicator – PDI", to classify development centres (DC) by electrification covering population. Other data (optional) are needed to represent in the maps the physical features and information for policy makers in energy planning formulation and decisions.

ADMINISTRATIVE → from previous survey & census, PM office

- Provinces and district limits GIS data
- Settlements at villages level: population, electrified or not, census codes, GIS coordinates (updated longitude and latitude);

INFRASTRUCTURE → from previous surveys, ministry of transport, MIME, MEM

- Road networks: existing and planned; asphalt (if possible permanent or not) –
 GIS
- Water supply and sanitation: type of schemes (network, permanent, well...) -GIS

RESOURCES → from water resources Ministry, MIME, MEM

- Rivers and basin in GIS
- Hydro potential in general, location map of minihydro sites identified (GIS coordination, potential power, production, operation or planned, discharges)
- Biomass potential (rice husk production, agriculture residues such as sugarcane, coconut husks, cassava stem..., biomass and tree farming), Location map of biomass sites (operational and/or planned with GIS coordination, potential power and production).

ENERGY SECTOR → contact and collect from EDC, EDL, MIME, MEM, EAC

 Grid network existing and planned: updated: 230 kV, 115kV, 35kV, 22kV; existing and planned substations with installed capacities and exact location (GIS coordinates)

- Generation (including IPP): existing and planned; potential; including renewable, actual availability? PPA rate?
- Private as much as possible (REEs, PESCos, battery charging...) : capacity, number of costumers, type of business.
- Electrification rate % for each village (if possible) or for each district.

MULTISECTOR DATA: Health, Education, Religious centres (these data are used to calculate "Potential Development Indicator" to measure the socio-economic impacts of the potential rural electrification programs.

- Type of centre, following the national classification (high school, secondary school, primary school, training centre...; hospital, maternity, health point....;) with GIS coordinates, electrified or not, number of staff, teachers, number of students.
- Existing and planned centres

LOCAL ECONOMY → Ministry of commerce, of industry

- Small scale and other industries; industrial zones
- Commercial centres / markets, bank outlets (permanent, weekly...,) with GIS coordinates

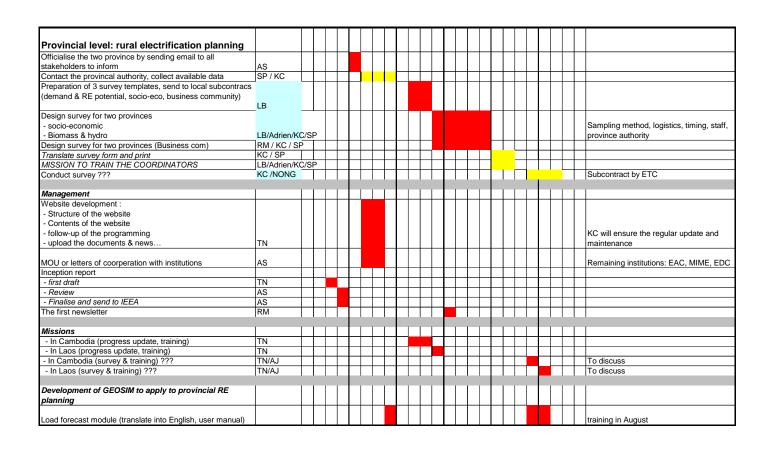
OTHER STUDIES, REVIEW, DATA

- Collect other available data and information from previous studies and projects
- All existing databases

Part II – Notes for short-term action planning

8 Detailed schedule

		Α	pril			May		J	une			July		Αι	ıgus	t	Septe	mbe	er NOTE
National level: rural electrification planning						,						Ĺ							
PDI (Potential Development Indicators)		+	H	\dashv	+	+	\vdash		+	H	+	+	\dashv	+	+	\dashv	-	+	
Collect data to calculate PDI :																1			
- population at village level - health centers																			
- schools																			
- agruculture lands	SP in Laos																		Identify and collect all GIS database, doc
- roads, - electric network	KC in Cambodia																		and reports. We have many database, but need to update and VERIFY
- Glecule Helwork	Carribodia						-									- t			but need to apaate and VERNI 1
Create GIS database and enter those data into GIS	CP/																		Extract data from MEDICOM, from MEM
(manifold)	Yoy & Rany	+			1	Т	Н		+	Н	+	+	H	+	+	-	-	_	and other database Objective is to have an evaluation grid
Propose criteria grid for planning analysis																			and its weigting system and to lead the
Send to Sengprasong & Ky Chanthan	TN												Ш						discussion (animate) of the group
																			What criteria are to be taken into accoun
																			in Laos? In Cambodia? Weighting
Sengprasong discuss with MEM, EDL on criteria grid and	SP																		systems : Pop, health center, school,
weighting value for each criteria	5P	+		_		-			+	Н	+	+	H						agriculture land, roads
Ky Chanthan discuss with MIME, EDC & EAC on criteria grid																			
and weighting value for each criteria	KC	_			-1				-		_	-		_		4			To calculate PDI for each country at
																			village (or district) level to class disctrict i
Integrate script to calculate the PDI into manifold	TN / Adrien	\perp	Ш							Ш			Ш						terms of PDI
Creation of development centers' list for Laos & Cambodia																			
(priority list from district centers/village centers)	TN						 												List of DC & PDI is one of the indicator
SEND TO LAOS AND CAMBODIA FOR NATIONAL							П			П			П	T		1		T	
VALIDATION Present the PDI and Development center (DC) to local				_									\blacksquare			-			
stakeholders, validate the list of development center	TN																		In combination with mission (see further)
																			· ·
Other indicators of rural electrification Propose Indicators to be represent into GIS and send to							Н						Н						
stakeholders	TN																		TO be elaborated
Collect data and update existing data on						,													
- % of rural electrified - power network and generation	SP & KC (Yoy &																		
- hydrology & rivers	Rany)																		
Create the GIS-based prepresentation of the indicators on																			
- rural electrification,																			
- development, - sustainable energy indicators	СР																		
Present the indicators to local stakeholders	-																		In combination with mission (see later)
National level policy dialogue tool (CIS)		_	1 1						,								-		CIS based tool to present indicators
National level policy dialogue tool (GIS) Finalise the tool (indicators, structure of the database, output		+		+	-					Н			H						GIS based tool to present indicators PDI, RE rate, POP, networks (road &
reports format)	TN																		power), databases
Finalise database (data check, update, verify, entry, GIS)	Rany & Yoy	_			_		Ш									4		_	Simple interface "button" to display the
Finalise the tool (interface, programming)	СР																		corresponding map
Check the tool and transfer to national stakeholders	SP & KC																		Inclusing transfer MANIFOLD licenses
User manuals (in english, khmer & lao)	SP & KC		Ш			1									\perp				
Report "status on rural dev, energy planning		I			T	T		T	T					T				T	
approaches, ongoing programs & institutional	L																		
framework First draft for internal review	TN	+	+	_		+	Н	+	+	$\vdash \vdash$	+	+	\vdash	+	+	\dashv	-	+	
Sent to stakeholders for comments & review		+	+1	-			\vdash		+	\vdash	+	+	\forall	+	+	+		-	
Continue to collect the docs & update										П			Ц						
Final version									_	Ц		1					_	_	
Multi-sector working group		T										T							1
Draft note on role and steps	TN/AS						П			П			П						N. C.
- identify the stakeholder ministries & present cap-redeo project factsheet	SP & KC					1						1							Name, title and fonction of the person contacted. Need to consult with ETC
	5. 4.10	+		1	+	+	H	+	+	H	+	+	\forall	+	+	\dashv	+	\dashv	25.1.adica. 1150d to consult with E10
MIME meeting with EDC, EAC, REF		\bot		4	_	1	Ц		L	Ц	_	1	Ц	1	\perp	_		4	
MIME can organise a meeting with ministries to discuss creteria grid & weighting. Or with introduction letter, local																			Need minutes of meeting to be reported.
consultant meets each of them to discuss	MIME / KC												ot						Coordinate with ETC
MEM can organise a meeting with ministries to discuss										T									
creteria grid & weighting. Or with introduction letter, local consultant meets each of them to discuss	MEM / SP																		Need minutes of meeting to be reported
	IVILIVI / OF	+	\vdash	+	+	+	H			\dashv	+	+	H	+	+	+	+	\dashv	Treed minutes of meeting to be reported
Consult the criteria and weighting system (by phonen, emails,	[1						1							
by direct interview with officials from concerned ministries)		+	\vdash	4	+	_	Ц	H		\dashv	+	+	\square	+	+	4	-	\dashv	
Establish the list of informal working groups Meetings with them to discuss the indicators, PDI, DC	SP & KC	+	\vdash	\dashv	+			_		\vdash	+	+	\vdash	+	+	\dashv	+	+	In combination with the mission
gu mar arom to arouse the maleutore, i bi, be	1										_		$\perp \perp$						Johnsmader mar trie milosion



9 Outputs, method, time frame for NATIONAL level

Stakeholder group constituted led by MIME & MEM: 1st meeting in May or June to validate the proposed approach and criteria.

9.1 Letter

IED send a draft letter to the designated Focal Points in MIME (Heng Kunleang) & MEM (Anousak) to submit for the signatures → Beginning May

Local subcontractors (Sengprasong and Chanthan) will follow-up and collect the supporting letter from the MIME and MEM and contact identified sources (ministries, organisations...) to collect data.

9.2 Time frame for national level activities

- IED send templates for data : end of April
- Stakeholders provides existing data by end June (subcontractors to contact and collect data).
- Local GIS experts compile & combine data and input into database, under supervision of IED expert: June

- IED expert completes database (validation) under GIS (restructure, check with information, projections...): July
- Local subcontractors develop user manuals: July
- Present of outputs (see below) to local stakeholders for discussion: July or August
- Finalisation : July August

9.3 Outputs:

- GIS database with all data (see section 6 above).
- Maps represent database (power system, population and rural electrification status, other physical features). Other geospatial representation of database can be proposed, depending on data availability
- PDI for development centres in Laos & Cambodia
- Classified list of Development centres with number of covering population and hinterlands
- User manuals
- · Report on status of RE

10 Outputs, method, time frame for PROVINCIAL level

10.1 Questionnaire

The basis for data collection at provincial level is village (or locality) level questionnaire survey. Some spot survey may be required at the household level, but at the outset, secondary data available is sufficient. (Locality hereafter is understood as groups of households within a village, under following accepted classification: Province District Commune Village Locality Households).

Detailed questionnaire is prepared separately for three themes but to be conducted at the same time:

- socio economic topics,
- biomass and mini-hydro production potential sites
- business community (ETC)

ETC will take overall responsibility and coordination of the survey. Two separate contracts will be established by ETC with local counterpart to conduct survey (CDEC & Sengsavang).

Project local subcontractors (IT expert) will capture data collection into Excel (or Access) database for analysis. After, they integrate the results into manifold and GEOSIM as inputs

10.2 Time frame (see the table above)

Final selection of provinces: 10th April (KHAMMUON in Laos & KAMPONG CHAM in Cambodia)

- Launch provincial stakeholder meeting: July (Laos), August (Cambodia) to present the methodology and approach.
- IED & ETC agree with local stakeholders on sampling survey, modality, survey plan...: June – July,
- IED & ETC send templates for data collection: June.
- A mission, combined with the launching provincial stakeholder groups > validate survey questionnaire, approach...
- Conduct survey: to be conducted by CDEC in Cambodia and by Sengsavang in Laos
- Local subcontractors compile & combine data and inputs :
- IED complete database under GIS: → Target to be completed by December 2007

10.3 Letter:

Chairs person (MIME in Cambodia and MEM in Laos) issue a letter to provincial authority in June (*IED provides a draft by June*) to inform about:

- Cap-redeo activity
- Survey
- Provincial stakeholder group
- Access to relevant information and data

1 or 2 stakeholder meetings have to take place to discuss stakeholders' priority & objectives of provincial RE, formulation of master plan. MIME & MEM will identify the relevant stakeholders, invite them and organize these meeting with assistance of local subcontractors.

Subcontractors (CDEC & Sengprasong) will contact local authority to inform, to follow, and to keep them in touch with cap-redeo, play the role of interface for IED expert. Organise the meeting with the group to validate the database, discuss the scenario and preliminary results.

10.4 Outputs

- Same outputs as national outputs, but for provinces (see above)
- Demand forecasting analysis
- Power supply planning for period of 15 years : options by diesel, by minihydro, by grid extension
- Economic analysis of the RE for two provinces
- Investment plan for RE and policy recommendations in term of policy priorities, incentives, financing of investment
- Final GEOSIM tool and user manuals, adapted for Cambodia & Laos.
- User manuals in Khmer and in Lao

11 Training courses

In total, we have 8 training modules to be carried out (A: database; B: Energy dev links, impacts & indicators; C: GIS functionalities; D: monitoring tool use, maintenance, updating; E: Techco-eco aspect of grid, off-grid; F: Load forecasting; G: GEOSIM tool; H: Investment plan). See detailed work schedule for more details.

- Modules A&B: 4 and 5 April 2007 in Laos
- Update training for Cambodia on module B: June 2007, in combination with a multisector stakeholder meeting and mission
- D: Initially proposed on July. May provide a little later→ December 2007
- E: should be provided earlier than F → August/September 2007
- F: Eco-fin analysis, options & costs. Not integrated yet the financial analysis → proposed on September/October 2007
- C&G → 2008

12 Website

Website: www.cap-redeo.com is under IED responsibility.

- Its structure and specifications are proposed by IED and in consultation with stakeholders.
- It has dynamic structure so web administrator can upload and change its contents.
- It is expected to be complete by end of April
- CDEC is responsible for its update (upload) and maintenance.

Remarks to information dissemination on website

- No tariff option to be put on website.
- No commercial information on website.
- Modality for validation of the doc to be put on website: Training materials are public, OK. Reports: 1 month for comments and remarks on confidential

Annexes

- A1. Photo of kick-off meeting A2. Agenda of kick-off meeting A3. Brochure of kick-off meeting