### **Viet Nam National EPI (NEPI)**

# Cold Chain Equipment (CCE) Maintenance Outsourcing Contract 2010 – 2012

## PROJECT VIE/025 "STRENGHTHENING THE COLD CHAIN IN THE EPI FRAMEWORK"





The National Institute of Hygiene and Epidemiology

### **Introduction Panel**

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### Overall objective

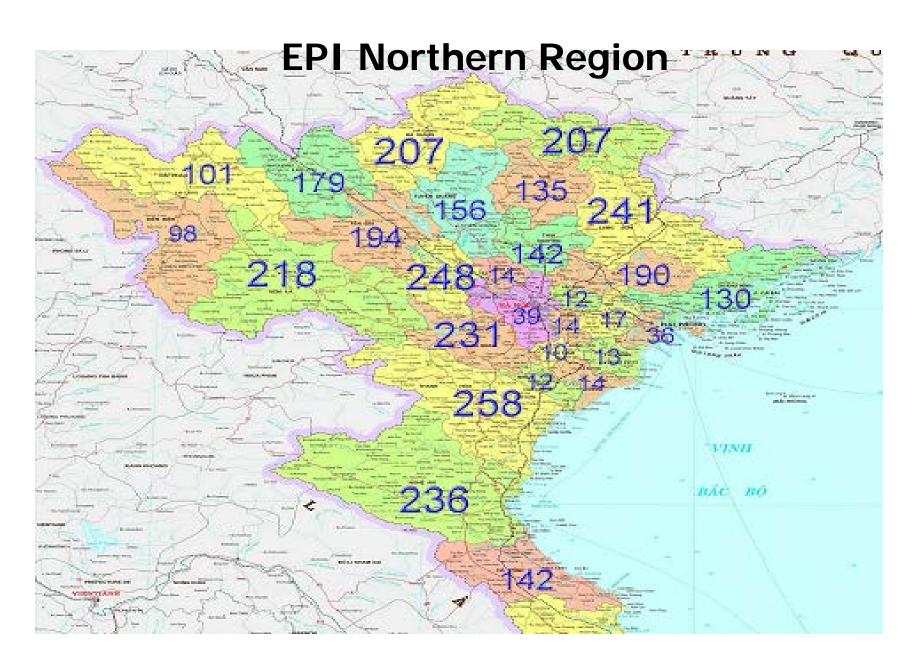
The Service Contract was signed in January 2010, covering preventive and corrective maintenance services for the cold chain equipment (CCE) installed at 63 Provincial Preventive Medical Centers (PPPMC), 700 District Preventive Medical Centers (DPMC) and 4,000 Communal Health Centers (CHC).

Following the orientation and trainings of the field technicians the services commenced in April 2010 and completed by December 2012.

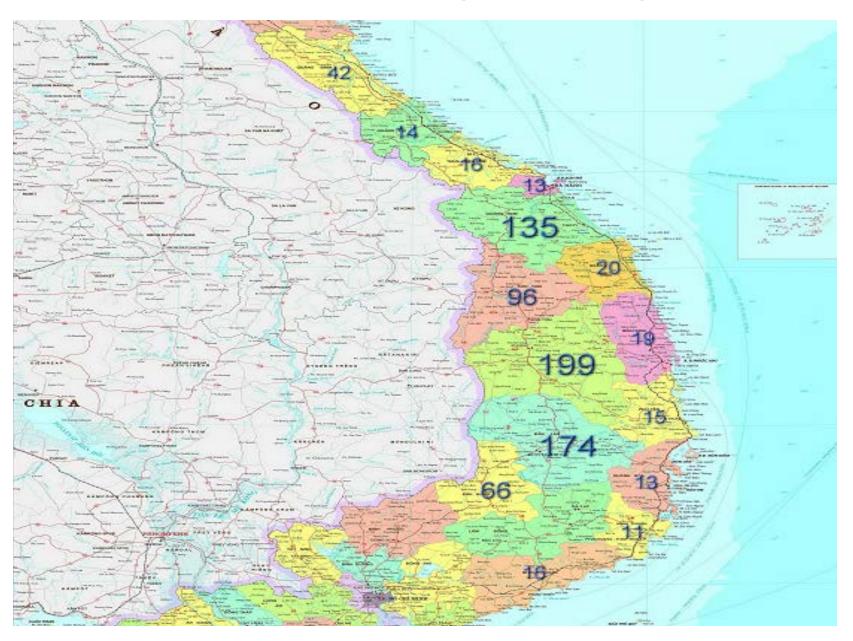
The assignment was aimed at assisting NIHE/EPI with the development and implementation of a countrywide EPI equipment maintenance plan for the duration of 36 months for commune level and 30 months for district and province level to achieve the following Objectives:

- Strengthen the Cold Chain in the Framework of EPI for Vietnam focusing to improve the Vaccine Vial Monitor (VVM).
- All cold chain equipment under these services arrangement shall be in good working condition and operational to keep the correct storage temperature for vaccine.
- Ensure sustainable management of the cold chain by extending lifespan of the equipment and supporting the VVMs.
- Planned Preventive Maintenance (PPM) services identified as a tool to ensure the cost effective operation of the cold chain equipment.

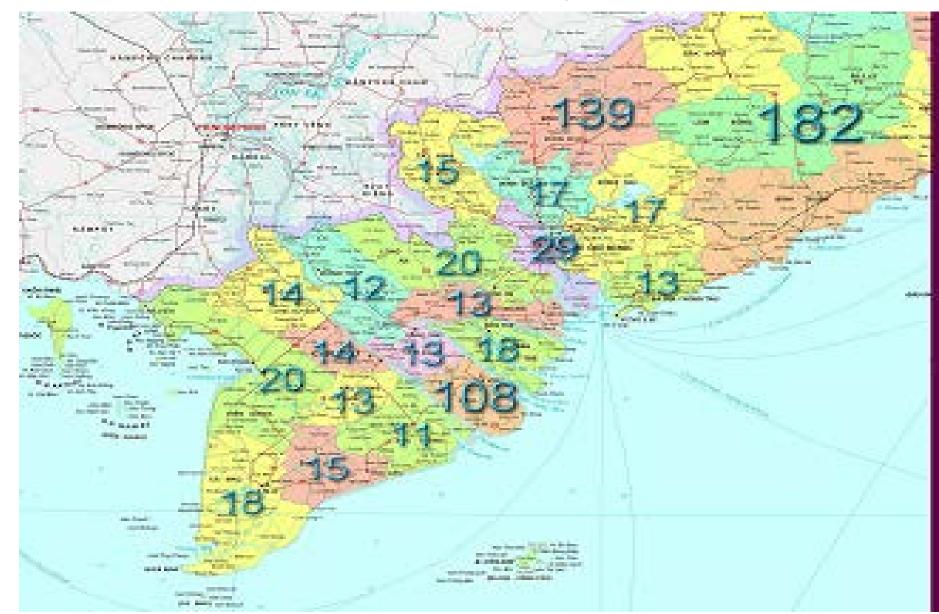
### **EQUIPMENT POPULATION**



### **EPI Center & Highlands Region**



### **EPI South & Mekong Delta**



### **Target Facilities**

The targeted facilities within the provinces are:

- 63 Provincial Preventive Medical Centres
- 691 District Preventive Medical Centres
- 4008 Commune Health Centres

### **Outsourced Assignment**

Contractor's responsibility is to design, organise and implement the EPI cold chain equipment maintenance including training of district and commune level EPI staff on cold chain equipment maintenance services, along stated guidelines.

### **Guidelines/Activities**

Two types of Maintenance interventions are to be implemented:

A: Scheduled preventive annual visits for all equipment Planned preventive maintenance activity will take place on site of the installed cold chain equipment

B: Corrective maintenance as needed and on-call basis
As needed corrective maintenance or repair activity will
take place on site of the installed cold chain equipment

### **Contract implementation**

Annually, around 5,000 cold chain equipment were covered and majority of them are located in hard to reach commune of the country where 4,000 of RG 50 refrigerators are installed.

Monitoring and supervision of the nationwide cold chain maintenance service contract was one of the major tasks for the EPI management during the contract implementation year 2010, 2011 and 2012 to ensure the quality and effectiveness of the maintenance services and to learn from the experience in the field.

Maintenance data gained from the 3 year maintenance contract is helpful to EPI in planning maintenance costs and required human resources for the sustainable maintenance organization.

At present EPI has to rely on local budget to cover maintenance costs after completion of the ODA funding support from LuxDev, Project VIE/025.

During the implementation period regular contract management meetings were held with participation of concerned parties (LuxDev Project VIE/025, NIHE, NEPI, regional EPI, Provincial preventive medical centres, the Contractor) to help assure the implementation of the maintenance services to be in line with the Contract's Term of Reference and especially in securing quality vaccine preservation for effective immunization nationally.

### Performance of the maintenance services summary

| Lot - Region                              | 2010                            |                         | 2011                            |                         | 2012  |                         |
|---|---------------------------------|-------------------------|---------------------------------|-------------------------|-------|-------------------------|
|   | Planned<br># for the<br>service | Actual # of performance | Planned<br># for the<br>service | Actual # of performance |       | Actual # of performance |
| Lot 1 for 15 Central & Highland provinces | 849                             | 590                     | 925                             | 926                     | 954   | 938                     |
| Lot 2 for 20 southern provinces.          | 701                             | 443                     | 587                             | 589                     | 621   | 602                     |
| Lot 3 for 14 north-delta provinces        | 1007                            | 1,030                   | 1,057                           | 1,057                   | 1,068 | 1,060                   |
| Lot 4 for 14 north-<br>mountain provinces | 2487                            | 1,320                   | 2,356                           | 2,369                   | 2,394 | 2,360                   |
| Total                                     | 5,044                           | 3,383                   | 4,925                           | 4,941                   | 5,037 | 4,960                   |

The trainings for the regional equipment managers (REM) and provincial equipment managers (PEM) were conducted in the four EPI regions from end of July to early September 2010, providing 128 provincial and regional staff with essential technical and maintenance management skills required for the vaccine cold chain equipment management. Trainings focused on technical aspects of operation, installation, daily maintenance and basic repairs of cold chain equipment (TCW3000, TFW800, RG50), and management duties and functions of Cold Chain Equipment Managers at 3 levels (national equipment manager (NEM), REM, PEM).





Reporting templates for EPI cold chain management and methods for ordering of spare-parts for cold chain equipment, and building of a sustainable maintenance system within EPI.

User trainings were conducted the first time in 2008, at 63 provinces nationwide for approximately 1400 provincial and district staff.

The trainings were then repeated the second time in 2009 and the third time in 2011.





# Thank You!