

The CARIBBEAN LABOUR MARKET INFORMATION SYSTEM (CLMIS)

Outline of the System and a brief on the "roll-out" in 2013

Background

The ILO Decent Work Team and Office for the Caribbean (ILO DWT-POS) formally established the Caribbean Labour Market Information System (CLMIS) Project in August 2010 with the aim to pilot and "implement a revision of selected Labour Administration functions, establish the organisational and human resource capabilities to computerise these functions using an integrated system of Labour Administrative Records, and produce a set of key labour and employment statistics from these records."

After a little more than a year of piloting in Saint Vincent and the Grenadines in 2010, and in Saint Lucia in 2011, the product is ready to be delivered to other countries in the English- and Dutch-speaking Caribbean. This product will support the Caribbean Departments of Labour (DoL) in making a major break-through by enhancing:

- the quality of their service delivery;
- the capability to design employment and labour markets interventions; and
- the ability to monitor the impact of such policies and programmes.

The CLMIS utilises two major components to achieve this.

1. The CLMIS Labour Administration Application is the application that standardises the DoL's major reporting procedures and introduces a supporting software package. Current modules include procedures to handle and report on complaints handling, dispute resolution, labour inspections, and various other employment and OSH related operations. The core of the System is a centralised National Labour Administration Database (NLAD) that

- assists labour administration officers and managers to process, report on, or monitor all on-going labour administration procedures in real time. Users can generate and print automated letters, statements, the status of cases, statistical and workflow tables.
- The second major component of the CLMIS is a web-based dissemination system for Labour Market Information (LMI). This application allows the participating producers of labour market information¹ to disseminate a nationally agreed package of LMI to the public via the internet.

The CLMIS has the potential to become the System of preference in the 22 ILO member States of the English- and Dutch-speaking Caribbean. It is obvious that necessary development and support services offer a host of business opportunities and promises strengthened Labour Market Information Systems in the region. Considering that it is an ILO-owned System, its use could go beyond the English-and Dutch-speaking Caribbean.

Deployment of the System

The CLMIS software was installed in Antigua and Barbuda, Saint Kitts and Nevis, Saint Lucia, and Saint Vincent and the Grenadines. This work was implemented in the context of the Memorandum of Understanding with the Secretariat of the Organisation of Eastern Caribbean States (OECS).



¹ These include Departments of Labour, the National Statistical Organisations, National Insurance System, Trade Unions, Employers' Organisations, TVET Institutions, Special Employment (job creation) Programmes, Labour Inspectorates or OSH Authority, and various line Ministries.

In response to the urgent requests from ILO's constituents, the software was installed in Trinidad and Tobago (partially), and in Suriname. In the wake of these requests the system will be installed in Anguilla, British Virgin Islands, Dominica, Grenada, Montserrat and St. Maarten before the end of 2013:.

To date the deployment of the software has been funded by the ILO as part of its current activities and from the budgets of the respective Governments. In all these countries, the Departments of Labour are adapting their work processes and building their data sets using the CLMIS software. At the same time the three key LMIS institutions² are working together with other Labour Market Information (LMI) stakeholders to establish the internet-based national labour market information data facility (this includes a web based national labour market indicators database) which is open to the public.

The ILO holds the copyright on the CLMIS input forms, software application and reports³. Deploying the system implied the promotion, installation, and nitial tailoring of the CLMIS to specific (short term) country needs (including training of DoL staff). However, in the long term, support services, maintenance and development as well as training are functions that are critical for the users and they will determine the sustainability of this information system. The ILO DWT-POS adopted three basic responses as a strategy to sustain the CLMIS as the information system used by the DoLs in the Caribbean region:

- 1. "An open software" approach;
- A network of accredited national service providers; and
- A CLMIS coordination Unit in the ILO DWT-POS.

Actual implementation of this strategy has now become critical to support the on-going work in countries where the CLMIS software was installed in 2011-12 and is an absolute requirement to deploy the CLMIS in other countries that have requested the system.

Support, maintenance and development

The open software approach (see Annex 2) allows the countries to move in a planned trajectory to develop national capacity after the CLMIS software is installed by the ILO/CLMIS Unit (see Annex 1). Once the Ministry of Labour/Department of Labour (M/DoL) is using the software, this Unit will partner

These are: the National Statistical Organisation (NSO), the Ministry/Department of Labour (M/DoL) and National Insurance System (NIS).

The system was developed by Mr Reynold Simons with support of the ILO DWT-POS. Mr Kerwyn Roach, a software developer contracted by the ILO developed the software application. with one or more national (public or private) sector service providers for support, maintenance and development of the CLMIS applications at the national level. This Unit will also make sure that the objective of harmonisation of LMI across the region is maintained and that new developments of the software at the country level are shared.

Work plan for the CLMIS Unit: 1 June to 31 October 2013

In the coming six months the CLMIS Unit in the ILO DWT-POS for the Caribbean will implement the following work plan:

- Develop a Terms of Reference (ToR) for the CLMIS Unit in the ILO DWT-POS that will be responsible for the CLMIS in the long run (ToR to include a draft annual budget and job specifications).
- Provide technical assistance to the OECS meeting of Permanent Secretaries and Labour Commissioners on establishing the LMI system.
- Complete the on-going work related to the establishment of an LMI system in Antigua and Barbuda, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname and partially in Trinidad and Tobago:
 - a) Support the official launch of the LMIS websites.⁴
 - b) Provide maintenance and training support services for the systems installed.
 - c) Sign agreements with one or more national service providers who will have access to the source code and will then provide most of the maintenance, development and training support services for the M/DoL.
 - d) Monitor and consolidate changes made to the national systems.
- Plan, implement and follow-up on establishing an LMI system in The Bahamas, Dominica, Grenada and Anguilla:
 - a) The deployment of the CLMIS software.
 - b) Support the official launch of the LMISwebsites.⁵
 - c) Sign agreements with one or more national service providers who will have access to the source code and will provide most of the development, maintenance and training support services for the Ministry/DoL.
- 5. Finalise the development of the software with respect to security issues.
- 6. Design and deliver a basic support service package including training.

⁵ Static and the dynamic websites

⁴ Static and the dynamic websites

 Design and establish an operational network of national service providers as outlined in this document which includes the design of a formal agreement with the service providers.

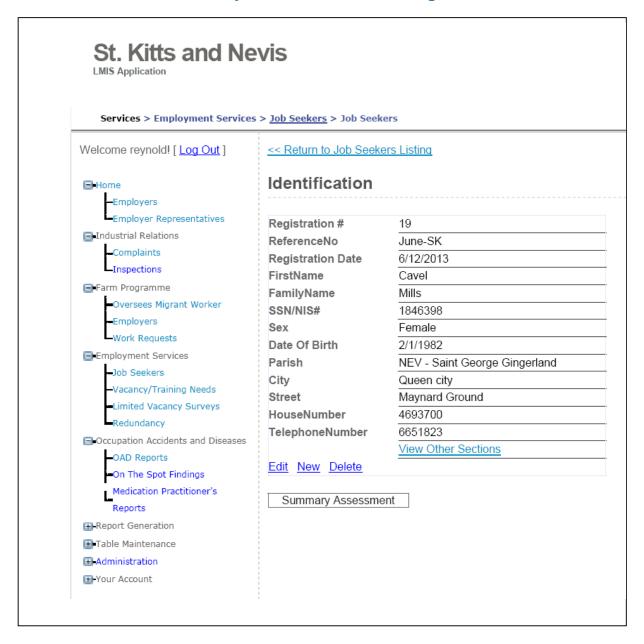
At this stage the CLMIS Unit will, in its preliminary formation, consist of:

- The Senior Specialist, Employment and Labour Market Policies at the ILO DWT-POS (3.5 working months).
- A senior software developer (5 working months).
- An Associate Expert in LMI (5 working months).

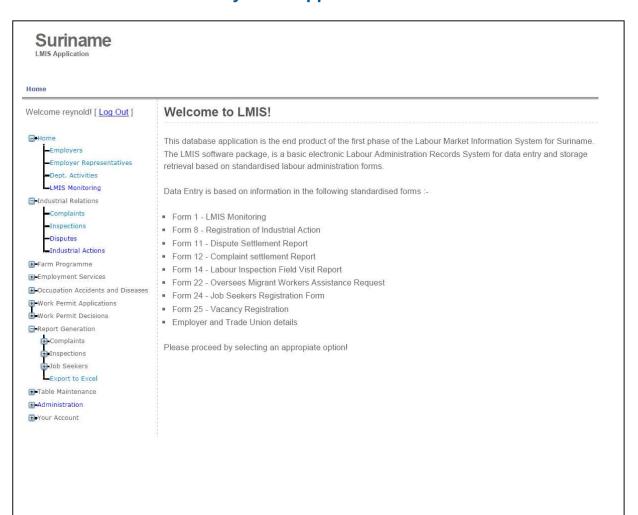
Annexes:

- Overview of steps in deploying the LMIS software and establishing a national LMIS.
- Specification of minimum computer hardware and software requirements for the installation of the CLMIS software.
- 3. The CLMIS software and Public Employment Services (PES) A strategy to revitalize the PES in the Eastern Caribbean by 2014 with a special focus on integration of IT.
- 4. Memorandum of Understanding.

CLMIS System: Job Seekers Registration



CLMIS System: Application for Suriname



Annex 1:

Overview of steps in deploying the CLMIS software and establishing a national LMIS

Each country needs to establish the basic conditions for implementation of the System -- funding of local project component, human resources, hardware and software. The design of a national project document or at least a work plan is highly recommended (a generic template is available). The support of the ILO to establish an LMIS is organised in three missions.

1st Mission

The first technical mission will provide the ILO with the details of the situation in the country as it relates to Labour Market Information and how the Labour Administration Functions are organized. During this first mission the Department of Labour (DoL) counterpart team will be able to discuss deployment of the software and necessary adjustments, sensitize the stakeholders, and reach formal agreement on the actual content of the LMIS (what LMI each stakeholder will contribute). Based on this the DoL can design a work plan.

The DoL in each country must have the work plan and funding for the local project component in place prior to the first mission.

2nd Mission

During the second technical mission the CLMIS software will be installed on the DoL network, the DoL staff trained and the interagency LMIS team also trained in preparing non-DoL indicators for publication on the dynamic website. The DoL in each country must have the following basic requirements in place prior to the start of the second mission:

- 1) Hardware: Server, a wired or wireless network, and work stations;
- 2) Software (web design and the ILO-CLMIS course); and
- 3) Human resources: Training of the system administrator and statistician and computer literacy training of all DoL staff.

3rd Mission

The static and dynamic websites will be launched during the third and final technical mission. During this mission the first official output will be generated from the DoL computerized Labour Administrative Records database. The data submitted by the participating agencies will be vetted and all web content will be uploaded. The launch may be organized as a formal activity.

Budget and Funding

The general approach to funding the CLMIS deployment is that funding for major cost components will be allocated from the following sources:

Generic Country summary budget				
	Cost per count	Cost per country to be funded from national sources		
Line Item	Total	Cash Expenditure		
Total				
Total HR costs				
ILO Specialists				
Consultants*				
Country/DoL Staff				
Regional Organization Staff				
Travel and DSA				
Cost of Training				
Communication, promotion and publication				
Office facilities, supplies/machines***				
Consultation with stakeholders				
Sub total				
Miscellaneous @ 5%				
Monitoring and evaluation costs 3%				
Cost increases @ ?%				

- * These costs vary based on national needs (size of the DoL); existing government IT services available and local pricing. Costs include a local consultant to provide training, install the network and a 2 year service contract.
- ** Actual costs depend on national needs (size of the DoL), existing government IT facilities available and local pricing. Hardware configuration: 1 Server with power supply with network and internet related hardware/cabling; work stations; scanner and printer.

Annex 2:

Specification of Minimum Computer Hardware and software requirements for the CLMIS Software

1) Introduction

- a) Open source software approach: The use of "open source software" was adopted considering the limited budgets of the Departments of Labour in the English- and Dutch-speaking Caribbean, and the capacity to pay for information and statistical systems in the small-island developing states. However, getting sufficient support for open software was seen as a challenge in this subregion. Therefore, a middle of the ground solution was adopted by choosing Microsoft SQL Server as a platform for the software. The free, limited version of this software was sufficient to satisfy the needs of most Caribbean countries. Countries requiring more features could simply switch to one of the commercially marketed versions of the platform.
 - Open source software continues to be used to develop the system further after it is deployed in the countries and they continue to develop "national applications" that will be shared among users.
- b) Coordination and training: The ILO DWT-POS will establish a Unit that will coordinate the knowledge network, provision of services and the maintenance of the CLMIS software after its initial deployment in the various countries.
- c) CLMIS Network: The ILO is the owner of the copyright of the CLMIS software. However, it is unrealistic to assume that the DWT-POS could continuously provide the necessary services (training, maintenance and other services) to the Labour Departments in the many countries it serves. Therefore, the day-to-day activities related to this function should be undertaken by local service providers in the respective countries, from the private or public sector.

In each country where the CLMIS software is installed, the mandated partner of the ILO, usually the Ministry or Department of Labour, will assign one or two service providers who will:

- Be trained to perform "daily routine" maintenance and support functions;
- Get tools to provide training and "daily routine" maintenance and support services;
- Have access to the source code in order to develop new applications with the obligation to submit all source code developed for new applications to the CLMIS Unit at the ILO DWT-POS.
- d) **Biennial updates:** Once every two years the ILO will coordinate the release of an upgraded version of the software to ensure that it is updated in line with the changes in the operating system and platform. These releases will also contain the applications that were added to the systems in the various countries.

Hardware

- a) DOL Server, modem and related hardware: The specifications will ultimately depend on the current labour administration structure and size of the DoL staff)
 - Windows 2008 server with minimum 2GB RAM or greater (4 GB RAM) and at least 60 GB or more of available hard disk space.
 - ii) The CLMIS software is installed on a Microsoft Windows 2008 server with:
 - (1) File Server and Web Application options enabled
 - (2) Internet Information Service (IIS) 7.x web server enabled
 - iii) Users access the CLMIS using web based clients such as Internet Explorer (7.0 or higher) or Google Chrome via internal TCP/IP network connecting client computers to the windows 2008 server
- b) Workstations and PCs for the technical staff
- c) Laptops or tablets for field work (optional)
- d) Flatbed scanner

3) Software

- a) Operation system: Windows 2008 server (not the small business edition)
- b) Additional software to be installed include (minimum):
 - i) Microsoft SQL Server 2008 Express R2 edition⁶ (free download)
 - ii) Microsoft .NET 3.5 and .NET 4.0 framework
- Other facilitating software: MS-Office (with Access) or Open Office; PDF software package; Scanning software with OCR
- 4) Security Application security: each user to be assigned a SQL database user-id and password
- 5) Administrative privileges: The ILO software developer will need administrative rights to install SQL servers and related software and/or the CLMIS software for subsequent updates of the system on a case by case basis.

⁶ If there already is a license for the "full version" of Microsoft SQL Server then the enhanced security, reporting and other features can be utilized

Annex 3:

The CLMIS software and Public Employment Service (PES) A strategy to revitalize the PES in the Eastern Caribbean by 2014 with a special focus on Integration of IT

Background and Justification

History: The Departments of Labour (DoL) in the English- and Dutch-speaking Caribbean were established in the late 1940s and early 1950s and the Public Employment Services (PES) function was included in their mandate. In countries where the size of the labour market was large enough the PES was organized as a separate unit in the DoL. However, in many countries, this function was simply performed by one or two "Employment Officers".

The focus of the newly formed DOL was and has remained in Industrial Relations and Labour Inspection, without unemployment benefits or other clear employment programmes to administer. PES functioned largely as appendices to the DoL. With a few exceptions, the PES operations were limited to "registering job seekers and vacancies" whereas success in placing job seekers remained dependent on employers, who largely did not actively use the PES in their recruitment strategies and policies.

Response to PES challenges:: local, ILO, IT

The process of building a Labour Market Information System in several Caribbean countries laid bare the current malaise of many public employment services in the Caribbean. The issues that need to be resolved relate to the (employment) policies and policy coherence (and the PES strategy), operational (efficiency) and funding.

At the end of the 1990s most Caribbean Departments of Labour understood that the PES faced mounting challenges including a structurally changing labour market environment, the operation of Private Employment Agencies⁷ (PEA), insufficient resources, a worsening job market, and a shrinking clientele. In response, policy-makers focused on establishing new internet-based job brokering facilities. Often the underlying assumption was that these internet-based systems would make a strong contribution to solving the employment challenges and problems the PES had to cope with.

At the beginning of the new millennium, the ILO had limited resources to support the development of public employment services and support by the US Department of Labor was short-lived. All this explains to a large extent the policy dead end that many PES in the region find themselves in today and the operational challenges they are facing. As the PES continue to struggle to overcome these challenges their image suffered. Over the years they have been seen as a struggling entity with limited human resources and limited capabilities to implement their mandate.

The global economic and financial crisis of 2009 and the slow recovery resulted in reduced employment growth and increasing unemployment in the small island communities in the region and demanded responses from Governments. Many governments established or intensified employment (job) support measures. Invariably, these programmes have budgets that are a multiple of the annual DoL budget and provide participants cash benefits on top of other services delivered. Today, apart from the challenges referred to earlier, the PES increasingly run the risk of becoming seriously marginalized in this unfolding policy landscape.

1.1. Justification

The PES as a sustainable Labour Market Institution.

Over the past two decades, the PES became marginalized or practically defunct in some countries. Once well externally-funded short term projects come to an end, the decline may leave countries without a (public) policy on employment services and/or a labour administration entity with operational capability in this area. In addition, experience has shown that without an entity charged with policy design and coordination, short-term programmes are implemented in isolation with little or no communication and/or synergies.

⁷ The adoption of ILO Convention 181 ended the ban on "free of charging" Private Employment Agencies. While in many countries the legislation prohibiting the provision of employment services for a fee was not repealed, PEAs are "allowed" to operate. The requirement that employment services must be free of charge gave the PES an effective monopoly in the employment services "market" r. Especially in labour markets where PEAs have become active and/or legalised, the PES must now develop a new labour market strategy and mode of operation.

In the meeting with Permanent Secretaries and Labour Commissioners of the OECS, the delegates confirmed that the PES as an institution remained a policy objective in the Eastern Caribbean. However, all participants agreed that currently these services are not up to the task and are very much in need of strengthening.

It was agreed that based on a clear policy commitment to strengthening the PES for it to become the main Labour Market Institution charged with the design of employment polices and programmes, the ILO and other developmental partners can plan their activities in 2013-2014, to contribute to this objective. With its knowledge of the subregion and the outcome of discussions on strategic objectives, the ILO will develop both short- and long-term national country programmes on public employment services, which will be supported as outlined in the remainder of this document.

2. Strategy, Objectives and Outcomes

2.1. Strategy

Considering the urgency of the employment challenge, especially as it relates to youth employment, the programme outlined here includes an immediate response and envisions a revitalized PES that can make a strong contribution to ongoing or planned labour market programmes. This immediate response builds on the strong IT and statistical capabilities that the public employment services of the Department of Labour can contribute to labour market interventions, and most importantly a renewed mandate of its tripartite supervisory board, in close collaboration with the ILO,.

In addition to this immediate response, the support programme aims to contribute to developing a national consensus on an employment policy for <*name country*>, and the institutional and legislative framework for the private and public sector employment agencies. Based on this consensus amongst the stakeholders, but in particular the Tripartite Social Partners, the strengthening of the PES and the role of ILO support thereof can be planned.

2.2. Objectives

2.3. Outcomes

The PES unit, mandated to coordinate Labour Market Policies in <name country>, has the institutional and human resource capacity to play a regulatory role, design active employment policies, and implement or coordinate implementation of labour market policies on its own or by entering into public-private partnerships with employers, and with training, enterprise development and other employment related institutions.

3. Outputs and Activities

3.1. Outputs

- 1) A Project document to revitalise the PES through institutional strengthening and establishing publicprivate partnerships with employers, and with training, enterprise development and other employment related institutions
- 2) National workshop on Labour Market Policies and Employment policies and programmes
 - a) Role/mandate/tasks/staffing of the PES
 - b) A network of stakeholders for employment services (synergies between programmes; policy Coordination; accumulation of expertise/skills in one focal point
 - c) Legal/regulatory frameworks
 - d) Information network/system
 - e) Work plan for revitalisation of the PES
- 3) A revitalised PES based on the project objectives/outputs
- 4) Revised national legislation on employment services, non-traditional employment relations and part time work
- 5) One Stop Centres for Employment Services
- 6) Trained public employment services staff

3.2. Activities

- 1) Prepare a project document to revitalise the PES
- 2) A Tripartite National workshop on the PES, Labour Market Policies and Employment polices/programmes to include items such as: role/mandate/tasks/staffing of the PES; a network of stakeholders for employment services (synergies between programmes; policy Coordination; accumulation of expertise/skills in one focal point; Legal/regulatory frameworks; Information

- network/system; Work plan for revitalization of the PES; a revitalized PES based on the project objectives/outputs; Revised national legislation on employment services, non-traditional employment relations and part time work; One Stop Centres for Employment Services;
- 3) Implementation of the project to revitalize the PES (includes training seminar for PES Staff, networking and "one-stop-centres")
- 4) Design, adoption and proclamation of revised national legislation on employment services, non-traditional employment relations and part time work.

Annex 4:

MEMORANDUM OF UNDERSTANDING

On <country name> National Labour Marker Information System (<country name abbreviation> - LMIS)

Background

- 1. For most <country nationals>, employment is the single most important source of income, self-realization, (self) respect and dignity. It is largely through work that we integrate and value our citizens. To run their business employers or public services managers need paid employees and/or self-employed persons. This labour force is a critical factor of production that in today's knowledge economy determines which business will have the competitive edge in the market. Therefore, it is in the world of work or in a more narrow sense in the labour market that we engage ourselves in producing wealth, distributing income and expressing our human development.
- 2. Labour Market Information (LMI) captures all these elements. Through LMI <country name> will better understand how economic growth and wealth creation does or does not translate into human development. We need LMI to plan, monitor or compare our achievements in these areas. The Labour Market Information System (LMIS) uses statistical indicators but also news stories or more formal analyses to inform us how we progress in providing Decent Work for all, improve productivity and develop our economy with equity.
- 3. The global economic and financial crisis, which became evident in early 2009, impacted heavily on the Caribbean region and <*country name*>. This has increased the demand for LMI and in response, our national agencies involved must step up their efforts to produce more and better LMI and make it available to policy-makers and the wider public.
- 4. LMI comes from many sources, which are managed by different institutions, and this information is released at different intervals. Pulling all this information together is often a challenge in itself. Therefore, the collaborative effort of the agencies, that produce, own and disseminate LMI, is essential to put more and better LMI in the hand of <country nationals>. Sharing will facilitate analysing a wide range of labour market indicators, result in better packaging of timely Labour Market Information and ensure that it is user-friendly and cost efficient.
- Considering the above, the LMI Stakeholders Meeting in <country name>, convened today,<date>
 decided to adopt this consensus document, to achieve the following objectives:
 - 1. Produce more, better and timely LMIS for <*country name*>, its people, government, business, trade union, and civic society organizations
 - 2. Forge and formalize a national consensus on a national plan of action that aims at:
 - a. Making more efficient use of human, financial and other resources
 - b. Avoiding duplication of data sources
 - c. Making data sources more complementary taking into consideration various methodologies and techniques
 - d. Strengthening the role and the impact of our national statistical capacity, particularly of the Statistical Service
 - e. Sharing infrastructure especially in the area of ICT
 - 3. Mobilize more (financial) resources to produce and disseminate LMI
 - 4. Integrate ICT in LMI
 - 5. In order to achieve these objectives the participating agencies will undertake the following action:
 - Formalize the consensus on the data sources for LMI (censuses, surveys and administrative databases) that respective agencies and institutions will operate in <name country>on an ongoing basis to generate⁸ the LMI output specified in Annex1. The participating agencies guarantee free and timely access to this information where necessary subject to limitations and conditions laid down in specific annexes to this MOU.

⁸ Implementation of an LMI output and needs assessment may be needed to take a final decision on this.

- Assign responsibility for specific labour market indicators or other LMI specified in Annex 1
 and Annex 2 to national agencies, where relevant and subject to approval of the designated
 authorities. Each agency that has responsibility for specific labour market indicators or other labour
 market information commits itself to:
- Produce, process and make this information available to the public with the agreed periodicity
- Publish this information so it is readily accessible to policy- and decision-makers in Government,
 Business, Trade Unions and non-profit organizations, job seekers, students, and the public at large
- Collaborate to provide the LMI needed to conduct labour market analysis and report regularly. Participating agencies will facilitate the labour market analysis performed by a designated national agency by:
- Establishing and maintaining (electronic) data sets of labour market statistics and setting standards for access to this information
- Providing access to micro data files while adhering to relevant legal, ethical and other privacy considerations in the statistical process
- Jointly operate and maintain the internet based "one window" LMI dissemination facility as the national platform that is freely accessible to the public. This website is jointly established and maintained by the participating agencies through submitting the information specified per agency in Annex 1.
- 6. The agencies participating in the LMIS will pursue these objectives and implement scheduled activities by integrating these activities into the normal operations that fall within their mandate.
- 7. To review, adjust and implement the **joint objectives and activities** the following operational mechanism is established:
 - a) The Steering Committee (5 members), consisting of the Department of Labour (PS/Labour Commissioner), the National Insurance System (CEO) and <<u>National Statistical Organisation></u> (Dir/Chief Statistician), the national umbrella organizations (2) of Trade Unions and Employers
 - b) The Stakeholders meeting: (representatives) of all participating agencies, institutions and organizations
 - c) The Technical Task Force: agency officers responsible for producing and maintaining the LMI at the agency level and who may also be available for implementing joint LMIS activities
- 8. The LMI Stakeholders Meeting will take place annually to decide on all policy issues regarding this MOU as well as Information Technology (IT), budgetary, organizational, managerial and legal issues.

Signatures (All participating agencies)	
---	--

(Signature)	(Place)	(Date)
(Olgitature)	(i lacc)	(Date)

Annexes to the MOU

- 1. List of tables and indicators in the < name country>LMIS/website
- 2. Other LMI in the LMIS
- 3. Two-year programme to establish the basic data sources in < name country> and related Budget
- 4. The LMIS Statistical Website