



# Thematic Performance Evaluation

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USDOL ILAB-supported Labor Administration  
Electronic Case Management Systems

in

Colombia, Honduras, Paraguay,  
Peru, Philippines, Sri Lanka  
and Vietnam

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*Sistemas, Familia y Sociedad*  
*Consultores Asociados*

## ECMS COUNTRY FACT SHEETS

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# COLOMBIA:

## ECMS Fact Sheet I

- System Overview -



### System Title

Sistema de Información de Inspección, Vigilancia y Control (SISINFO)

### ECMS Status

Active

### Principal Institutional Owner

Ministry of Labor

### Implementation Stage Reached

Full Deployment

### Secondary Institutional Users

- Ministry of Health
- National Directorate of Taxes and Customs (DIAN)
- Network of Chambers of Commerce (CONFECAMARAS)
- National Planning Department, Ministry of Finance (DANE)

### Components Currently Used

All modules, with regular updates

### Geographic Extent of Deployment

- In all regions/offices (32 geographic departments and 4 special labor offices)
- The Ministry of Labor also has (municipal) labor inspectorates and, according to recent reports, approximately 100 have included cases in SISINFO

### Number of Enterprises Registered

Approximately 52,400

### Sector Focus

SISINFO includes over 400 templates to record inspection/labor violation information. Some templates are adapted for specific sectors/industries

### Description of Main Components/Modules

- Labor Inspection Module
- Planning and Reporting
- Complaints Management
- Establishment Licensing
- Reports
- Inspection Follow-up and Tracking

## COLOMBIA: ECMS Fact Sheet II

### - Key Software Features and Gaps -

Functionality	Colombia	Comments
1. Stores data in centralized database accessible in real-time to all authorized users	✓	
2. Includes online/offline data collection capability	✗	The system is not designed for offline data collection.
3. Aggregates labor law violation data by geographic area or type of violation	✓	These types of reports can be produced by exporting and filtering data.
4. Tracks key performance indicators such as number of inspections carried out	✓	The team and supervisor can generate dashboard which tracks several KPI.
5. Integrates data visualization tools such as dashboards	✓	The dashboard included data visualization tools.
6. Forms and workflow reflect current labor administration procedural requirement	✓	SISINFO contains a comprehensive and robust workflow based on labor laws and regulations. It has more than 140 variables and 400 formats.
7. Registers worker complaints, industrial accidents	✓	Included in a labor inspection checklist.
8. Tracks the status labor violation cases through hearings and sanctioning stages	✓	SISINFO has a process to track labor cases. It is tracking more than 80,000 cases.
9. Sends alerts to inspectors when follow-up actions are required	✓	SISINFO has system alerts for each follow-up action.
10. Generates the inspection report as well as letters and notices used at different stages of the inspection process	✓	
11. Assigns inspection duties to individual and/or groups of inspectors	✓	
12. Role-based security features that restrict access to some kinds of data/ECMS module	✓	
13. Data modifications controlled or traced to users	✓	
14. Data sharing with other information systems	✓	SISINFO made interoperations with other systems as a service (SOAP / REST).
15. Advanced data analytics for predicting labor violations	✗	

# COLOMBIA: ECMS Fact Sheet III

## - Technical Characteristics and Overall Assessment -

### Software Type

Proprietary: Oracle DB 12. (Licensed)  
Opensource: PrimeFaces, Subversion, Tomcat, Sprint Roo, Java JEE, HTML5, CSS3

### User Categories

- Labor Inspectors, Assistants and Technicians, and Coordinators
- Directors and Vice Ministry of Labor Relations
- Approximately 1,000 registered users

### System Maintenance

Ministry of Labor has a support contract with the IT service provider to maintain the system

### System Hosting

Hosted on Ministry infrastructure and network

### ECMS Costs (Grantee Expenditures, self-reported)

All expenditures are for the period 2013-2017:

- Consultant contracts for software development: US\$577,300
- Scanning and uploading cases that predated ECMS development: US\$ 477,200
- Training, consultation meetings and communication activities: US\$ 424,300
- TOTAL: US\$ 1,479,400

### Evaluation Team Assessment of ECMS (based on February 2021 status)

Framework Area	Evaluation Criteria	Rating
Technology	Extent software is fully developed, the number of types of features, level of adaption to ICT enabling environment	★★★★★
People	Extent the labor administration is effectively addressing the constraints affecting user ECMS adoption through training, support, other capacity building activities	★★★★ <sup>1</sup>
Processes	Extent software has been adapted to the labor administration's legal framework and procedures and facilitates inspection systems workflow	★★★★★

<sup>1</sup> Inspectors in Bogotá were reported not to have fully adopted the system.

# HONDURAS:

## ECMS Fact Sheet I

- System Overview -



### System Title

ECMS

### ECMS Status

Under Development

### Principal Institutional Owner

Ministry of Labor

### Implementation Stage Reached

Software partially developed but not accepted by the Ministry of Labor

### Secondary Institutional Users

- Ministry of Health
- Office of the Attorney General of the Republic: Institution receives the case when the file cannot close the second instance in the Office of the Attorney General of Labor

### Geographic Extent of Deployment

- System not yet deployed
- Based on current plans, ECMS will be deployed country-wide

### Components Currently Used

None

### Number of Enterprises Registered

N/A

### Sector Focus

N/A

### Description of Main Components/Modules

The ECMS includes 27 modules; of these, MOL has validated 18 modules. Specifically, the modules cover:

- System Administration and Security
- Labor Inspection Planning and Reporting
- Establishment Registration
- Complaint Management
- Judicial and Conciliation Hearings Management
- Labor Violation Fine Management
- Occupational Health and Safety
- Occupational Medical Visits
- Statistical and Indicator Reports
- Inspection Follow-up and Tracking
- Trade Union Registration

# HONDURAS: ECMS Fact Sheet II

## - Key Software Features and Gaps -

Functionality	Honduras	Comments
1. Stores data in centralized database accessible in real-time to all authorized users	✓	
2. Includes online/offline data collection capability	✗	The system is not currently designed for offline data entry. When the internet connection drops, the ECMS finishes the current entry, which remains in memory and is synchronized when the connection returns. After the transaction is completed, it does not allow one to continue working offline.
3. Aggregates labor law violation data by geographic area or type of violation	✓	The dynamic reporting module allows users to sort information by geographic area.
4. Tracks key performance indicators such as number of inspections carried out	✓	
5. Integrates data visualization tools such as dashboards	✓	
6. Forms and workflow reflect current labor administration procedural requirement	Partial	The Ministry has withheld validation on some ECMS modules, pending modification. The IT contractor reported that it needed additional information to adapt the reports to Ministry requirements.
7. Registers worker complaints, industrial accidents	✗	The Ministry did not request a complaints registration module. Ministry personnel indicated there are no personnel to follow up on these complaints.
8. Tracks the status labor violation cases through hearings and sanctioning stages	Partial	Users can obtain information about the status of cases by extracting data from the dynamic reporting module and predefined reports.
9. Sends alerts to inspectors when follow-up actions are required	✓	
10. Generates the inspection report as well as letters and notices used at different stages of the inspection process	✓	
11. Assigns inspection duties to individual and/or groups of inspectors	Partial	In the first version of ECMS, administrators can manually assign cases to individual inspectors. The Minister has requested that the next version of ECMS integrate a feature that randomly assigns inspectors to cases.
12. Role-based security features that restrict access to some kinds of data/ECMS module	✓	The ECMS limits access by user roles. However, the grantee suggests a study is needed to better define how role-based restrictions should be defined.
13. Data modifications controlled or traced to users	✓	There is a transaction log to record what users did when they were logged into the system.
14. Data sharing with other information systems	✗	The grantee and the Ministry discussed data-sharing applications in the design phase but decided against implementation.
15. Advanced data analytics for predicting labor violations	✗	

# HONDURAS: ECMS Fact Sheet III

## - Technical Characteristics and Overall Assessment -

### Software Type

Opensource, Microsoft SQL Server

### User Categories

ECMS will be used for almost 470 users from the following categories:

- Labor inspectors
- Labor administrators
- Occupational physicians
- Workers and worker representatives
- Employers

### System Maintenance

Ministry of Labor is composed of 7 persons who support daily operations and projects

### System Hosting

Hosted on Ministry of Labor Network

### ECMS Costs (Grantee Expenditures, self-reported)

- IT service provider contract for software development: US\$ 135,000
- ECMS project manager/consultant: US\$ 35,000
- Development of online training modules for labor inspectors: US\$ 18,000
- ECMS modifications/upgrades and content development for training: US\$ 65,000
- Computer equipment for labor inspectors: US\$ 98,000
- Servers (2): US\$ 20,000
- Meetings: US\$ 8,000
- TOTAL: US\$ 379,000

### Evaluation Team Assessment of ECMS (based on March 2021 status)

Framework Area	Evaluation Criteria	Rating
Technology	Extent software is fully developed, the number of types of features, level of adaption to ICT enabling environment	★★ <sup>2</sup>
People	Extent the labor administration is effectively addressing the constraints affecting user ECMS adoption through training, support, other capacity building activities	★
Processes	Extent software has been adapted to the labor administration's legal framework and procedures and facilitates inspection systems workflow	★★★

<sup>2</sup> The software design is advanced, but many modules have not yet been validated and none have been used in the field. There may be various technical glitches and other adjustments that will be required before the software meets the labor administration needs.



**PARAGUAY:**  
**ECMS Fact Sheet I**  
**- System Overview -**



**System Title**

ECMS or Sistema de Inspección del Trabajo (SIS)

**ECMS Status**

Inactive

**Principal Institutional Owner**

Ministry of Labor, Employment and Social Security

**Implementation Stage Reached**

Beta Version Completed  
Partially Deployed and then Suspended  
due to Covid-19

**Secondary Institutional Users**

Ministry of Health

**Components Currently Used**

None

**Geographic Extent of Deployment**

Expected to be deployed in all 16 regions

**Number of Enterprises Registered**

N/A

**Sector Focus**

N/A

**Description of Main Components/Modules**

- Labor Inspection Planning and Reporting
- Complaints Management
- Establishment Licensing
- Reporting
- Occupational Health and Safety Risks
- Inspection Follow-up and Tracking

## PARAGUAY: ECMS Fact Sheet II

### - Key Software Features and Gaps -

Functionality	Paraguay	Comments
1. Stores data in centralized database accessible in real-time to all authorized users	✓	
2. Includes online/offline data collection capability	✓	
3. Aggregates labor law violation data by geographic area or type of violation	✓	
4. Tracks key performance indicators such as number of inspections carried out	✓	
5. Integrates data visualization tools such as dashboards	✓	
6. Forms and workflow reflect current labor administration procedural requirement	Partial	The first version was validated by the labor administration as meeting their procedural requirements. Later, following a change in Minister, the Minister requested modification to adapt to new requirements.
7. Registers worker complaints, industrial accidents	Partial	The first version of ECMS included a module on OSH and complaints management but revisions have been requested.
8. Tracks the status labor violation cases through hearings and sanctioning stages	✓	
9. Sends alerts to inspectors when follow-up actions are required	✓	
10. Generates the inspection report as well as letters and notices used at different stages of the inspection process	✓	
11. Assigns inspection duties to individual and/or groups of inspectors	✓	
12. Role-based security features that restrict access to some kinds of data/ECMS module	✓	
13. Data modifications controlled or traced to users	✓	
14. Data sharing with other information systems	✓	
15. Advanced data analytics for predicting labor violations	✗	

# PARAGUAY: ECMS Fact Sheet III

## - Technical Characteristics and Overall Assessment -

### Software Type

Opensource language (PHP) with BD (Postgree)

### User Categories

- Labor Inspectors (numbering approximately 23 in March 2021)
- Labor Administrators

### System Maintenance

IT Department composed of 5 persons, who will support daily operations and oversee revisions in existing ECMS software

### System Hosting

Hosted on Ministry of Labor infrastructure, network and hardware

### ECMS Costs (Grantee Expenditures, self-reported)

US\$ 97,924 Subcontract for ECMS, which included:

- Preparation of labor inspection procedures manual and a “Manual of Functions of the General Directorate of Labor Inspection and Supervision (DGIFT)”
- Design, development, and testing of ECMS software, including a mobile application, software administration and user manuals
- Training for software administrators
- User training
- Digitization of inspection records carried out from 2013 to the start of the software (approximately 6,900 records)

### Evaluation Team Assessment of ECMS (based on March 2021 status)

Framework Area	Evaluation Criteria	Rating
Technology	Extent software is fully developed, the number of types of features, level of adaption to ICT enabling environment	★★ <sup>3</sup>
People	Extent the labor administration is effectively addressing the constraints affecting user ECMS adoption through training, support, other capacity building activities	★
Processes	Extent software has been adapted to the labor administration’s legal framework and procedures and facilitates inspection systems workflow	★

<sup>3</sup> The software design is relatively advanced, but many modules have not yet been fully validated or used in the field. There may be various technical glitches and other adjustments that will be required before the software meets the labor administration needs.

# PERÚ:

## ECMS Fact Sheet I

### - System Overview -



#### System Title

Sistema de Informático de la Inspección de Trabajo (SIIT)

#### ECMS Status

Active

#### Principal Institutional Owner

National Superintendency of Labor Inspection (SUNAFIL)

#### Implementation Stage Reached

Full Deployment

#### Secondary Institutional Users

- Ministry of Labor and Employment Promotion
- Ministry of Health
- National Customs and Tax Administration (SUNAT)

#### Components Currently Used

All Modules

#### Geographic Extent of Deployment

In all regions/offices (26 geographic regions)

#### Number of Enterprises Registered

Approximately 17,000

#### Sector Focus

Includes forms for use in specific sectors and industries

#### Description of Main Components/Modules

- Labor Inspection Planning and Reporting
- Complaints Management
- Establishment Licensing
- Reporting
- Occupational Health and Safety Risks
- Inspection Follow-up and Tracking

In addition, SUNAFIL developed two complementary modules, not integrated into the SIIT:

- Electronic mailbox that allows registered enterprises to submit payroll and other information for remote inspection
- The System of Alerts and Monitoring (SAMO) which used ECMS and other data drawn from other government information systems for advanced analytics to help predict labor violations<sup>4</sup>

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<sup>4</sup> See <https://busquedas.elperuano.pe/normaslegales/aprueban-la-implementacion-del-sistema-de-alertas-y-monitor-resolucion-ministerial-n-291-2019-tr-1831812-1/>

## PERÚ: ECMS Fact Sheet II

### - Key Software Features and Gaps -

Functionality	Perú	Comments
1. Stores data in centralized database accessible in real-time to all authorized users	✓	
2. Includes online/offline data collection capability	✓	
3. Aggregates labor law violation data by geographic area or type of violation	Partial	Reports are developed by extracting data from the SIIT and creating the report using Excel or a similar tool. They are not automatically or consistently generated and reviewed. Some regional offices generate their own reports.
4. Tracks key performance indicators such as number of inspections carried out	✓	The SIIT team can generate the dashboard indicators using ECMS data, but they are not dynamically generated.
5. Integrates data visualization tools such as dashboards	Partial	The SIIT dashboard includes data visualization tools, but they are currently being improved by SUNAFIL's IT Department.
6. Forms and workflow reflect current labor administration procedural requirement	Partial	SIIT contains standardized forms based on labor laws and regulations. It is composed of 80 tables and 13 views to analyze information. However, the IT Department has had to develop some separate applications for procedures not currently part of SIIT.
7. Registers worker complaints, industrial accidents	Partial	
8. Tracks the status labor violation cases through hearings and sanctioning stages	✓	The SIIT has forms to track the outcomes the progression of labor violation cases.
9. Sends alerts to inspectors when follow-up actions are required	✓	
10. Generates the inspection report as well as letters and notices used at different stages of the inspection process	Partial	SIIT generates a basic inspection report. Letters and notices are created outside the system.
11. Assigns inspection duties to individual and/or groups of inspectors	Partial	SIIT can be used to assign some duties to individual inspectors, but it neither fully automates the process nor is the feature available for all kinds of duties performed by inspectors.
12. Role-based security features that restrict access to some kinds of data/ECMS module	Partial	There are some parts of the system that are not effectively restricted based on assigned access rights.
13. Data modifications controlled or traced to users	✓	
14. Data sharing with other information systems	Partial	In 2017, the SIIT connected to the Electronic Payroll System (registry of company workers) within the module covering inspection orders. The SIIT also connected with the Work Accident System (registry of notifications of work accidents, fatal accidents, and occupational illness).
15. Advanced data analytics for predicting labor violations	✓	The SIIT developed SAMO in 2019. It uses information in the SIIT and other government databases to predict potential labor violations.

# PERÚ: ECMS Fact Sheet III

## - Technical Characteristics and Overall Assessment -

### Software Type

Opensource language (Java) with Oracle database

### User Categories

- Labor Inspectors (numbering 800)
- Labor Administrators

### System Maintenance

SUNAFIL has a 5 person IT Department, composed to support daily operations and new projects

### System Hosting

Hosted on Ministry of Labor network. SUNAFIL is acquiring his own datacenter.

### ECMS Costs (expenditures reported in final evaluation report)

- Budget for preliminary assessment to define redevelopment needs: US\$ 1,500
- Software development costs: US\$ 64,600

SUNAFIL covered labor inspector training costs from its own budget (no cost information available)

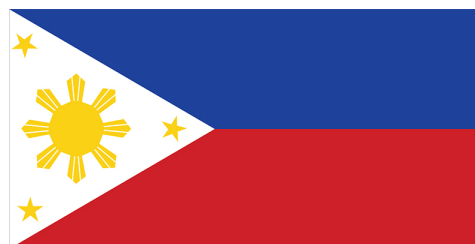
### Evaluation Team Assessment of ECMS (February/March 2021 status)

Framework Area	Evaluation Criteria	Rating
Technology	Extent software is fully developed, the number of types of features, level of adaption to ICT enabling environment	★ ★ ★
People	Extent the labor administration is effectively addressing the constraints affecting user ECMS adoption through training, support, other capacity building activities	★ ★ ★
Processes	Extent software has been adapted to the labor administration's legal framework and procedures and facilitates inspection systems workflow	★ ★ ★

# PHILIPPINES:

## ECMS Fact Sheet I

- System Overview -



### System Title

Labor Inspection Management Information System (LI-MIS)

### ECMS Status

Active

### Principal Institutional Owner

Ministry of Labor

### Implementation Stage Reached

Full Deployment

### Secondary Institutional Users

- Bureau of Local Employment
- Bureau of Workers with Special Concerns
- Bureau of Labor Relations
- National Conciliation Mediation Board
- Philippines Overseas Employment Administration
- Tripartite Committees
- Congress

### Number of Enterprises Registered

196,670

### Geographic Extent of Deployment

In all regions/offices

### Sector Focus

Includes one generic inspection checklist and specific checklists for maritime and fishing vessels, buses, and construction sites

### Description of Main Components/Modules

- Labor Inspection Module with checklists for general labor standards, occupational safety and health, and illegal contracting and subcontracting
- Auto-notification system for serious issues, such as child labor and refusing labor inspector access to the workplace premises

In addition, BWC developed two complementary modules, not integrated into the LI-MIS:

- Establishment Report System (ERS), deployed in July 2020, for online submission of reports to notify DOLE of the implementation of flexible work or alternative work arrangements, temporary and permanent closure, and the retrenchment of workers
- Joint Monitoring System (JMS), developed in early 2020, to monitor compliance with Covid-19 safety protocols. As of late 2020, almost 7,000 establishments were registered online and around 3,200 reports had been received.

## PHILIPPINES: ECMS Fact Sheet II

### - Key Software Features and Gaps -

Functionality	Philippines	Comments
1. Stores data in centralized database accessible in real-time to all authorized users	✓	
2. Includes online/offline data collection capability	✓	
3. Aggregates labor law violation data by geographic area or type of violation	Partial	These types of reports can be produced by exporting and filtering data but are not automatically generated reports.
4. Tracks key performance indicators such as number of inspections carried out	✓	The team received a screen shot of the dashboard which tracks several KPIs. The dashboard is not generated in real time, however.
5. Integrates data visualization tools such as dashboards	✓	The dashboard included data visualization tools such as a map and graphs.
6. Forms and workflow reflect current labor administration procedural requirement	✓	LI-MIS contains a comprehensive electronic checklist which is based on labor laws and regulations.
7. Registers worker complaints, industrial accidents	✓	Included in a labor inspection checklist but not as a separate module.
8. Tracks the status labor violation cases through hearings and sanctioning stages	Partial	This was highlighted as a key gap in the system. LI-MIS labor inspection module has fields to enter information about how cases were followed up and if restitution was paid but they are not regularly updated, which diminishes its use for case management.
9. Sends alerts to inspectors when follow-up actions are required	Partial	The system has an automatic alert system if an inspector indicates child labor or refusal to entry, but not to follow-up on case management steps.
10. Generates the inspection report as well as letters and notices used at different stages of the inspection process	Partial	LI-MIS generates the inspection report but no other letters and notices. Laws require a paper inspection report to be left with the enterprise.
11. Assigns inspection duties to individual and/or groups of inspectors	✓	
12. Role-based security features that restrict access to some kinds of data/ECMS module	✓	
13. Data modifications controlled or traced to users	✓	
14. Data sharing with other information systems	✗	
15. Advanced data analytics for predicting labor violations	✗	



# PHILIPPINES: ECMS Fact Sheet III

## - Technical Characteristics and Overall Assessment -

### Software Type

Opensource

### User Categories

LI-MIS is reported to be utilized by over 1,000 users nationwide, including Labor Inspectors, Technical Services Support Division Chiefs, BWC Sub-national Focal Persons, Field Office and Regional Office Directors and Key Senior Officials of the Department of Labor and Employment

### System Maintenance

System is maintained by a 5-person team within the BWC.  
BWC does not currently have a support contract with the IT service provider.

### System Hosting

Hosted on DOLE's internal network

### Hardware Used for Data Entry

Labor inspectors are issued tablets with 4G internet connections

### ECMS Costs (Grantee Expenditures, self-reported)

IT service provider contract for software development and system documentation: US\$ 124,850

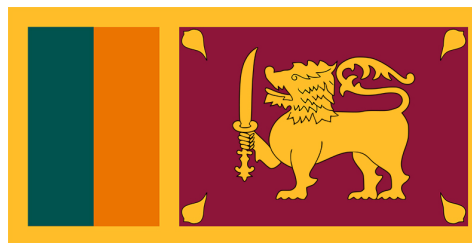
According to ILO, although there was no contract specifying the limits of these services, the amount stated above included management services, security testing and troubleshooting, software upgrades, security patches and bug fixes. The IT contractor also provided training and mentoring to DOLE MIS staff and the MIS focal points from the regions, for every module delivered. Payments were made after delivery of each module, the completion of training and mentoring, and the submission of a progress report.

### Evaluation Team Assessment of ECMS (February 2021 status)

Framework Area	Evaluation Criteria	Rating
Technology	Extent software is fully developed, the number of types of features, level of adaption to ICT enabling environment	★★★
People	Extent the labor administration is effectively addressing the constraints affecting user ECMS adoption through training, support, other capacity building activities	★★★★★
Processes	Extent software has been adapted to the labor administration's legal framework and procedures and facilitates inspection systems workflow	★★★

# SRI LANKA: ECMS Fact Sheet I

## - System Overview -



### System Title

Labor Information System Application (LISA)

### ECMS Status

Still accessible on the DOL network, but the DOL reported that LISA was only used in a few sub-offices as of January/February 2021

### Principal Institutional Owner

Department of Labor (DOL), Ministry of Labor

### Implementation Stage Reached

Full Deployment

### Secondary Institutional Users

N/A

### Components Currently Used

- Inspection module
- Complaints & Disputes Management

Use was reported as limited, even for these modules. Users reported having reverted to manual systems and/or Microsoft Office tools like Excel.

### Geographic Extent of Deployment

11 zonal offices, 40 district offices, 17 sub-offices and 10 engineering offices which employ approximately 300 labor officers.

### Number of Enterprises Registered

9,000 of 30,000 factories

### Sector Focus

N/A

### Description of Main Components/Modules

- Inspections and Follow-up Inspections
- Complaints and Disputes Management
- Legal/Prosecution Management
- Work Planning/Scheduling
- Digital Documentation Library
- Statistical Module
- OSH Module
- Child Labor Module
- Dedicated Windows/Android tablet application for field use (no internet connectivity required)
- Management Oversight Module

## SRI LANKA: ECMS Fact Sheet II

### - Key Software Features and Gaps -

Functionality	Sri Lanka	Comments
1. Stores data in centralized database accessible in real-time to all authorized users	✓	
2. Includes online/offline data collection capability	✓	
3. Aggregates labor law violation data by geographic area or type of violation	Yes, but not currently functional	The DOL reported that the statistical module was not functioning and to get data out of the system, the entire dataset needed to be extracted and then filtered in Excel.
4. Tracks key performance indicators such as number of inspections carried out	Yes, but not currently functional	The DOL reported the statistical module was not functioning and to get data out of the system, the entire dataset needed to be extracted and then filtered in Excel.
5. Integrates data visualization tools such as dashboards	Yes, but not currently functional	The DOL reported there was a dashboard feature, but it used only “dummy” data.
6. Forms and workflow reflect current labor administration procedural requirement	✗	When LISA was first developed, it reflected procedural requirements but has not been updated to match current regulations and checklists. DOL reported that their inability to modify forms was an important challenge of using the system.
7. Registers worker complaints, industrial accidents	Yes, partially functional	LISA has a dedicated module for complaints management and OSH, but the DOL reported that it is only partially in use. Users reported specific challenges with the case transfer function.
8. Tracks the status labor violation cases through hearings and sanctioning stages	Yes, partially functional	LISA has a dedicated module for complaints management that includes tracking features, but the DOL reported that it is only partially in use; most offices have reverted to manual systems.
9. Sends alerts to inspectors when follow-up actions are required	Yes, partially functional	LISA includes tracking and scheduling features with alerts, but the DOL reported that it is only partially in use; most offices have reverted to manual systems.
10. Generates the inspection report as well as letters and notices used at different stages of the inspection process	Yes, partially functional	DOL officials reported that the letters are part in English and part in Sinhalese, which they found problematic.
11. Assigns inspection duties to individual and/or groups of inspectors	Yes, partially functional	LISA includes tracking and scheduling features with alerts, but the DOL reported that it is only partially in use; most offices have reverted to manual systems.
12. Role-based security features that restrict access to some kinds of data/ECMS module	✓	Labor officials reported it was not possible to remove users from the system.
13. Data modifications controlled or traced to users	✓	
14. Data sharing with other information systems	✗	
15. Advanced data analytics for predicting labor violations	✗	

# SRI LANKA: ECMS Fact Sheet III

## - Technical Characteristics and Overall Assessment -

### Software Type

Opensource, Microsoft SQL server

### User Categories

- Labor Administration Officials
- Labor Inspectors
- OSH Engineers
- Child Labor Officers
- Field Office and Regional Office Directors
- Senior Officials of the Department of Labor
- Prosecution Unit Personnel
- Industrial Relations Unit Personnel
- System Administrator(s)
- Clerical Personnel

When fully deployed, LISA was operating in 82 locations staffed by 300 labor officers.

### System Maintenance

In 2016, the Department of Labor established a 5-member team for the management and day-to-day operations of LISA: 1 Labor Officer and 4 IT graduates. In February 2021, evaluation stakeholders reported the team was 3-4 members. BWC does not currently have a support contract with the IT service provider.

### System Hosting

Hosted on Ministry network. DOL described problems with server and bandwidth capacity, resulting in slow response time, inadequate back-up systems, and back-up data was not encrypted.

### Hardware Used for Data Entry

Labor inspectors were issued with tablets but refused to use them for data entry. OSH engineers also received tablets, which they used.

### Approximate ECMS Implementation Costs

Software development, training, and launch: US\$ 282,554  
Government reported contributing over US\$ 300,000 for tablets, other hardware and Internet connections

### Evaluation Team Assessment of ECMS (based on February 2021 status)

Framework Area	Evaluation Criteria	Rating
Technology	Extent software is fully developed, the number of types of features, level of adaption to ICT enabling environment	★ <sup>5</sup>
People	Extent the labor administration is effectively addressing the constraints affecting user ECMS adoption through training, support, other capacity building activities	★
Processes	Extent software has been adapted to the labor administration's legal framework and procedures and facilitates inspection systems workflow	★

<sup>5</sup> The software design is relatively advanced but is still in the early development stages.

**VIETNAM:**  
**ECMS Fact Sheet I**  
**- System Overview -**



**System Title**

Not yet named. Currently called “ECMS”

**ECMS Status**

Not Operational

**Principal Institutional Owner**

Ministry of Labor, Invalids and Social Affairs (MOLISA)

**Implementation Stage Reached**

- Software design completed
- Software development still in progress
- User training and deployment not yet started

**Secondary Institutional Users**

N/A

**Components Currently Used**

First module was in test phase as of February 2021

**Geographic Extent of Deployment**

Not yet deployed.  
Will be piloted in three provinces: Hanoi, Dong Nai, and Ho Chi Minh City

**Number of Enterprises Registered**

N/A

**Sector Focus**

N/A

**Description of Main Components/Modules**

- System Administration Module
- Enterprise Management Module
- Inspection Management Module
- Labor Inspection Campaign Module
- Violations and Sanctions Management Module
- Data Analytics and Reporting Module

## VIETNAM: ECMS Fact Sheet II

### - Key Software Features and Gaps -

Functionality	Vietnam (planned features)	Comments
1. Stores data in centralized database accessible in real-time to all authorized users	✓	
2. Includes online/offline data collection capability	✓	
3. Aggregates labor law violation data by geographic area or type of violation	✓	
4. Tracks key performance indicators such as number of inspections carried out	✓	
5. Integrates data visualization tools such as dashboards	✓	
6. Forms and workflow reflect current labor administration procedural requirement	✓	
7. Registers worker complaints, industrial accidents	✓	
8. Tracks the status labor violation cases through hearings and sanctioning stages	✓	
9. Sends alerts to inspectors when follow-up actions are required	✓	
10. Generates the inspection report as well as letters and notices used at different stages of the inspection process	✓	
11. Assigns inspection duties to individual and/or groups of inspectors	✓	
12. Role-based security features that restrict access to some kinds of data/ECMS module	✓	
13. Data modifications controlled or traced to users	✓	
14. Data sharing with other information systems	✗	
15. Advanced data analytics for predicting labor violations	✗	

# VIETNAM: ECMS Fact Sheet III

## - Technical Characteristics and Overall Assessment -

### Software Type

Opensource, Microsoft SQL server

### Planned User Categories

- Labor Inspectors
- Provincial Office Directors
- Senior Labor Administration Officials

### Planned System Maintenance

System will be maintained by MOLISA IT department known as LASIK or the “IT Center”  
Two staff will be assigned to the project: a Software and an IT Engineer

### Planned System Hosting

To be hosted on MOLISA Network

### Hardware Used for Data Entry

To Be Determined

### ECMS Costs (Grantee Expenditures, self-reported)

IT service provider contract: US\$ 138,092

Includes software development and testing, user training, support during pilot phase, development of an ECMS scale-up plan and six months software warranty

### Evaluation Team Assessment of ECMS (based on February 2021 status)

Framework Area	Evaluation Criteria	Rating
Technology	Extent software is fully developed, the number of types of features, level of adaption to ICT enabling environment	★
People	Extent the labor administration is effectively addressing the constraints affecting user ECMS adoption through training, support, other capacity building activities	★
Processes	Extent software has been adapted to the labor administration's legal framework and procedures and facilitates inspection systems workflow	★