Establishment of Digital Land Management System (EDLMS) through Digital Survey and Settlement Operations of 3 (three) City Corporations, 1(one) Pouroshava and 2(two) Rural Upazila of Bangladesh Project (1st Revised)

Establishment of DLMS Project

Sponsoring Ministry/Division	**: Ministry of Land**
Implementing Agency	**: Department of Land Records & Surveys (DLRS)**
Concerned Division of Planning Commission	**: Agriculture, Water Resources and Rural Institutions Division**
Project Approval	**: 21/06/2018 by ECNEC**

Objective and Targets (Beneficiaries) of the Project

- To improve the government's competence of land management to increase tax revenues and benefits and reduced land disputes by protecting people's property rights through digital land surveying and digitalization of mouza maps and khatians.

- To accelerate the qualitative development of Land Administration by providing unrestricted and transparent access to land information.

- To ensure hassle free services for the people.

Project Duration & Cost
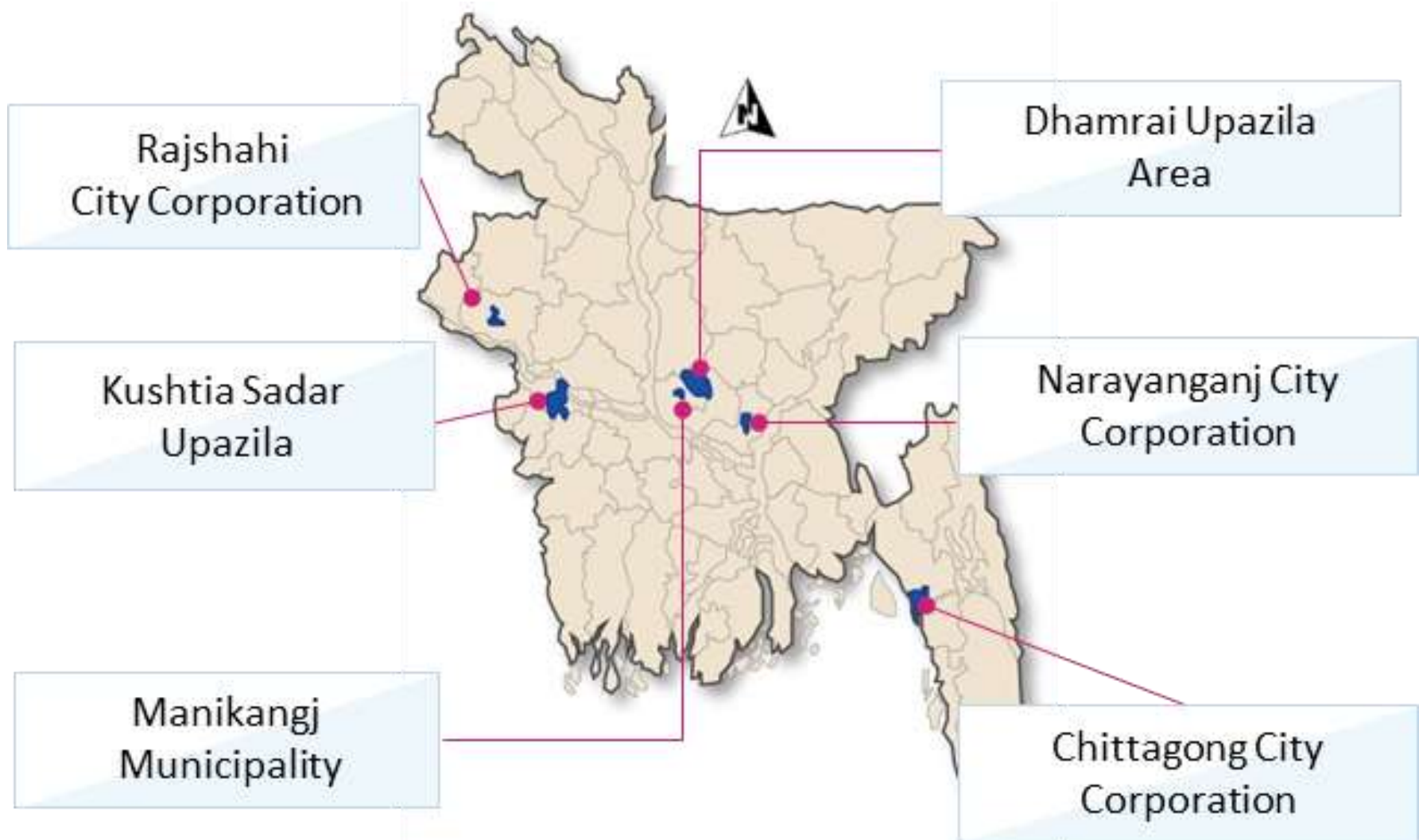
Project Implementation Period:

      a) Date of Commencement   : 01 July, 2018

      b) Date of Completion   : June, 2025

Estimated Cost of The Project (In Lakh Taka):

Total	:	**38350.00**
GOB	:	7810.00
Project Aid (PA)	:	30540.00
Own Fund	:	0.00
Others	:	0.00

PA Source: EDCF (Exim Bank Republic of Korea)

Project Location

Rajshahi City Corporation

Kushtia Sadar Upazila

Manikangj Municipality

Dhamrai Upazila Area

Narayanganj City Corporation

Chittagong City Corporation

Details of the Project Sites

Project Sites	Area (Km²)	No. of Mouza	No. of Plots (Estimated)
Rajshahi City Corporation	47	40	149,726
Chattogram City Corporation	181	68	312,597
Narayanganj City Corporation	61	71	227503
Kushtia Sadar Upazila	316	116	31,173
Dhamrai Upazila	303	298	222,095
Manikangj Municipality	25	41	262,552
TOTAL	933	634	1,205,646

The Services to be established

- **Digital Cadastral Survey:**
  - Aerial Photogrammetry, Control Survey, Detailed Survey for 6 project area (933 km2)

- **Land Data Digitalization and Building Database.**

- **Development of Digital Land Management System(DLMS):**
  - Land Settlement System, Land Administration System, Integrated Data Management System, Public Portal System, Central Monitoring System
  - Establishment of DLMS System in National Data center (Cloud based DLMS and digital map service) at the BDCCL and BCC, and supply ICT operational infrastructure for 92 government offices in the project area and also supply survey equipment to PEA

- **Capacity building of DLRS personnels.**

- **Supporting operation and maintenance.**

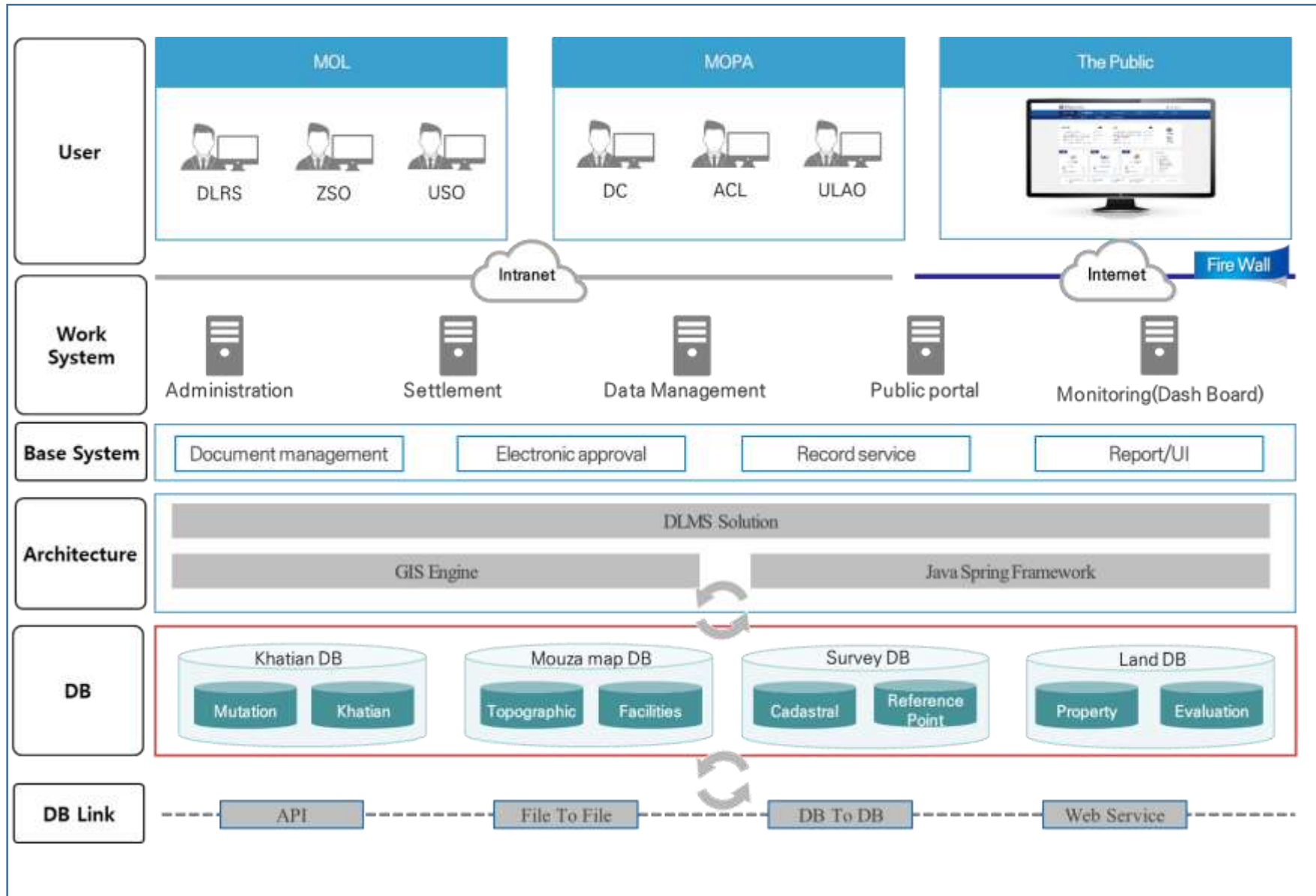Establishment of Digital Land Management System (EDLMS) Project

The Equipment/technology to be used

- **Global Navigation Satellite System (GNSS)**

- **Electronic Total Station (ETS)**

- **PEN Computer (Protection Environment Notebook)**

- **Total Survey System (TOSS)**

- **Unmanned Aerial Vehicle (UAV)/Survey Drone/Airplane**

- **Laptop Computer, Desktop Computer, Smart Tab, Database Server, Network Web Server, Network GIS Server etc.**
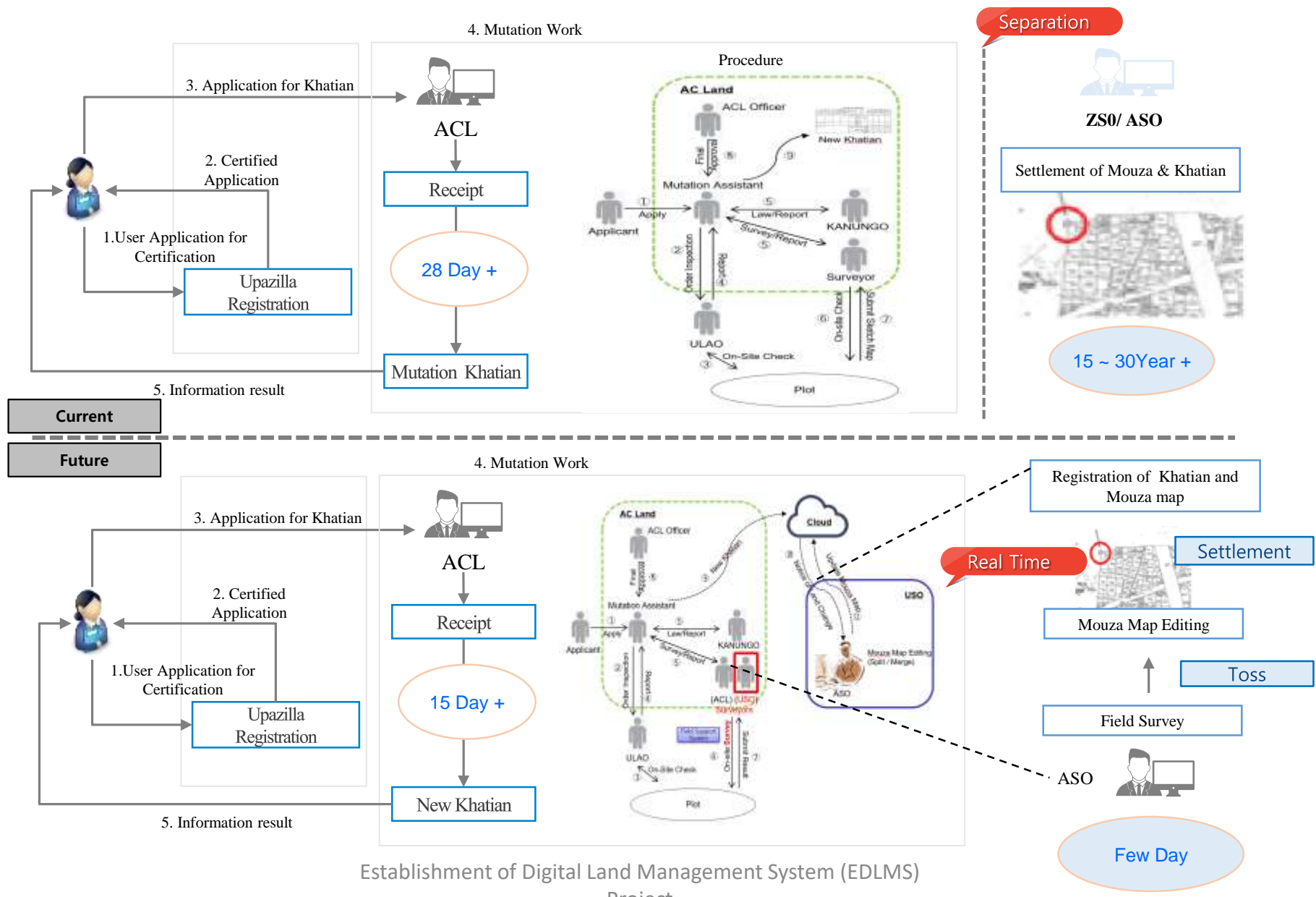
Development of Computer room

Type of office	Number of office
DC Office	06
ZSO Office	04
AC (Land) Office	16
USO Office	09
ULAO Office	56
Total office	89

Targeted System

User	MOL — DLRS, ZSO, USO	MOPA — DC, ACL, ULAO	The Public	

| **Work System** | Administration | Settlement | Data Management | Public portal | Monitoring(Dash Board) |

Intranet | Internet | Fire Wall

Base System: Document management | Electronic approval | Record service | Report/UI

Architecture:
DLMS Solution
GIS Engine | Java Spring Framework

DB:
Khatian DB — Mutation, Khatian
Mouza map DB — Topographic, Facilities
Survey DB — Cadastral, Reference Point
Land DB — Property, Evaluation

DB Link: API — File To File — DB To DB — Web Service

Current Module vs Previous Module

Establishment of Digital Land Management System (EDLMS) Project
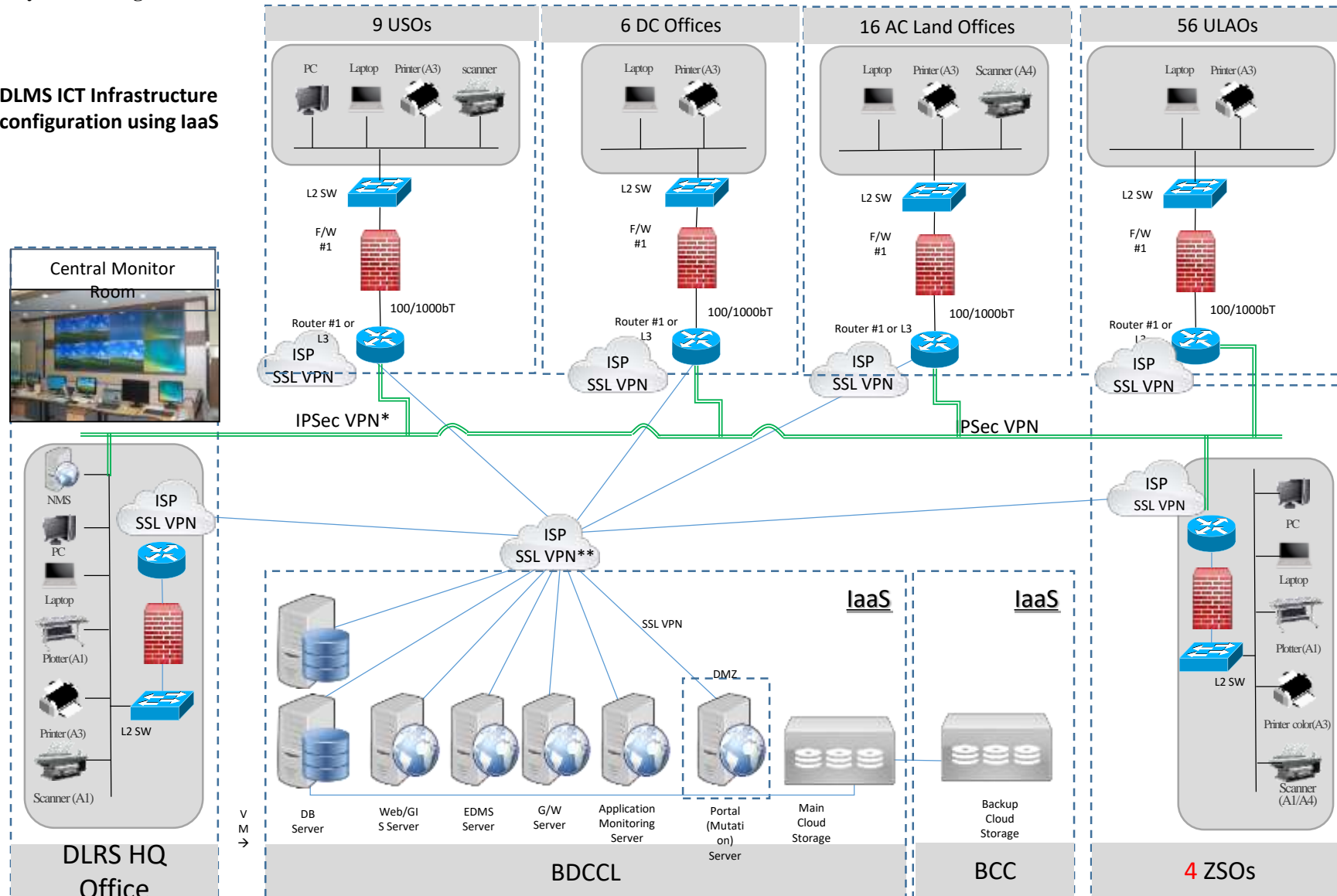
Cloud Service & ICT Infrastructure
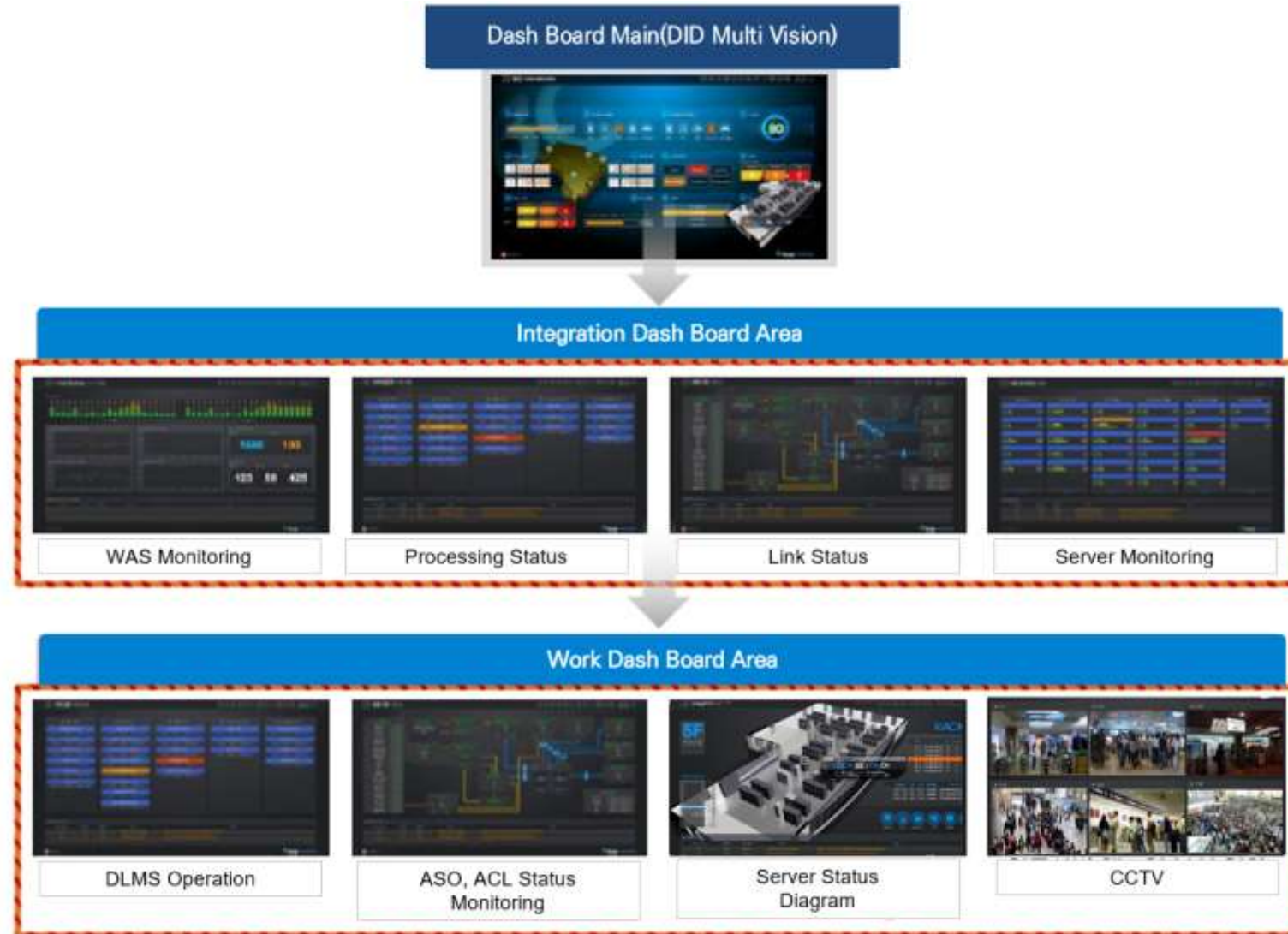
System Configuration

DLMS ICT Infrastructure configuration using IaaS

*IPSec VPN: Connection from the DLRS HQ Office to monitor the status of the network equipment of the Router or L3 Switch in local offices.

**SSL VPN: Security connection from the BDCCL providing IaaS to local offices, if applicable.

Monitoring System

11/1/2023

Modern Computer Training Centre

Expected Outcome

(i) Protect property rights on the basis of establishment of an efficient and modern land administration system,

(ii) Enable the authority to impose land taxes upon people who own their

lands as a financial resource for sustainable economic growth,

(iii) Reduce land disputes,

(iv) Bring transparency and to provide unrestricted access to land information through the latest ICT technologies and introduction of holistic approach of speedy modern survey methodology; and

(v) Disseminate the knowledge for digital land management system in Bangladesh through the self-generated capacity building.

Thank You