DIGITALIZATION OF LAND ADMINISTRATION IN GHANA

TRANSFORMING LANDS COMMISSION

Presentation by:

BEN ARTHUR

DEPUTY EXECUTIVE SECRETARY, LANDS COMMISSION

MISSION STATEMENT

"To provide high quality, reliable and efficient services in geographic information, guaranteed tenure, property valuation, surveying and mapping through teamwork and modern technology to our stakeholders"

VISION

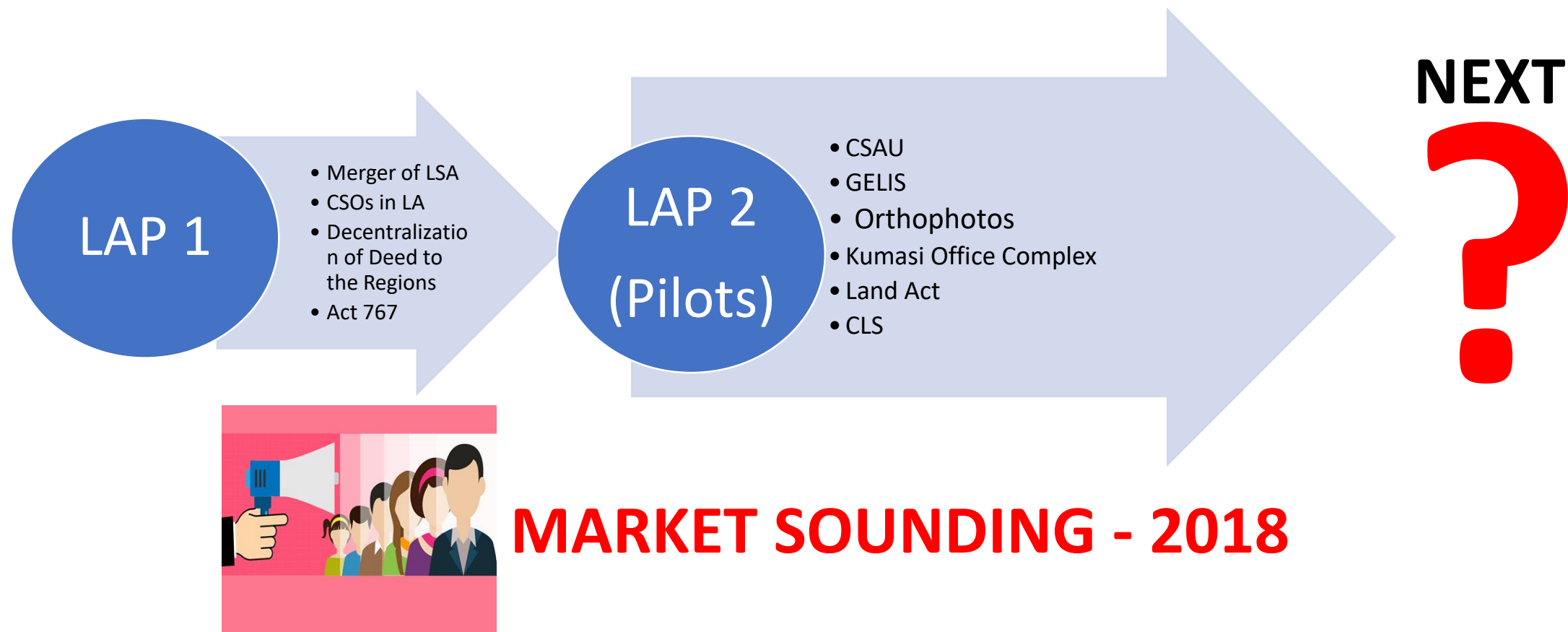"To become a Center of Excellence for Land Services Delivery"

GOAL

"Customer satisfaction is our goal"

Our target

- *"To efficiently maintain up-to-date land records, provide reliable land information, equitably and effectively deliver land administration services to improve tenure security & unlock DEAD CAPITAL in land, in order to increase the contribution of land to socio-economic development for the BENEFIT OF THE GHANAIAN PEOPLE and the country."*

BRIEF BACKGROUND OF INTERVENTIONS

LAP 1

- Merger of LSA
- CSOs in LA
- Decentralization of Deed to the Regions
- Act 767

LAP 2 (Pilots)

- CSAU
- GELIS
- Orthophotos
- Kumasi Office Complex
- Land Act
- CLS

NEXT ?

MARKET SOUNDING - 2018

Wholistic Transformation agenda anchored on the successes and gaps identified from previous interventions

"It is unacceptable that some sections if the country's land administration were still in a manual environment in the age of technology"

HIS EXCELLENCY NANA ADDO DANKWA AKUFO-ADDO
PRESIDENT OF REPUBLIC OF GHANA

EFFORTS SO FAR

DATA CAPTURE & CONVERSION
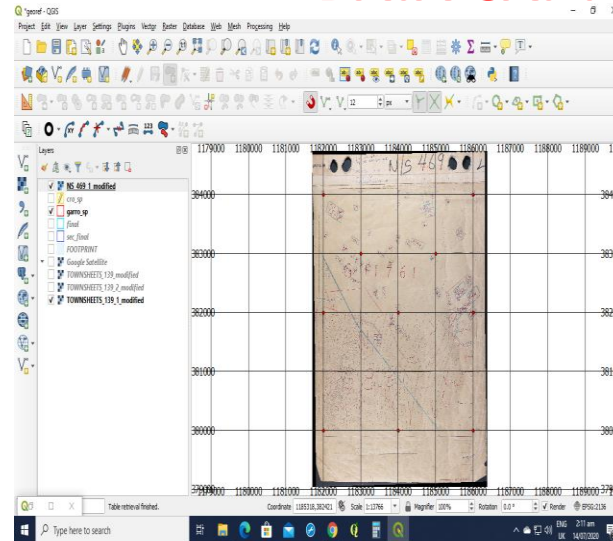
Scanning

Geo-referencing

Digitizing & Integrating

Archiving
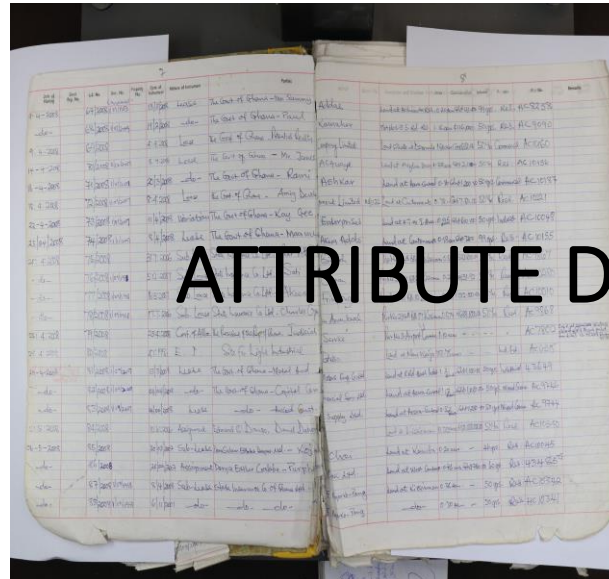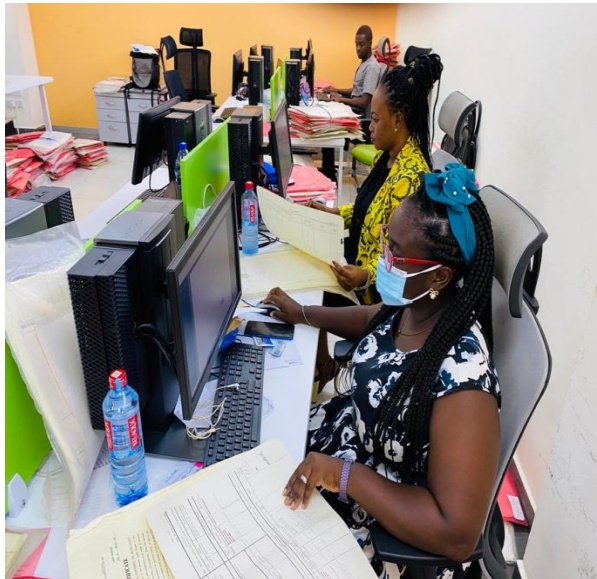
ATTRIBUTE DATA CAPTURE
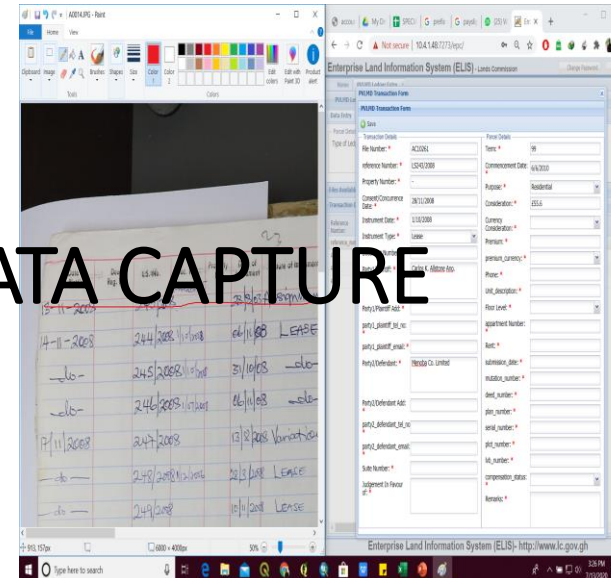
FILE MANAGEMENT & ARCHIVING
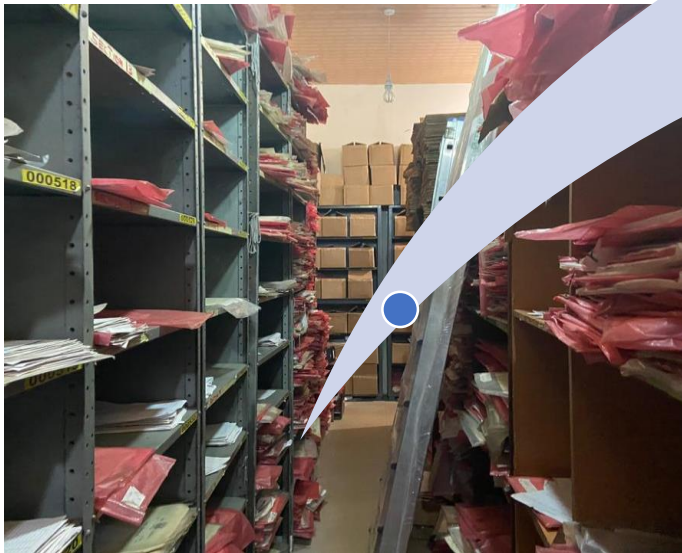
DIGITALIZED BUSINESS PROCESS

- GELIS → - ELIS (IN-HOUSE) →

- Case Management system
- Digital records information/ consolidated searches
- Performance Monitoring & Management (Delivery & Compliance Dashboard)
- Data Analysis and Reporting
- Online Services & Tracking for selected applications
- Online payment through Ghana.gov platform
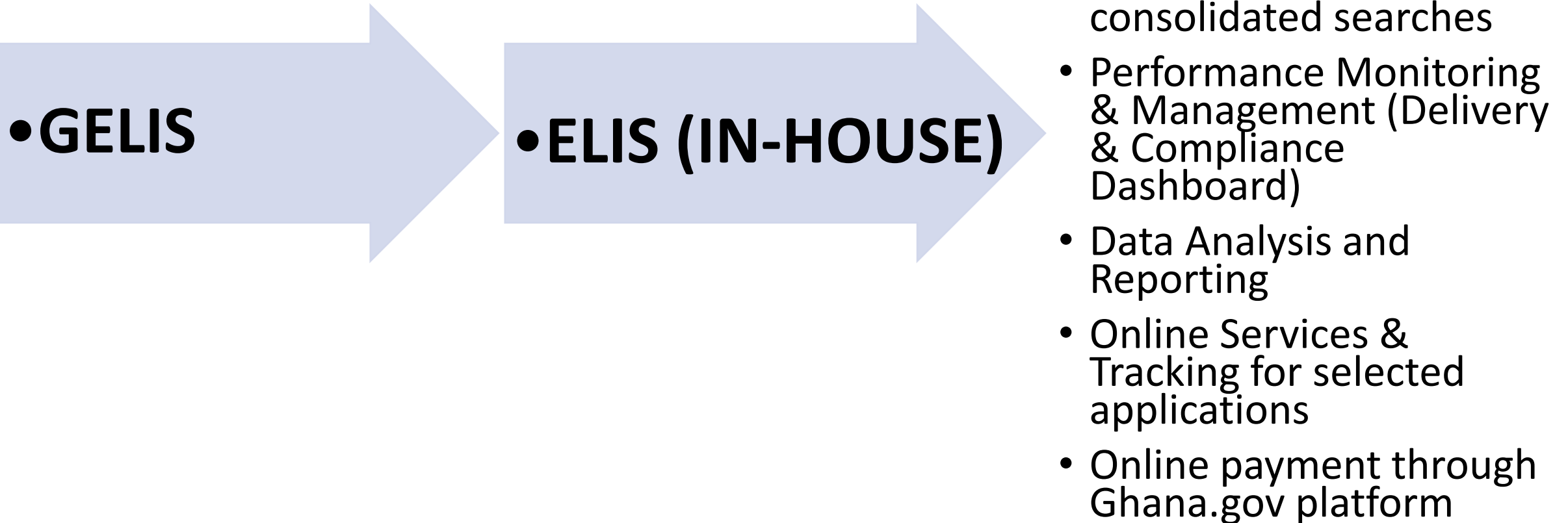
PILOT DIGITALIZED BUSINESS PROCESSES

ENTERPRIS LIS (ELIS)

TITLE PLAN PREPARATION

PUBLICATION MGT

BILLING MGT

ELIS SUPPORTED SERVICES

Regional Number & Plan Approval → Searches → Stamping → Concurrence & Consent
• Assign
• Sublet
• Mortgage
→ Title Registration
• (First Registration,
• Transfer (Whole or Part),
• Objecti...
→ Deeds Registration

JOB TRACKING

Online Services – Greater Accra and Six New Regions

Access LC Online Services

Tracking Job on Portal

Online Payment Platforms

Electronic GCR

SOP & TECHNICAL OPERATIONAL MANUAL

DELIVERY & COMPLIANCE DASHBOARD

DIGITAL PROPERTY MASS VALUATION

FIELD DATA COLLECTION MOBILE APP
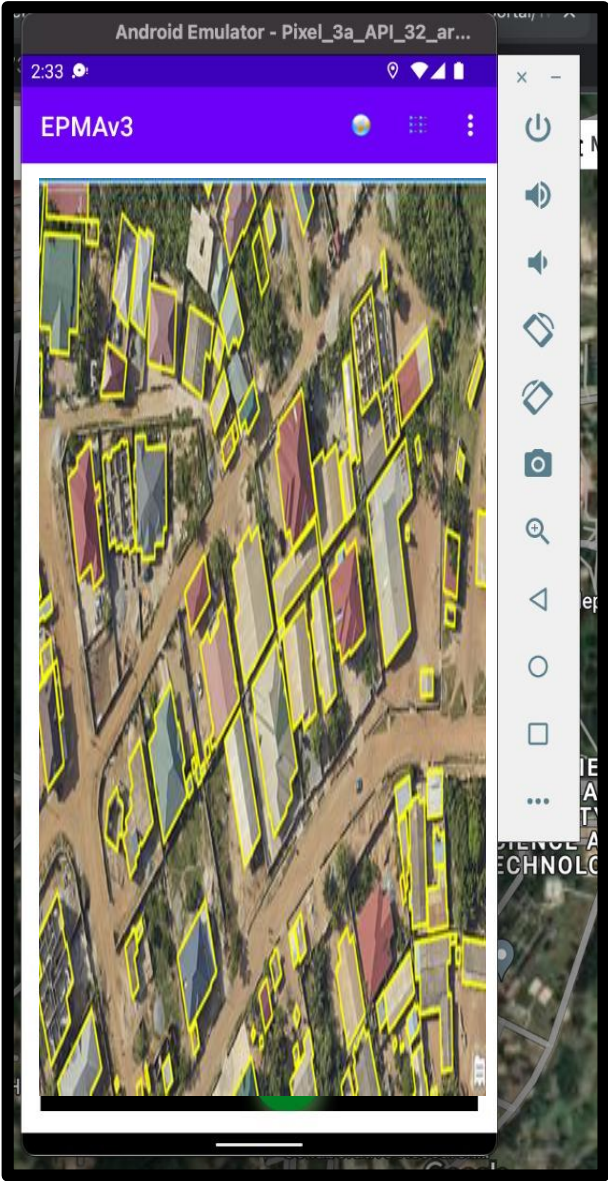
Property Data Collection

Valuation Number: KSDA16001026

Assembly Name: KSDA

- Purpose of Valuation
- Subject Structure
- Property Use (PUC)
- Property Use (Specific Use)
- House Number
- Street Name
- Owner's Name
- Owner's Contact Address
- Owner's Email Address
- Owner's Phone Number

QUALITY ASSURANCE

Measurement Details

| Show 10 rows | Copy | CSV | Excel | PDF | Print | Search: |

m_length ▲	m_width	m_area	m_rate	m_amount	area_percentage	Details
223.15	1	223.15	735.3	164082.2	100%	Delet

Showing 1 to 1 of 1 entries   Previous 1 Next

GAPS/CHALLENGES & KEY CONSIDERATIONS

- Overlaps in spatial data across Divisions
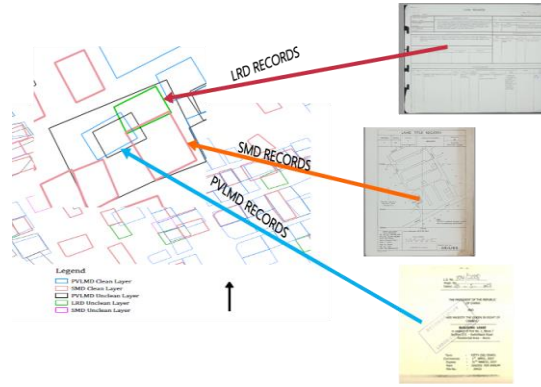
- Limited digitization coverage & data gabs – manual and digital working side-by-side

- Generation of Final output from data captured during processes

- IT infrastructure limitations – Data Centre, Network infrastructure,

- Inadequate HR Capacity (In-house software team)

- Office layout and poor working environment

KEY CONSIDERATIONS FOR TOTAL TRANSFORMATION
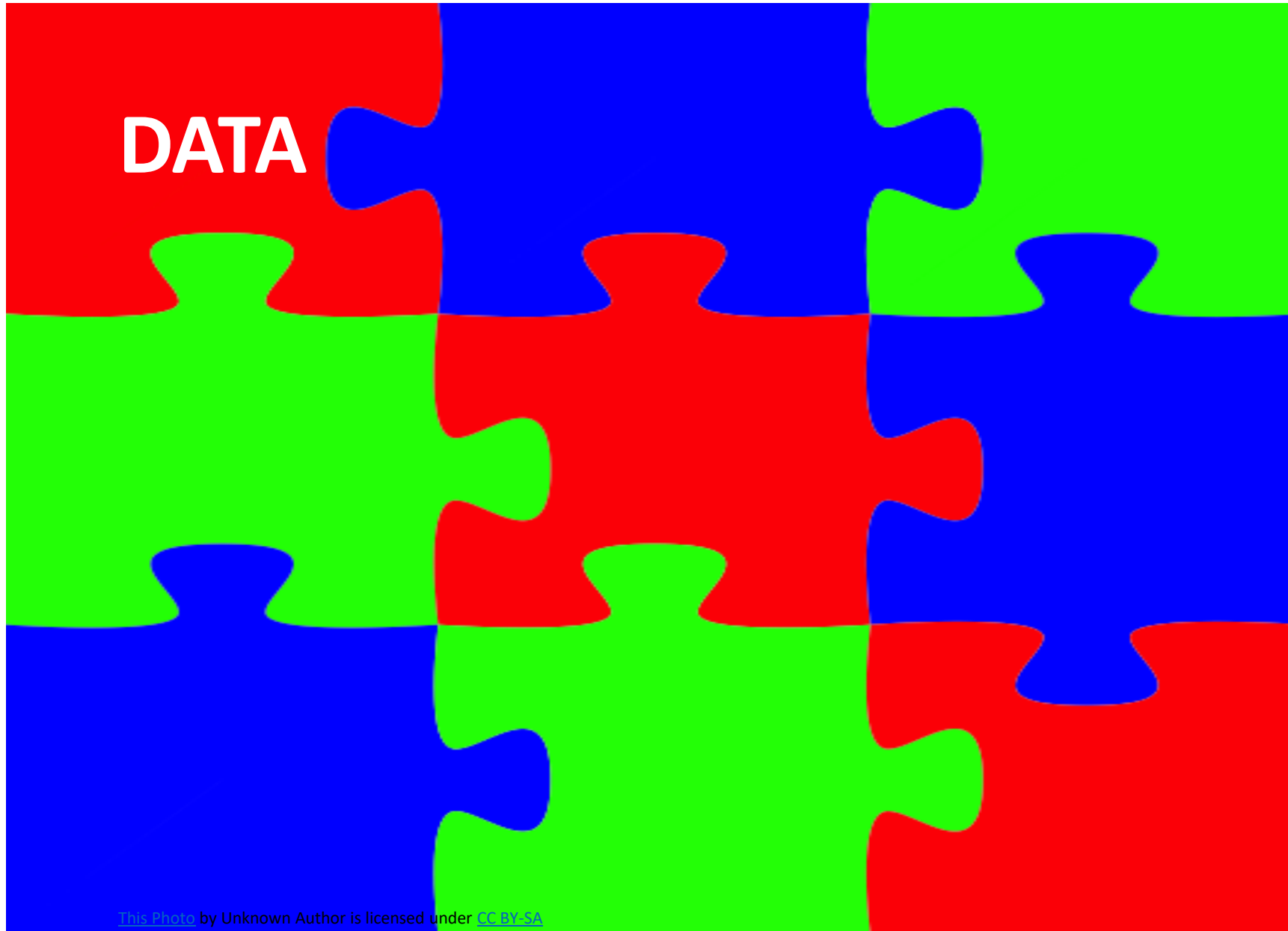
DATA

1. **DIGITAL BASE MAPS WITH LiDAR**

2. **SURVEY DATA (CORS & GRN)**

3. **FIT-FOR-PURPOSE SURVEYING TECHNIQUES**

4. **DIGITAL DATA (MANUAL TO DIGITAL DATA)**

5. **SYSTEMATIC RECONCILIATION OF LC RECORDS WITH GROUND SITUATION**

4. **DATA CREDIBILITY**

KEY CONSIDERATIONS FOR TOTAL TRANSFORMATION

DATA **SOFTWARE**
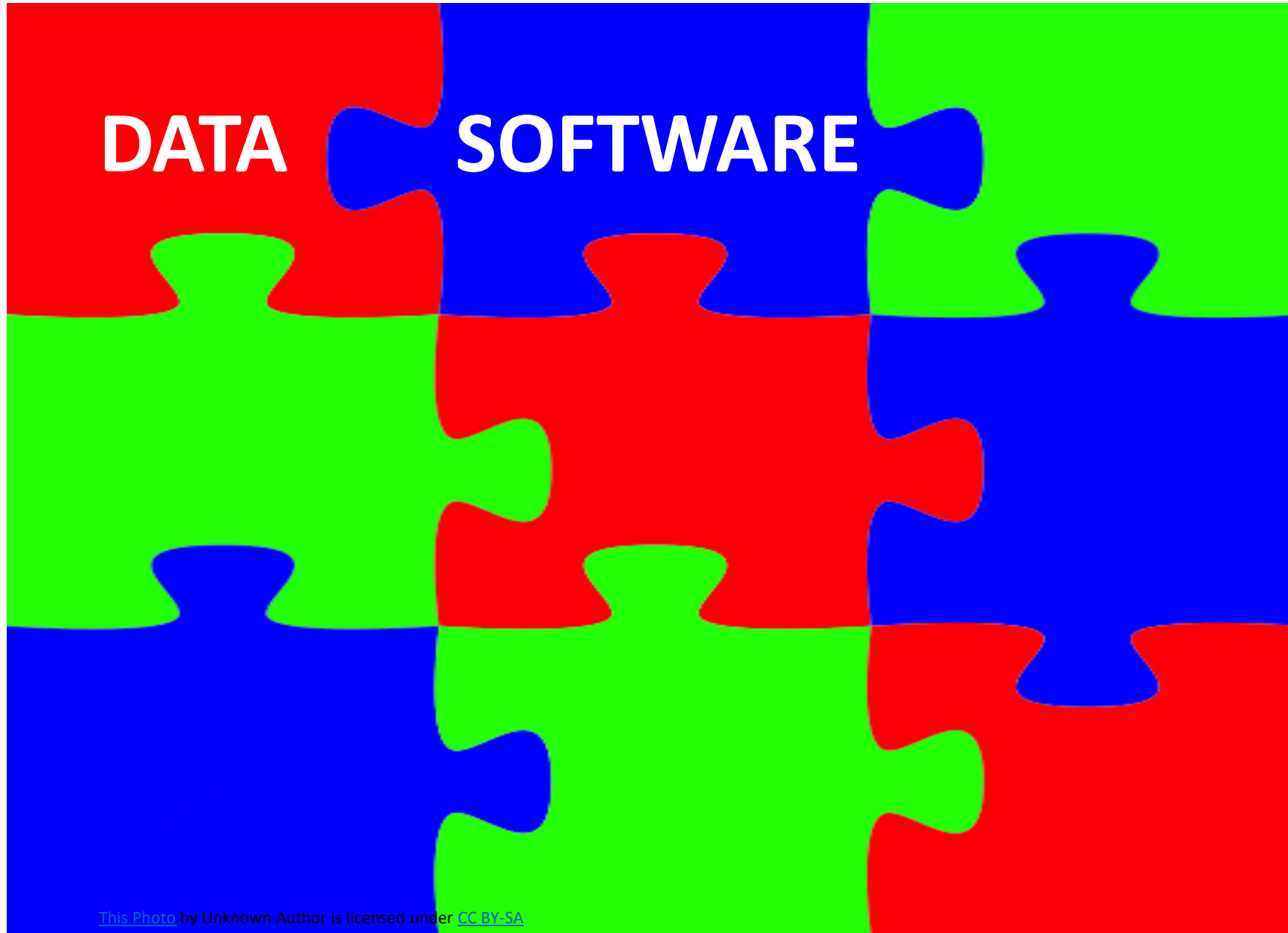
1. **LIS – UPGRADE OF GELIS/ELIS (COVERAGE & ADDITIONAL FUNCTIONALITIES)**

2. **BUSINESS PROCESS (REENGINEERING) & AUTOMATION**

3. **EFFICIENCT DATA CAPTURE, RETRIEVAL AND USE IN GENERATING FINAL OUTPUTS**

4. **STATISTICS AND REPORTS**

KEY CONSIDERATIONS FOR TOTAL TRANSFORMATION

DATA   **SOFTWARE**   **ICT INFRASTRUCTURE**
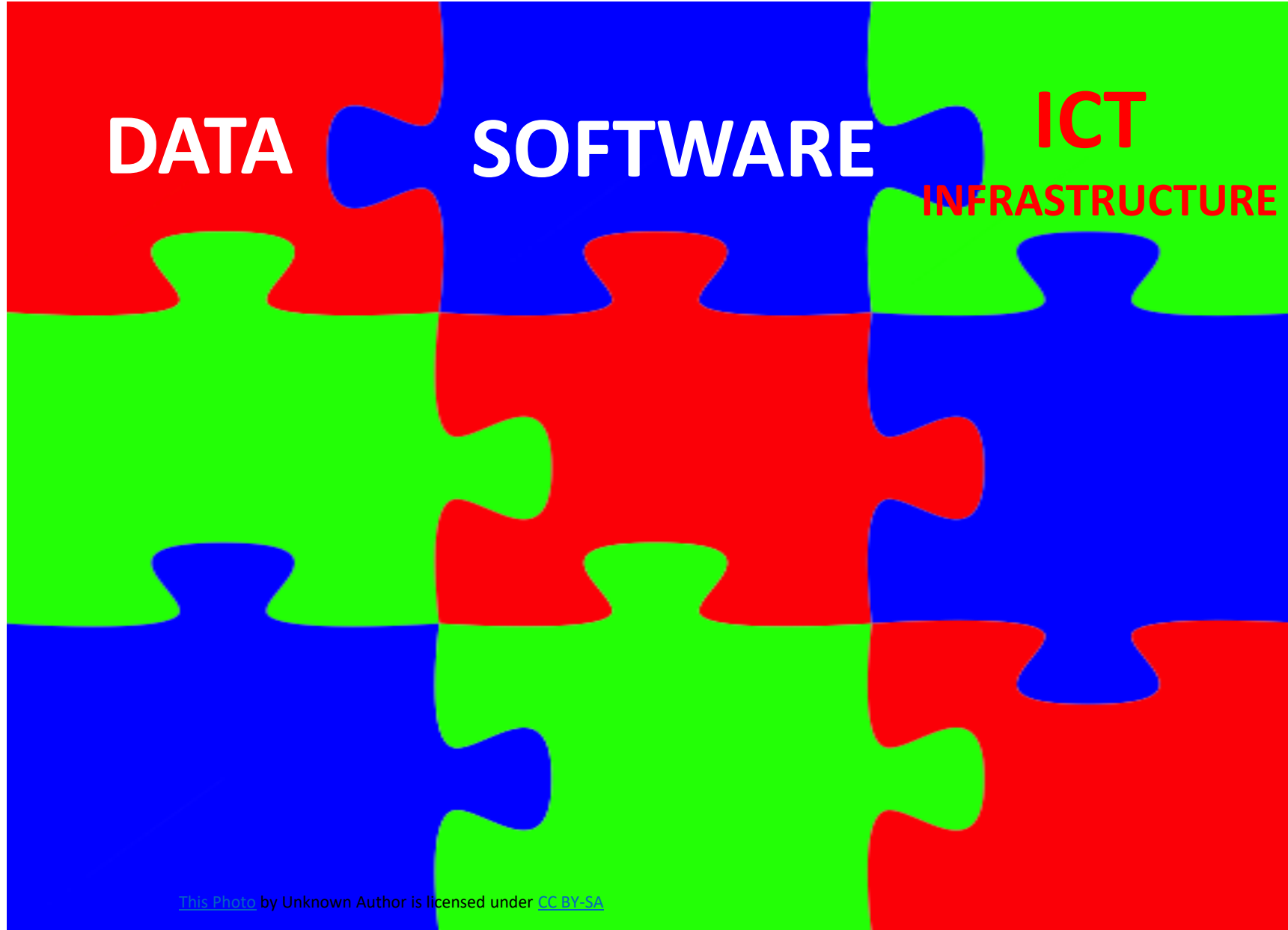
1. RELIABLE SERVICE AVAILABILITY
2. NETWORK INFRASTRUCTURE
3. DATA SECURITY
4. HARDWARE (SERVERS, STORAGE, POWER ETC)
5. CLOUD COMPUTING, DR SITE, BACKUP SITE

KEY CONSIDERATIONS FOR TOTAL TRANSFORMATION

DATA

SOFTWARE

ICT INFRASTRUCTURE
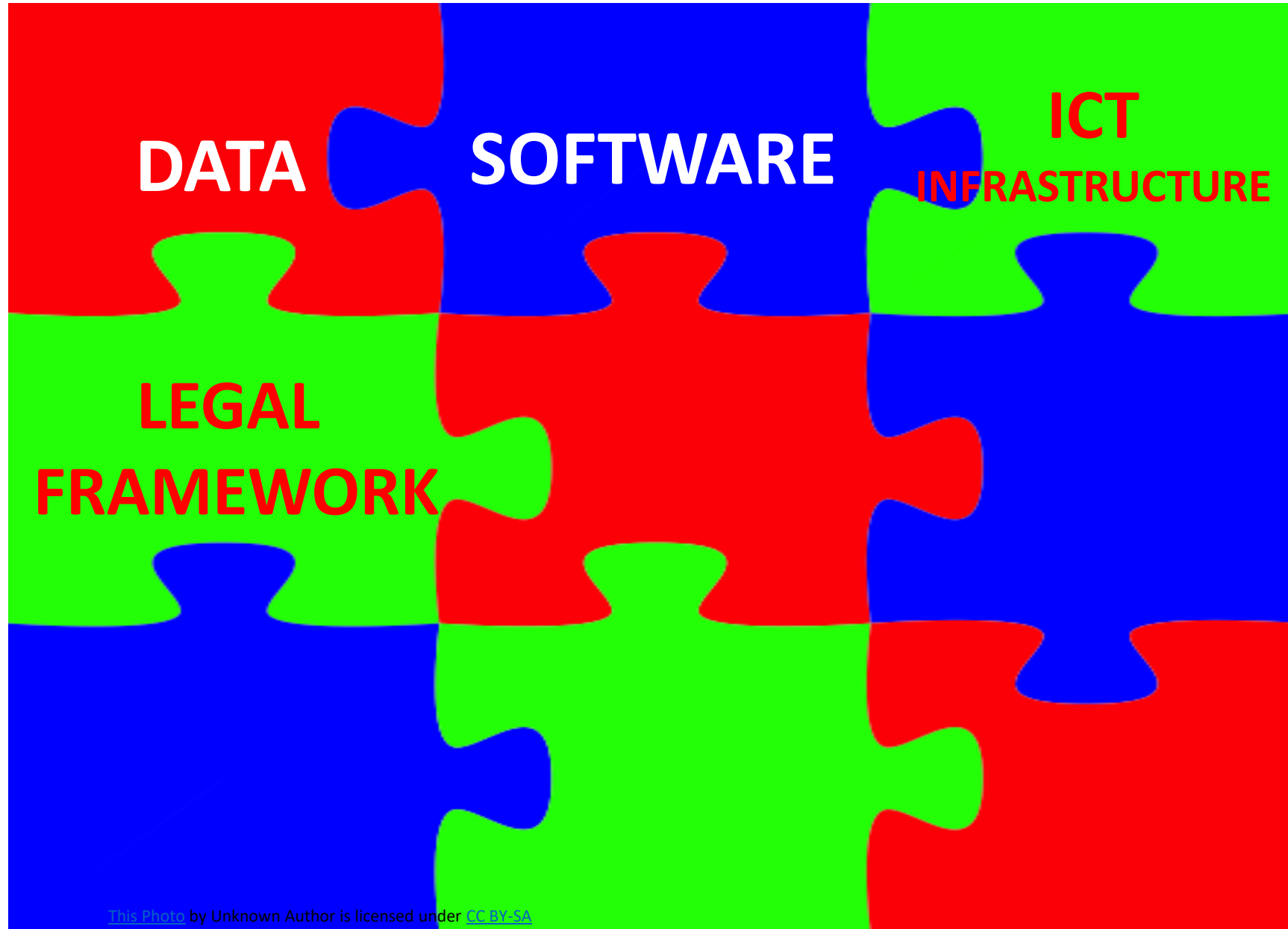
LEGAL FRAMEWORK

1. REVIEW OF EXISTING LEGAL FRAMEWORK

2. WORKING WITHIN LEGAL FRAMEWORK – (LAND ACT)

1. LIs TO OPERATIONALIZE LC AND LAND ACT

2. JUDICIARY – DATA SHARING & TRAINING

KEY CONSIDERATIONS FOR TOTAL TRANSFORMATION

DATA

SOFTWARE

ICT INFRASTRUCTURE

LEGAL FRAMEWORK

WORKING TOOLS
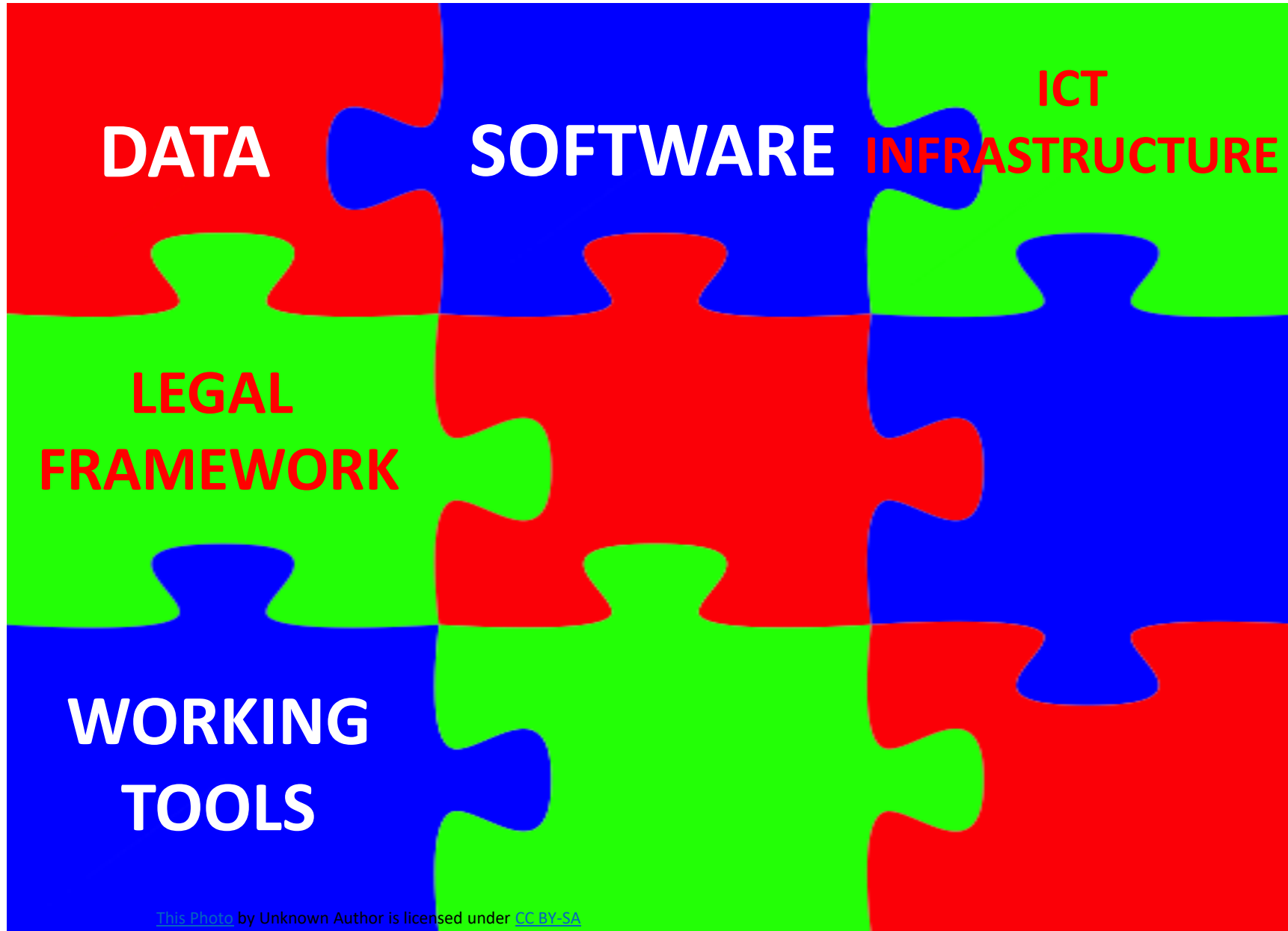
1. COMPREHENSIVE TOOLING & RETOOLING LC

VEHICLES, COMPUTERS, ASSESSORIES, PRINTERS SCANNERS, SURVEY, EQUIPMENT ETC.

KEY CONSIDERATIONS FOR TOTAL TRANSFORMATION

DATA

SOFTWARE

ICT INFRASTRUCTURE

LEGAL FRAMEWORK

WORKING TOOLS

WORKING ENVIRONM'T
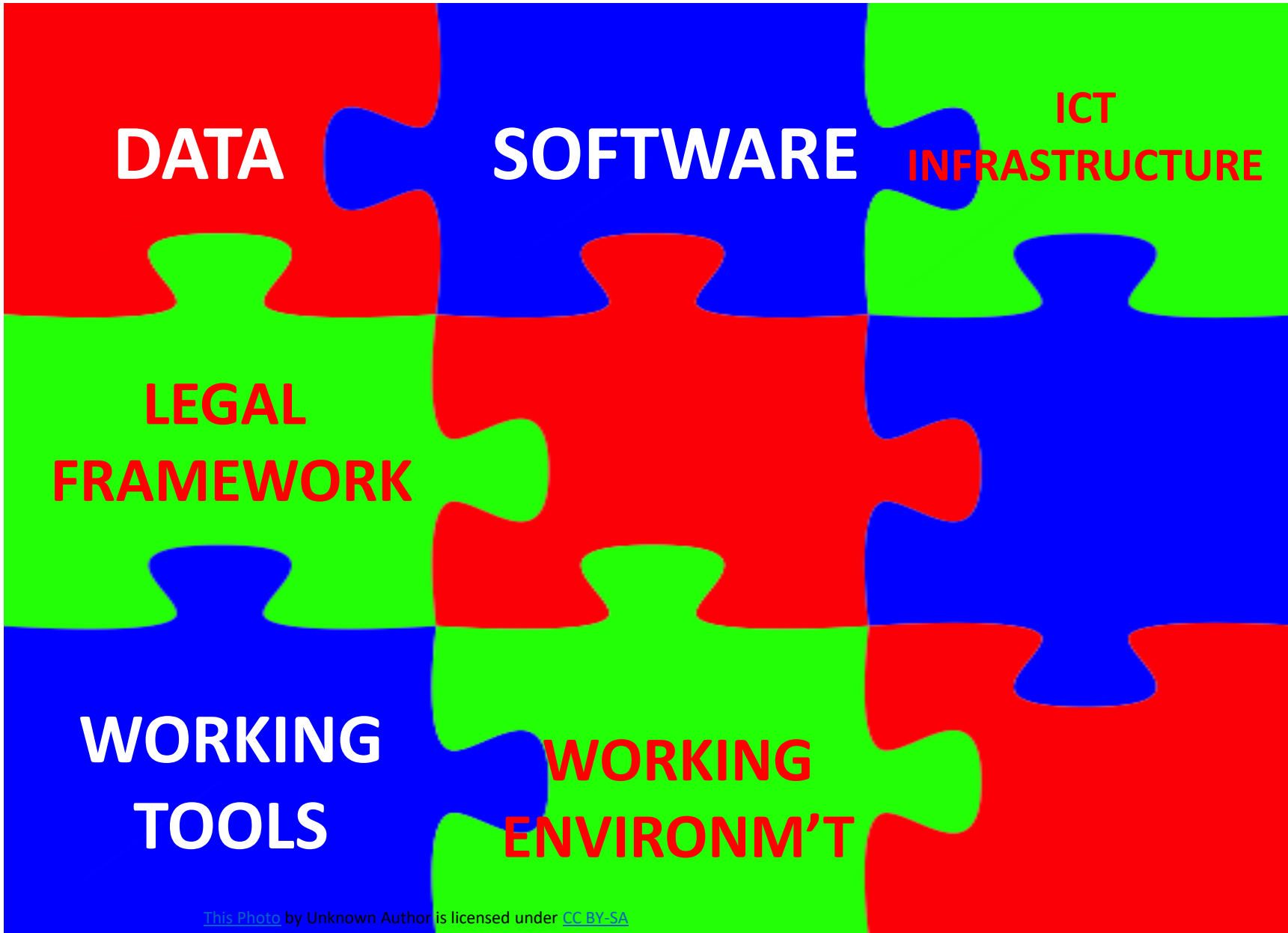
1. PHYSICAL INFRASTRUCTURE.

2. DECENTRALIZED OFFICES

3. 13 MODEL REGIONAL OFFICES

4. 10 MODEL SATELLITE CSAUs

5. LC STAFF TRAINING CENTRE

KEY CONSIDERATIONS FOR TOTAL TRANSFORMATION

DATA **SOFTWARE** **ICT INFRASTRUCTURE**

LEGAL FRAMEWORK

WORKING TOOLS **WORKING ENVIRONM'T** **COMMUNICATION**
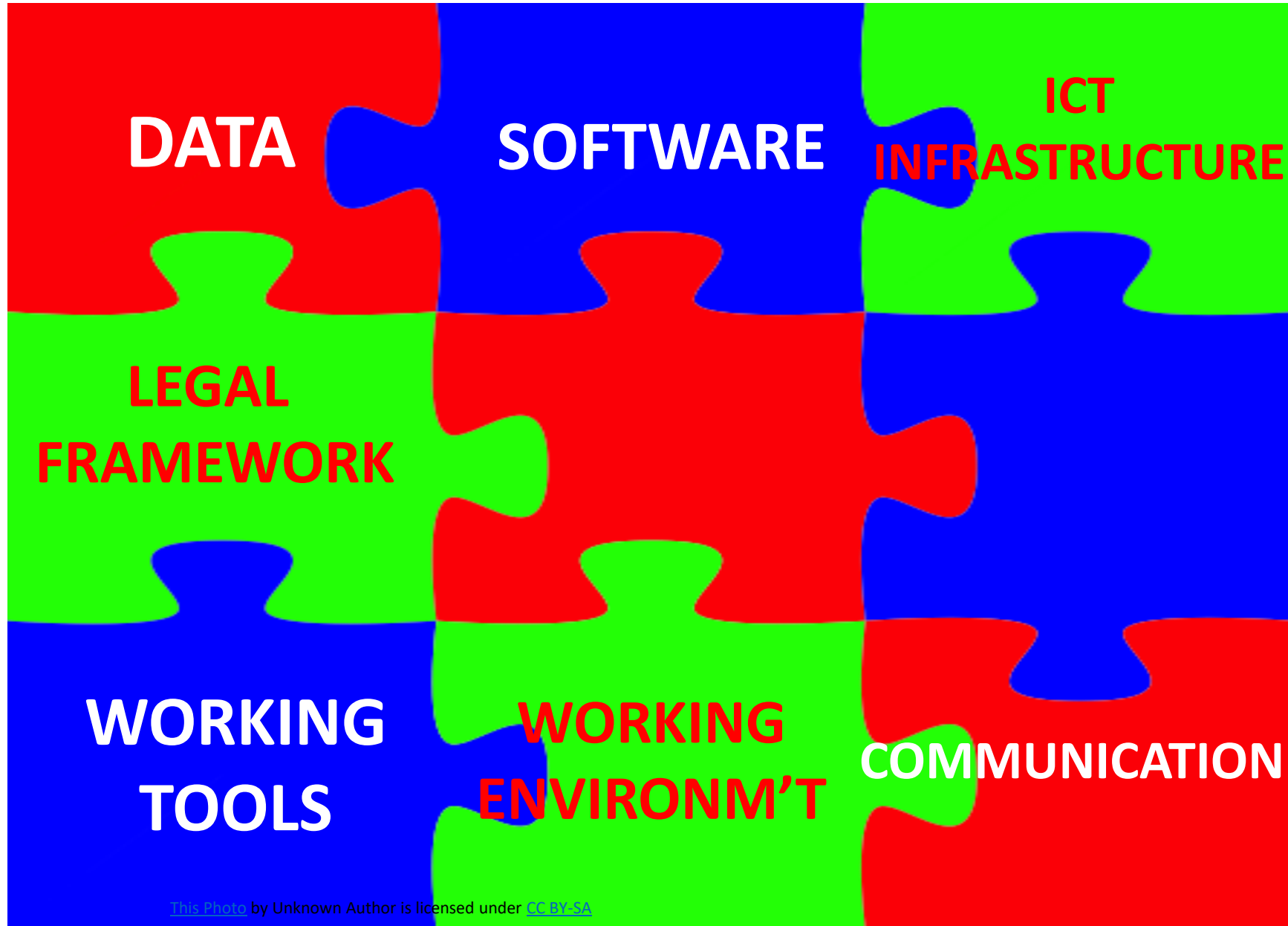
1. **INTERNAL**

2. **EXTERNAL**

3. **STAKEHOLDERS (CORPORATE/PROFESSIONAL)**

4. **PORTALS & DIGITAL ACCESS TO LAND SERVICE DELIVERY INFORMATION**

KEY CONSIDERATIONS FOR TOTAL TRANSFORMATION

1. REVIEW OF SOP & OPERATING MANUALS
2. COMPLIANCE STANDARDS
3. DELIVERY TARGETS
4. WORK CULTURE CHANGE

KEY CONSIDERATIONS FOR TOTAL TRANSFORMATION
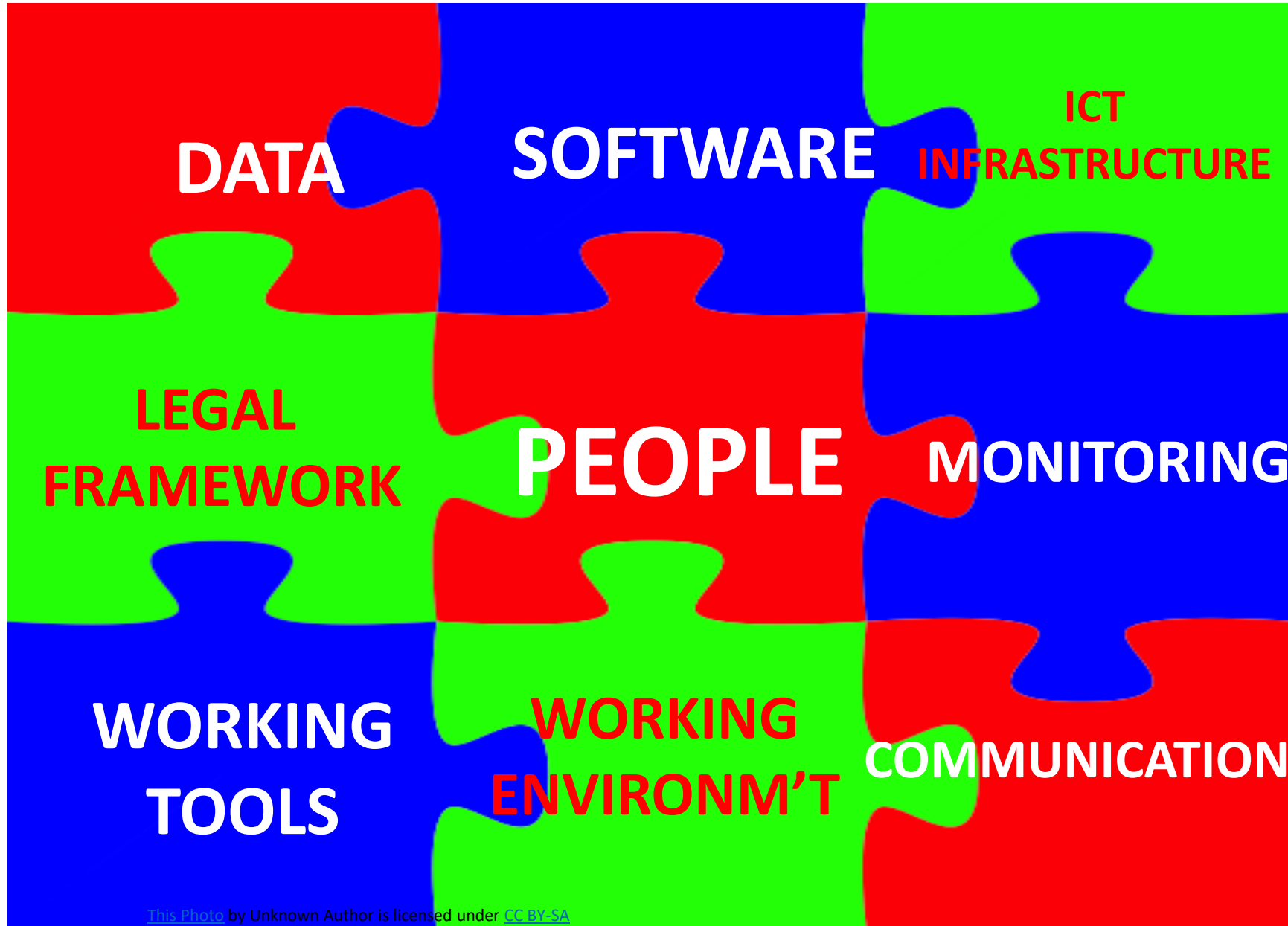
1. **RATIONALIZATION, RE-ALLIGHNMENT & INTEGRATION**

2. **CAPACITY BUILDING**

3. **RETRAINING**

4. **MOTIVATION / CONDITIONS OF SERVICE & REWARD SYSTEMS (IGF)**

5. **CHANGE MANAGEMENT**

PROJECT COMPONENTS

MAPPING & SURVEYING
Create updated Maps, CORS and Geodetic networks etc.

01

DIGITAL TRANSFORMATION
Digitize all manual records and upgrade the existing land information management software.

02

DECENTRALISATION OF SERVICES
Establish 10 land service centers at local levels.
Online Access to Land Services Delivery

03

5-year Implementation

04

SYSTEMATIC TITLING
Undertake systematic land titling campaign and exercise

05

CAPACITY BUILDING
Build thirteen (13) new regional offices, enhance staff capacity, computers and equipment.

06

NSDI
Create a national spatial data infrastructure to meet the spatial data needs of other government department and companies .

IMPROVED MAPS AND SPATIAL DATA

National Digital Base Maps

Line Maps 1:2500

NSDI

High Resolution (10Cm/ 4pnt.)
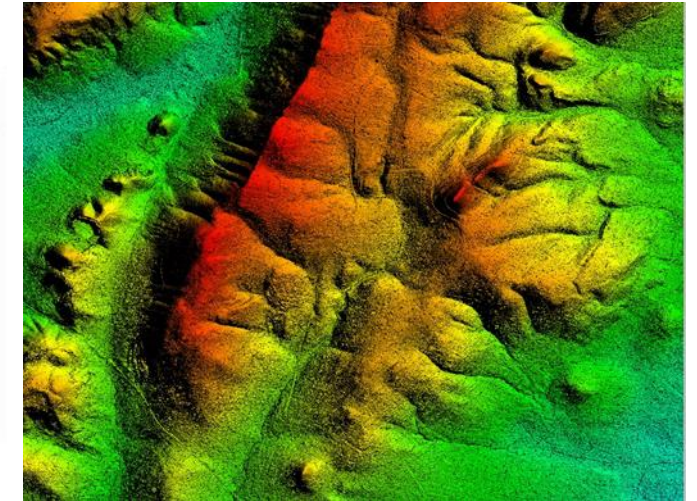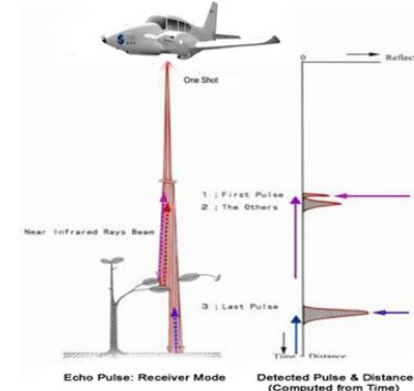
Lidar Products

IMPROVED MAPS AND SPATIAL DATA
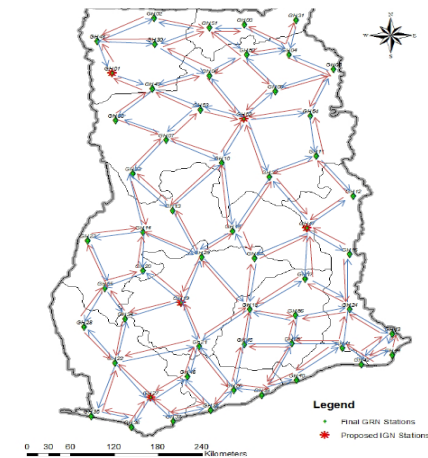
Establishment of CORs (Nationwide)

Establishment of GRN

SYSTEMATIC CREATION OF NATIONAL CADASTRE – (LUSPA, GhIS, LISAG, MMDAs, CLSs, CICOL)

DIGITAL BASE MAPS

SURVEYED BOUNDARY
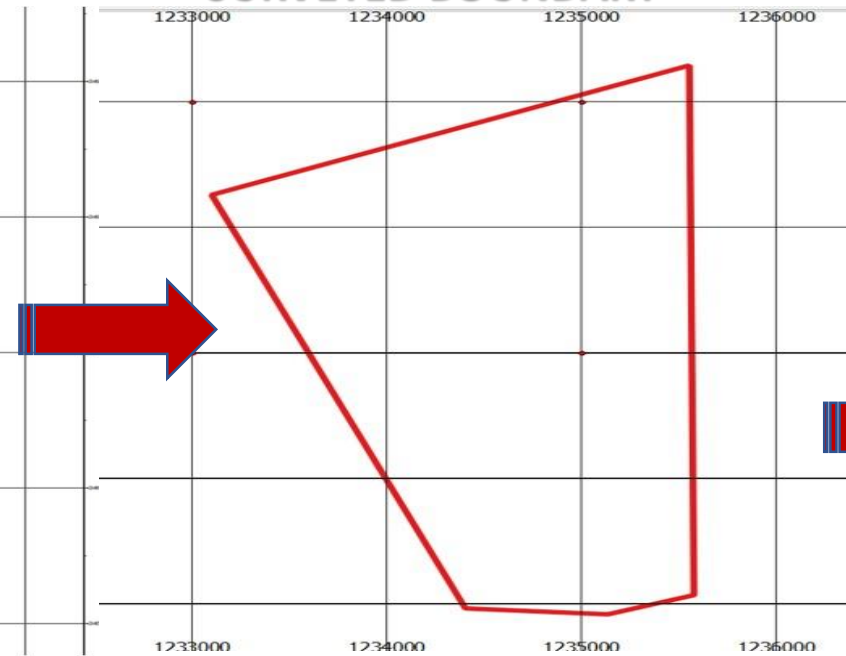
LINE (SECTIONAL) MAPS
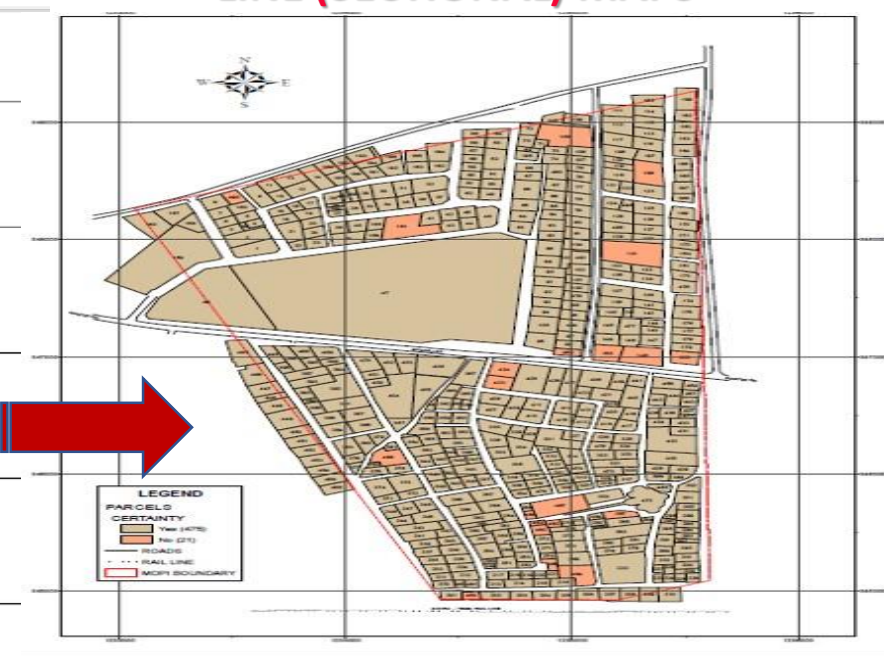
FIELD DATA COLLECTION

LC RECONCILED RECORDS

LANDED PROPERTY DATABASE
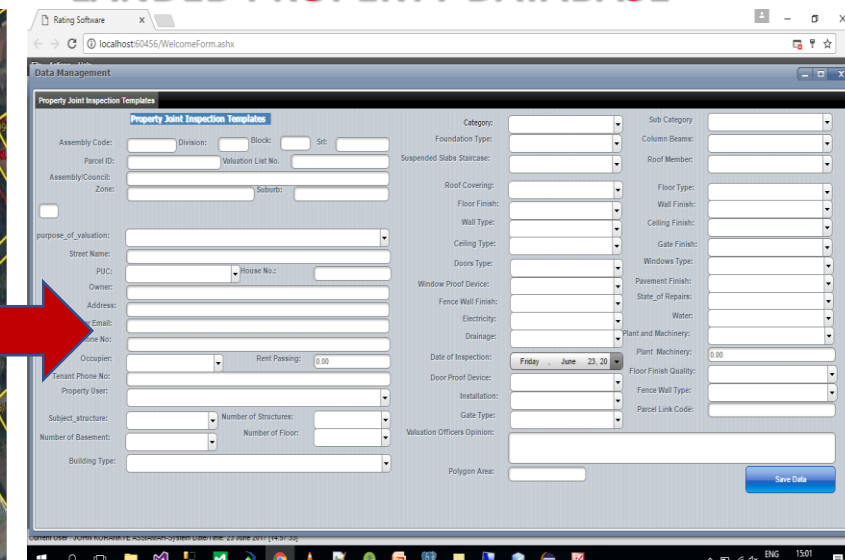
DIGITAL TRANSFORMATION OF LAND SERVICES DELIVERY

DATA CAPTURE & CONVERSION OF EXISTING RECORDS

MAP CAPTURE & DIGITIZATION

ATTRIBUTE DATA CAPTURE

MODERN STORAGE, ARCHIVAL & RETRIEVAL SYSTEM

DIGITAL TRANSFORMATION – BUSINESS PROCESS AUTOMATION

PLAND APPROVAL & TITLE PLAN PREPARATION

ACCESS RECORDS SEARCHES

JOB ALLOCATION & TRACKING

FINAL REPORTS & OUTPUTS
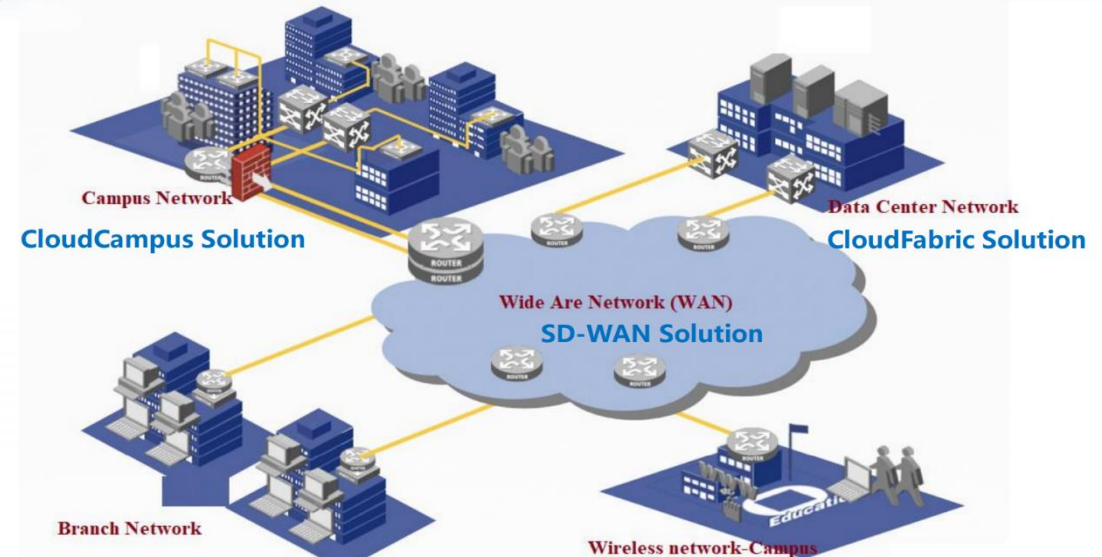
COMBINATION OF ON-PREM & CLOUD DATA CENTRES

NETWORK INFRASTUCTURE

. DCENTRALIZATION OF LAND SERVICES DELIVERY

IMPROVED WORKING ENVIRONMENT (CONSTRUCTION OF 13 MODEL REGIONAL OFFICES)

TAMALE
KOFORIDUA
SEKONDI
CAPE COAST
BOLGATANGA
HO
TEMA

MODEL REGIONAL OFFICES

6 NEW REGIONS
OTI
BONO EAST
NORTH EAST
SAVANNAH
WESTERN NORTH
AHAFO

10 MODEL DISTRICT CLIENT SERVICE CENTRES (DISTRICT CSAUs)

ONLINE SERVICES NATIONWIDE

APPLICATION SUBMISSION & BILLING

PAYMENTS –GHANA.GOV

E-GCR RECIEPTS (CAGD)

TRACKING OF APPLICATION

CAPACITY DEVELOPMENT & IMPROVED WORK CULTURE

STAFF RATIONALIZATION, RETRAINING AND REDISTRIBUTION – CHANGE MANAGEMENT

CONTINUOUS TRAINING AND CAPACITY DEVELOPMENT

COMMUNICATION & PUBLIC ENGAGEMENTS

RETOOLING THE LANDS COMMISSION

- **COMPUTERS AND ACCESSORIES, PRINTERS ETC**
- **SCANNERS**
- **OPERATIONAL VEHICLES**
- **FURNITURE**
- **SURVEY EQUIPMENT**

WHERE ARE WE?

- **ALL TECHNICAL PROCESSES COMPLETED**

- **FINANCING MODEL UNDER DISCUSSION WITH MoF**

- **DRAFT LEGAL AGREEMENT CONCLUDED WITH ATTORNEY GENERAL'S OFFICE**

- **PROJECT EXPECTED TO COMMENCE IN 2023**

CONCLUSION
Key Expected Outcomes

- Introduce innovative fit-for-purpose technologies for survey to reduce time and cost of surveys

- Possibility of conducting searches with "plot numbers" as well as plans extracted from layouts, etc

- Opportunity for conducting instant searches online

- Provide reliable and updated digital map data for use by ALL - Map once and Use by ALL

- Establish and share credible and reliable land records with land holding groups, CLSs, LUSPA, MMDAs and the general public to improve service delivery and security of tenure

- Operate almost completely digital and Improve turnaround time for delivering all land services

- Build a land Administration Institution manned by well trained and qualified professionals

- Create a conducive working environment for staff and client of Lands Commission

- Ultimately create a new client focused Lands Commission as a "Center of Excellence for Land Services Delivery "

THANK YOU FOR YOUR ATTENTION

KEY PROJECT INTERVENTION AREAS

Project Components
1. Improved Maps and Spatial Data
a. Production of Digital Base Map
b. Establishment of GRN and CORS & Transformation parameters)
c. National Spatial Data Infrastructure (NSDI)
2. Digital Transformation of Lands Commission
a. Data Conversion and Integration
b. Business Process Reengineering & Automation
c. Land Information System
d. System Operation & Maintenance
e. Augmentation of ICT Base

3. Decentralization of Land Service Delivery

   a. Construction, Equipping & Establishing 10 satellite CSAUs

   b. Construction, Equipping & Establishing 13 Regional Offices

   c. Development & Management of Online Platforms Services & New Business Models

4. Systematic Recording/Titling, Verification and Creation of National Cadastre

   a. Design of Strategy for creation of National Cadastre

   b. Preparation of Sectional Maps & collection of field data for National Cadastre, Property Taxation etc , in selected urban areas

5. Capacity Development, Improved Work Culture and Corporate Governance

   a. Transforming Culture by Standards

   b. Human Resource Development

   c. Augmentation of Logistical Base (Vehicles & Equipment)

6. Project Management