### INTEGRATED STATISTICAL SYSYTEM: Data Collection, Processing and Dissemination



Dr. Abdallah Abdelaziz Zoubi Executive Director Population Census of Jordan, 2015

### Goal:-

Timely, accurate and adequate response to data needs in support of policy works and decision making

### **Objectives:-**

Gathering harmonized and internationally comparable data to support:

- Availability of <u>timely</u>, <u>accurate</u> statistical information enables countries to address a wide range of issues in today's rapidlyevolving global economic and social landscape
- Improve the <u>efficiency</u> of data and metadata collection, validation, processing, storage and dissemination;
- Improve <u>quality</u>, eliminating errors and incoherencies and
- shortening statistical **publication cycles**, and
- enhance the <u>accessibility</u> and visibility of the Organization's statistical outputs .

### Structure:-

The overall architecture of the Statistical System consists of three layers :

- Production layer: collection, validation, processing and management of statistical data and metadata
- Storage layer: validated statistics and related metadata are stored
- dissemination layer: for producing statistical publications and online/offline interactive statistical products

The three layers (or pillars in the architecture modular) supported by a <u>workflow</u> system which automates statistical and publication processes wherever possible, and tracks the steps involved.

## Components of the Integrated Statistical System

### Data Sources:

- Censuses
- Sample surveys & Specialized Studies
- Administrative records from Line ministries

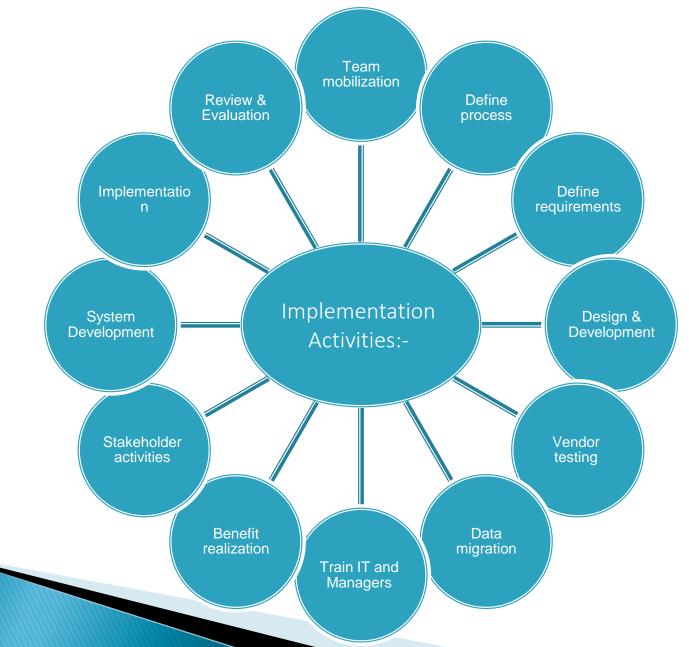
### Processes:

- Design and testing
- Data collection
- Processing and analysis
- Dissemination
- Monitoring & Evaluation

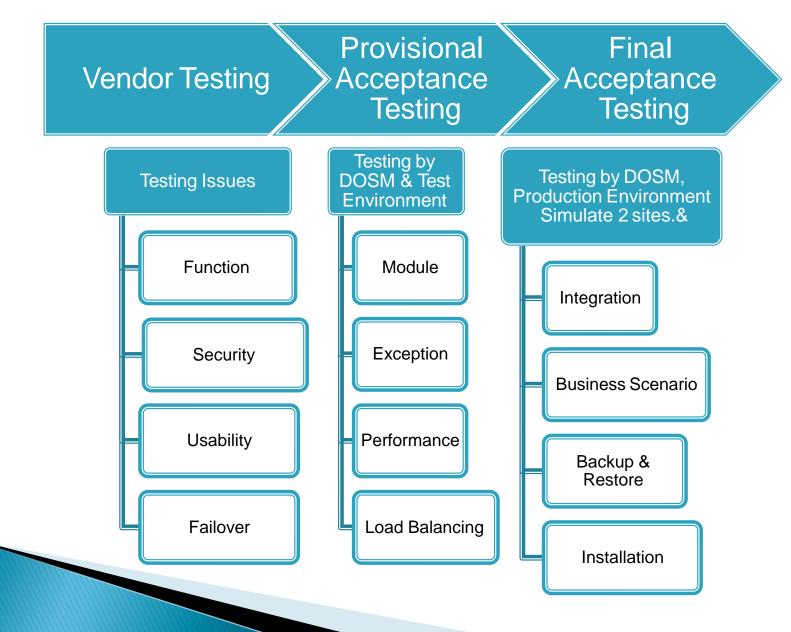
### Features:-

- Process based approach
- Interoperable
- User Centric
- Sustainable
- Flexible
- Collaborative
- Reusability
- Central repository: (include all standalone databases)
- Modalities of publication; online
- External accessibility/ linking other government bodies

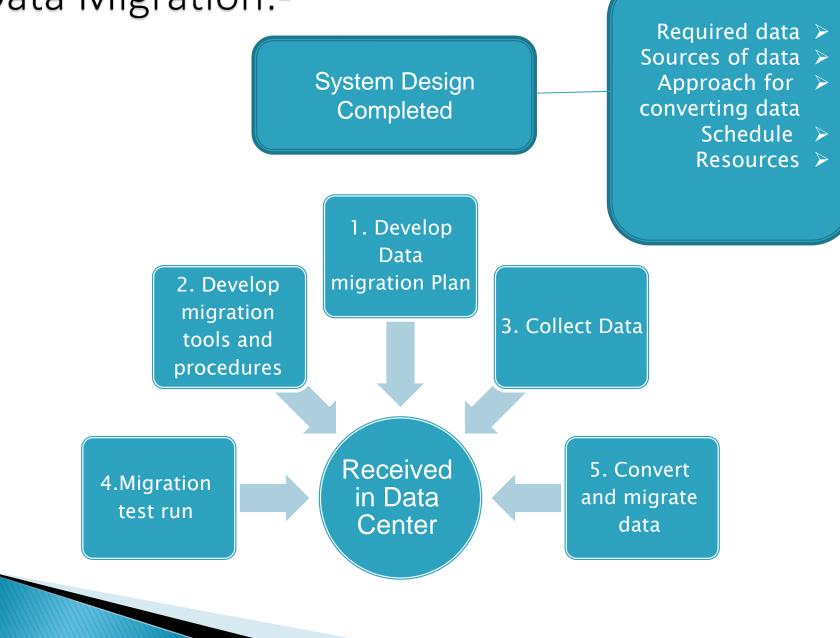
### **Implementation Activities:-**



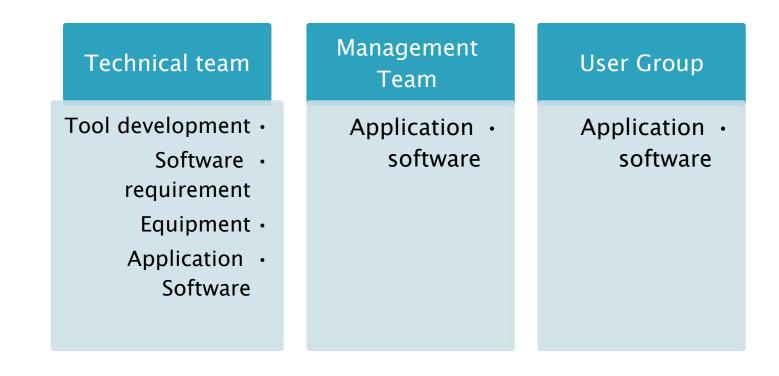
### Testing:-



### Data Migration:-



### Training:-



### Critical Success Factor:-

#### Subject Matter

- Business and Technical Architect
- System Integration Expertise
- Implementation Expertise

#### **Experts**

- Active participation during discussions
- Identify Issues and Requirements
- Timeliness of Respond
- Decision Making

### **BENEFITS of ISS:-**

- 1. More Effective Monitoring of the Census/Survey
- 2. Efficiency of Census/ Survey Processes
- 3. Centralized Integrated Statistical System
- 4. Extend Dissemination of Statistical Information
- 5. Data Visualization
- 6. Knowledge Sharing
- 7. Addressing CHALLENGES

### \*More Effective Monitoring of the Census/Survey

- Complete information on the Census / Survey
- Pro-active Monitoring mechanism.
- Number of Sample Case assigned to each officer

### \* Efficiency of Census/Survey Process

- Reduce the number of processes
- Edit Spec Validation
- Census/Survey Data available for review after each submit
- the batch for validation.
- Automate Manual Processes.
- Automate Manual Processes
- Report Preparation

# Centralized Integrated Statistical System

- flexibility to transfer data between disparate Systems
- Data Consistency and Up –To– Date
- Data at "finger tips"

# Extend Dissemination of Statistical Information

- Mechanism for publishing Census/ Survey Reports on website
- Dissemination of Data Requests
- Dissemination of Customized Census/ Survey Reports
- Feedback from the "Customer"
- Customer Service

### \* Data Visualization

- Analyzing information using Maps (Geospatial Database)
- Performance Management System
- Business Intelligence.

## Knowledge Sharing

- Turning personal knowledge into corporate knowledge that can be shared throughout the organization
- Platform for collaboration, sharing and disseminating knowledge throughout the organization
- Knowledge Repository.

### \*ISSUES & CHALLENGES:-

- Data migration to central repository;
- Knowledge gap related to complicated statistical analysis
- Timeline is usually a challenge
- Time needed to have new system architecture and system development tools and training and migrating to the new system

## Some Features of the Jordan Population Census, 2015

### Substantive/ Technical Preparations

### Technical designs and testing

Training

Human resources & modalities of work

## **Geographical Preparations**

- Geo-coding System of cities, villages, cams and admin affiliations
- ✓ Office demarcation of digital maps
- ✓ Field digital demarcation & clearing/adoption
- Listing of Buildings, Housing units and households with GPS9 (eligibility for enumeration)
- ✓ Data transition cycles/ data migration to the center
- ✓ Quality assurance, (role of call center)
- Management of operations

## Processes of Data Collection

- > Needs and mobilization of human resources
- > Training, tasking and deployment
- Monitoring performance
- > Analysis, production of process indicators, and progress indicators

Work flow line in support of quality assurance

## Data transition processes

Three cycles of data transition

- Transfer of demarcation data, starting with office demarcation of digital maps, ending with field demarcation and accreditation
- Listing transfer, starting with listing BLGs, HU & HHs in handed demarcated areas, accreditation and storing
- Enumeration data transfer, including visiting and interviewing HHs
- Storage and security of data

# Data Processing

In electronic solutions I particular, processing of data is continuous throughout all stages including the enumeration In addition, electronic processing for

Consistency, completeness and range check
During preparation of tables
During analysis and evaluation

### Processes of producing results

### Sets of indicators:

- Preliminary indicators
- Main indicators
- Detailed indicators
- Census tabulation plan

### Census reports

## Thank you