

# Myanmar Recovery Coordination Center Development and Implementation.



**Information Management  
Approach.**

**Response to floods AUG 2015.**

- A. Strategy for transition from humanitarian emergency to Early Recovery (ER).**
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  - B. Information management framework for Recovery.**
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    - B2.** Information needs assessment: datasets, metadata.
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      - OPTION 2.** Distributed hosting: Myanmar, several ministries, database replication.
      - OPTION 3.** Distributed hosting: Cloud Services Outside Myanmar, Virtual Private Cloud.
      - OPTION 4.** Distributed hosting: Myanmar Ministries Cloud: Virtualization.
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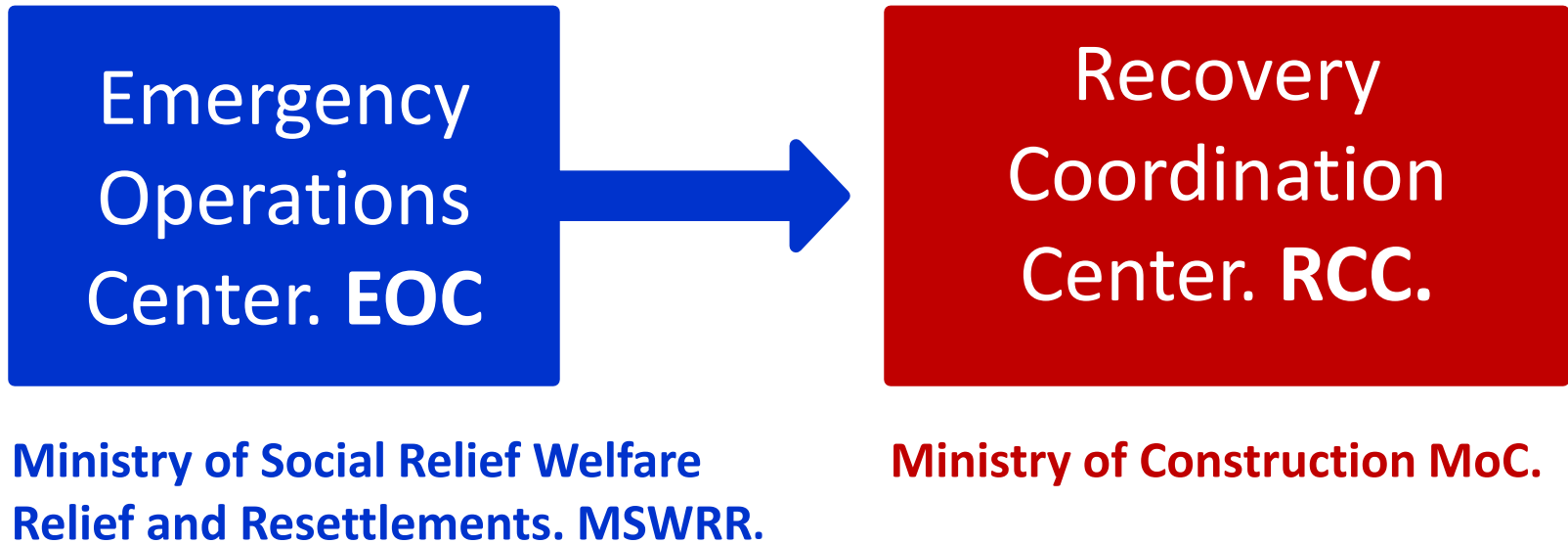
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# Strategy for transition from humanitarian emergency to Early Recovery (ER).



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**A**

**From Emergency to Early Recovery.**



**1. Use of existing resources and data available from the EOC.  
(When possible).**

**4. Use of standard Information management framework for Recovery: from data gathering to product dissemination.**

**2. Recovery baseline data should include latest emergency data.**

**7. Use of advanced ICT in the recovery coordination center.**

**3. Standardized format for data collection on agreement with stakeholders and conformed to requested information products: DaLA, Sitreps, maps, donor project performance reports, etc.**

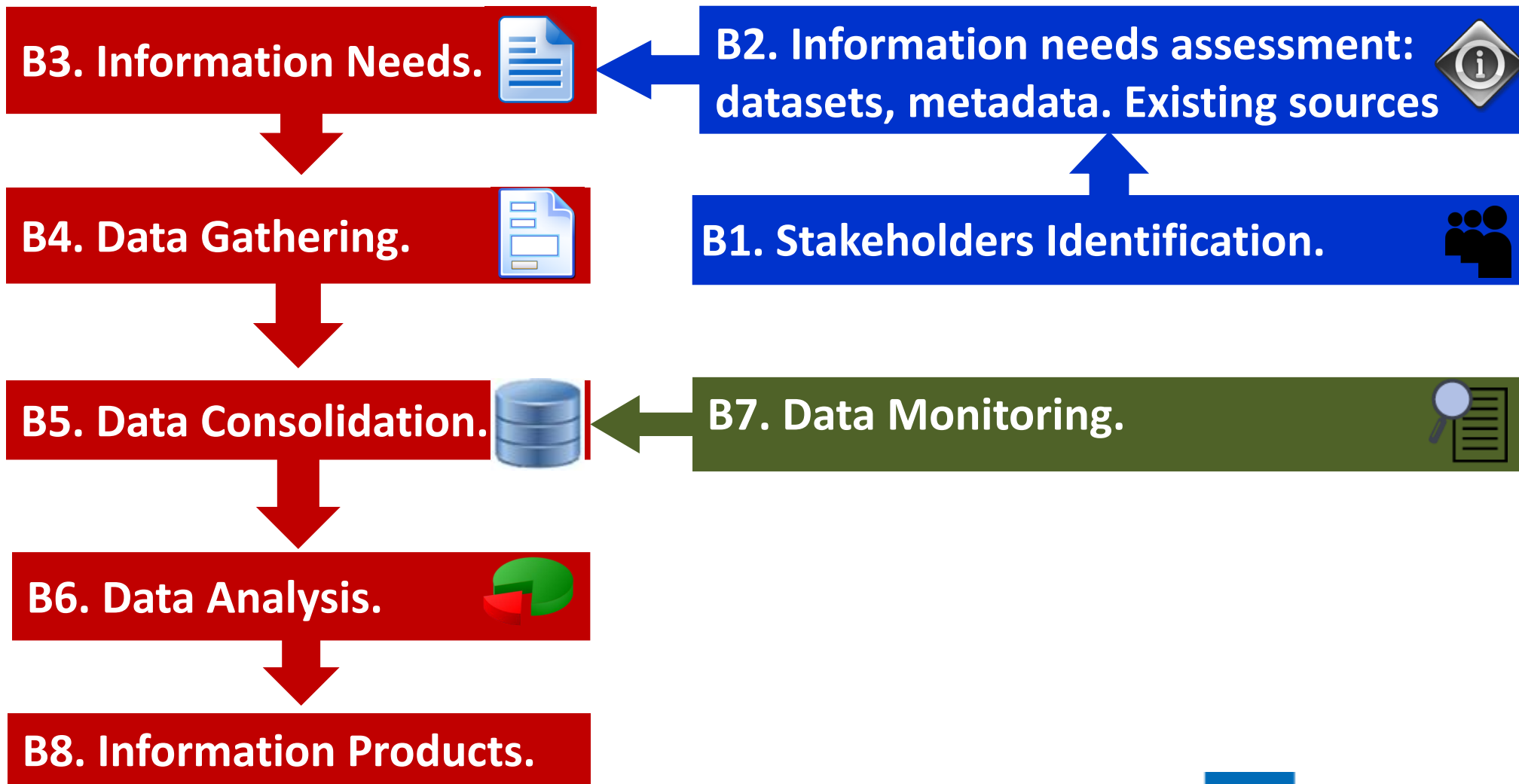
**6. Data verification and consolidation consultation with stakeholders.**

**5. Data gathering from all possible sources: General Administration Department (MoHA) Government, INGOs, UN, etc.**

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# A1 Strategic Principles.





## **B** Information management framework.

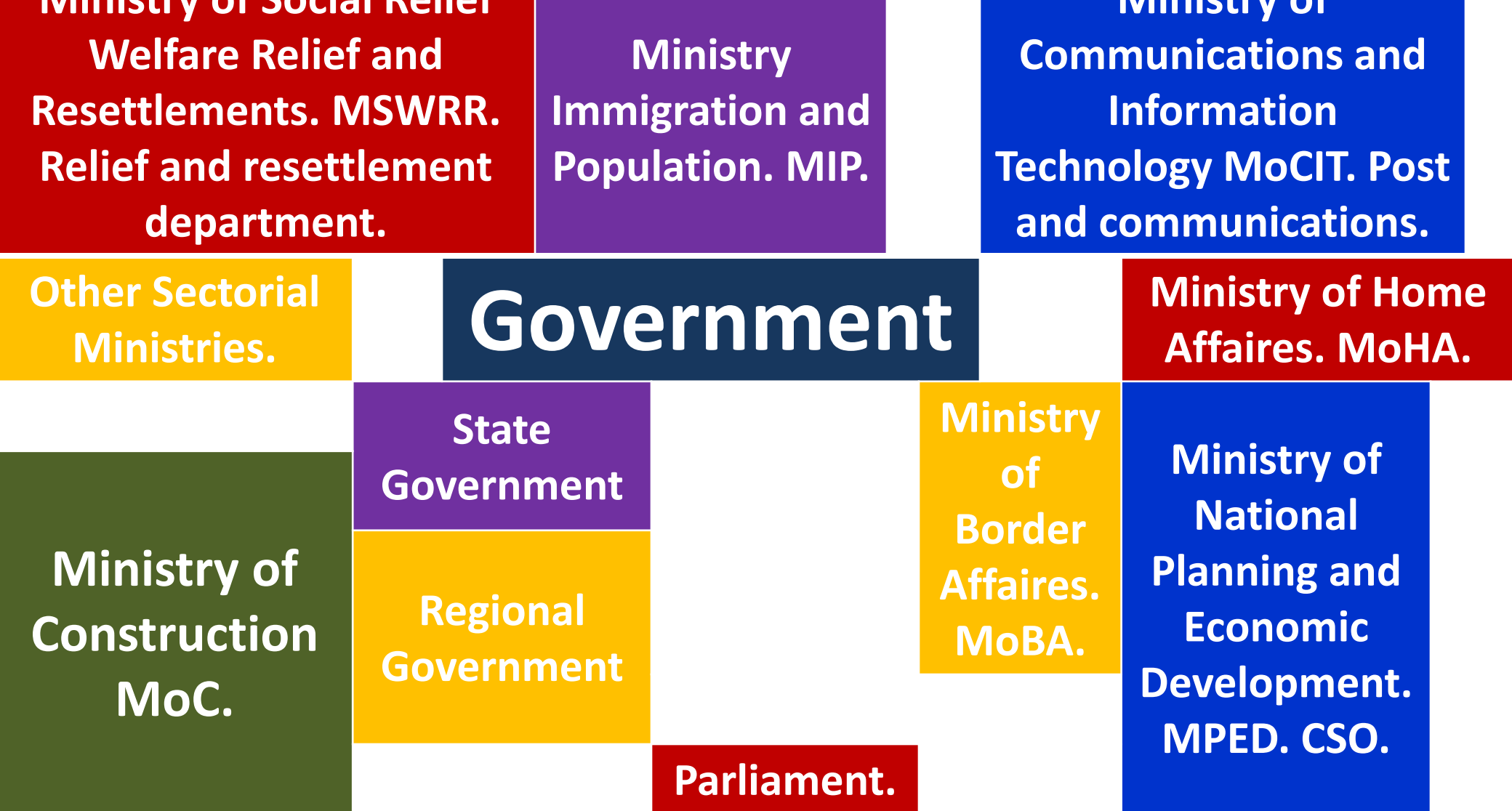
## Definition: Stakeholders In Information Management for Recovery.

“Whoever has an interest in any of the stages within the Recovery Information management framework”:

Stakeholders	IM Stages
Data providers.	B4. Data Gathering.
Analysts. Information Management Officers.	B6. Data Analysis. B7. Data Monitoring.
Data administrators.	B5. Data Consolidation.
Information products producers.	B8. Information Products.
Information products consumers: Decision makers.	B3. Information Needs. B8. Information Products.

## B1 Stakeholders Identification





## B1 Stakeholders Identification



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**Private sector**

**NGOs**

**UN  
Agencies**

**Donors**

**Organizations**

**Civil  
Society**

**Red Cross**

**MIMU**

**Information  
Management  
Network**










## **B1** Stakeholders Identification



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Type	Location/Name	Functionality/ platform	Contents/ Notes
Database 	Myanmar Post and Telecommunications/MSWRR/EO C. MDLD. Myanmar Loss and Damage DB.	DESINVENTAR implementation. Queries, customized web forms, online July 2016.	Emergency data and indicators. <a href="http://www.mdld.rrd.gov.mm">www.mdld.rrd.gov.mm</a> Lowest admin level: village tract, ward. Good sector definition, good stakeholders mapping, good collection template. Support UNHABITAT.
Database 	MNPED/Foreign Economic Relations Department (FERD)/Development Partners' Working Committee (DWPC) MOHINGA.	Aid Information Management System. Aid dashboard based on activities, export to Excel interactive maps, disaggregation by district, currently online.	Aid activities and indicators, good presentation. Money disbursement based as primary indicator. EU donor. mohinga.info Design: CATALPA Int. <a href="http://www.catalpa.io/">www.catalpa.io/</a> GDP data is available at township level. CPI (urban) is also available.
Database 	MIMU/Myanmar Information Management Unit)/DEVINFO.	DEVINFO implementation. Can upload data. Can export data to csv format. Online.	203 indicators in 12 Sectors. Compiles published data. <a href="http://www.devinfo.org/myanmar">www.devinfo.org/myanmar</a>
Database, Excel  	Ministry of Population and Immigration. Census department office/ Census database.	Excel reports on demand. Offline database. Standardized for OCR collection form.	Census data. Good disaggregation. Minimum administrative level: Ward/Village tract. Support from UNFPA. Several datasets such as occupation are still not yet available.
Excel, GIS, Access   	MIMU/Myanmar Information Management Unit)/3W.	Wide range of platforms, datasets and maps. Additionally, technical expertise in data management and GIS mapping.	3W data to ward/village level, GIS mapping capacity. Most pre-disaster datasets have been consolidated by MIMU to a much finer granularity than most other data sources. MIMU also has prepared a list of flood-affected village tracts, confirmed by either satellite imagery or field reports.
Excel 	Recovery Assessment (damage and loss assessment from Ministry of Construction)	Excel dataset not yet used for analysis.	Primary data collection from affected townships, includes household-level data. However, dataset is improperly formatted and will require much processing. Almost a duplicate of the GAD data used in the MOSWRR damage and loss dataset.







## B2

## Inventory of available data sources.



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Type	Location/Name	Functionality/platform	Contents/Notes
Excel 	MOSWRR (Ministry of Social Welfare, Relief and Resettlement) floods dataset	Basic Excel file	Used mainly for geographic prioritization and progress monitoring of relief interventions. Collection of data from GAD, Ministry of Health, Ministry of Social Welfare, Ministry of Construction, Ministry of Border Affairs, Ministry of Planning and Economic Development and Ministry of Agriculture and Irrigation. Unfortunately, dataset is outdated. Last updated early September 2015.
Hard Copy, GIS 	Climatological data and Flood information from EOC and DMH	DMH forecasters and EOC technicians manage a combination of GIS systems (funded both by the AHA Centre and USAID) and water level and climate monitoring from DMH.	Extensive monitoring of the physical extent and severity of the flooding. Used primarily in the monitoring of tide and river levels to aid in the evacuation of affected persons. Unclear if new reports are being generated.
Hard Copy 	General Administration Department data	Hard copies of assessment forms developed by MOSWRR.	Collected from village and ward level as GAD alone has the footprint to do this. Regular collection and updating of damage and loss data, almost a duplicate of the recovery assessment data collected by the Ministry of Construction.
Excel 	PDNA dataset	Excel database used for the preparation of the PDNA.	Consolidation of data from numerous sources, including the MOSWRR damage and loss dataset, pre-disaster socioeconomic indicators from the Census, IHCLA and MICS.
Excel 	MIRA dataset	Excel dataset used to prepare the MIRA report.	Primary data collection. Incorrectly sampled and outdated. Low-level of applicability to the MDLD.
Database 	MMSis	Online repository of pre-disaster socioeconomic indicators	Extensive set of economic indicators. Regularly updated. Of particular importance to the MDLD are GDP figures at township level, CPI and other market monitoring tools.

## B2

## Inventory of available data sources.



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# B3

## Information Needs.



**Paper forms:  
OCR**



**Telephone**



**Answering  
machine**



**Online  
Surveys**



**Options**

**Telephone  
hotline**



**On line  
forms**



**Outsourced  
Surveys.**

**Data Mining  
from available  
databases.**



**E-mail/ email  
form.**



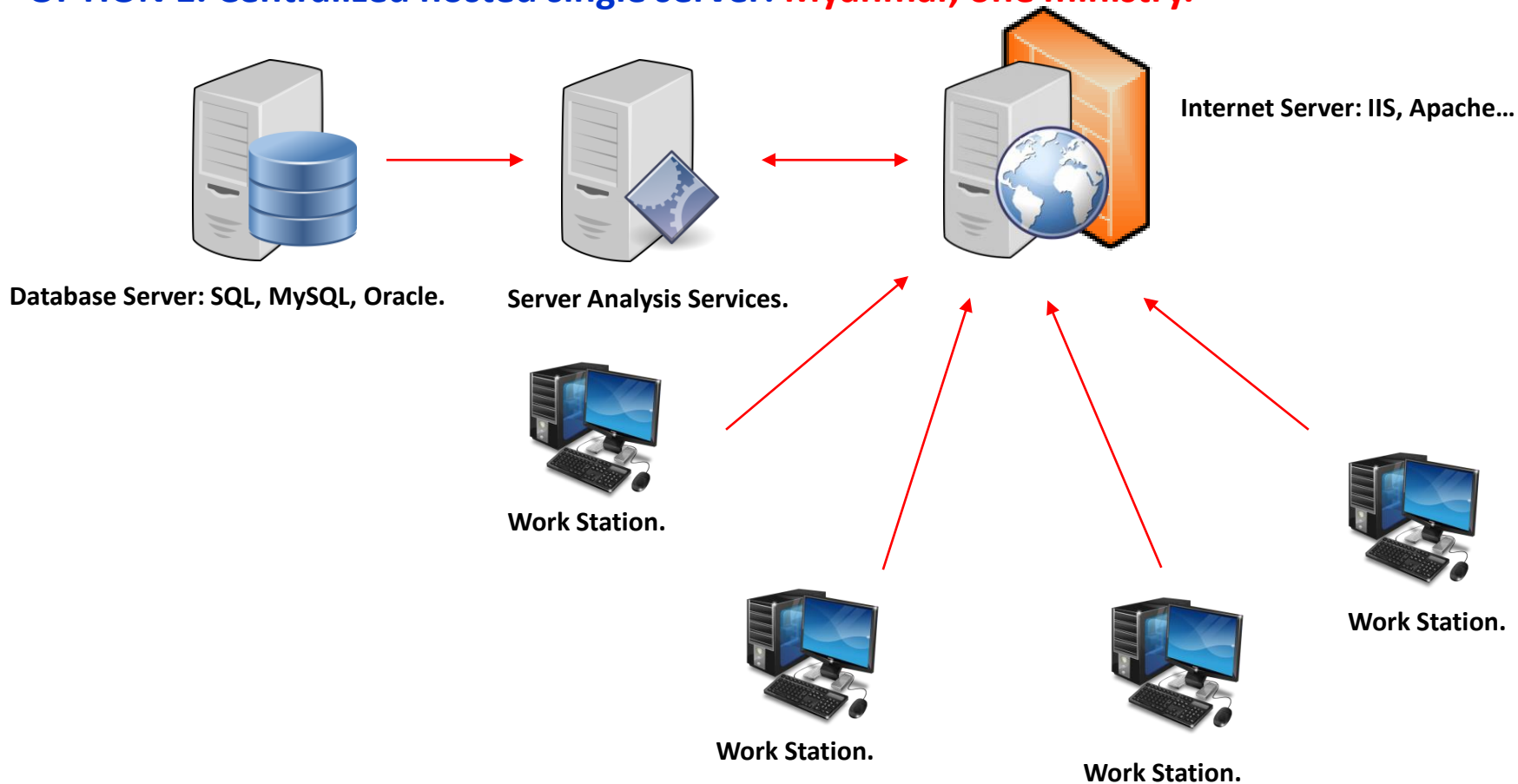
**B4 Data Gathering.**



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## OPTION 1. Centralized hosted single server: Myanmar, one ministry.



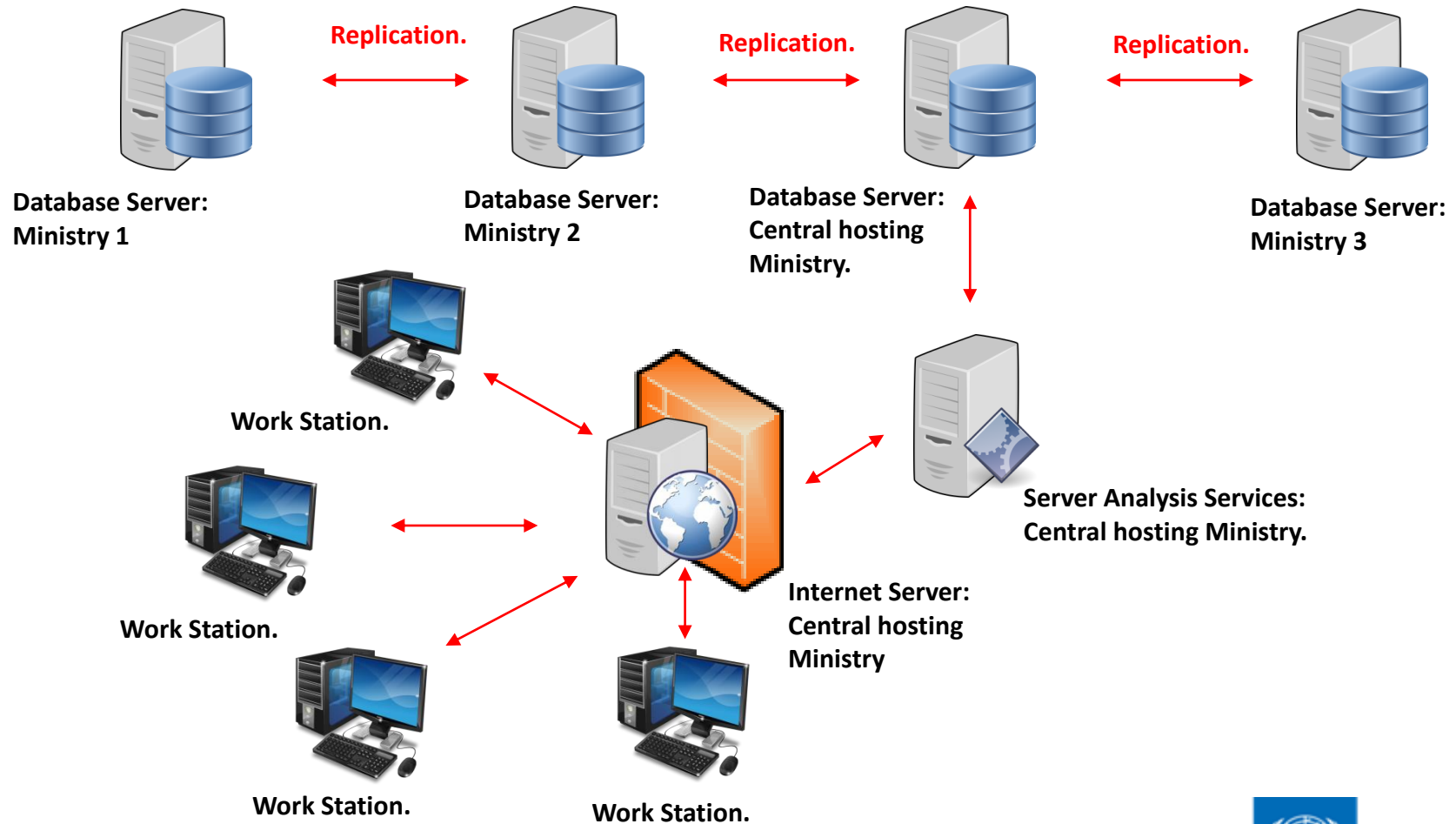
**B5** Data Consolidation: Repository



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## OPTION 2. Distributed hosting: Myanmar, several ministries, database replication.



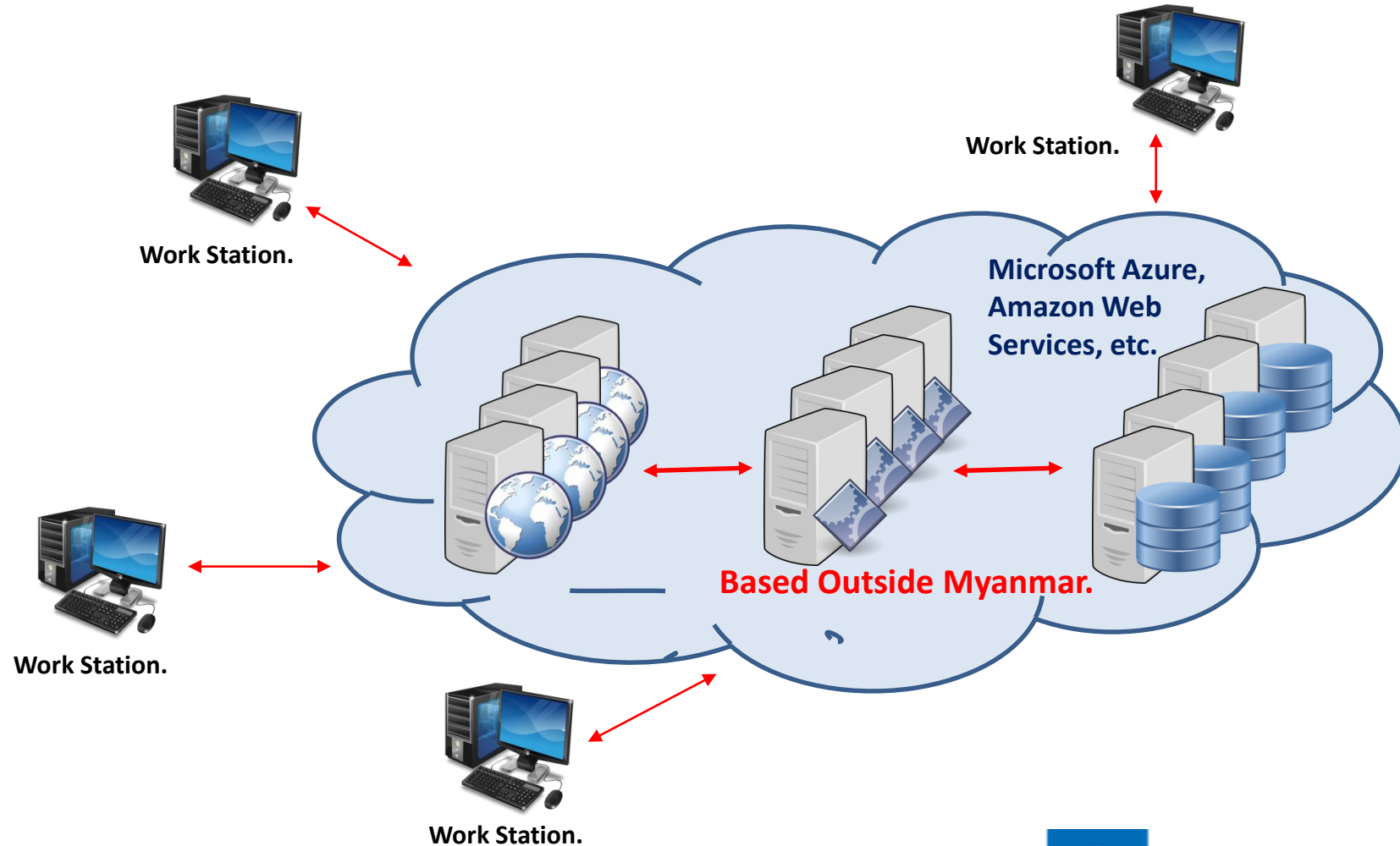
## B5 Data Consolidation: Repository



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### OPTION 3. Distributed hosting: Cloud Services Outside Myanmar, Virtual Private Cloud.



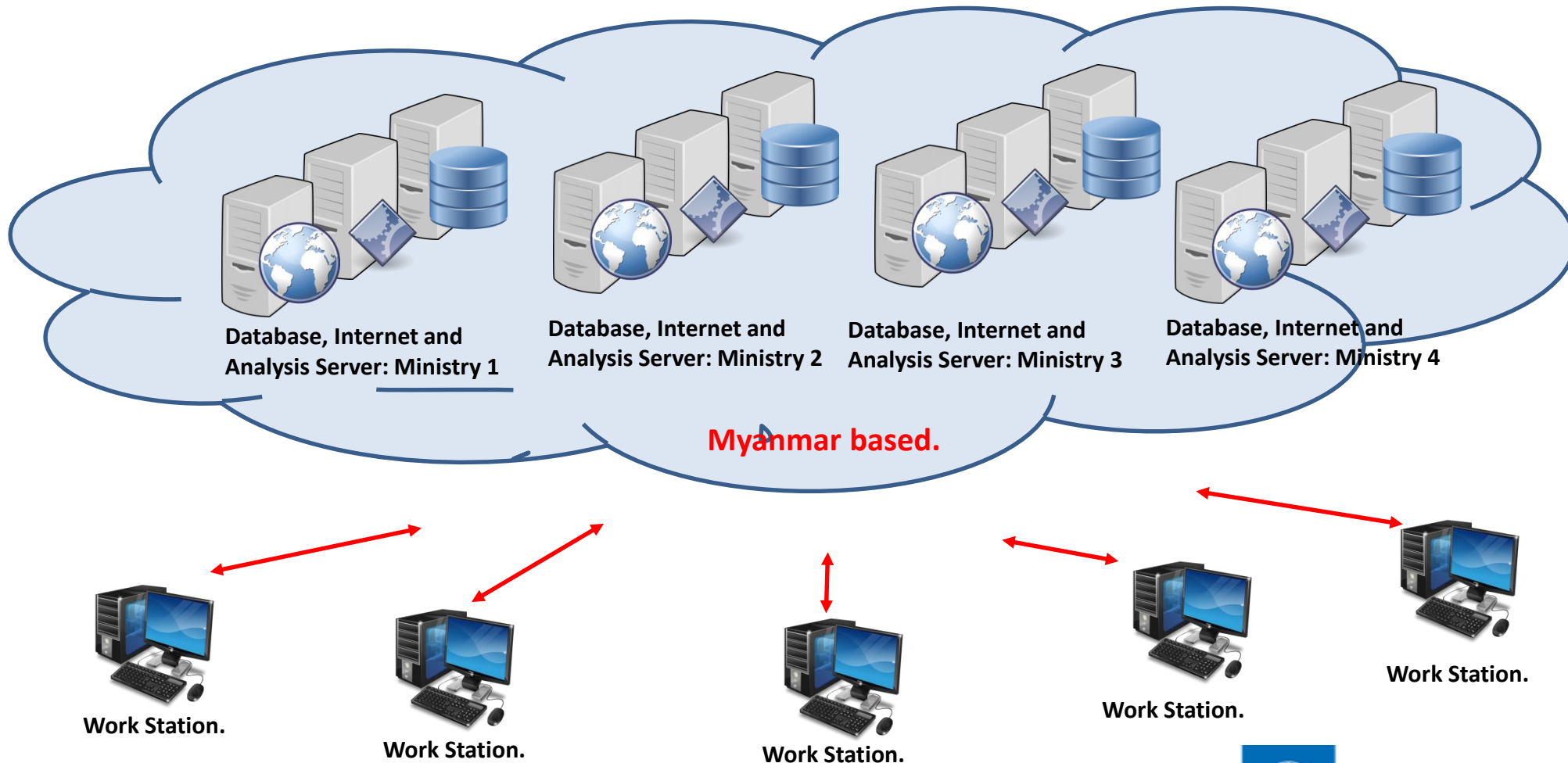
## B5 Data Consolidation: Repository



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## OPTION 4. Distributed hosting: Myanmar Ministries Cloud: Virtualization.



**B5** Data Consolidation: Repository



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## OPTION 5. Locally stored Database. Myanmar, one workstation, one Ministry.



Microsoft  
Access TM.



Stand alone: Work Station.

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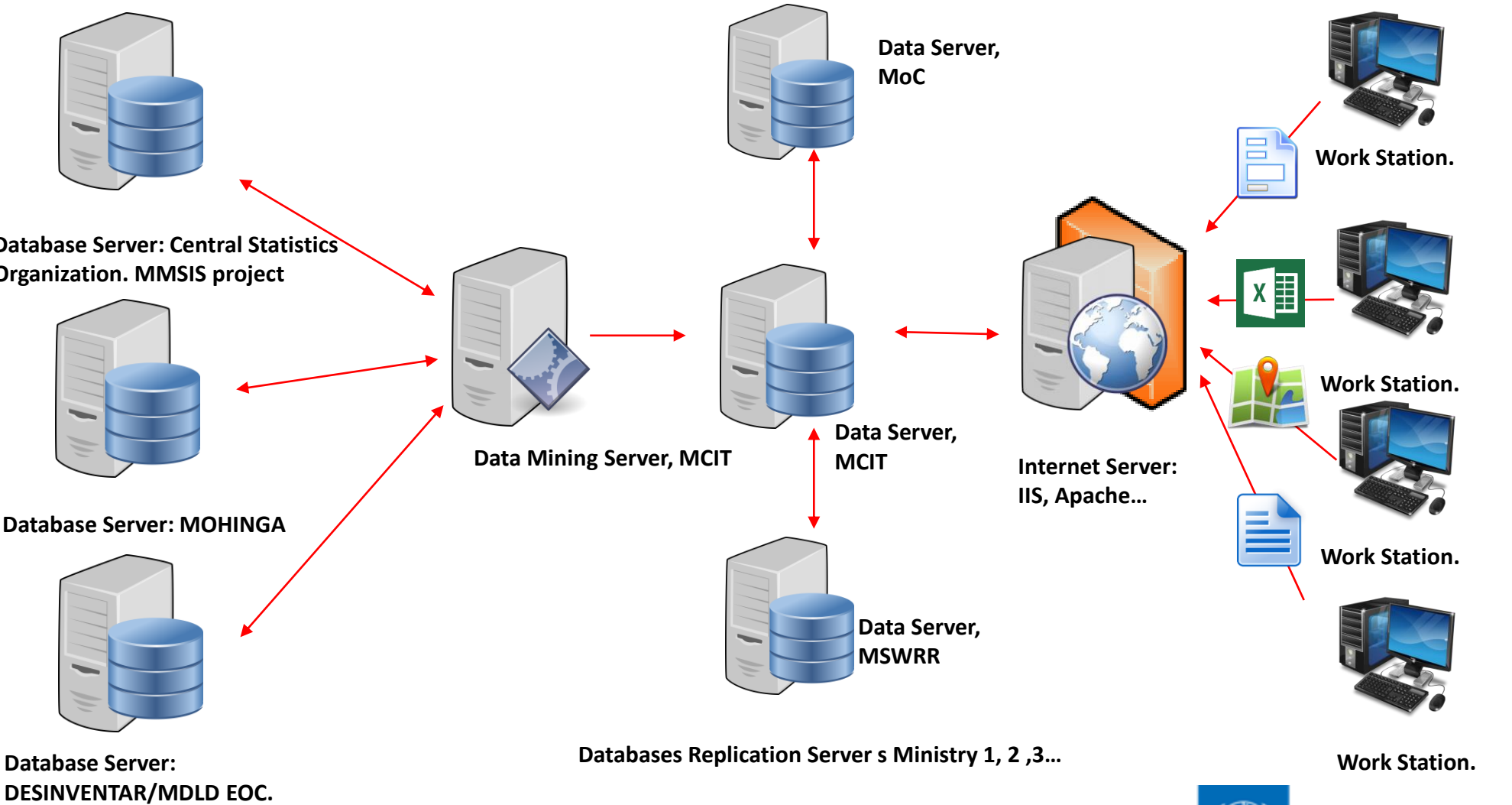
**B5** Data Consolidation: Repository



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**OPTION 6. Preferred Scenario: Host MoCIT, replica hosts Moc and MSWRR.**



**B5 Data Consolidation: Repository**



Technology	Advantages	Disadvantages	Options
<b>1. Centralized hosted single server.</b>	Data ownership. Control and local capacity created.	No full redundancy. Capacity needed.	Ministry of ICT or MoC.
<b>2. Distributed hosting: Among Ministries servers.</b>	Full redundancy for disaster recovery. Participation of different Ministries.	Cost. Technology involvement. Capacity needed. Partial integration: only at database level. Internet connectivity.	Windows server cluster/ Ms. SQL server. Linux / MySQL.
<b>3. Distributed hosting: Cloud Services.</b>	Seamless integration. No infrastructure cost. Full redundancy for disaster recovery.	Cost per month to budgeted. Data ownership. Capacity not created. New broadband internet connectivity. Long term. Internet connectivity.	Amazon. Azure. Google.
<b>4. Distributed hosting: Myanmar Ministries Cloud, Virtualization.</b>	Full infrastructure virtualization as base for e-Government. Transparent to the user. Full redundancy.	Initial Cost future savings. Project Management: should be part of a bigger project. Capacity to be sourced. Excellent coordination between Ministries needed. Internet connectivity.	VM Ware. Microsoft Hyper-V.
<b>5. Locally stored Database.</b>	Simplicity, cost. Data ownership. No Internet connectivity.	No redundancy at all. Risk of data lost. No concurrent users.	MS. Access.

## B5 Data Consolidation: Repository



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**Final decision for location with ministries and stake holders.**

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## **B5** Data Consolidation: Repository



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Software to be used, stakeholders, indicators,  
composite indicators , procedure.

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## B6 Data Analysis.



Frequency of data to be monitored,  
selected indicators, information products.

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## **B7** Data Monitoring.




**Android iPhone application for dissemination and collection.**

**Bulletins and Sitreps**

**Recovery Plan.**



**Dashboard**



**Contact Directory**



**Databases:  
BIER, Project  
financial  
tracking**



**RCC Web Portal.**



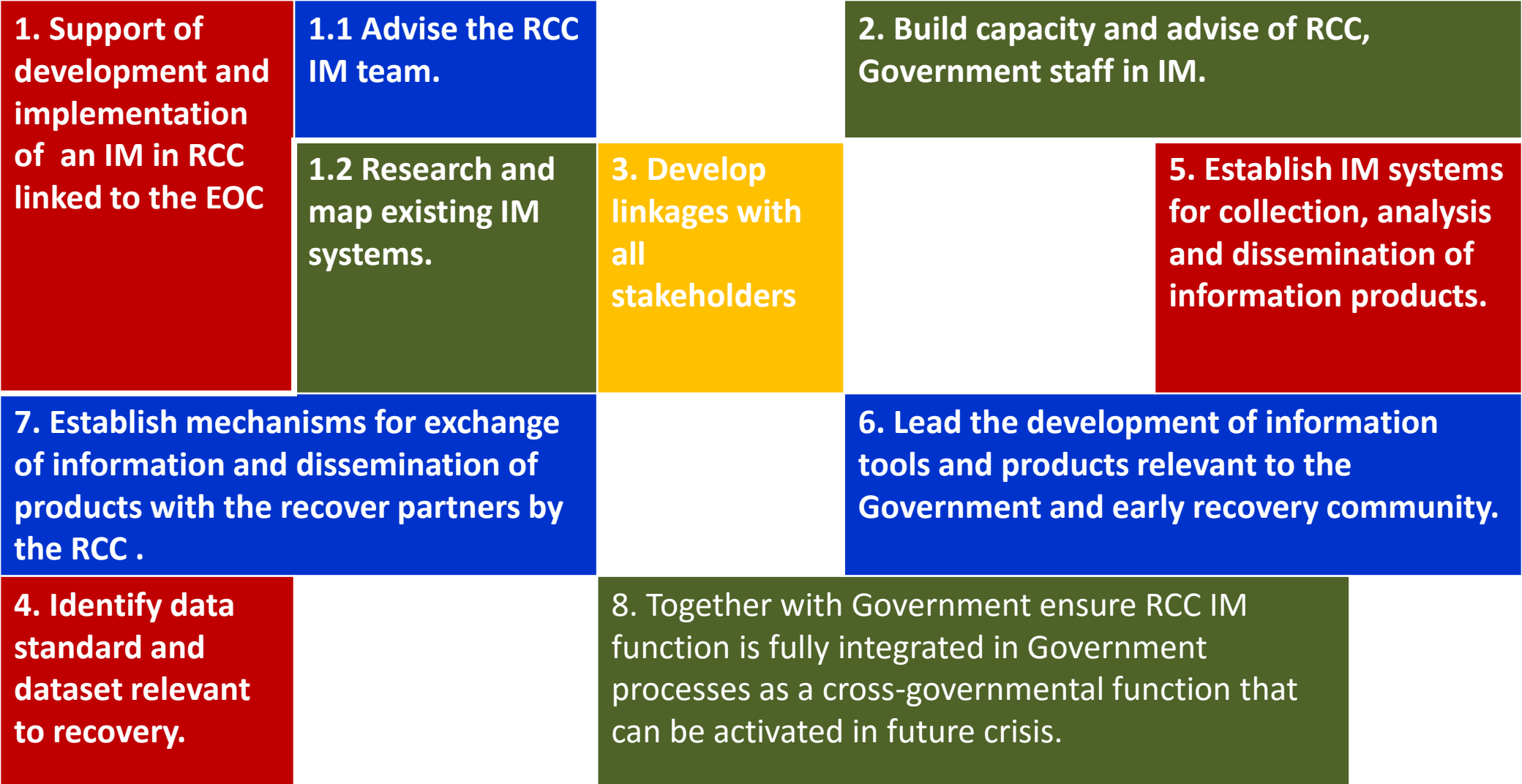
**Maps**



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**B8** Information Products and dissemination.





## C Consultancy objectives.



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# Follow up documents. November 2015 to April 2016.

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**D** Time frame



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# Questions?



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