NATIONAL GIS AND DATA GOVERNANCE EXPERT

GIS IMPLEMENTATION ROADMAP

May 2022

MASAR implementing partners

In collaboration with

1   THE GIS IMPLEMENTATION ROAD MAP

The overarching objective of this paper is to generate a road map for setting up GIS units taking into consideration the specificity of each area of intervention (AoI), the progress level reached, and the distinct risks and challenges per AoI. The three AoI are: 1) Union of Municipalities (UoM) of Oussat wa Sahil al Qaytaa, and UoM of Menieh and they will be referred to as AoI1; 2) UoM of Dreib Al Awssat, UoM of Dreib El Gharby, and UoM of Dreib El Chemali and they will be referred to as AoI2; 3) UoM of Deir El Ahmar and Aarsal Municipality and they will be referred to as AoI3.

The GIS Road Map intends to guide the establishment, operationalization, institutionalization of the GIS unit along with setting a plan to endure sustainability. This entitles setting up a GIS governance strategy, developing standards and policies related to geospatial data (data sharing and data security) and employee's rules and regulations, setting the scope of work, defining standards operation procedure (SOP), and developing key performance indicators (KPI).

Figure 1 shows the proposed implementation road map that includes six phases and spans over 27 weeks hence up to almost 6 months. The actual work is intended to start by the first of September 20201 and end in March 2022. However, many preparatory activities must be accomplished to avoid delays. However, after reviewing some of the deliverables reports per AoI, it became obvious that each AoI is at a different stage in the GIS implementation plan. Hence it is vital to develop a Road Map for each AoI alone at this stage. As such, the following table shows the various activities that must be carried in each phase and the progress status per AoI. For example, the work with AOI1 can start at phase 2 rather than phase 1 and can start immediately since the GIS employees are recruited and they are ready for the induction to start with the coaching and training to start drafting the policies and standards. This will save us delays and the work can then be only customized to other AoI. The preparatory phase is detailed in the road map since not all AoIs are aligned in terms of readiness and preparedness to start in phase 1. Please note that the rows highlighted in blue are activities to be carried by the UoM with the support of a legal entity to facilitate the implementation of the GIS unit.
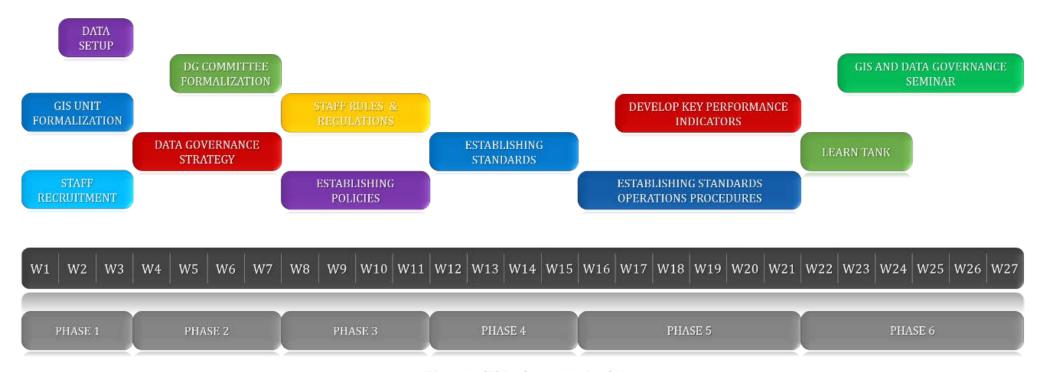
Figure 1 – GIS Implementation Road Map

	Action	Road Map Activities	Intervention Per AOI			Notes
			AOI1	AOI2	AOI3	
PREPARATORY PHASE	GIS Capacity Building	Train employees and volunteers on Municipal GIS	✓	✓	✓	
	GIS Data Acquisition	Develop GIS Database	✓	WIP		
	Hardware Purchase and Instalment	Purchase the Hardware.	✓	✓		
		Setup the hardware and software.	✓			
	GIS Office Refurbishment	Allocate an office per UoM.	✓	✓		UoM
		Office furniture and accessories.	✓	✓		UoM

Phase	Duration	Component	Task			Responsible
PHASE 1	3 Weeks	GIS Staff Recruitment	Develop necessary ToR for staff recruitment.	✓		
			Interview the Trainees.	✓		UoM
			Draft the needed decisions to recruit GIS staff at the GIS unit	✓		Support of Legal Entity
			Recruit two staff based on merit and interview grid.	✓		UoM
			Induction of staff by the GIS Expert.	✓		
		GIS Unit Establishment Formal Decision	Draft the Decision.			Support of Legal Entity
			Formalize the Decision.			UoM
		GIS Data Setup	GIS Geodatabase copy on the GIS Coordinator main computer.	✓		Should be carried by the Expert who developed the GIS Database
			Training and familiarization on the GIS data.			Should be carried by the Expert who developed the GIS Database
PHASE 2	4 Weeks	Data Governance Strategy	Draft a Data Governance Strategy.	✓	✓	
		Multi-Disciplinary Governance Committee	Select persons from each UoM from various disciplines.			UoM
			Set the scope of work of the GIS Governance committee.			UoM & Legal Entity
			Formalize the GIS Governance Committee.			UoM
PHASE 3	4 Weeks	Establishing Policies	Coach and Train the GIS Coordinator and GIS Technician on how to write policies.			
			Work with the GIS Coordinator and GIS Technician to identify the most important policies.			

Phase	Duration	Activity	Task	Note
			Supervise the drafting of the Policies	Legal Entity Support
			Supervise the drafting of a policy for the employees' internal rules and regulations	Legal Entity Support
			Review the Policies	
			Approve the Policies by the GIS Governance Committee	
PHASE 4	4 Weeks	Establishing Standards	Guide the GIS Coordinator and GIS Technician to develop standards for each policy.	
			Supervise the drafting of Standards	Legal Entity Support
			Review the Standards by the GIS Consultant	
			Approve the Standards by the GIS Governance Committee	
PHASE 5	6 Weeks	Establishing Standards Operation Procedures (SOP)	Guide the GIS Coordinator and GIS Technician to identify all the procedures and the routine	
			Supervise the drafting of the SOP as a step-by-step guide.	Legal Entity Support
			Review the SOP	
			Approve the SOP by the GIS Governance Committee	
		Develop Key Performance Indicators	Guide the GIS Coordinator and GIS Technician to identify all the procedures and the routine	
			Review and approve the KPI	An external neutral entity must be involved
PHASE 6	6 Weeks	GIS and Data Governance Seminar	Learn Tank	
			GIS and Data Governance Seminar	