



UN-HABITAT

# SYSTEMATIC LAND INFORMATION AND MANAGEMENT



**A Technical Manual for the  
Establishment and  
Implementation of a Municipal  
Geographic Information System**

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United Nations Human Settlements Programme publications can be obtained from UN-HABITAT Regional and Information Offices or directly from: P.O.Box 30030, GPO 00100, Nairobi, Kenya  
Fax: +(254-20) 762 40 60, e-mail: [unhabitat@unhabitat.org](mailto:unhabitat@unhabitat.org)

website: [www.unhabitat.org](http://www.unhabitat.org)



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# Foreword

## Purpose and Approach

UN-HABITAT prepared this manual as one of the project activities under the urban management component of the Support to Priority Areas in the Urban Sector (SPAUS) programme and the Urban Development Programme for the Somali region (SUDP).

The Systematic Land Information and Management (SLIM) manual is in line with a methodology that UN-HABITAT developed for the establishment and implementation of Geographic Information Systems (GIS) in municipalities. UN-HABITAT GIS activities in the Somali region have focused on the use of quick and cost-effective methods for acquiring and processing geographic information and making it available to different users in the urban land sector. GIS and remote sensing techniques have been combined with field survey methods to realize the rapid provision of urban land information that is already being used for various land management purposes, e.g. urban planning and design and property taxation.

Systematic Land Information and Management is primarily designed to assist municipal staff to collect data on urban properties and develop a property database that can be used for more efficient and effective urban land management. The manual assumes the presence of the necessary urban land policy, as well as the proper legal and institutional frameworks to enable the full use of the property database in municipal land administration activities. The manual also assumes the availability of financial and technical resources to acquire up-to-date satellite (or aerial) imagery data, conduct ground surveys, develop and maintain large databases, and distribute geographic information. Other users and producers of geographic data in the public and private sectors may also find the manual useful.

## How to Use the Manual

The manual is divided into sections, each of which deals with one fundamental component of the municipal GIS development process. The user is advised to follow the step-by-step procedures described in the manual, as all the sections are related.

Systematic Land Information and Management is based on the use of proprietary GIS products and established GIS concepts. The user is not obliged to use the proprietary GIS products described in the manual. The use of different GIS products may, however, imply the adoption of different procedures to obtain similar results. To this extent, the manual may be used as a checklist in the development and implementation of a municipal GIS. This manual is only intended to operationalize the process of GIS development and is not intended to replace existing policies or guidelines.



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