TOOLKIT **EDITION 2** 2023

CITIES' **INFRASTRUCTURE DELIVERY** AND **MANAGEMENT** SYSTEM **CIDMS**

national treasury
Department:
National Treasury
REPUBLIC OF SOUTH AFRICA

cITIEs SUPPORT PROGRAMME

IUDF
INTEGRATED URBAN DEVELOPMENT FRAMEWORK

2030 NDP

This is the second edition of the Cities Infrastructure Delivery and Management System (CIDMS) Toolkit.

The CIDMS provides a holistic system for the management of infrastructure based on the requirements of SANS 55001: Asset management - Management systems – Requirements, tailored for application in South African metropolitan cities and specifically in support of the country's spatial transformation agenda. The CIDMS system also incorporates an infrastructure delivery system based on the National Treasury's Framework for Infrastructure Delivery and Procurement Management (FIDPM) system.

This toolkit was initially developed by the Cities Support Programme of the National Treasury of South Africa in partnership with the eThekwini Municipality, the City of Johannesburg Metropolitan Municipality and the City of Cape Town circa 2018, following demand from metropolitan cities for a system to accelerate the delivery of infrastructure and to manage infrastructure portfolios more sustainably.

Revision 2 of this toolkit provides updates to the toolkit as a whole and has been informed by discussions in the CIDMS reference group meetings, the CIDMS Community of Practice Sessions and the technical engagements with the metros. This revision incorporates inputs from the Climate Resilience and management of resilient infrastructure work undertaken in collaboration with the World Bank. The changes in this revision of the toolkit are aligned with the FIDPM, and a new module for guidance on the Operations and Maintenance of infrastructure assets has been included.

Cities Infrastructure Delivery Management System Toolkit Edition 2
2023
ISBN No: ISBN: 978-0-621-46215-9

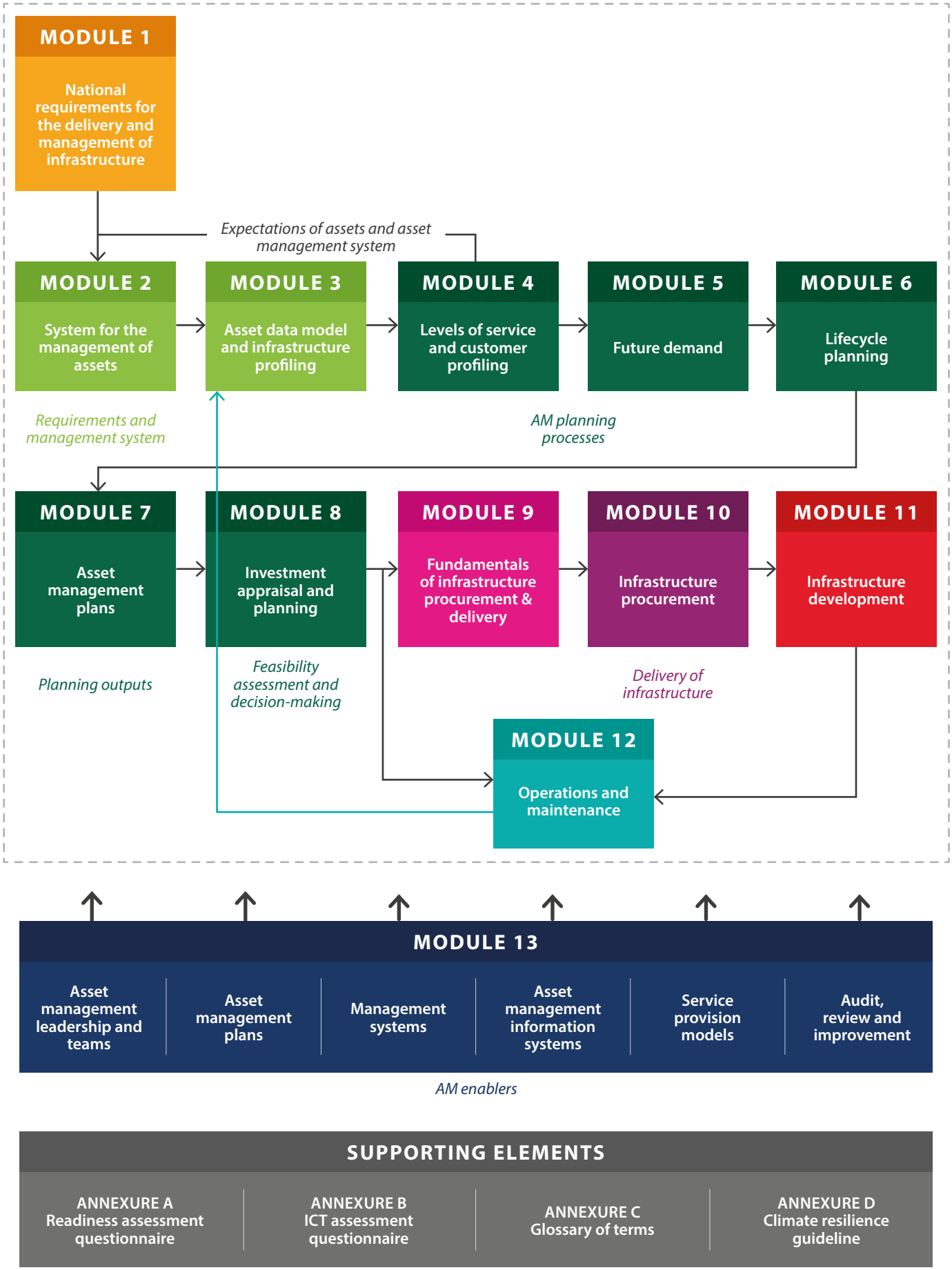
ACKNOWLEDGEMENTS

FUNDER
The revised CIDMS toolkit and technical support to the CIDMS project has been funded by SECO, the Swiss State Secretariate for Economic Affairs.

PROJECT REFERENCE GROUP
Representatives from the eight metropolitan municipalities, the National Treasury Local Government Infrastructure Unit and the Cities Support Programme.

TOOLKIT REVIEW
This CIDMS Toolkit was Reviewed by the World Bank, Cities Support Programme, National Treasury and SMEC.

TOOLKIT LAY-OUT, DESIGN, PRODUCTION AND PRINTING
Geolix


MODULE 1
National requirements for the delivery and management of infrastructure
Expectations of assets and asset management system
MODULE 2
System for the management of assets
MODULE 3
Asset data model and infrastructure profiling
MODULE 4
Levels of service and customer profiling
MODULE 5
Future demand
MODULE 6
Lifecycle planning
Requirements and management system
AM planning processes
MODULE 7
Asset management plans
MODULE 8
Investment appraisal and planning
MODULE 9
Fundamentals of infrastructure procurement & delivery
MODULE 10
Infrastructure procurement
MODULE 11
Infrastructure development
Planning outputs
Feasibility assessment and decision-making
Delivery of infrastructure
MODULE 12
Operations and maintenance
MODULE 13
Asset management leadership and teams
Asset management plans
Management systems
Asset management information systems
Service provision models
Audit, review and improvement
AM enablers
SUPPORTING ELEMENTS
ANNEXURE A Readiness assessment questionnaire
ANNEXURE B ICT assessment questionnaire
ANNEXURE C Glossary of terms
ANNEXURE D Climate resilience guideline

CONTENTS

Module 1 *National requirements for the delivery and management of infrastructure*

List of figures that appear in Module 1

List of tables that appear in Module 1

List of case studies that appear in Module 1

Module 2 *System for the management of assets*

List of figures that appear in Module 2

List of tables that appear in Module 2

Module 3 *Asset data model and infrastructure profiling*

List of figures that appear in Module 3

List of tables that appear in Module 3

List of case studies that appear in Module 3

Module 4 *Levels of service and customer profiling*

List of figures that appear in Module 4

List of tables that appear in Module 4

Module 5 Future demand

List of figures that appear in Module 5

List of tables that appear in Module 5

Module 6 *Life-cycle strategies and plans*

List of figures that appear in Module 6

List of tables that appear in Module 6

Module 7 *Asset management plans*

List of figures that appear in Module 7

List of tables that appear in Module 7

Module 8 *Investment appraisal and planning*

List of figures that appear in Module 8

List of tables that appear in Module 8

Module 9 *Fundamentals of infrastructure procurement & delivery*

List of figures that appear in Module 9

List of tables that appear in Module 9

Module 10 *Infrastructure procurement*

List of figures that appear in Module 10

List of tables that appear in Module 10

Module 11 Infrastructure delivery

Module 12 *Operations and maintenance*

List of figures that appear in Module 12

List of tables that appear in Module 12

Module 13 *Enablers*

List of figures that appear in Module 13

List of tables that appear in Module 13

ANNEXURES

Annexure A
CIDMS Readiness Assessment

Annexure B
CIDMS ICT Readiness Assessment

Annexure C
Glossary & Acronyms

Annexure D
Climate Resilience

CITIES' **INFRASTRUCTURE DELIVERY** AND **MANAGEMENT** SYSTEM

CIDMS