

IMQS PROFESSIONAL SERVICES

Infrastructure Management Consulting



THE BUSINESS CHALLENGE

Effective and efficient long-term management of public infrastructure underpins socio-economic development and societal wellbeing. Countries rely on large investments in infrastructure assets that are managed at different scales to achieve: strategic goals, deliver services, bolster industry, ensure public safety and support the livelihood of communities.

Within this environment, public organisations are often simultaneously faced with juggling limited financial and human resources. These resources need to be directed in the most effective manner at: operating, maintaining and renewing infrastructure; addressing backlogs; and comprehensively dealing with changes in demand.

Over the last 30 years, in the wake of large-scale infrastructure-related catastrophes, global standards, such as ISO 55001, have come to define key elements of the science of infrastructure asset management. Guided by these best practices, organisations who wish to demonstrate effective governance to stakeholders, or improve their performance, need to be able to assess their asset-management practices, as well as the performance of the infrastructure, and put progressive plans in place to address gaps.

The need therefore arises for the establishment of an integrated and resilient management framework from a strategic level, through to tactical and operational levels. These systems should be built in a way that is appropriate to the operational environment and speak to the strategic needs of the organisation. An important outcome of this integrated management landscape is the constructive steering of short, medium and long-term decision-making based on best practice and access to reliable and accurate information.

WHO WE ARE

IMQS builds specialised, GIS-centric software for the Infrastructure Asset Management market. This means that we are committed to conceptualising and constructing solutions for real-world problems that impact the lives of people, at all levels and from all communities, on a daily basis. It is our business to think of innovative ways to enhance the value of your organisation's physical assets, while you focus on the work that matters – delivering key services to your valued customers. IMQS' software is currently enabling effective decision-making, service delivery and customer satisfaction in over 100 government and private organisations in South Africa and internationally.

PROFESIONAL SERVICE CLIENTS

- City of Tshwane
- City of uMhlathuze
- Johannesburg Water
- Department of Transport and Public Works

KEY SKILLS

- Engineering
- Data Management
- Financial and Management
- Project Management
- Systems Analysis

THE SOLUTION

IMQS provides services that help asset-intensive organisations establish infrastructure management frameworks and systems as a key enabler to achieve their strategic objectives. Our team combines software, asset management, financial, engineering, data management and analytics expertise to set a robust and progressive management and technical platform for ongoing improvement in service delivery. Software solutions and services are often employed by clients as a key catalyst to drive improvement in management processes, as well as enabling improvements in the quality of data that underpins decision-making. A data management strategy is core to ensuring that relevant data is established that supports effective decision-making throughout the organisation and is able to be scaled to accommodate changes in needs, technology advances and the evolution of practice maturity. Work on improving data is often tackled in parallel to applying a structured approach to improving, and integrating, the infrastructure management framework (looking at people, process, and technology aspects). Our goal is to constructively support the establishment of context-relevant management frameworks, in line with best practice, that enable asset-intensive organisations address their strategic objectives and operational needs effectively.

The resulting management framework and information enable clients to:

- Construct a comprehensive, scalable and representative view of an organisation's infrastructure management landscape
- Guide decision-making with regards to capital and operational expenditure
- Inform strategic, tactical and operational management and planning
- Inform risk, performance, and financial management
- Inform effective project and maintenance management
- Enhance organisation-wide communication and understanding of infrastructure management needs and objectives.
- Enhance statutory reporting capabilities and stakeholder communication

CORE SERVICE LINES

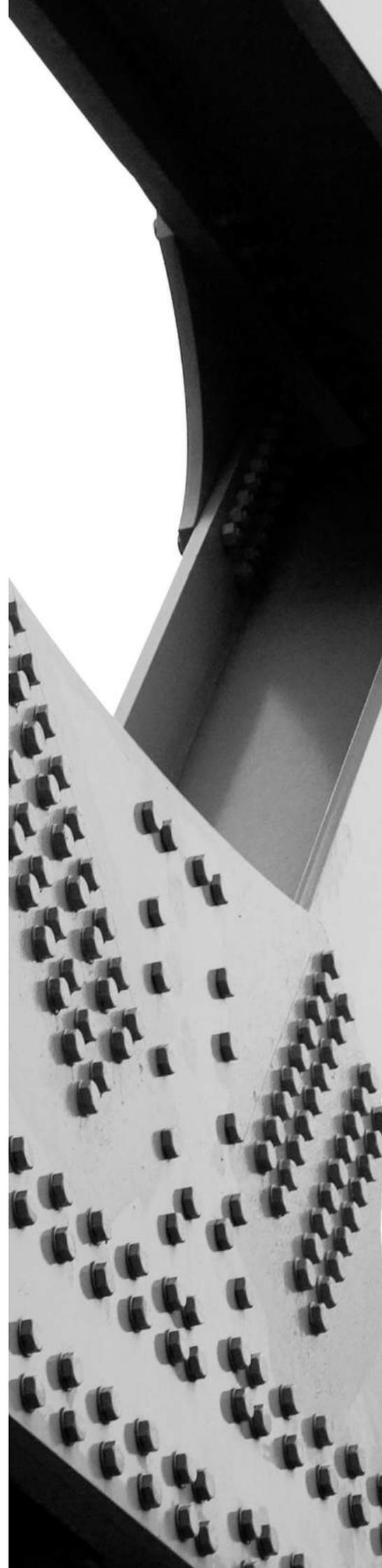
TYPE OF CORE SERVICE

ASSET REGISTER



KEY ELEMENTS OF CORE SERVICE

- Establishment and evaluation
- Infrastructure valuation
- Verification
- Compliance with accounting standards



TYPE OF CORE SERVICE

KEY ELEMENTS OF CORE SERVICE

ASSET MANAGEMENT FRAMEWORK



- Asset and system performance management
- Data management systems and processes
- Infrastructure risk management systems
- Infrastructure funding strategies
- Establishment and operation of an Asset Management Office
- Establishment and operation of a Project Management Office

DATA ANALYTICS



- Data improvement plans
- Asset data models
- Life cycle modelling
- Failure mode data interpretation
- Data management policy, procedures, and standards
- Data services "alphanumeric & spatial / GIS"

MAINTENANCE MANAGEMENT



- Improvement strategy development
- Resource and budget optimisation
- Annual planning

ASSET MANAGEMENT PLANS



- Asset Management Plans covering all engineering and building sectors
- Service delivery backlog studies
- Strategic Asset Management Plans
- Maturity development

ASSET MANAGEMENT POLICY



- Financial asset management
- Physical asset management
- Integrated asset management

ASSET MANAGEMENT PRACTICES IMPROVEMENT



- Maturity assessment
- Needs determination, prioritisation, and improvement planning
- Change management planning and implementation

TYPE OF CORE SERVICE

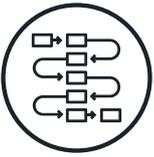
KEY ELEMENTS OF CORE SERVICE

TRAINING



- Awareness
- Baseline AM competency
- Advanced AM techniques

PROJECT & PROGRAMME MANAGEMENT



- Internal management and control of projects
- Establishment of PMUs and support

KEY SKILLS

ENGINEERING

Lifecycle modelling, needs determination, prioritisation, response optimisation, strategic and tactical planning, practice maturity development

DATA MANAGEMENT

Data establishment (desktop and field), controls, assimilation, interpretation, optimisation, spatial and alphanumeric reporting

ACCOUNTING

Financial and Management Accounting

PROJECT MANAGEMENT

Systems, processes, services integration, implementation

SYSTEM ANALYSIS

Information system assessments, solutioning

CONCLUSION

Asset-intensive organisations rely on vast networks of expensive infrastructure assets to achieve strategic goals within financially constrained environments. IMQS provides an integrated professional advice and support service for organisations committed to optimising the management of their infrastructure. The goal is to build a context-specific management framework in line with global best practice, supported by robust data management, that speaks directly to an organisation's strategic objectives and operational needs. These management frameworks, and their supporting data, help organisations focus on doing the right things in the right manner to ensure cost effective, optimised and sustainable management of their infrastructure.

In so doing, IMQS strives to achieve its goal of performing a meaningful role in supporting societal well-being, development and growth.

CONTACT

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