



Technical note:

UNIDO/CTCN: NAWASA Grenada

Improvement of water supply management through a GIS based monitoring and control system for water loss reduction in Grenada

Project Output 2: Review of GIS systems and recommendations for future development

Deliverable 2F: Job requirement description for the GIS unit

1. Introduction

The following report (issued on the 27th November 2019) was developed by the Wood/GISCAD team as a core deliverable of UNIDO/CTCN project entitled "Improvement of water supply management through a GIS based monitoring and control system for water loss reduction in Grenada". This project was delivered in collaboration with technical staff within the National Water and Sewerage Authority of Grenada (NAWASA).

The scope of the technical note relates to the following objectives of Output 2 of the project:

- Job requirement description for the GIS unit

This includes providing indicative job role descriptions and expected qualifications for the following four job roles:

- GIS Manager
- GIS Senior Analyst / Deputy Manager
- GIS Analyst
- GIS Technician

All role descriptions have been written to be gender neutral, and thereby ensure equal opportunities for all applicants applying for any future GIS role at NAWASA.

2. GIS Manager

2.1 Job role description

The key responsibilities of this role are:

- Acting as technical leader for all GIS matters within NAWASA;
- Act as the primary GIS contact for NAWASA's General manager and Senior Management team;
- Act as the primary custodian for all GIS datasets held within NAWASA's GIS systems;
- Ensure the effective day-to-day operation of NAWASA's GIS systems;
- Implement and maintain a high level of quality assurance of all work delivered by the NAWASA's GIS team;
- Act as the primary point of contact for GIS work requests - delegating to wider GIS team as required;
- Take the lead in ensuring NAWASA's GIS systems are updated to keep pace with changes in IT and GIS technologies;
- Lead the writing and delivering NAWASA's GIS strategy;
- Working with internal IT and external IT partners to ensure continuity of all GIS services; and
- Leading the development of external funding bids relating to GIS.

2.2 Expected qualifications

- Higher level GIS education qualification and/or ideally a minimum of 10 years experience of working in a GIS role;
- Experienced in managing complex GIS projects;
- Experienced in managing a team of GIS specialists;
- Expert user of QGIS desktop software and extensions;
- Advanced data management skills to facilitate spatial data Infrastructures for complex projects and multi-platform delivery;
- Experienced in the use of enterprise databases (ideally PostgreSQL) linked to QGIS;
- Experienced in the development of mobile data capture applications;
- Experienced in the development of web maps and web applications;
- Excellent communication and teamwork skills;
- Exemplary focus, ambition and attention to detail; and
- Advanced numeracy, analytical and computer skills for data manipulation and management (MS Excel and Access).

3. GIS Senior Analyst / Deputy Manager

3.1 Job role description

The key responsibilities of this role are:

- Acting as NAWASA's GIS manager when the GIS Manager is on leave or otherwise unavailable;
- Acting a technical leader for GIS matters within NAWASA;
- Acting a custodian point of contact for GIS datasets held within NAWASA's GIS systems;
- Supporting the GIS manager to ensure the effective day-to-day operation of NAWASA's GIS systems;
- Providing advice to general GIS users across NAWASA;
- Leading the development and deployment of mobile mapping solutions;
- Work with the GIS manager to ensure that NAWASA's GIS systems are updated to keep pace with changes in IT and GIS technologies;
- Act as a mentor to all GIS analyst's and technician's within NAWASA's GIS team;
- Support the GIS manager in allocating GIS work requests across the wider GIS team;
- Contributing to the writing and delivery of NAWASA's GIS strategy;
- Working with internal IT and external IT partners to ensure continuity of all GIS services; and
- Supporting the development of external funding bids.

3.2 Expected qualifications

- Higher level GIS or equivalent education qualification and/or a minimum of 5 years -experience of working in a GIS role;
- Experienced in delivering GIS projects;
- Expert user of QGIS desktop software and extensions;
- Advanced data management skills to facilitate spatial Data Infrastructures for complex projects and multi-platform delivery;
- Experienced in the use of enterprise databases (ideally PostgreSQL) linked to QGIS;
- Experienced in the development and use of mobile data capture applications;
- Experienced in the development of web maps and web applications;
- Excellent communication and teamwork skills;
- Exemplary focus, ambition and attention to detail; and
- Advanced numeracy, analytical and computer skills for data manipulation and management (MS Excel and Access)

4. GIS Analyst

4.1 Job role description

The key responsibilities of this role are:

- Undertake GIS analysis and mapping tasks delegated by the GIS manager or Senior GIS analyst(s)
- Providing support to GIS technicians – including checking of work
- Providing advice to general GIS users across NAWASA
- Ensuring the effective day-to-day operation of NAWASA's GIS systems
- Updating the content of data held within NAWASA's master GIS system
- Supporting the development and deployment of mobile mapping solutions;
- Act as a mentor to all GIS analysts and technicians within the wider GIS team

4.2 Expected qualifications

- Degree level GIS or equivalent qualification and/or a minimum of 2 years experience of working in a GIS role;
- Experienced in delivering GIS projects;
- Competent user of QGIS desktop software and extensions;
- Experienced in the use of enterprise databases (ideally PostgreSQL) linked to QGIS;
- Experienced in developing and using mobile spatial data capture applications
- Excellent communication and teamwork skills
- Exemplary focus, ambition and attention to detail
- Advanced numeracy, analytical and computer skills for data manipulation and management (MS Excel and Access)

5. GIS Technician

5.1 Job role description

The key responsibilities of this role are:

- Capture and entry of new data into NAWASA's GIS system;
- Undertaking GIS analysis and mapping tasks;
- Ensuring the day-to-day operation of NAWASA's GIS systems;
- Providing advice to general GIS users across NAWASA;
- Update of metadata within the GIS system; and
- Supporting the development and deployment of mobile mapping solutions

5.2 Expected qualifications

- Relevant college level qualification and/or a minimum of one-year experience of working in a GIS role;
- Basic experience of using QGIS desktop software and extensions;
- Basic experience of using enterprise databases (ideally PostgreSQL) linked to a GIS;
- Basic understanding of mobile spatial data capture applications;
- Excellent communication and teamwork skills;
- Exemplary focus, ambition and attention to detail; and
- Advanced numeracy, analytical and computer skills for data manipulation and management (MS Excel and Access)

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