



REPORT TO: CITY MANAGER

TO BE REFERRED BY THE OFFICIAL TO MAYCO VIA THE RELEVANT WATER AND SANITATION 79 COMMITTEE [AFTER CONSIDERATION BY CITY MANAGER]

1. ITEM NUMBER

2. SUBJECT

FEEDBACK ON THE INTERNATIONAL 2023 SWAN SMART WATER CONFERENCE (INCLUDING ADVANCED METERING INFRASTRUCTURE), 9 - 11 MAY 2022 IN GLASGOW, UK.

ISIHLOKO

INGXELO ENGOHAMBO OLUYA PHESHEYA KWINKOMFA YESIZWE KA2023 YESWAN SMART WATER (KUQUKA IZISEKO EZIPHUCULIWEYO ZOKUBALA IIMITHA) NGOWE9 UKUYA KOWE11 KUCANZIBE 2023 EGLASGOW, UK.

ONDERWERP

TERUGVOERING OOR DIE INTERNASIONALE 2023- SWAN SMART WATER-KONFERENSIE (GEVORDERDE METINGSINFRASTRUKTUUR INGESLUIT), 9 -11 MEI 2023 IN GLASGOW, VERENIGDE KONINKRYK

LSU: Q0292

3. EVENT SUMMARY

EVENT DETAILS	
CONFERENCE/SEMINAR	20223 SWAN Smart Water Conference in GLASGOW, UK
OTHER	Also attending meetings with Peer Review and Independent Review Panel sessions
DATE	9-11 May 2022
VENUE	Crowne Plaza Glasgow in Scotland
TOTAL COST TO THE CITY	R77 943.99
CITY	GLASGOW
COUNTRY	SCOTLAND

ATTENDEE DETAILS	
NAME AND SURNAME	DESIGNATION
Siyabulela Bashe (at City cost)	Director: Commercial Services, Water & Sanitation
Thashane Sing (at City cost)	Head: Meter Management He was not able to attend due to his VISA not being approved on time. The daily allowance was paid back to the City as well as a partial refund of R7 322 for the flight. However the cost of accomodation was not refundable.
Tertius Rust (at his own travel cost)	AMI and Digital Transformation Specialist, Commercial Services, Water & Sanitation

PROVIDE SUMMARY OF HOST ORGANISATION / CITY
<p>The Smart Water Networks Forum (SWAN) is the leading international hub for the smart water sector. A UK-based non-profit organisation, it brings together leading global water utilities, solution providers, academics, investors, regulators, and other industry experts to accelerate the awareness and adoption of “smart”, data-driven solutions in water, wastewater, and stormwater networks worldwide. The event attended was the SWAN annual conference, which more than 400 water stakeholders attend each year.</p>

4. OBJECTIVE

The aim of the journey was as follows:

- To participate in the 2023 Smart Water Networks Forum Conference hosted by SWAN for Smart Water Technologies from 9 to 11 May 2023, partake in workshops and panel discussions.
- Engage in meetings with utilities currently implementing or having deployed Advanced Water Metering Infrastructure (AMI). The intention is to lessen the City's uncertainty regarding the feasibility of deploying approximately 660,000 smart water meters at a cost of more than R4B over multiple years. These sessions were designed to gather information and equip the AMI project team and management to achieve specific AMI program objectives. They aim to install a system that:

- Is delivered safely, reliably, and efficiently.
- Delivered the objectives and benefits determined in the project charter and observed in other international AMI projects.
- Integrates with the city's digital initiatives and core applications.
- Is acceptable by all internal and external stakeholders.
- Serves as an exemplar for other digital transformation initiatives within the city.
- Acts as a beacon in Africa to leverage this technology and share the experience with others.

5. OUTCOMES

Outcomes achieved from conference interactions include:

The 3-day conference (see attached agenda – Annexure A) included the following activities:

- **Day 1/3 Workshops:**

- Tertius facilitated a workshop around Scaling Innovation and what it takes a startup to succeed in the water market. Siya Bashe participated in the same workshop but in a different team. The key take way was that the water industry takes a very long time to adopt new technologies and startups struggle to get traction and thus innovation appears to be difficult in the water sector. This workshop highlighted the need for utilities to support new ideas and help or drive the industry to innovate.
- Tertius conducted a master class on the art of storytelling, which was attended by 25 young water professionals from around the world. The presentation emphasised five key aspects: formulating arguments, decision-making, negotiation tactics, power dynamics, and the importance of confidence in innovation management.

- **Day 2/3 of the Conference:**

- The SWAN 13th Annual Conference main event took place from 10th to 11th of May 2023. The theme, "Making Smart Water Mainstream," aimed to transition the industry from early adopters to the early majority by providing practical guidance through current global utility challenges.
- Siya Bashe presented the Cape Town abstract titled "How the Disciplined Secure Innovative Projects" during the panel discussion "Easing the Smart Metering Journey," where more than 400 attendees were present.
- Tertius Rust led a roundtable discussion titled "Navigating the Procurement Puzzle in Utilities" and its role in business transformation. Vitens, Netherlands, provided valuable insights into navigating procurement challenges and shared use cases from their Smart Water Projects.

- **Day 3/3 of the Conference:**

- Amongst other sessions, the SWAN leadership team launched the registration for the Cape Town Smart Metering event, scheduled to take place on February 29, 2024, at the Waterfront in Cape Town. Hosting this event in Cape Town will be beneficial for the City and South Africa in gaining further knowledge of Smart Metering.
- Tertius was honoured with an Award for Outstanding Leadership in Water.

Key relationships built during the conference include:

- The City strengthened its relationship with SWAN and expressed interest in hosting a future conference in South Africa to allow more African and South African utilities to participate.
- The City's representatives were well received throughout the conference and were approached by various event organizers to share the City's journey at other global events. Both Siya and Tertius were requested to facilitate and participate in panel discussions at the Aqua Tech Amsterdam event scheduled for 6 – 9 November 2023. Tertius was also invited to represent the City at the SWAN Americas Smart Metering Workshop in Milwaukee, Wisconsin, USA on 29 September- 2023. No actions have been taken on these invitations as of yet.

Outcomes from the proceedings and interactions outside the conference:

- **Engagement with Malta Water:**
- A meeting was held with Malta for lessons learnt during their deployment of AMI.
- Malta have installed over 300 000 AMI meters and are currently on another deployment of AMI, replacing between 24 000 – 30 000 meters a year.
- They identified the below as the major benefits of AMI
 - Reduction in leakages and reduced non-revenue water, as a result of leak detection capabilities and notification system
 - Improvement in accuracy and reliability of water balancing
 - Automated billings, resulting to improvement in revenue
 - Improved customer engagement and communication capabilities
- Highlighted risks to assess, manage and mitigate:
 - Review of technology and meters suitable for Cape Town environment to ensure optimal function and benefits of the system
 - Would discourage retrofit if full meter replacement is financially viable. They have identified that the AMI battery life is around 15 years and the retrofitted meters failed before the battery.
 - Test for penetration before full installation to ensure communication challenges are not experienced after installation leading to queries.
 - Encouraged data analysis as the deployment progresses in order to identify and deal with challenges before proceeding with further installations
 - Protection of data should be key

- Assess impact and manage customer experience at all times.
- Highlighted policy areas that might need to be reviewed:
 - Leak rebate process and approval will need to be reviewed
 - Revision/ backdated billing as a result of estimated readings before and after the replacement of meters with AMI
- **Anglian Water Services, UK :**
 - Anglian Water a peer reviewer for our Feasibility Stage gate review, held a meeting with Tertius outside of the conference. This conversation led to a subsequent meeting with the broader City Of Cape Town's AMI project team on 26 May 2023.
 - Key discussion points discussed:
 - Anglian Water primary goal of the AMI project determined as the protection of supply, which is crucial in the eastern part of the UK and this objective was compared to the City's envisaged AMI played a vital role of being a driver of water resource management.
 - Anglian Water is currently experiencing drought, but it is not expected that AMI will provide any benefit as its rollout began too late and therefore encouraged the City to proceed with the AMI project to mitigate the impact of future climate changes and drought.
 - Anglian Water recommended that the City should not focus solely on revenue, but also on how much AMI will improve waste reduction, a point they believed was understated in the reports.
 - They commended the City's detailed and comprehensive assessment of AMI.
 - Some lessons learnt from the engagement with Anglian Water:
 - An active effort could lead to a 2-2.5% reduction in per capita consumption.
 - They observed that 1 in 10 properties have leaks.
 - 5% of properties are likely to develop a leak during the meter's lifetime.
- Vitens, Netherlands - were part of the Peer Review team that reviewed the City's AMI feasibility study. Overall, their feedback emphasized the importance of water conservation benefits over the application of technology or potential revenue enhancement.

6. ACTIONS REQUIRED

The following actions were identified based on the interactions during this international trip:

- As the host city for the Smart Metering Workshop, the City of Cape Town has several commitments:
 - The City will personally extend invitations to join the February 2024 event, to the AMI peer reviewers and other Utilities engaged with so far in our AMI project journey,

- Anglian Water, UK.
 - Yarra Valley Water, Australia.
 - PUB, Singapore.
- The City will make local municipalities aware of the event for the opportunity to engage with international subjective matter experts and to obtain first-hand knowledge from their AMI learnings.
- As a partner, Anglian Water Services has committed to a series of meetings with City to discuss lessons learned from AMI deployment as the City progresses through the AMI journey.

Due to a delay in the UK visa, application process Thashane Sing was not able to attend the conference face to face as originally planned. The actions and reporting required in dealing with the issue are being finalised.

7. IMPLICATIONS

7.1 Constitutional and Policy Implications No ☒ Yes ☐

7.2 Environmental implications No ☒ Yes ☐

7.3 Financial Implications No ☒ Yes ☐

7.4 Legal Implications No ☒ Yes ☐

7.5 Staff Implications No ☒ Yes ☐

7.6 Risk Implications No ☒ Yes ☐

7.7 POPIA Compliance

- ☒ It is confirmed that this report has been checked and considered for POPIA Compliance.

NOTE: POPIA Section MUST be completed otherwise the report will be returned to the author for revision.

Contact your Directorate POPIA Stewards should you require assistance.

The City has a contract in place with XL Embassy Travel for the safe-keeping of Traveller's personal information as required by the POPI Act.

8. RECOMMENDATIONS

It is recommended that:

- a) The feedback report on the trip 2023 SWAN Smart Water Conference, undertaken by Siyabulela Bashe and Tertius Rust, which took place in Glasgow UK from 9 to 11 May 2023, **be considered and noted**.

IZINDULULO

Kundululwe ukuba:

- a) **Makuthathelwe ingqalelo kwaye kuqwalaselwe** ingxelo engohambo oluya kwiNkomfa ka2023 yeSWAN Smart Water, oluthatyathwe nguSiyabulela Bashe noTertius Rust ebanjwe eGlasgow UK ukususela ngowe9 ukuya kowe11 kuCanzibe 2023.

AANBEVELINGS

Daar word aanbeveel dat:

- a) Die terugvoeringsverslag oor die reis na die 2023 SWAN Smart Water-konferensie onderneem deur Siyabulela Bashe en Tertius Rust, wat van 9 tot 11 Mei 2023 in Glasgow, Verenigde Koninkryk plaasgevind het, oorweeg word en daarvan kennis geneem word.

PLEASE NOTE:

- **FOR EXECUTIVE MAYOR AND COUNCILLORS TRAVELLING OUTSIDE THE BORDERS OF THE RSA OR INTERNATIONALLY, A REPORT TO BE SUBMITTED TO MAYCO AND THE RELEVANT SECTION 79 PORTFOLIO COMMITTEE.**
- **FOR OFFICIALS TRAVELLING OVERSEAS FOR COUNCIL RELATED ACTIVITIES, A REPORT TO BE SUBMITTED TO THE CITY MANAGER FOR CONSIDERATION, AND FOR CONSIDERATION OF REFERRAL TO MAYCO VIA THE RELEVANT SECTION 79 PORTFOLIO COMMITTEE.**

9. GENERAL DISCUSSION

The Water and Sanitation Directorate will continue to use its SWAN membership to engage with other peer utilities and be involved in community of practice to assist the City in its Advanced Metering Infrastructure (AMI) and Smart Water journey.

10. ANNEXURES

Annexure A: SWAN 2023 Conference Agenda

FOR FURTHER DETAILS, CONTACT:

DATE			
NAME	Siyabulela Bashe	CONTACT NUMBER	021 400 3610
E-MAIL ADDRESS	Siyabulela.bashe@capetown.gov.za		
DIRECTORATE	Water & Sanitation	FILE REF NO	
SIGNATURE :	 <small>Digitally signed by Siyabulela Bashe Date: 2023.08.08 13:18:20 +02'00'</small>		

ACTING EXECUTIVE DIRECTOR

[ETIENNE HUGO]

COMMENT:

The ED's signature represents support for report content and confirms POPIA compliance.


SIGNATURE:

NAME	Etienne	 <small>Digitally signed by Etienne Hugo Date: 2023.08.08 14:18:42 +02'00'</small>
DATE	Hugo	

MANAGER: INTERNATIONAL RELATIONS

COMMENT:

DR. DENVER VAN SCHALKWYK

SIGNATURE:	Dr Denver	 <small>Digitally signed by Dr Denver van Schalkwyk Date: 2023.08.10 08:32:11 +02'00'</small>
DATE	van Schalkwyk	

☐ REPORT COMPLIANT WITH THE PROVISIONS OF COUNCIL'S DELEGATIONS, POLICIES, BY-LAWS AND ALL LEGISLATION RELATING TO THE MATTER UNDER CONSIDERATION.

LEGAL COMPLIANCE

☐ NON-COMPLIANT

COMMENT:

NAME _____

_____ Certified as legally compliant based on the contents of the report.

TEL _____

DATE _____

CITY MANAGER

☒ NOTED

☒ REFER TO THE MAYORAL COMMITTEE VIA THE RELEVANT SECTION 79 COMMITTEE

DATE _____

COMMENT:

PLEASE NOTE THAT THE ABOVEMENTIONED CITY MANAGER'S SIGNATURE IS ONLY TO BE OBTAINED FOR OFFICIALS TRAVELLING AND NOT FOR COUNCILLORS.

THE CITY MANAGER WILL RECOMMEND THAT THE REPORT IS REFERRED TO MAYCO VIA THE RELEVANT SECTION 79 PORTFOLIO COMMITTEE BY THE OFFICIAL. IN SUCH INSTANCES, THE CITY MANAGER'S SIGNED REPORT SHOULD BE ATTACHED AS AN ANNEXURE TO THE REPORT TO THE SECTION 79 PORTFOLIO COMMITTEE AND MAYCO.