Review of: "Non-revenue Water Reduction"

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Title

"Non-revenue Water Reduction" how about "Reducing Non-revenue Water" or "SCADA: A Potential Solution to Non-Revenued Water Consumption", so similar title

Abstract

1. SCADA - kindly define acronyms on first use.

2. " The summary highlights the importance of reducing non-potable water as it leads to increased water availability and revenues for WSCs"

Did the authors perhaps mean "reducing wastage of non-potable water"

3. "...of the isolated area", please what does the author mean by isolated area?

4. Not sure if "GIS" can be considered a department.

Introduction

5. "and the world as reducing (NRW) means" please remove the brackets around NRW.

6. "and Physical/Real Loss reduction allows utilities to postpone capital investments required in water source development schemes." Kindly review this for clarity

7. "Reporting low levels of NRW will mask real problems affecting efficient drinking water operation. "

How does reporting non revenue water affect drinking water operation?

8. "Some reports put the NRW level at 22%;" pls cite

9. "Accordingly, network operations, GIS, hydraulic analysis, and the commercial sector collaborate to estimate and quantify NRW components."

a. network operators - does the author mean water distribution network operators or telecoms network operators?

b. what does hydraulic analysis mean?

10. "As each component affects the NRW level" - what components are being referred to?

10b. Please re-arrange this paragraph. The author began discussing the components before listing what the components are

10c. It would have been beneficial to briefly describe what the 5 components are.

Implementation

11. What does DMZ mean? De-militarized zone?

11b. What do IWSSTA, O&M, Luxor NRW mean? Please define on first use.

12. Please what is being implemented? DMZ? What does the DMZ do?

In the previous paragraph, the author stated "Networks are divided into groups of DMAs (District Metered Area) or large regions called counter zones (DMZs)."

12b. Please what does this mean? What is the network used for?

12c. What does District Metered Area mean?

13. Figure 1 is not clear, kindly make it more legible

14. What is the SCADA Application? Was it designed by the author or is it a 3rd party solution?

15. "DMZ equipment includes ..." But DMZ is an area or place, how can it then have an equipment?

16. On Fig 2, please what does "125 Link with GIS maps" mean

16b. GIS preparing maps to HM, what is HM?

17 Similarly in Fig 3, PLC, RTU, M2M are all not defined

17b. What does Object signify in Fig 3?

Results and Discussion

18. Not sure what results are being presented. Was a solution developed?

18b. Are these for SCADA? Was SCADA the solution that was created? These are not clear.

19. Table 1 "you can see that in the year 2021, after using SCADA systems, the %NRW decreased". This is not clear at all from the table.

In 2021, NRW increased in DMZ3 and stayed the same in DMZ4. Did the authors mean 2022 instead of 2021?

20. "In the following figure, the main functions should exist in the SCADA application (Graphics, Historical data, alarms, trends, reports, and security)." This seems to imply that the SCADA system has not yet been built and these are features that the developed system should have. If this is the case, then where did the results in Table 1 come from?

Conclusion

21. Most of the contents here should have been in the Results and Discussions section.

Overall,

The author made a lot of assumptions without full description. Seems the work was a follow-up on a previous work to which readers are not privy, hence making it difficult to effectively follow the manuscript's flow.

The organization and structure needs to be improved, as some descriptions and definitions of terms come after they have been used. Many of the acronyms were also not defined on first use (or at all in some cases). Finally, there are no citations in the work.