

# Review of: "Optimized Low-Powered Wide Area Network within Internet of Things"

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**Potential competing interests:** No potential competing interests to declare.

This paper focuses on three different strategies: LoRa power consumption model design, simulation of IoT wireless sensor networks, and implementation of SF allocation across the wireless sensor network and results analysis. However, the contribution to the methodology and overall research work needs further improvement.

This paper mainly focuses on MATLAB Simulink, and how the authors clarify it by optimizing the LPWANs within the IoT. In another form, the title has to be rephrased.

1. In the abstract, the first-time use of any abbreviation should be written in its long form.
2. Please state the research objectives and scope in the abstract.
3. Introduction should be improved.
4. The purpose of this study should be clarified, needs improvement with the scope of the study and summarized in a proper way towards the conclusion.
5. The citations should be marked correctly and clearly.
6. Parameters 3.3 are well structured, however, what parameters were chosen for the proposed model must be stated in a proper way.
7. References should be marked according to the standards.
8. Figure 3.1 The text does not fit properly. I suggest to number the figures 1, 2, 3, etc., not based on the section.
9. I suggest to number the tables 1, 2, 3, etc., not based on the section.
10. Figure 3.2 should be redrawn.
11. Figure 4.1 x-axis and y-axis units?
12. Figure 4.2 x-axis and y-axis? What authors trying to conclude from this result?
13. Figure 4.9 should be redrawn, moving the DASH, LoRaWAN, and Sigfox moving out of the graph. Now it is overlapping.
14. Each figure should be well explained and have to be concluded matching the scope of the research work.
15. Section 5 Title is missing.
16. All the figures and tables should be redrawn and named it in proper way.
17. The conclusion must be well written. The information provided is not enough.

The research work shows the unclear contribution of authors and highlights information which is well-known by other fellow researchers. The novelty and architecture of the research work are missing.

