FIFTH MEETING MINUTES

Date: 28/3/2025
Time: 14:00 PM
Facilitator: Robert

IN ATTENDANCE

Brian Ma, Yuk Lam

AGENDA

1. Team restructuring and technical group assignments

2. Exploration of Phase Shift Keying (PSK) approach

3. Multi-beacon ID encoding strategy

4. Feedback documentation and meeting records

DISCUSSION AND DECISIONS

1.Team Division

The team will be split into three subgroups:

Two subgroups to test different multi-beacon approaches

One subgroup to focus on system engineering tasks

2.Technical Exploration: PSK

The team will experiment with Phase Shift Keying (PSK), as suggested by Iain and endorsed by Rob.

3.Beacon Data Packet Structure

The beacon communication will use a 16-bit data packet:

8 bits for data;2 bits for start/end flags;6 bits for parity

4.Beacon ID Encoding

Within the 16-bit packet, specific bits will encode the beacon ID, using a buffer to manage timing and bit separation.

5.Feedback Documentation

Xingyu Luan will document the feedback plan and actions taken in response.

SUMMARY AND CONCLUSIONS

- Team is now working in subgroups to improve parallel technical progress.

- PSK is being actively explored as a promising signal differentiation method.

- The beacon ID encoding protocol is preliminarily defined using a structured bit allocation.

- Meeting records and feedback tracking are formally documented.

NEST MEETING

·The next meeting is scheduled for **April 16th at 19:00 PM**.