**Client Meeting Notes Summary – 19 Mar 20**

**Team Updates:**

*Bridget*: Statement of work and DIS setup/understanding

*Tran*: Build on behaviour algorithm and DIS connection to Unity

*Andrew*: Build on understanding of DIS (research and platform documentation readings)

*Tate*: Alternate system options

**General Notes:**

Deliverable Confirmation:

* Simulation models (e.g. flock behaviour and a separate one for ground behaviour – Unity)
  + Aimed at programming at least three behavioural algorithms
* Entity handling software (DIS) – position updates to handle the entity and broadcast on network
  + Configure DIS with Unity platform
    - Delivered as one piece of software
    - Configure as point to point communication or broadcast to the network - anyone listening to the port will receive packets (usually use port 3000)
* PDU packets received and handled by simulated environment (VBS) network

Statement of Work  
- all required changes and updates made – for all of us to sign and send to client for final approval

**Topics:**

DIS Clarification

* VBS already has DIS installed – just use as an arbitrary platform to integrate with other platforms
  + Search for LVC and DIS in VBS Documentation
  + Find the menu and right configuration
* Ensure parameters can change in Unity entities
  + When mapped into VBS (have to test) to ensure looks realistic
* Focus only on single PDU component – Entity State PDU
  + DIS Data Dictionary: <http://faculty.nps.edu/brutzman/vrtp/mil/navy/nps/disEnumerations/JdbeHtmlFiles/pdu/29.htm>
* Dead reckoning
  + Check requirements – only to incorporate if the data being transferred requires that variable
* Integration
  + Send to a specified destination in the format you specify
* OpenDis Language
  + When integrating things - often works better in same language (use C# - Unity)
    - Result in two different processes separately
    - Easier to interface together

Unity Algorithm (Flock)

* Check all three rules are correctly implemented
  + Too much of a uniformed pattern (spacing looks fixed – unrealistic)
  + Add an element of randomization

Alternate Systems

* Had looked at SteelBeast (commercial off the shelf) and accessing labs offsite
* Not a requirement: VBS simulation is just the visualiser (can be checked using packets – Wireshark)

**Outcomes:**

Possible change of Requirement if lockdown occurs:

* no connection to simulated environment (VBS) required – just monitor network for packets being sent
* note: the VBS integration can be done quite late if required – not essential at current time

Taskings: Andrew take lead on DIS

Meetings: All offline from now until further notice – utilise GoToMeeting with Sura as host