**Minutes for the meeting of Javlin held on the 20th of October 2014 at 14:00 in EHB Foyer, Edward Herbert Building**

**Present**

K.Ankobia (KA)

K.Adedoyin (KAZ)

Y.Georgiou

A.Parsons (AP)

E.Hollington

A.Peers (AJP)

**Apologies**

None

**Absent**

None

**1. Minutes from the last meeting**

The minutes of the last meeting were accepted.

**2. Main Business**

Initial discussion was centred around the events of the National Instruments (NI) Workshop held in W1.72 on the 17th of October.

IG suggested that a simple method of initialising the DaNI robot was implemented following the issues on the 17th where the DaNI failed to correctly store the program. AP indicated that the continued use of the operator controlled LED to indicate the correct operation of the program as suggested by NI would be favourable.

IG and AP then discussed the use of NI’s Application for mobile phones as a viable control method for the DaNI robot.

The meeting then turned to meeting the assessment criteria of Gateway One:

KA informed the group that the initial project Gantt Chart is now on the Facebook page and is awaiting upload to GitHub.

**ACTION: In addition to this IG and KAZ are to upload the links to the video that has been shot of the robot’s operation to GitHub.**

The group then worked through the list of requirements for the successful completion of the task and compared these to the capabilities of the current equipment. AJP indicated that the current arm appears to fall short of the demands of the mission requirement, work will be undertaken to increase the lifting capabilities of the arm and to reduce the time taken to rotate the gripper arm through 400 degrees. The requirements for Status indication, visual feedback and environment analysis can also not be met with the base equiptment. YG stated that these issues could be addressed through the use of wireless communications between the control point and the robots.

AP agreed to look into the price and specifications of suitable cameras to enable visual feedback to the operators.

**ACTION: AP to specify and price appropriate camera equipment.**

KA reminded the group that the current robots were unable to guarantee that the load did not exceed a maximum tilt of 30 degrees, this prompted the group to discuss methods of achieving this ranging from complex Stewart Platforms to simple hook or gimbal systems. The discussion with NI had revealed that LabVIEW has an inverse kinematics library which would be well suited to this area.

Discussion turned to the administration side of the task, YG suggested the implementation of a bibliography on GitHub whilst KA reminded the group that Logbooks were assessed. From as Systems perspective EH had produced a stakeholder diagram which was awaiting upload to GitHub.

AJP and AP asked the group to consider the provision of manual overrides on the systems to ensure that in the event of the robots not performing as expected the user could regain control. It was agreed by YG and EH that semi-autonomous was a preferred option, as it allowed the systems to still make their own decisions.

All then agreed that the GitHub portfolio should be ready for the freeze by the end of Wednesday to allow time for modification if required, it is to include minutes, agendas, links, relevant documents, VI’s and other programs.

**3. Assessment and deadlines**

Gateway One is booked for Friday the 7th of November at 12:00pm in W1.76.

**4. AOB**

None



The meeting to a close at 14:42

**The next meeting will be on a date to be decided.**

**Adam Peers**

**B219234**

**21st October 2014**