Meeting summary: 07/02/19

## Present during meeting

* Lajos Török (Supervisor)
* Erik Schaltz (Supervisor)
* Nicolás Murguizur
* Nicolai Haugaard
* Estefanía Ruiz
* Aitor Teran
* Mihai Rusu
* Faheem Achmad

## Meeting Agenda

1. Group introduction.
2. Scope of the project.
3. Inverter hardware keep or buy.
4. Regenerative braking.
5. Component modelling.
6. Meeting frequency.

## Meeting discussion

1. Scope of project.
   1. Motor torque control is the core of the project.
   2. From the existing hardware it is possible to implement regenerative braking, cruise control, anti-slip control and so on, these will be side objectives.
   3. EMI/EMC is out of scope of the project.
   4. Buying a new inverter may be counterproductive since we will lack access.
2. Inverter tests.
   1. Start with open loop to see that everything work.
   2. To check hardware under load, it must be connected to the motor (not short term), also a high current power supply must be used.
   3. When connected to motor slowly start applying power.
3. To generate the code it is our decision to use Simulink or hard code it. However it would be nice to code it ourselves so we get the knowledge.
4. Lajos has agreed to send info about the DSP coding course. Maybe reading material will be enough.
5. The group needs to ask for the work permit ASAP.
6. DSP card needs to be recovered (or a new one bought). Walter may have it. Lajos has agreed to ask.
7. Batteries do not need to be modelled, and a DC supply will be used for tests.
8. If current in and out of the batteries is controlled, it will be necessary to implement a higher level, which falls out of scope.
9. The team must decide the best control strategy.
10. Motor parameters should be obtained by the team members even though they have been found beforehand.
11. Supervisors have agreed to look for some literature about regenerative braking and control strategies. Some extra literature about motor parameter findings would be nice.
12. Mechanical model of the whole kart could be implemented, simulating the mechanical characteristics such as weight or friction.
13. Meetings will be held every two weeks, the team will send a meeting proposal about one week ahead of time.
14. About report writing, table of contents should be created. The report must not contain useless information.
15. Next meeting will be held Thursday 21st of February.