## ph-coding

**Predictive Haptic CODing Devices In Next Generation interfaces**

**Grant agreement#: 829186**

**H2020 FET Open**

**Deliverable reporting document**

<table>
<thead>
<tr>
<th>Deliverable no: 1.2</th>
<th>Lead beneficiary: ULUND</th>
<th>WP: WP1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deliveable title: Kick-off meeting report</td>
<td>Type: Report</td>
<td>Dissemination level: Public</td>
</tr>
<tr>
<td>Due Delivery date: 2019-03-31</td>
<td></td>
<td>Date delivered: 2019-03-31</td>
</tr>
</tbody>
</table>

**Short description of the deliverable**

Kick-off meeting agenda, photograph, report and first Action Plan.
Ph-coding kick-off meeting

Location: Lund, Biomedical Center (BMC)

Agenda 2019-02-25, Meeting room Dora Jabobsson BMC D15

10:00  Coffee. Introduction: presentation of partners, people
10:15  Overall scientific introduction, overarching aims of ph-coding
       Presentations by work package (background, what the WP solves in relation to targets, possible collaborations identified, general discussion):
10:45  WP2: Brain mechanisms (Henrik Jörntell, ULUND)
11:30  WP3: eSkin (Ravinder Dahiya, UoG)
12:20  Lunch
14:00  WP4: Haptically Intelligent robot systems (Etienne Burdet, ICL)
14:45  Lab visit with Live experiment
16:00  Coffee
16:15  WP5: Haptic displays and user interfaces (Vincent Hayward, ACA)
17:00  Management issues: Web site, logo, dissemination & exploitation
17:30  Open Data Management plan in relation to ODRP
18:00  Meeting of the Steering Committee, Action Plan, IPR
19:30  Dinner 'downtown'
Agenda 2019–02–26. Meeting room Dora Jabobsson BMC D15
09:00 Coffee, further discussion of Action Plan
10:00 Detailed planning of collaborations
11:00 Forward looking discussion on dissemination & exploitation

Group Photograph
Kick-off Meeting Report

Recruitment progress
Lund University (ULUND): The recruitment progress is finished.

Imperial College of Science Technology and Medicine London (ICL): Due to institutional restrictions the first part of the recruitment process will be finished during March–April and additional recruitment will be completed during the summer. The initial plan is to recruit two PhD students.

University of Glasgow (UoG): 2 postdocs will initially be recruited with candidate interviews concluded during February. One of the postdocs to be recruited is a former PhD student at the research group and the second candidate is a PhD from Korea who will focus on working with flexible electronics.

Actronika (ACA): The goal is to hire young PhD student which will both give a good start to the career and be financially beneficial to the company. A second recruitment campaign is at the time of the meeting in progress with the support of a recruitment company. So far no suitable candidates have been found. In order to get the project started, internal resources are instead used until suitable PhD students have been found.

Scientific presentations and progress so far
Each of the participating beneficiaries gave a presentation of their research groups, their research and what they aim to achieve during the project. For further details see the presentations attached with the deliverable.

Regarding the scientific progress of the project so far ICL, UoG and ACA only made limited progress yet, due to the recruitment issues mentioned above. ULUND have been able to work at full speed thanks to completed recruitment, with substantial progress towards targets already made.

Website
The website is up and running. In order for us to better display the project and its objectives images from the scientific presentations during the kick-off meeting will be chosen and displayed on the webpage.
The page containing contact information will be updated to contain links leading to the individual research group webpages, rather than the webpages of the respective universities. New email addresses will be created, one which is connected to all PIs and one connecting to all members of the consortium.

Logo
A problem with the first version of the project logo was the huge amount of details it contained, causing problems when shrunk to fit documents. Thus, a new version was created and voted for by the meeting attendants. The final logo will be completed within a few days.
**Dissemination and exploitation**
A dissemination and exploitation plan is a deliverable for month 12. Its foreseeable possible contents were discussed.

**Open data management**
The concepts of the Open Research Data Pilot (ORDP) and the Data Management Plan (DMP) were presented and discussed. FAIR data and how to practically realise it was discussed. Figshare was proposed as the platform to use for open data access. The relevant processes used by UoG was discussed, and ULUND will look into the processes used at Lund university.

**Meeting of the steering committee**
Discussions of intellectual property rights management, policies, management guidelines and the first action plan.
The discussion also emanated in a proposed new design of the ACA haptic displays. A new implementation of the display is now planned to also include a sensing device to make the interface “perceptive” of user intent from the user interaction, a new innovative design which goes beyond current targets formulated in the Grant Agreement.
Action Plan

The following is the components of an action plan for the first year of the Ph-Coding project, where the action plan is added components beyond Grant Agreement or more specified implementation.

- ACA will design an artificial fingertip using materials provided by UoG.
- ICL will send 1-2 postdocs to ULUND for 1-2 weeks during April or May in order to have a detailed discussion regarding the architecture of predictive coding.
- UoG will send 2 postdocs to ULUND for 1-2 weeks during April–May in order to have a detailed discussion regarding the design principles for the e-skin.
- ACA will develop the miniaturized haptic display based on the measurements taken during the lab visit and other implementation details judged beneficial for the commercialization potential of the miniaturized components.
- The detailed implementation of the skin shear force model for WP2 was discussed between ACA and ULUND.
- ACA and ULUND will in addition produce a scientific review about how the cuneate nucleus processes haptic information.

The next meeting will be a physical meeting approximately at M6. Subsequent meetings will vary between physical and electronic meetings.

The estimate at the time of the kick-off meeting is that all 4 groups should be able to clear their respective deliverables for month 12, despite having initial problems with recruitment triggered by the very early start date suggested by the EC.