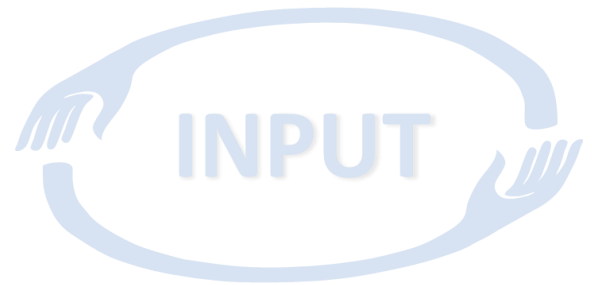


# MILESTONE REPORT



Project acronym: INPUT

Project number: 687795

MS4, Theoretical foundations of EMG signals established

Related Work package(s): WP5

Related Deliverable(s): D5.1, D5.2, D5.3

Lead Participant ICL

Dissemination level: PP

Planned delivery date: 2018-02-28

Actual delivery date: 2018-02-28

Reporting Period: 2

## 1 DESCRIPTION OF THE MILESTONE

Milestone number <sup>18</sup>	Milestone title	Lead beneficiary	Due Date (in months)	Means of verification
MS4	Theoretical foundations of EMG signals established	3 - UMG-GOE	24	The theoretical foundations for optimal signal recording and processing are finished.

## 2 PROVE OF MILESTONE FULFILMENT

ICL has created a biophysical model of the forearm muscles to investigate the variability of EMG features under non-ideal conditions (such as electrode shift and fatigue). The implementation is described in detail in the associated reports for deliverables 5.1 and 5.3.

Experimental measurements have been conducted to validate the simulation findings and to investigate changes in EMG features with electrode repositioning, as planned for the two above-mentioned deliverables. Moreover, experimental studies have been carried out to investigate the linearity in muscle activity for multi-DoF control. Results are reported in deliverable 5.2. The findings resulting from the modelling/experimental studies have been implemented by SUPSI-IDSIA in the design of the regression control system based on machine learning.

## 3 DECISION TAKEN ON PROJECT BECAUSE OF THE MILESTONE

No changes needed project is on track

Reorganisation of the project

Changes: