

P2731

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Type of Project: New IEEE Standard
PAR Request Date: 26-Jun-2018
PAR Approval Date: 27-Sep-2018
PAR Expiration Date: 31-Dec-2022
Status: PAR for a New IEEE Standard
Project Record: P2731

1.1 Project Number: P2731
1.2 Type of Document: Standard
1.3 Life Cycle: Full Use

2.1 Title: Standard for a Unified Terminology for Brain-Computer Interfaces

3.1 Working Group: Unified Terminology for BCI Working Group (EMB/Std Com/UT-BCI)
Contact Information for Working Group Chair

Name: Luigi Bianchi
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Contact Information for Working Group Vice-Chair
None

3.2 Sponsoring Society and Committee: IEEE Engineering in Medicine and Biology Society/Standards Committee (EMB/Std Com)

Contact Information for Sponsor Chair

Name: Carole Carey
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Contact Information for Standards Representative
None

4.1 Type of Ballot: Individual

4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot: 06/2019

4.3 Projected Completion Date for Submittal to RevCom

Note: Usual minimum time between initial sponsor ballot and submission to Revcom is 6 months.: 02/2020

5.1 Approximate number of people expected to be actively involved in the development of this project: 20

5.2 Scope: The standard establishes terminologies and definitions used in the description of Brain-Computer Interfaces.

5.3 Is the completion of this standard dependent upon the completion of another standard: No

5.4 Purpose: The purpose of the standard is to provide unified terminology and definitions.

5.5 Need for the Project: Presently, there is great confusion in the description of Brain-Computer Interfaces because there are several different visions of such systems, mostly due to its intrinsic multidisciplinary nature. This can cause misunderstandings or even make impossible to compare different systems and its performances so that it is sometimes very difficult to decide which one is more appropriate for a certain application. A Brain-Computer Interface is usually formed by assembling two distinct parts, one that is intended to analyze brain signals, and another one that is responsible to translate the analyzed signals into commands toward the environment. Once standardized the way in which these two parts interact it is possible to mix and match many of them in a very friendly way. This will also allow to define strategies aimed at optimizing the performances of entire systems

5.6 Stakeholders for the Standard: Scientific Community, BCI systems vendors, Users

Intellectual Property

6.1.a. Is the Sponsor aware of any copyright permissions needed for this project?: No

6.1.b. Is the Sponsor aware of possible registration activity related to this project?: No

7.1 Are there other standards or projects with a similar scope?: No

7.2 Joint Development

Is it the intent to develop this document jointly with another organization?: No

8.1 Additional Explanatory Notes: