HBP-SGA3: HUMN BRAIN PROJECT - FLAGSHIP

Description

The HBP is now poised to start the last of four multi-year work plans, which will take it to the end of its original incarnation asan EU Future and Emerging Technology Flagship. Our plan is that the end of the Flagship will see the start of a new life forthe HBP, as an enduring European scientific research infrastructure, EBRAINS, that is on the European Strategy Forum on Research Infrastructures (ESFRI) roadmap. This document sets out the proposed work plan for the final phase of the HBPFET Flagship, or 3rd Specific Grant Agreement (SGA3). It builds on the strong foundations laid in the preceding phases, makes adaptations to profit from lessons learned along the way and will introduce new participants, with additional capabilities, to complement those in the SGA2 Consortium. During the HBP s Ramp-Up Phase and first two Specific GrantAgreements (SGAs), we laid the foundation for empowering empirical and theoretical neuroscience to approaching thedifferent spatial and temporal scales using state-of-the-art neuroinformatics, simulation, neuromorphic computing, neurorobotics, as well as high-performance analytics and computing. While these disciplines have been evolving for someyears, we now see a convergence in this field and a dramatic speeding-up of progress. Computing has not only become a cornerstone of neuroscientific research, but has also helped industry to push the development of neuro-technologies. Europe is investing heavily in this field, and has started the EuroHPC Joint Undertaking, with a view to achieving global leadership,and to make Europe independent of the technical domination of a few commercial enterprises. Data is driving a scientificrevolution that relies heavily on computing to analyse data and to provide the results to the research community. Only with strong computer support, is it possible to translate information into knowledge, into a deeper understanding of brainorganisation and diseases, and into technological innovation.

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