ISAB-G FINDINGS AND RECOMMENDATIONS AFTER ITS MEETINGS

ON 24 FEBRUARY AND 6 APRIL 2023

1. Concerning the IdeaSquare activities in 2022, ISAB-G is impressed with the progressed. The fast ramp-up of activities after the Covid-19 related restrictions were lifted over the summer is impressive, including receiving many students in CBI programmes. The communication efforts have improved to a very satisfactory level. The activities for CERN personnel have mobilized a significant number of them. The focus on ATTRACT related activities provides a reasonable financial stability. The Green Village idea has taken shape and IdeaSquare is well involved. ISAB-G thanked the IdeaSquare personnel for their achievements and for the clear and informative presentations.

2. ISAB-G considers the division of tasks in two groups at IPT in IdeaSquare natural and concludes that the structure of groups and teams have clear reporting lines. ISAB-G recommends continuing to share the administration between the basic IdeaSquare running and the EU-funded activities.

3. ISAB-G finds that the financial situation of IdeaSquare has improved. For the coming two years the required basic operation budget seems to be secured, for the longer-term the baseline for personnel may be covered from EU subsidies. The worries have now shifted to sufficient funding being available to allow a healthy growth of activities that requires more space and to have long-term baseline funding to allow activities that are not a priori earmarked, e.g., CBI activities not relating the EU funded projects. The latter is needed to keep IdeaSquare the vibrant creative space for new ideas. There is a parallel concerning the funding situation of IdeaSquare and a typical start-up company in terms of instability and keeping everybody on their toes. ISAB-G recommends that the CERN management sets up modest stable long-term baseline funding that covers basic operations that cannot be funded from grants such as by the EU, and some free-running creative activities in addition to the grant sponsored activities. Further growth of IdeaSquare requires an expansion of the building. ISAG-G recommends that IdeaSquare works with the CERN management to expand the building and that IdeaSquare finds a significant part of the funding for this expansion from external parties, such as from providing executive management courses. ISAB-G further recommends that IdeaSquare informs the CERN Finance Committee once a year of its activities and connects through the CERN KT department to the industrial liaisons of the (Associate) Member States.

4. ISAB-G notes the success of the Terra Forming theme for CBIs. It recommends continuing with this theme and to further develop it.

5. ISAB-G took note of the evolution of the CERN IdeaSquare Journal of Experimental innovation (CIJ). CIJ now has a rather stable number of submissions, publications, and readers audience. However, it falls below the threshold to be indexed by Web of Science. The unique character of CIJ is both a strength and a weakness. A general concern is that large amounts of data are acquired for CIJ related research without the goals or the conditions of data gathering being sufficiently clear. ISAB-G suggests that CIJ could organise training, especially for young researcher, to improve that situation. Such trainings will lead to higher impact articles and possibly nore submissions to CIJ. ISAB-G recognises the large inkind contributions made by S. Makinen V. Brancolini and the other editors and thanks their employers for allowing them to do this important job. ISAB-G recommends improving advertisement of CIJ and

bringing it to the attention of a much larger community. CIJ should set target publication rates well in excess of 20 per year.

6. ISAB-G took note that ATTRACT is now running stably and that a new Phase-1B is starting imminently and of the efforts to bring ATTRACT and IdeaSquare to the attention of the relevant EU bodies and recommends continuing the effort to work with the EU on continuing ATTRACT and ATTRACT-like activities, such as Green Village, CARAT and Women in Tech, and even to intensify the collaboration with the EU on this if possible.

7. ISAB-G supports the presented Green Village initiative, which visibly will connect IdeaSquare with CERN strategies for the future and recommends continuing to incorporate technologies and ideas that contribute to the Green Deal from the outside world inside CERN, therefore offering to re-vitalize one of the key ideas behind GRADE.

8. ISAB-G appreciates the efforts to strengthen the role and visibility of IdeaSquare in supporting CERN in its future plans. ISAB-G recommends that IdeaSquare continues to offer fast-prototyping to CERN personnel, continue to host an internal open day ("Open Doors") and continues to host high-level events to bring together experts from several different domains, including the EC and other European policy makers related. IdeaSquare should showcase how their education programmes may help CERN employees to create start-ups.

9. ISAB-G recommends that IdeaSquare explores the possibility to better involve the CERN Member States, especially those from the East and South parts of Europe, e.g., by better promoting IdeaSquare in these countries, by offering satellite activities or by associating to similar parties in these countries.

10. ISAB-G took note of the achievements of IdeaSquare in Crowd4sdg which is now coming to an end. It recognises that it only tangentially touches on the IdeaSquare aims and strategy. Nevertheless, because of its innovative role model, ISAB-G recommends that IdeaSquare exploits this citizen science project to its full potential, and more specifically uses the lessons learnt from Crowd4sdg also in support of the Science Gateway citizen science projects.

11. ISAB-G took note of the contacts between IdeaSquare and Science Gateway and the plan for a joint Pilot project for later this year. A good relation will strengthen both entities. ISAB-G recommends to keep working with and Science Gateway in positioning IdeaSquare in the palette of offerings of Science Gateway.

12. ISAB-G notes that the identified security and access questions related to IdeaSquare now being on the public side of CERN, are being addressed. ISAB-G recommends keeping both the open spirit of IdeaSquare and guaranteeing a safe workspace for those working there.

13. ISAB-G congratulates IdeaSquare with its new communication strategy and its execution. ISAB-G recommends that the on-going incorporation of both an expert abstract and a layman's summary in ATTRACT showroom be completed soon.

14. ISAB-G appreciates that interesting detector R&D projects take place at IdeaSquare, e.g., concerning electronics and three-dimensional scintillator detectors. ISAB-G recommends exploring the possibilities for a residence programme for deep tech innovation. The CERN programmes for fellowships

and associateships could provide such a framework. A link could be established with the ECFA detector R&D programme.

15. ISAB-G much appreciates the work done on Relation Value, with a tool being developed by Prof. Ambos from the University of Geneva in conjunction with IdeaSquare. Such a tool may have much wider use for knowledge institutions than just IdeaSquare. ISAB-G recommends to further develop this tool and to present it at a next meeting.

16. Concerning equipment for rapid prototyping ISAB-G is satisfied with what is available and notes that this is well used. ISAB-G recommends being careful with new acquisitions unless there is the expertise available to have it well used. An example of a possible acquisition that could be explored for potential is eXtended Reality technology.

17. ISAB-G recommends that the membership of its committee is published on the IdeaSquare web site.