

ISAB members:

Present in person: Sijbrand de Jong (Radboud, Chair), Kalevi Ekman (Aalto University), Michela Magas (ICF), Ezri Tarazi (Technion), Erika Garutti (Univ. Hamburg).

Excused: Mar Capeans (CERN)

ID2 staff:

Present in person @ ID2: Pablo Garcia-Tello (CERN), Laetitia Pedroso (CERN), Catarina Batista (CERN), Ole Werner (CERN), Dina Zimmermann (CERN), Lauri Valtonen (CERN), Jimmy Poulailon (CERN), Giulia Gaddi (CERN), Mirabelle Breidvik (CERN), Roy Pennings (CERN, secretary), Matteo Vignoli (Univ. Bologna, CIJ), Valeria Brancolini (CIJ).

Meeting agenda: <https://indico.cern.ch/event/1414157/>

S. de Jong started the meeting at 10:00 AM. The minutes from the previous meeting were approved, with a minor typo to be corrected. The draft agenda was also approved.

P. Tello commenced the round of presentations by providing an overview of the IdeaSquare strategy, referencing the draft document sent to the ISAB on June 27, 2024 (see “Overview of the IdeaSquare Strategy and rationale regarding ISAB recommendations” at the link above). Key highlights included IdeaSquare’s overall vision and a SWOT analysis detailing the priorities related to funding operational costs and activities. This was especially highlighted given that the first round of EU projects in the pipeline were not selected for funding, and IdeaSquare did not receive any budget from CERN during the MTP.

The ISAB provided several initial recommendations:

- Refine the vision statement to emphasize education for entrepreneurship, innovation, and research on innovation, aligning more closely with the original IdeaSquare mission and CERN’s core mission.
- There is a risk with the proposed mission of being put into the education category only, e.g. for the EU being primarily associated to the Erasmus programme. The funding opportunities in such a programme are much more cumbersome and do not match well with IdeaSquare. Also, for CERN internally, being associated with education poses the risk of moving from indispensable to nice to have.
- In the SWOT the weaknesses and threads focus both more or less completely on the financial resources. Are there underlying weaknesses? And is the “continuous start-up mode” not a virtue?
- Strengthen relationships in Brussels with upcoming Commissioners and high-level civil servants and advisors.
- Explore to create a combined program with CERN KT, where IdeaSquare lead the first initial market fit and ideation process with the researcher.
- Enhance connections with CERN Council delegates to bolster the perception of IdeaSquare’s value to CERN Member States.
- Clearly differentiate between strategy and tactics in the draft document.

As agreed upon in past meetings, a subsequent draft of the IdeaSquare strategy 2024-2030 will be shared with ISAB in autumn 2024 to receive additional feedback. The final draft will be submitted to ISAB for consideration during its Annual Meeting in January 2025.

R. Pennings followed with a presentation on the financial status of IdeaSquare, including an analysis of potential worst-case scenarios. This analysis was necessary due to the concerns raised by P. Tello regarding the financial sustainability of IdeaSquare for 2025 and 2026 (see “Financials and Financial Sources Including EU Projects and Executive Education” at the Indico link above). R. Pennings provided a list of EU projects currently under review by the European Commission. He emphasized that a budget allocation from the CERN MTP is crucial to bridging the financial gap between the end of the ATTRACT projects under the current framework program and the anticipated new projects in FP10. Although IdeaSquare has developed a pipeline of projects, primarily Green Village (GV) related, intended to bridge this gap, the first round of submitted proposals was not selected for funding. R. Pennings also followed with a presentation of IdeaSquare seeking alternative budget sources other than EU projects in the form of paid executive education workshops. IdeaSquare has managed to start a pipeline of business schools and private organizations interested in its offerings. The materialization into incomes will still require additional time. P. Tello also commented about the initial efforts of IdeaSquare in establishing contacts with private capital organizations as well as donor foundations to explore additional funding sources. Although the prospects are also promising, he mentioned that it takes time to build a stable funding streamline.

The ISAB fully acknowledged and shared the concerns expressed and offered the following initial recommendations:

- Continue and strengthen the efforts for diversifying the funding sources.
- Revise the pricing strategy for executive education.
- Explore the partnership with institutions offering similar services (e.g. MIT).
- Connect to national programmes (e.g. there is a Finnish programme for young PhDs to get a grant to work in innovation that may be used at IdeaSquare).
- Ask for help to the brothers and sisters of the Design Factory Global Network.
- Concerning the CERN baseline funding, IdeaSquare should explore ways to get the funding from CERN by emphasis on the indispensable service for CERN to attain its missions and the links with its member states to fund its future. 10 years of celebration is a good point to explore grand donation for the IdeaSquare, that will guarantee its future.

D. Zimmermann then provided an overview of the prototyping activities at IdeaSquare. The presentation highlighted the courses offered to benefit CERN’s research community and the initiatives aimed at fostering cross-fertilization of ideas among CERN’s prototyping communities (see “Status on Prototyping Activities” at the Indico link above). P. Tello expressed concerns about the need to renew some of the prototyping machinery, such as 3D printers, at IdeaSquare’s workshops in view of a desired better offer to CERN researchers in the coming years. Due to budget constraints, these updates have been halted, potentially impairing the services IdeaSquare provides to CERN researchers.

The ISAB fully recognized the significant value of IdeaSquare’s prototyping facilities and expressed surprise that, in acknowledgment of these contributions, IdeaSquare is not receiving internal funding from CERN to scale it and update its facilities. The ISAB also recommended exploring the possibility of invoicing for the use of the prototyping facilities at IdeaSquare.

O. Werner and **C. Batista** provided an overview of the education and training activities at IdeaSquare, along with future development plans (see “Status on Student Activities” at the Indico link above). They highlighted the growing demand for IdeaSquare’s new educational program, IdeaSquare Planet (i2Planet). Each year, IdeaSquare operates at full capacity for student courses. New collaborations have been established with educational institutions from CERN member states and beyond, including Norway, the USA, Thailand, Singapore, Estonia, and Germany. Following a testing period during 2024

and 2025, i2Planet is set to offer a unique value proposition in the education and training of young innovators.

The ISAB expressed keen interest in the methodological details of i2Planet. Questions were raised about the selection of collaborating universities. P. Tello explained that the primary obstacle for universities was securing funding to cover students' costs while staying at IdeaSquare, which IdeaSquare is currently unable to provide. The ISAB was also curious about the connection between IdeaSquare's education and training programs and CERN. P. Tello clarified that this connection is established in several ways, such as through interactions between IdeaSquare students and CERN researchers and fellows, and through inspiration drawn from CERN technologies.

J. Poulailon and **M. Breidvik** offered an overview of the communication activities at IdeaSquare (see "Communication and Outreach including Science Gateway" at the Indico link above). They highlighted the extensive number of developed channels for communication as well as the rich scope of the communication areas addressed (e.g. EU projects, educational programmes, prototyping events, etc). Of special interest is to consolidate links with Science Gateway, complementing the offer of the CERN's ECO group to the general public. For example, preliminary collaboration with Science Gateway (e.g. offering the visitors the opportunity to get a guided tour through IdeaSquare) showed significant demand.

The ISAB acknowledged the communication and outreach efforts with special emphasis on the quality of the IdeaSquare website and provided the following initial recommendations:

- Revise the scope and ambition of the communication activity.
- Align the formulation of IdeaSquare vision with the Communication and Outreach one.
- Put more effort in internal CERN communication, that will strengthen its presence and continuance activities with the local community of researchers.

M. Vignoli, **V. Brancolini** and **L. Valtonen** followed with a presentation regarding the status of the IdeaSquare Journal of Experimental Innovation (see "Status of CIJ" at the Indico link above). Among the new developments, they highlighted the increase of CIJ to three issues per year, the inclusion of new sections (Methodological notes and ATTRACT Socio-economic studies), and the organization of monthly clinics for students. They further highlighted, among others, the intention of applying to the Web of Science again in early 2025.

The ISAB commended the efforts and significant achievements behind the CIJ and its new developments and provided the following initial recommendations:

- The need to engage with the industrial and business communities.
- Emphasize the CIJ's role as a vehicle to publish and support the theoretical framework for the methodological tools that IdeaSquare has built.
- Explore possible collaborations with publishing stakeholders (e.g. MIT Press).
- Avoid being stuck by the impact-factor game. Consider that being read by business executives can have a major impact.
- Explore possible finance sources such as SCOAP3.
- Explore the possibility that publications become part of a yearly conference that combine academic and business contribution (and leaving generated income including sponsorship).

P. Tello continued with an overview of the R&D activities hosted by IdeaSquare (see "Status on R&D&I activities at ID2" at the Indico link above"). In this regard, IdeaSquare continues hosting activities linked to the development of high-performance electronics and detectors with applications to large-area fast-tracking systems and linked to testing Hyper Kamiokande detectors and electronics and the

developments for CMS Inspection Robots. In the pipeline and within the Quantum Technology Initiative at CERN, IdeaSquare will host the summer school on Quantum Sensing at CERN (Michael Doser, <https://doser.web.cern.ch/>, 2-6 September). Although nothing established yet, IdeaSquare is at the disposal of the Quantum Sensing community for becoming a hosting facility.

The ISAB was interested in the role and possible added value that IdeaSquare could offer to the Quantum Sensing community. P. Tello clarified that besides a hosting facility for meetings, etc, such a community could benefit from the IdeaSquare knowledge in assessing/submitting proposals seeking EU funding. Eventually, IdeaSquare's EU project management expertise could be put to service with the extra income benefit for IdeaSquare.

G. Gaddi and **L. Valtonen** closed the round of presentations by offering an overview of the research activities at IdeaSquare linked to Humanities (see "Humanities Research at IdeaSquare" at the Indico link above). Among others, it highlighted the increasing interest that IdeaSquare is presenting to scholars as a facility where innovation happens. As a result, two master's theses in 2023 and one MSc. and two PhD's are ongoing. Future developments include at least one MSc. and one PhD degree ready for the ongoing ones as well as 5+ publications based on the IdeaSquare field as research. The overall aim is to become known as a reference place to do innovation research.

The ISAB acknowledged these incipient activities and expressed its curiosity on future developments, and emphasis this realms are engines of technological breakthroughs (as shown in the Silicon valley example).

P. Tello thanked all the ISAB members for their continuous support, recommendations and help regarding the budgetary concerns.

S. de Jong thanked all those present for their presentations and input and closed the meeting at 18 h inviting the ISAB members to deliberate in a closed session.