

EWGIC OPINION ON EIC ACCELERATOR UNDER HORIZON EUROPE

Will the new format of the EIC Accelerator reduce the part of luck vs skills in the selection of the European deeptech champions?

The EIC Accelerator (launched under the “SME instrument” brand in 2014) has become the largest and most competitive public funding scheme for deeptech start-ups in Europe. With success rates falling rapidly below 1% (over 5,000 submissions expected in October 2020 vs funding available for 30-40 companies), the EIC Accelerator has fallen victim to its popularity.

Today, success in this programme requires a very high quality application, and a fair amount of luck (represented by the subjective opinion of third party evaluators).

In his science blog [Veritasium](#), Derek Muller makes an excellent summary of the contribution of luck to highly competitive selection processes: check this video (in particular [the part starting at 3:32](#)).

To summarize his point: Derek took the most recent class of NASA astronauts, where only 11 were selected out of 18,300 applicants, and simulated a selection process where astronauts are selected mostly based on skills, experience and hard work (95% of the evaluation weight) but also based on luck (5% of the evaluation weight). For each applicant, he generated a luck score out of 100, then added those numbers together weighted in a 95-5 ratio, to produce the final ranking. Then he went on and repeated this simulation 1,000 times, representing a 1,000 different selection processes. What he found is that the 11 astronauts that were picked had a very high “luck” score on average (94.7). He also found that, out of the 11 astronauts selected, only 1.6 on average (less than 20% of the astronaut class) would have been in the top 11 if luck had not played any role. The conclusion: when competition is fierce, being talented and hardworking is important, but not enough to guarantee success: you also need the “luck factor”.

Applying this line of reasoning to the EIC Accelerator, **one can easily understand why the current evaluation process is not conducive to the best companies applying to the programme.**

The EIC Accelerator programme has suffered from a “snowball” effect as it allowed resubmission of all proposals, regardless of the score they achieved in the previous submission.

This has led the success rate to drop over time, from 4% in October 2019 to 2.5% in January 2020 and less than 1% expected in October 2020.

European Innovation Council Accelerator pilot

Proposals submitted | Cut-off 20 March 2020



In the EIC Accelerator context, the **“luck factor”** is the difference between a proposal scoring 13.9 (excellent but not invited to interview) and a proposal scoring 14.2 (excellent and invited to interview). As the CEO of a deeptech start-up, if I feel that 80% of the companies selected for funding got there by a combination of skills and luck (not only skills), I am less tempted to invest the 200h + required to complete a high quality grant application.

To address this issue, the EIC Task Force is considering radical changes to the submission process under Horizon Europe.

This position paper summarizes the most important changes as well as their expected impacts and offers a few ideas for improving the programme further.

Challenge 1: reducing oversubscription

The EIC Task Force has put forward a radically new evaluation process with a pre-screening stage (short application), a regular written stage (full application) and an interview stage. The scoring scale (out of 15) is replaced with a simple “go / no go” approach. Most importantly, only two submissions are allowed at each stage before a 24-month cooling off period.

Challenge 2: a fair evaluation with clear evaluation criteria

Reducing the “luck factor” requires making the evaluation process as objective as possible, and reducing the risk for the experts to misinterpret key evaluation criteria. This is especially important for two evaluation criteria that have been causing major headaches for evaluators: non bankability and technology readiness level (TRL).

Challenge 3: skilled and trained evaluators

Recruiting a sufficient number of evaluators skilled in various deeptech topics is a major challenge, especially for thematic deadlines like the May “green deal” cut-off or the March “COVID-19” cut-off where EASME had to recruit a large number of green deal and healthcare evaluators over a short period of time.

Conclusions

Overall, the changes currently being discussed are likely to be **favourable to the best applicants** as they will reduce the application “noise” (sub-par applications that will not go through the pre-screening, less resubmissions overall), allowing the EC to provide higher quality evaluations of a smaller set of full stage applications, and therefore reducing the “luck factor” in the evaluation process.

However, the approach will also put a higher responsibility on a smaller number of evaluators, which as a result, must be carefully selected and trained. We present 15 possible improvement areas that should result in a fair and transparent evaluation process:

1. At the short application and full application stages, evaluators **should be completely new** between the two evaluations of the same proposal (to guarantee the absence of bias)
2. At the short application and full application stages, the cooling off period could be **reduced to 12 months** for the “best” unsuccessful applications (this would require a ranking process based on the number of “no go”)
3. At full proposal stage only, **a third submission** could be granted before their cooling off period (because the investment in developing a full proposal is much larger than at the short application stage) OR, assuming the number of applications has decreased sufficiently, the **use of an (online) consensus meeting and 3 evaluators** would eliminate potential “evaluation mistakes” (one evaluator misreading the proposal and giving a “no go” on one criterion would reject the proposal without any chance for contradictory discussion with other experts).
4. At the interview stage, evaluators should receive **clear guidelines** about how to allocate cases to the 3 different negative outcomes (there is a substantial difference between getting a new interview chance, vs being rejected with or without SoE).
5. **Seals of Excellence should be awarded to all high quality proposals** (together with the 24-month cooling off period), not only low-risk ones, so they have equal chances to raise funding from alternative sources.
6. **All evaluators should receive detailed guidelines** to evaluate TRL and non-bankability based on the same rules. The guidelines should include concrete cases of what is deemed and not deemed “bankable”, and what is TRL5/6 in multiple industries (as these guidelines already exist in most cases).
7. **All interview experts should receive detailed guidelines** to decide whether a proposal is allowed to present again at the interview, receives an SoE or goes into a cooling off period, and the decision should be clearly motivated in the evaluation summary report
8. **The “non-bankability” criterion should be renamed “risk”**: for example, a quantum computing company may have raised €10M last year and ask for €20M this year because it is extraordinarily difficult to get funded in this “high risk” domain. This does not make them bankable, quite the opposite, in fact.
9. **Evaluators should be evaluated**: data analysis could flag where evaluators are constantly overscoring or underscoring proposals and should be retrained or kicked out of the pool.
10. **EASME should proactively screen** the expert database for conflicts of interest (CoI) instead of relying on third party reporting (professional proposal writers and EIC coaches should never be part of the expert pool as many of them work as freelancers and do not show their filiation with the consultancy firms they work for). EASME should also perform extensive due diligence on a random sample of evaluators to root out overstated credentials.

11. **All evaluators (including interview jury members) should be regularly tested about their knowledge** of the evaluation process (e.g. with an online survey) and re-trained when they are scoring under a certain threshold (especially when evaluation criteria keep changing during the course of the programme, as it has been the case under Horizon 2020)
12. **Scoring patterns of evaluators should be analysed** in order to flag outliers (experts who constantly underscore or overscore proposals, or specific criteria) in order to make sure that funded proposals are not the ones that got the most generous evaluators.
13. **The new evaluation system should provide the detailed comments** of the experts to the applicants, as well as to the evaluators of the next stage, for transparency of the evaluation criteria (applicants should of course accept that 2 experts might have conflicting comments).
14. **The new evaluation system should allow for bi-directional communication between experts** where evaluators can send comments to each other (within the same stage or across multiple stages) in order to give them feedback about their understanding of the criteria.
15. **All interview jury members should be requested to read the proposal entirely** before the panel, and the role of "briefer" (the jury member who is supposed to introduce the case and lead the pre-interview internal discussion) should be discontinued so one jury member does not have a disproportionate impact on the evaluation outcome.

Will the new EIC Accelerator reduce the impact of luck vs skills in the selection of the European deeptech champions?

We believe the suggested changes are indeed supporting a more transparent and fair evaluation, but only when combined with clear and consistent evaluation criteria, as well as a thorough overhaul of the expert pool recruitment and training processes.

A full version of the paper can be downloaded at www.ewgic.eu

About EWGIC

Created in September 2019, the European Working Group of Innovation Consultants (EWGIC) gathers active innovation consultants in the field of European research and innovation projects. The group aims to facilitate exchange and promotion of best practices and success stories, as well as to promote professional skills and expertise. Today the group gathers 40 members, active in more than 18 countries around Europe.