



EUROPEAN RESEARCH EXECUTIVE AGENCY (REA)

REA.C – Future Society
C.4 – Reforming European R&I and Research Infrastructures

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Subject: Horizon Europe (HORIZON)
Project: 101079696 — ET-PP
Project review (Article 25)
Project review report

Dear Madam/Sir,

I am writing in connection with the above-mentioned review procedure for your grant.

Please find enclosed the draft review report. As you know it was drafted with the help of outside experts.

In our view, the project implementation is not satisfactory.

To improve the implementation, we would recommend the following changes:

The text below reflects the position and recommendations of the Project Officer of ET-PP. It is meant to be read as a complement to the opinion of the scientific reviewer. These two were independently written but agree completely in the general assessment. Even though many conclusions are similar, it is important to read carefully and take into account both assessments. The PO opinion gives a broader view while that of the scientific reviewer goes much more into detail on the work packages and especially on the deliverables.

As of November 2024, the project continues to be plagued by unresolved issues, high complexity, uncertainty in the achievement of objectives and lengthy delays on delivering core results. The basic sources of these difficulties, from the point of view of the Project Officer are the following:

- The location and, curiously, the form of the instrument have become a subject of political controversy between candidate host countries, and this is occasionally visible even in the interactions between the respective scientists.
- There are too many variables in the decision making, linked in a closed cycle of science – form – location – governance which the stakeholders until now have not been able to break. By continually introducing new variables, moving the goalposts and procrastinating, the decision-making bodies are actively diminishing their own chances of scientific domination in the field. Incidentally, this allows the international competition, unbothered by internal wrangling, to catch up.

- The management of the ET-PP project does not wield enough authority in the very complex structure of decision-making bodies. It is thus unable to push for certain decisions critical for the project to be expedited. As a result, a high proportion of the project's objectives are essentially in limbo, waiting for the other bodies to agree and decide.

While the funding authority does acknowledge that many of the obstacles are caused by factors and players outside the consortium, this does not change the fact that the original proposal ET-PP in the call HORIZON-INFRA-2021-DEV-02 was highly scored and gained funding on the grounds of promising to achieve a number of ambitious objectives. These were “the enlargement of the ET consortium, the legal framework, governance schemes, and financial regulations under which ET will be constructed and operated; the detailed technical design and costing of the ET observatory; the preparation of the ET site selection; detailing and cost-estimation of the required site infrastructure, and its socioeconomic and environmental impacts; [...]” Many of those objectives are now either extremely delayed with respect to the original planning or are downright not achievable in the project's lifetime. The delayed ones need to be pushed to the end of the project and for them to be completed, critical decisions should be taken soon and everything should work as expected from now on (i.e. as of December 2024); both of these conditions are far from guaranteed. In addition, up to this point many of the objectives that are achievable, have not been tackled seriously and the related deliverables are not of the expected quality.

Specifically, three core work packages, on Governance, Site Preparation and Technical Design are at risk of not being able to deliver any of their substantial results by the end of the project in August 2026: The “Legal Entity Statutes”, the “Roadmap to the Legal Entity”, the “Detector – “ and “Infrastructure Design Report” and the “Cost and Schedule Estimates”, to name but a few.

In many cases, the above would definitely constitute grounds for the termination of the grant agreement by the EU. However, the funding authority recognises:

1. the strategic importance of the Einstein Telescope for maintaining European scientific competitiveness in the field. This is a unique opportunity to achieve forerunner status in the gravitational wave field and build the most advanced third generation instrument; terminating the grant would certainly delay the ET observatory even more and create a bad precedent.
2. the forthcoming way and sincerity of the consortium management in admitting the difficulties rather than try to hide or distract. The continuous updates on the situation provided are very much appreciated. The commitment of the consortium and their willingness to move forward is not under doubt; they are mostly hindered by a complex structure and not enough own influence.

In view of the above, the funding authority does not wish to consider a grant termination. Instead, the grant management should pass in “damage control” mode and attempt to save as much as possible from the original scope. Some grant reduction might be unavoidable in the end, because more than one core objectives will not be reached, but on the other hand a fair amount of work can and should be carried out.

To achieve this, the following should happen:


- The tangled interdependency cycle that hinders the critical decisions should be decisively broken, preferably the way the reviewer has proposed in her assessment: by starting with the science case, determine the best configuration and continue from there on.
- The complicated and slow-moving management scheme of the Einstein Observatory (ETO, BGR, etc) should be put in motion, if possible in a simplified mode, instead of referring each decision from one player to the other and leaving the ET-PP management in a constant waiting state, totally disempowered.
- The ET-PP management should urgently mobilise all partners to – in turn – put pressure on the

stakeholders to expedite the critical decisions. All partners should also start paying serious attention to the quality of the submitted deliverables.

For details on each Work Package, please see the excellent report by the scientific reviewer. Idem for the corrections needed for each Deliverable.

Regarding an Amendment to officially move the deadlines of the Deliverables: This is still under consideration and will be discussed again in the upcoming official second review of the project at the end of Reporting Period #2. Deadline extensions and whole period deferrals are normally used for well-justified delays of a few months caused by technical difficulties or force majeure. This is not really the case here.

On a final note, we could examine the option of re-orientation of some of the work, i.e. find and agree to carry out some other work instead of the potentially unreachable objectives. Unfortunately this is hard to apply in the case of ET-PP because of the large number and criticality of these objectives. It is difficult to envisage something that could substitute the Statutes or the Technical Design Report, for example. However, the consortium can keep this option in mind, in case an opportunity should arise. While the acceptance of this re-orientation is far from guaranteed – please see the previous arguments on the funding award decision – it can be proposed and discussed.

 Please also note that a positive assessment of the technical work does NOT automatically guarantee that the costs will be accepted. This will depend on a number of other factors (such as compliance with cost eligibility rules, etc) which will be assessed separately, based on the financial reporting assessment that will take place later on.

If you disagree, please provide us with your **observations** — within **30 days** after receiving this letter.

Please ensure that the other participants in your project (if any) are informed of this letter and are given the opportunity to contribute their observations.

For any questions, please contact us via your [Funding & Tenders Portal account](#) > My Project(s) > Actions > Manage Project > Process communications.

Yours faithfully,

Authorising Officer

Enclosures: Review report