

*Paris Sphicas
CERN & NKUA
RECFA Meeting
Frascati, July 5, 2024*

- **Streamlining the “national inputs” to the ESPP**

National Inputs and Role of ECFA

For discussion and approval

Then discussion at Plenary ECFA session

Streamlining the process and form of national inputs

- ❑ **The Remit of the European Strategy Group (ESG) specifies that the ESG should take into consideration several aspects of the HEP landscape, including, very importantly, “the input of the particle physics community”.**
- ❑ **A major component of this overall community input are the “national inputs”, which will be collected individually by each country (and in some cases by regions).**
 - ❑ **In this context, the information collected from the different countries will be most useful in informing the ESPP process if it is as coherent and as uniform as possible, when addressing the key issues.**
 - ❑ **To assist with this, ECFA has put together a set of guidelines for the collection of the national inputs.**
 - ❑ **They are presented as suggestions meant to streamline the process across different countries: It is understood that each country will set its own process, schedule and questions to consider in forming a national view and submitting its input(s) to the Strategy.**
- ❑ **National inputs to the ESPP update can be sent at different points in time:**
 - ❑ **prior to the March 31 2025 deadline for submission of inputs to the ESPP;**
 - ❑ **after the March 31 2025 deadline but prior to the Symposium;**
 - ❑ **after the Briefing Book is publicly available, in time for the Strategy drafting session on Dec 1-5 2025. The final deadline for submissions for full consideration by the latter: Nov 14, 2025.**

Towards more uniform/coherent national inputs to ESPP

1. Organization of national and/or regional meetings

- One or two meetings are suggested (clearly, each country/region may decide to hold fewer/more meetings). These meetings would be most informed if they would occur after the corresponding information is released:
 - One meeting after March 31st, when all inputs to the ESPP are submitted.
 - One meeting after the release of the Briefing Book, at the end of September, and before the Drafting Session (first week of December).
- The meeting(s) could/should be co-organized by the RECFA delegate and the country's representative on the ESG. (It is noted that for some countries this is the same person).
- These meetings should be guided by a set of “standard questions” that should be considered by the communities.
- Potentially, and if deemed useful, the November 2024 Plenary ECFA meeting could be used to further guide and assist with this process.
 - Here, input from (P)ECFA is welcome/needed!

Towards more uniform/coherent national inputs to ESPP

2. The remit is explicit in its request that “The Strategy update should include the preferred option for the next collider at CERN and prioritised alternative options to be pursued if the chosen preferred plan turns out not to be feasible or competitive”

- **Since this next collider will constitute the next major/flagship project for CERN, it is imperative that the HEP physics community provide explicit feedback on both the preferred and alternative options, along with the reasons for any specific prioritisation.**

Towards more uniform/coherent national inputs to ESPP

3. Questions to be considered by individual countries/regions in forming and furnishing a “national input” to the ESPP:

- a) Which is the preferred next major/flagship collider project for CERN?

- b) What are the most important elements in the response to (3a)?
 - Physics potential
 - Long-term perspective
 - Financial and human resource requirements – and implications for other projects
 - Timing
 - Careers and training
 - Sustainability

Towards more uniform/coherent national inputs to ESPP

- c) How does the answer to (3a) get affected, i.e. should CERN/Europe proceed with the preferred option or should alternative options be considered:
 - i. If Japan proceeds with the ILC in a timely way?
 - ii. If China proceeds with the CEPC on the announced timescale?
 - iii. If the US proceeds with a Muon Collider?
 - iv. If there are major new (unexpected) results from the HL-LHC or other HEP experiment?
 - v. Beyond the preferred option, what topics for concurrent R&D on accelerators (e.g., High-Field Magnets, RF technology, alternate accelerators/colliders...) should be prioritised?
- d) What is the prioritized list of alternative options if the preferred one is not feasible (due to cost, timing, international developments, or other reasons)?
- e) What are the most important elements in the response to (3d)?
- f) To what extent should CERN participate in Nuclear, Astroparticle or other areas of science, while keeping in mind and adhering to the CERN convention? Please use the current level and form of activity as the baseline for comparisons.