

Meeting of the CEPC International Accelerator Review Committee

September 22-24, 2026, IHEP, Beijing

Charge

The CEPC Study Group, hosted by the Institute of High Energy Physics (IHEP), has been working on the design and development of a forefront e^+e^- collider as a Higgs factory that can extend to energies corresponding to the Z, WW and the top quark pairs, with the upgrade potential to a ~ 100 TeV pp collider. The CEPC represents a grand plan proposed, studied, and to be constructed by Chinese scientists in close collaboration with international partners. The CEPC Accelerator Technical Design Report (TDR) was released in December, 2023, which documents the design, the outcomes of the R&D of key technologies, the technical systems, and the cost estimate of the CEPC e^+e^- collider.

In January 2024, the CEPC accelerator entered the phase of Engineering Design Report (EDR) with the aim of completing the EDR before 2028 for the subsequent construction. In the event where the FCC has not been approved by ~ 2028 , the CEPC study group is poised to submit a proposal to the Chinese government requesting the inclusion of the CEPC in the 16th Five-Year Plan. (2030-2035).

The International Accelerator Review Committee (IARC), chaired by Dr. Steinar Stapnes (CERN, Switzerland, started from 2026) is asked to conduct the review on the development of the CEPC accelerator technical systems within the context of the EDR study. The Committee is specifically asked to review and comment on the following aspects:

1. Has the CEPC accelerator activities been carried out according to the EDR plan?
2. Has the CEPC accelerator team implemented or been addressing the recommendations and suggestions given by the IARC and the IAC in 2025?
3. Are the studies and replies to the concerns of the IARC's and the IAC's concerns satisfactory?
4. Are the overall EDR progresses on track since the 2025 review?
5. Are there weak points in the CEPC accelerator EDR program? If so how can they be remedied?
6. Any other issues you notice or any improvements you may suggest.

It is requested that a Committee report responding to this charge be forwarded to the CEPC Steering Committee Chair, Professor Yifang Wang by October 20, 2026.