23rd ITER Council appreciates continuous project progress as ITER prepares transition to Machine Assembly

ST PAUL-LEZ-DURANCE, France (15 November 2018) – The ITER Council has convened to review the performance of the ITER Project toward First Plasma in 2025. The Council evaluated the progress of manufacturing, construction and installation against established performance metrics and the Revised Construction Strategy approved at the Twenty-Second Meeting of the ITER Council in June. Based on the latest performance metrics, project execution to achieve First Plasma is nearing 60% completion.

At its Twenty-Third Meeting on 14-15 November 2018, the ITER Council assessed the latest reports and indicators covering technological and organizational performance. For the past three years, the ITER Project has sustained a vigorous pace and robust performance, with the ITER Organization and Domestic Agencies working collaboratively as an integrated One-ITER team to meet the project’s demanding schedule and the groundbreaking technical requirements of this first-of-a-kind machine. Looking toward the coming Tokamak Building delivery and transition to Machine Assembly phase, the Council is committed to keeping the ITER Project on track for success.

- Construction and manufacturing progress: Since January 2016, 36 scheduled Council-approved project milestones have been achieved. The Tokamak Concrete Crown civil works were completed on schedule in August 2018 by the European Domestic Agency, Fusion for Energy. Three US-supplied drain tanks and four Chinese-supplied vapour suppression tanks were installed the same month. The first Korean-supplied vacuum vessel sector is more than 80% finished. Russia has completed its production of poloidal field conductor for the ITER magnet system. India has nearly completed fabrication of the cryostat lower cylinder and base. The manufacturing of toroidal field coil winding packs, as well as cold testing and insertion of the winding packs into precision-fabricated cases, is well advanced in Europe and Japan.

Indeed, substantial progress is ongoing for every major ITER component, system and structure.

- Preparation for Machine Assembly: The Council took careful note of ongoing measures by the ITER Organization to prepare for the coming transition to Assembly Phase. Major components are arriving onsite with increasing frequency. Installations will continue in the coming year, with full-scale assembly beginning in 2020. The Council approved the mid-2019 launch of an In-Depth Independent Review of the ITER Organization’s Assembly and Installation Strategy.

- Design optimization: After careful consideration, the Council approved a proposal for adjusting the baseline configuration of the machine complying with safety requirements, with two equatorial ports allocated to the Tritium Breeding Systems and the development of a Disruption Mitigation System in keeping with project requirements.

ITER Member support: The Council noted with appreciation the efforts made by all Members to meet their in-kind and in-cash commitments to enable successful implementation of the refinements to the
construction strategy and 2016 Baseline and to achieve First Plasma in 2025. The Council reaffirmed the importance of all ITER Members meeting their annual in-kind and in-cash commitments on a timely basis to enable successful implementation of the refinements to the construction strategy and 2016 Baseline.

Council Members reaffirmed their strong belief in the value of the ITER Project mission and vision to develop fusion science and technology, and resolved to work together to find timely solutions to facilitate ITER’s success. The Council congratulated the One-ITER team on the commitment to effective collaboration that has put the project on the path to success. The Council will continue to closely monitor project performance, and to provide the support needed to maintain this pace of achievement.

BACKGROUND TO THE PRESS RELEASE

ITER—designed to demonstrate the scientific and technological feasibility of fusion power—will be the world's largest experimental fusion facility. Fusion is the process that powers the Sun and the stars: when light atomic nuclei fuse together to form heavier ones, a large amount of energy is released. Fusion research is aimed at developing a safe, abundant and environmentally responsible energy source.

ITER is also a first-of-a-kind global collaboration. Europe is contributing almost half of the costs of its construction, while the other six Members to this joint international venture (China, India, Japan, the Republic of Korea, the Russian Federation and the USA), are contributing equally to the rest. The ITER Project is under construction in Saint-Paul-lez-Durance, in the south of France.

For more information on the ITER Project, visit: http://www.iter.org/

1As stated in the press release of IC-19 on 17 November 2016, at that time: “The overall project schedule was approved by all ITER Members, and the overall project cost was approved ad referendum, meaning that it will now fall to each Member to seek approval of project costs through their respective governmental budget processes.”