## **ITER Project Status**

### T.C. Luce ITER Organization

iter	china	eu inc	lia japa	n korea	russia	usa

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# Overview

- ITER has launched the assembly and installation process:
  - Tokamak building external structure completed for start of assembly
  - Cryostat base has been placed in the tokamak pit
  - All large components and tools for assembling the first tokamak sector are available (first VV sector arrives in France this week)
  - Installation of services in the tokamak building has commenced
- Plan for First Plasma at end of 2025 is still maintained
  - Effect of pandemic is under assessment and will be reported to ITER Council in the fall

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#### Tokamak Building Construction: Crane Hall closed- External cladding complete



#### September 2019



June 2020

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#### Tokamak Building: Access Granted for IO Installation for Basement Levels 1 and 2

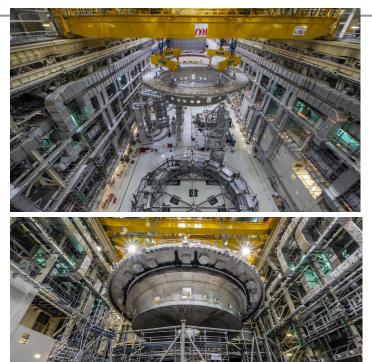


#### B11 B1 September 2019

#### B11 B1 March 2020

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### **Successful Cryostat Base Installation**



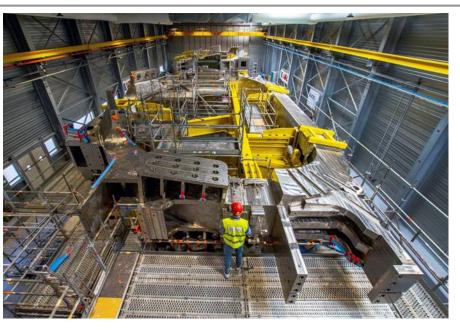
On 26 May, the ITER cryostat base was gradually lifted from its frame. carried across the Assembly Hall to the Tokamak **Building and** eventually lowered into the Tokamak Assembly Pit.





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# **Three Toroidal Field Coils On-site**



• First two TF coils arrived in April

• Third (required for first tokamak sector) arrived in June



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## **Poloidal Field Coils Are Also On-site**

• The divertor coils PF6 (below) and PF5 (right) are fabricated





 Upper and lower cryostat cylinders are ready to receive the coils



# **Moving Is Not Trivial**

• PF6 was the widest load to be moved (10 m)



## **First Vacuum Vessel Sector Complete**



 Fabricated, packed, and shipped arrives in France Wednesday

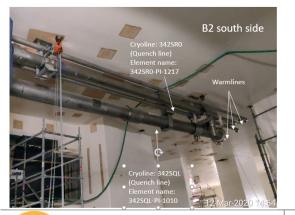


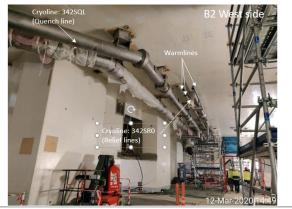


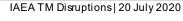


### **Progress on Installation of Services**







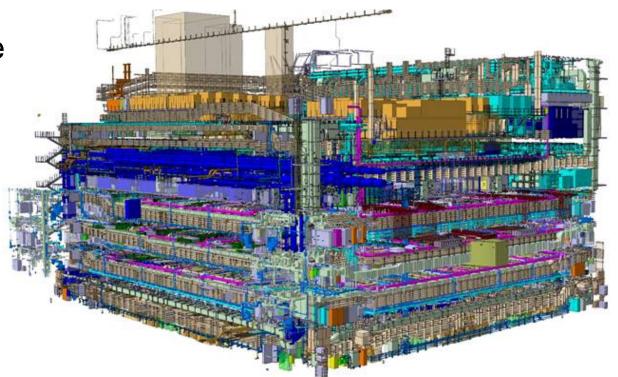




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# **Installation Is Highly Complex**

- Installation sequence must respect the needs of:
  - Operation
  - Inspection
  - Repair
  - Staged approach to completion of facility



# **Commissioning of Plant Systems**

Commissioning Status:

- Steady-state electric system basic services are in operation; commissioning of power supplies for clients continues
- Cooling water system commissioning has started; next six months are critical (heat rejection system, chilled water, first client cooling loop
- Cryoplant commissioning starts early 2021
- Reactive power compensation for the coil power supplies starts commissioning in early 2021

## **ITER Is Progressing Toward First Plasma**

