

Detritiation System Acquisition

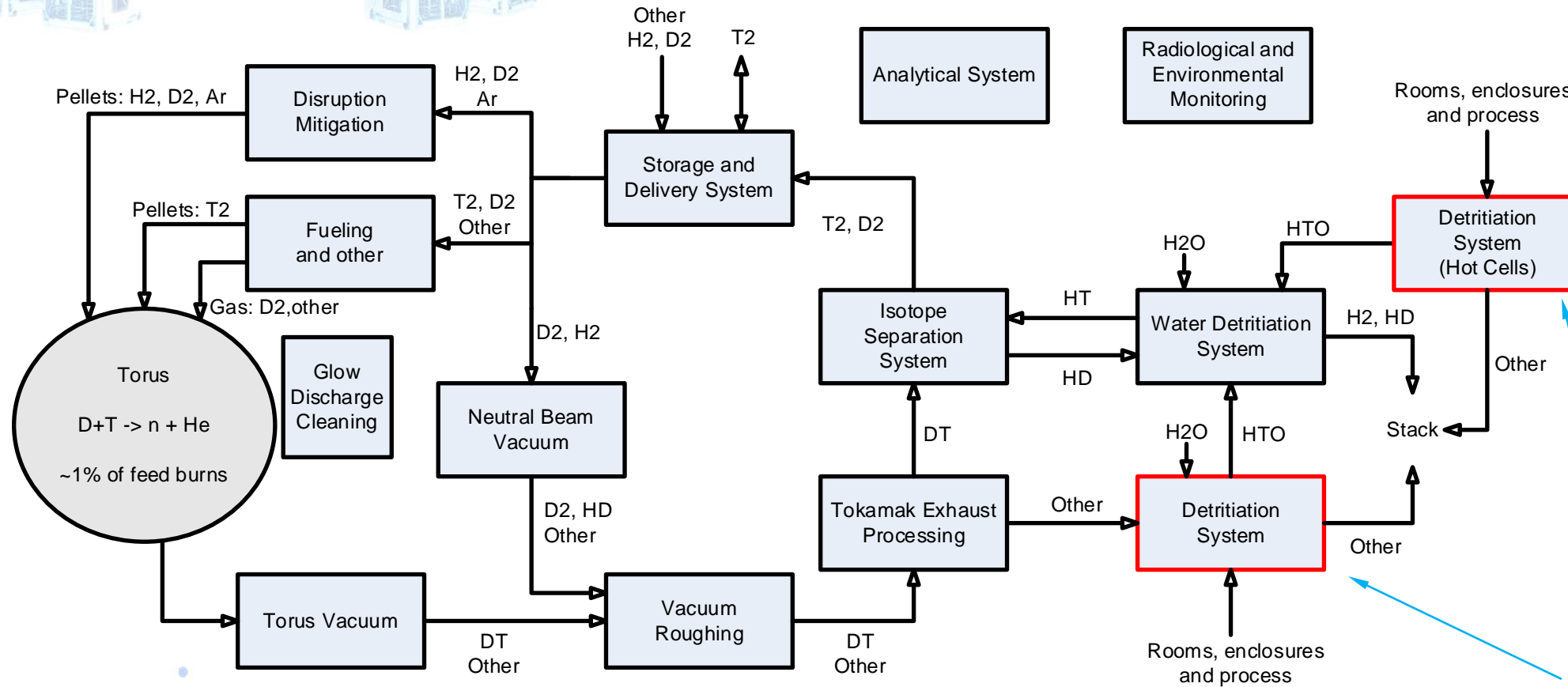
Christopher Grant-Wilson

Tritium Plant

Disclaimer: The views and opinions expressed herein do not necessarily reflect those of the ITER Organization

7 & 8 April 2021

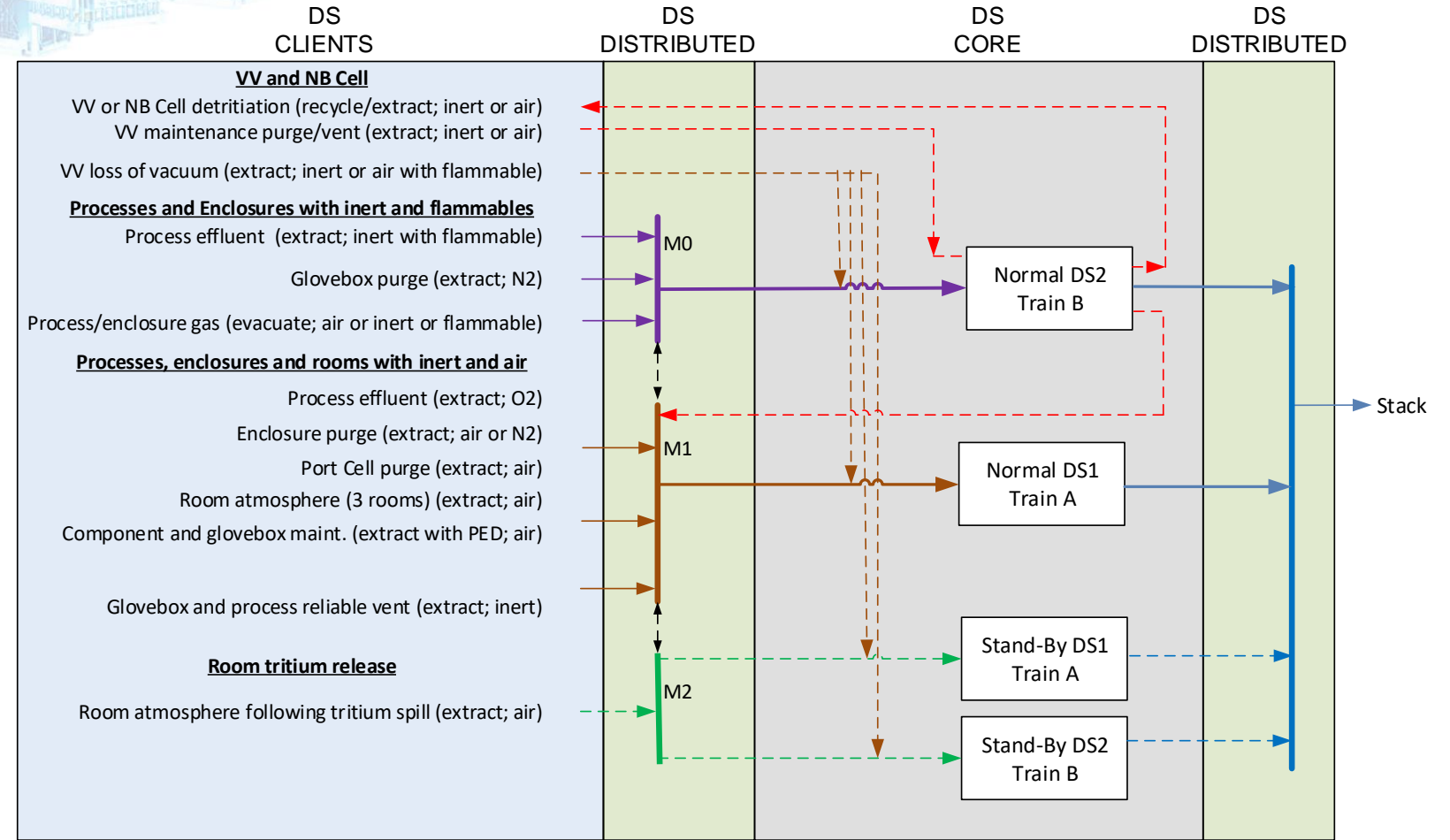
Remote ITER Business Meeting



Detritiation Systems

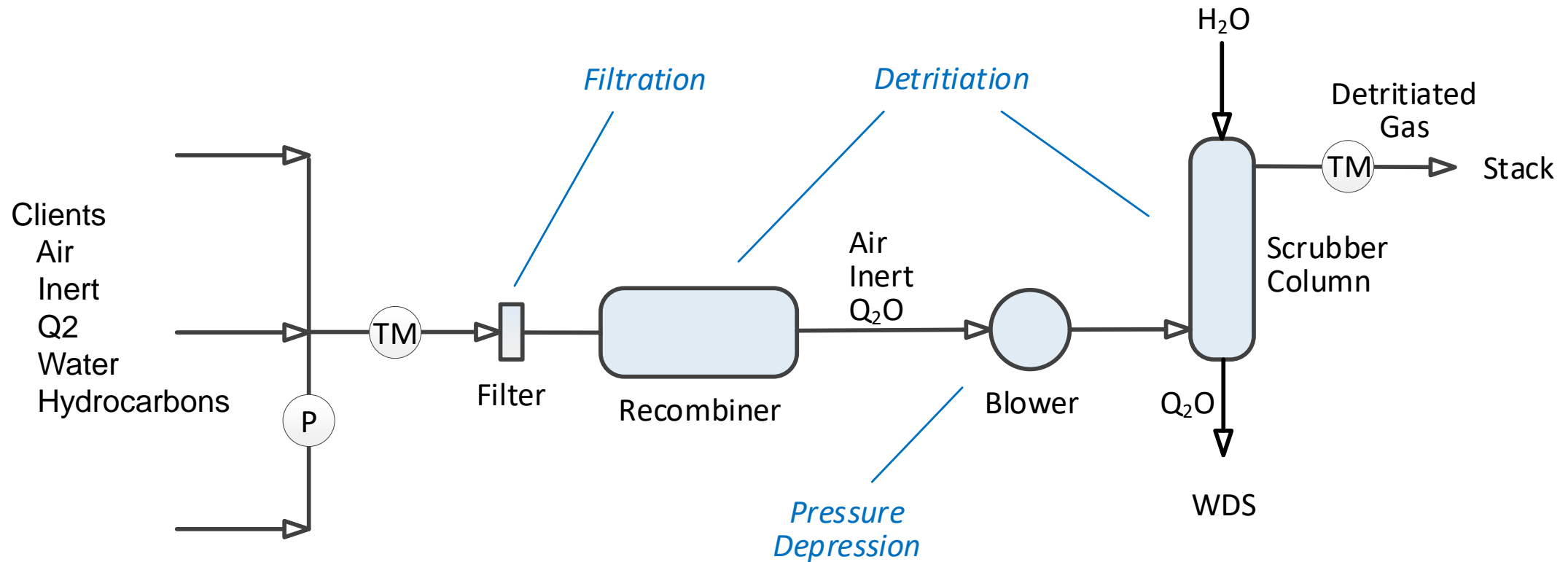
DS functions:

- Detritiation before gas release to environment
- Pressure Depression for dynamic confinement
- Filtration of radioactive particulates

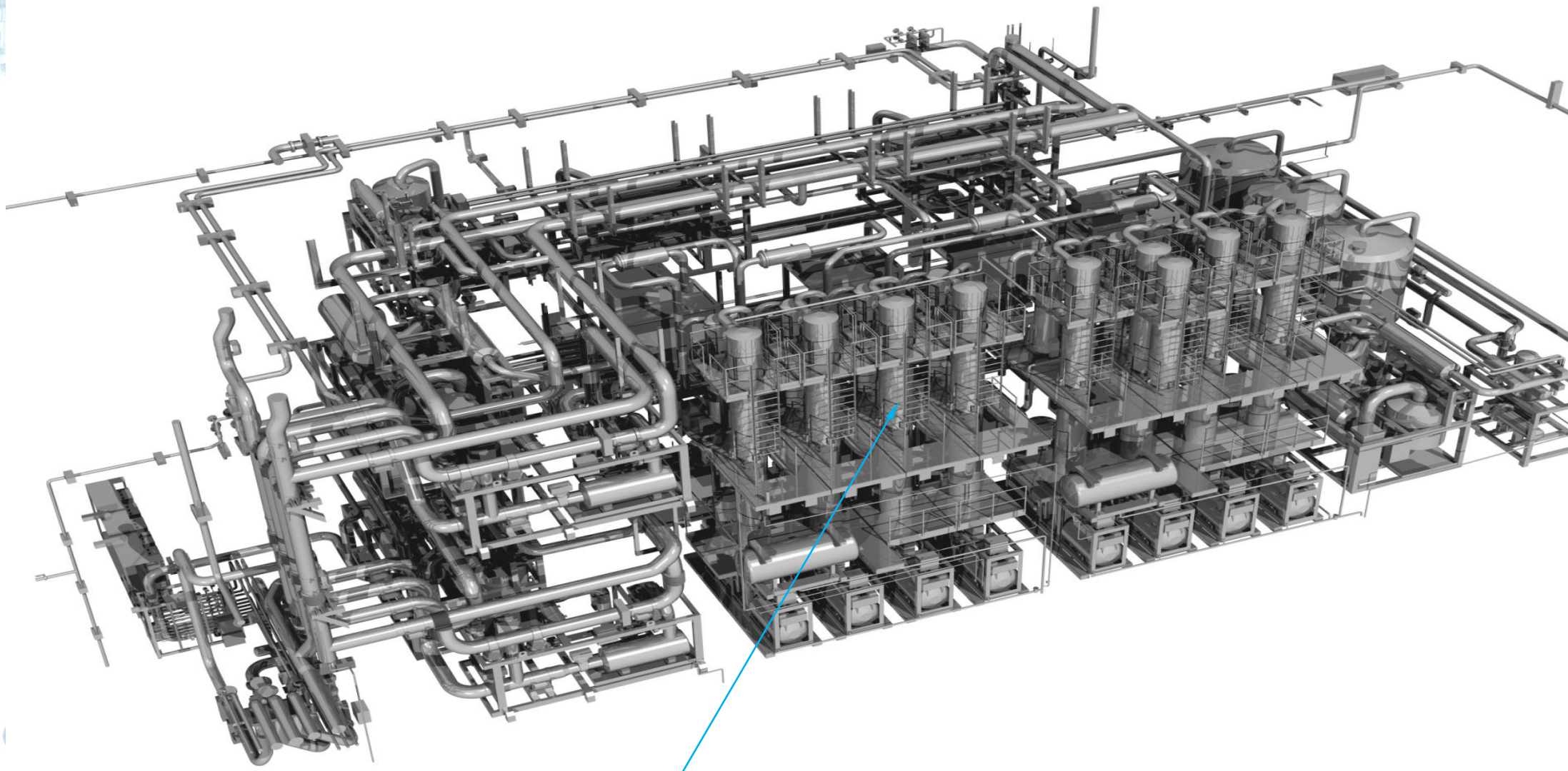


Tokamak Complex DS (Hot Cell DS not shown)

DS Overview and Safety Functions



Tokamak Complex DS (all 8 modules)



Scrubber columns, 8 each (11 m tall)

- DS core
 - At early final design
- DS piping network
 - Captive pipe installation begins 2021
- DS Qualification
 - Technologies validated
 - Beginning system qualification tests in 2021

- Scope
 - Tokamak Complex Detritiation System (TC-DS) Core
 - Total 8 modules (2 for normal operation; 6 standby for accident conditions)
- Planned contract for final design and procurement/fabrication of TC-DS Core
 - Call for tender to be launched in 2021
 - Final Design: 2022 - 2024
 - Initial manufacturing and testing first components: 2024 – 2027
 - Full manufacturing: 2025-2027



Industrial Opportunities – Other planned DS contracts

Other design & fabricate contracts planned as separate contracts:

- TC-DS Piping network (2023 – 2025)
 - Approximately 8 km piping network connects clients to TC-DS Core
- Component Nuclear Qualification (2023 – 2025)
- Hot Cell Facility Detritiation System (HCF-DS)
 - HCF-DS Core: 6 modules, similar arrangement to TC-DS
 - HCF piping network similar scale to TC-DS piping network
 - Will follow later according to Hot Cell Facility schedule



Thank you

