

WBS / Operations Activity	131.FDC - Far Detectors + FS Cryogenic Infrastructure
I&I	Yes

Count of RI-ID Row Labels	Column Labels			Grand Total
	3 (High)	2 (Medium)	1 (Low)	
Damage		1	3	4
[FD1-CE] Damage to the FEMBs / cold cables during or after integration with the APAs			1	1
[FD1-HV] Damage to the resistive Kapton film on the CPA - need for additional spares			1	1
[FD2-BDE] FD2 CE damage to the FEMBs / cold cables during or after CRP installation at SURF			1	1
[I&I] Goods Damaged during Shipment		1		1
Interfaces		1		1
[I&I] Scope is missing due to poor interface definition at Far Site		1		1
Labor		3	5	8
[FD2-CRP] Insufficient contributed labor for the installation of bottom CRP in FD2			1	1
[FD2-PDS] Additional on-project labor required during installation			1	1
[I&I] Unavailability of FS Integration Labor		1		1
[I&I] Underground cryostat installation is less efficient than planned		1		1
[PM] Insufficient scientific personnel for the FD1 integration and installation		1		1
[PM] Insufficient scientific personnel for the FD2 integration and installation			1	1
[PM] International partners fail to provide personnel for FD1 and FD2 installation			1	1
[PM] Loss of key personnel			1	1
Supply Chain	1	3	6	10
[CRYO] Price of LAr is uncertain (#1, #2)	1			1
[FD1-APA] Delay in UK APA production before 2026		1		1
[FD1-APA] Poor quality of frames or inaccuracy in hole/slot machining			1	1
[FD1-APA] US adds additional APA assembly scope due to insufficient rate of assembly in UK.			1	1
[FD1-CE] Need additional ASICs or FEMB test stands to speed up production			1	1
[FD2-PDS] Delays in warm electronics fabrication/testing			1	1
[FD-CE] insufficient TPC electronics spares - other than ASICs and FEMBs		1		1
[FD-CE] Single source vendor for TPC electronics components		1		1
[I&I] Complications with internal supply chains and logistics			1	1
[I&I] Customs delays			1	1
Grand Total	1	8	14	23