

ICD STATUS for SUS/UK & NEXT STEPS

D. Coyne, 15 Jun 2005

- FIRST CUT AT 4 OF 7 ICDS COMPLETED; MANY TBDs
- A NUMBER OF THE TBD ITEMS WILL BE ADDRESSED BY THE SUS/UK ELECTRONICS PDR 7/12
- NEED TO COMPLETE ICDS BETWEEN SUS/UK AND ISC, INS AND SYS
 - ISC REQUIREMENTS ON LOCK ACQ. WILL REQUIRE E2E
 - INS REQUIREMENTS ON INTERFACING TO INSTALL ARM & PAYLOAD POLAR POSITIONING FIXTURE (P3F) SHOULD NOT BE DIFFICULT TO DEFINE
 - SYS ICD TO CONFIRM MASS ALLOCATION IN CURRENT MASS BUDGET & DEFINE 3D ENVELOPE – STRAIGHT FORWARD, EXCEPT FOR FM/ITM COMBINED
 - EXPECT DRAFTS (TO SAME LEVEL AS OTHERS) BY ~6/17
- NEXT MUST ESTABLISH AN INTERFACE WORKING GROUP (IWG) AND ASSIGN AT LEAST ONE PERSON FROM EACH SUBSYSTEM (ONE AS EDITOR) TO EACH BILATERAL ICD
 - BY DEFAULT THIS WILL BE THE SUBSYSTEM LEADS

MAJOR INTERFACE ISSUES FOR ITM/ETM SUSPENSIONS:

- 1) SEI TO PROVIDE CLEAN AIR SHOWER
- 2) CONFIRMATION OF MIN ELASTIC MODE FREQUENCIES FOR SEI PAYLOADS
- 3) NEED AOS/TCS RING HEATER & THERMAL SHIELD DEFINITION
- 4) NEED AOS/COS ELLIPTICAL BAFFLE DEFINITION
- 5) AOS/TCS TO CONFIRM CP SIZE
- 6) NOISE BUDGET BETWEEN SUS/US AND SUS/UK ELECTRONICS

SIGNIFICANT INTERFACE ISSUES (REQUIRES WORK TO RESOLVE OR CONFIRM):

- 1) THERMAL CONDITIONS FOR NON-ITM SUSPENSIONS A LITTLE UNCERTAIN BUT SHOULDN'T BE A PROBLEM – LIKELY TO FORCE SEI TO INCORPORATE CU STRAPPING
- 2) ASSUMING MU-METAL SHIELDING OF SEI ACTUATORS CAN BRING MAGNETIC FIELD STRENGTH IN OPERATION TO FACILITY LIMIT BASED ON R. SCHOFIELD'S TESTING
- 3) OSEM & ESD CABLING/PINOUTS – HOW TO BUNDLE/SHIELD, ROUTE, ETC
- 4) OSEM INTERFACE ELECTRONICS & ESD ELECTRONICS LOCATION (LVEA OR CDS RACK ROOM?)