



**NETWORK SUPPORT GROUP**  
**Mission Operations Voice Enhancement (MOVE)**  
**Project**  
**Digital Voice Inter-Communications Equipment**  
**(DVICE)**

**JSC MOVE**  
**DVICE Transition Status**

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# Agenda



- Overview of the JSC DVICE project transition work and current status
- DVIS/DVICE Circuit Transition Schedule



# JSC Transition Overview



- The JSC transition from DVIS to DVICE has been planned into the following Transition Steps and Implementation Phases:
  - **Step #1 – B30 Keyset Transition**
    - ♦ Phase 1 – B30 Keyset Cabling Infrastructure
    - ♦ Phase 2 – Transition Equipment
    - ♦ Phase 3 – MOVE/DVICE System Installation
    - ♦ Phase 4 – B30 Keyset Cutover
  - **Step #2 – External B30 Keyset Transition**
    - ♦ Phase 5 – SIM Complex Keysets & Connectivity
    - ♦ Phase 6 – JSC Campus Keysets
  - **Step #3 – External Interfaces Transition**
    - ♦ Phase 7 – DVIS External Interface Cutover
    - ♦ Phase 8 – MVRE Upgrade to Digital Interface
  - **Step #4 – DVIS Decommission/Power-down**
    - ♦ Phase 9 – DVIS Removal (worked under several separate SRs)

<p><u>Legend</u> Green – Complete Blue – In Work Black – Planned</p>
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# JSC Forward Plans



- 2.0.2 Release Installation
  - 05/07 – 05/09 – Installed on LSOS DVICE
  - 06/01 – 06/03 – Installed on Prime DVICE
  - Note1: DVICE keysets remain at the 1.6.6 level which is backward compatible with the 2.0.2 system
    - ♦ 2.0.3 Release contains known keyset software updates, so the decision was made to delay the keyset upgrade
    - ♦ Alleviates the need to manually update the 700+ JSC keysets twice in a short period of time
    - ♦ 2.0.3 Release is targeted for site availability after completion of phase 7 (now 10/14/2012)
  - Note2: The 2.0.2 upgrade provided fixes needed for Phase 7
    - ♦ GPIF Consolidation effort
    - ♦ Bridge removal
- Phase 7 – External Interface Cutover (Includes Internal Elements at JSC)
  - 06/01/12 through 10/14/12



# Phase 7 – Overview



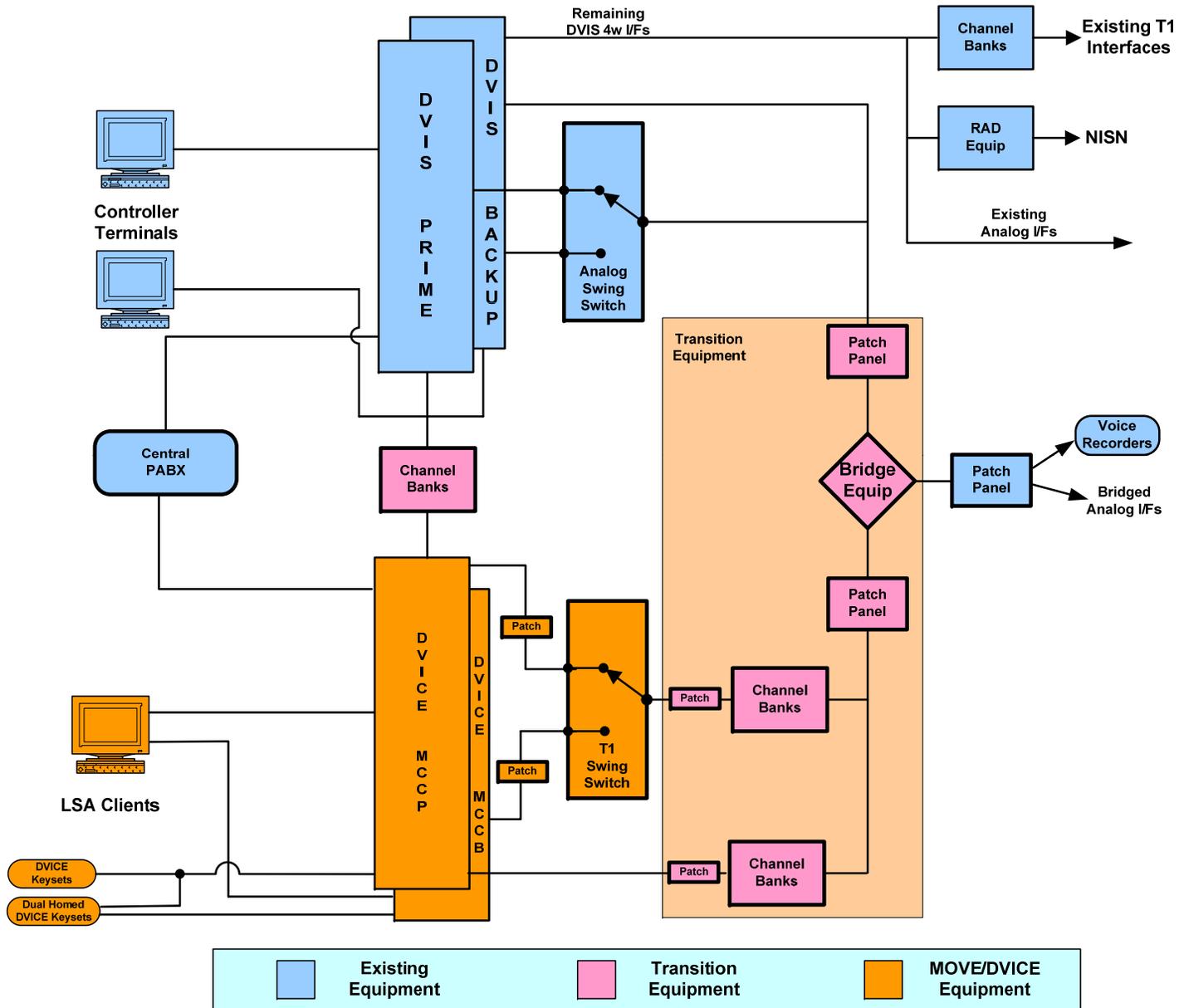
- Phase 7 – DVIS Circuit Transition Schedule
  - JSC Preparation . . . . . 06/01/12 – 06/30/12
    - ♦ T1 Consolidation, cable installation, etc.
  - NISN Circuit Transition . . . . . 07/09/12 – 08/03/12
    - ♦ GSFC, DFRC, JPL, KSC, MSFC
    - ♦ AT&T RAD remapping starts ~07/09/12
  - IP Circuit Transition . . . . . 07/16/12 – 09/07/12

IP	Start	Complete
ASI	Complete	Complete
ESA	07/16/12	07/20/12
ORBITAL	07/23/12	07/27/12
CSA	08/06/12	08/10/12
JAXA	08/13/12	08/17/12
RSA	09/04/12	09/07/12
SPACE-X	08/27/12	08/31/12

- Internal Circuit Transition . . . . . 09/03/12 – 10/14/12
  - ♦ SSTF, SVMF, Misc.



# Architecture – Start of Phase 7





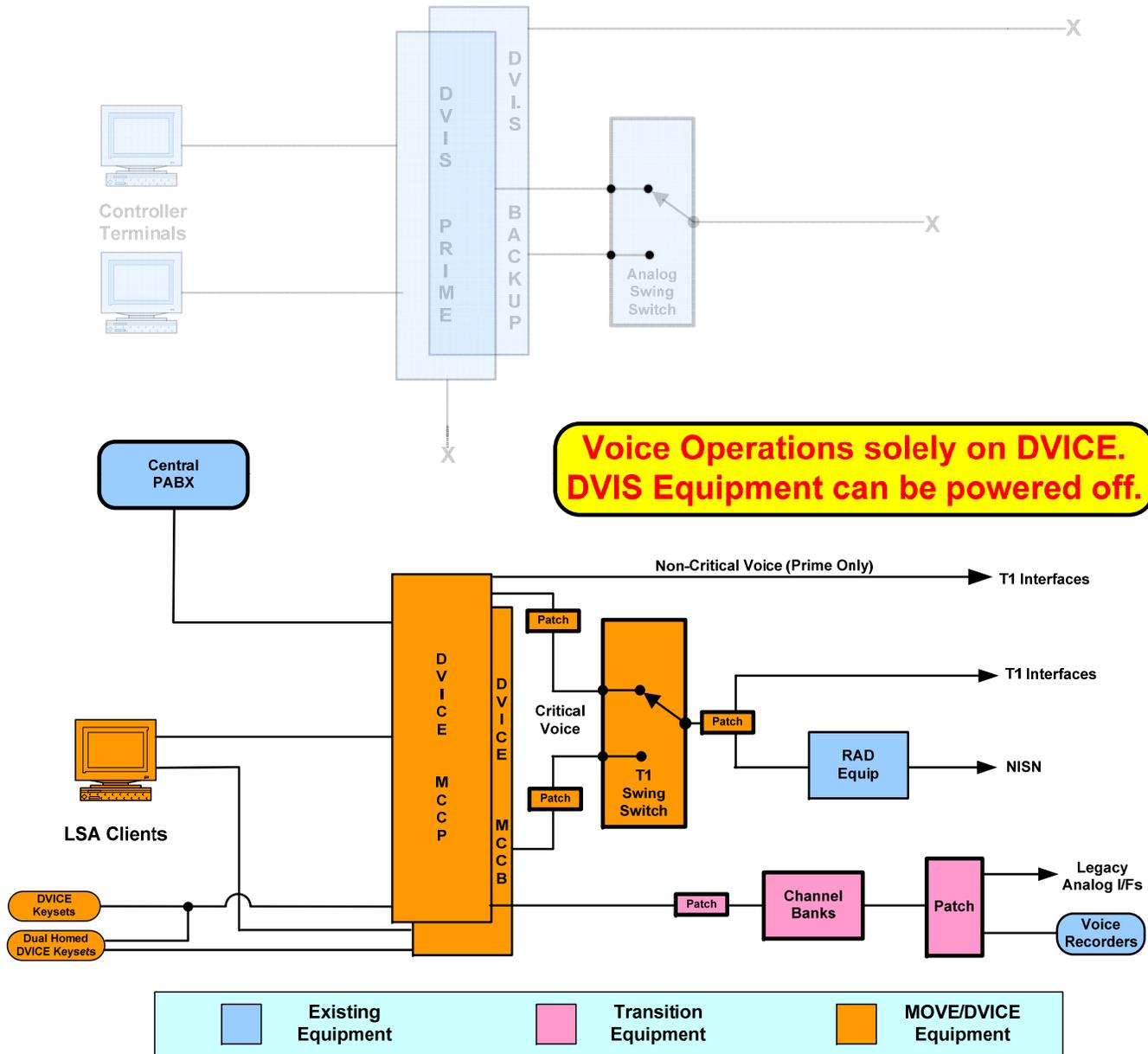
# Phase 7 – Transition Approach (cont.)



- External Interface Cutover - Implementation
  - Cutover planning and scheduling was closely coordinated with MCC facility management, maintenance, ISS operations, and their counterparts at the distant end.
    - ♦ International Partner (IP) coordination was performed through the Ground Segment Control Board (GSCB)
  - Coordination with the distant end includes:
    - ♦ Establish “make-good” patching as needed
    - ♦ Cutover phasing - single or multiple T1s cutover at a time
  - Circuit Cutover:
    - ♦ Disconnect current channel bank T1 cable(s) and connect DVICE T1 cable(s)
    - ♦ Perform end-to-end voice checks following cutover of each T1 interface using test loops. This ETE testing includes voice and PTT verification on designated circuits for ODAR S/G 3 & S/G 4.
    - ♦ External interfaces released to ops and configure to operational voice loops.
    - ♦ Follow-up circuit acceptance testing may be performed at the discretion of HVC, ISS GC, and the distant end customer on operational voice loops.
  - Analog interface cable to external interfaces will be removed under DVIS decommission SR.



# Architecture – Phase 7 Complete



# ACRONYMS

DVIS –	DIGITAL VOICE INTERCOMMUNICAITON SUBSYSTEM
DVICE –	DIGITAL VOICE INTER-COMMUNICATIONS EQUIPMENT
MVRE –	MISSION VOICE RECORDED EQUIPMENT
MOVE –	MISSION OPERATIONS VOICE ENHANCEMENT
GPIF –	GENERAL PURPOSE INTERFACE CARD
LSOS –	LIMITED STATION OPERATIONS SUPPORT
NISN –	NASA INTERGRATED SERVICES NETWORK
NSR –	NETWORK SERVICE REQUEST
SSTF -	SPACE STATION TRAINING FACILITY