



DS-T Development



• Overall Objective

- Rapid development and demonstration of autonomous, unattended terminal operations for low cost support of NASA missions

• Goals and Products

- Validated Deep Space Terminal (DS-T) prototype based on integration of Low Earth Orbiter Terminal (LEO-T) architecture into a DSN 34 meter waveguide antenna for autonomous unattended support of deep space missions

Right: Predecessor to DS-T, LEO-T radome & electronics on roof of Bldg 238 ; LEO-T is now the ground station of choice for support of near earth missions.

Left: Same concept is being applied to DSS-26 ; the DS-T electronics rack (far right) is being integrated with a BVR (second rack from right) at DSS-26 34m BWG Antenna for autonomous station demonstrations

Complete all subsystems for telemetry capable DS-T

Validate unattended telemetry operations of DS-T with MGS

Add uplink to DS-T & validate with DS1

Wrap-up DS-T technology transfer to DSN

