Appendix

1. RADI – transmission of Earth observation data SSC provides data transmission services from satellites for a wide range of societal functions, such as research and Crisis Response. SSC customer is RADI, China Institute for Remote Sensing and Digital Earth. RADI is a civilian Chinese research institute linked to China Academy of Science (CAS). For this purpose there is a dedicated antenna at the SSC Esrange ground station. The antenna does only receive data and is owned by SSC.

2. CMA, transmission of weather data SSC delivers since many years a service for China Meteorological Administration (CMA) regarding data transmission from weather satellites. Data from Chinese weather satellites which SSC provides services for at Esrange is shared within the global co-operation World Meteorological Organization (WMO) with both the American National Oceanic and Atmospheric Administration (NOAA) as well as with the European EUMESAT. For this purpose there are two antennas at the SSC Esrange ground station dedicated for CMA. The antennas only receive data and are owned by SSC.

3. CLTC, TT&C-services SSC provides services to China Launch and Tracking Control (CLTC) regarding TT&C since 2008. The services includes TT&C for pre-defined civilian satellites within research, Earth observation and weather data as well as for other scientific space crafts. CLTC is the Chinese organization conducting most of the TT&C services for civilian Chinese space programs.

For this purpose there is one antenna at the SSC Esrange ground station dedicated for CLTC. The antenna is used to support predefined civilian satellites or space crafts. The antenna is owned by CLTC. SSC controls the usage of the antenna. Two antennas are dedicated to CLTC missions at SSC ground station in Chile for TT&C missions within LEOP (Launch and Early Orbit Phase). These antennas are used predefined for LEOP-missions for civilian space mission. One recent example is the LEOP of the moon-mission Cháng'e.

4. CLTC owns the antennas and SSC controls the usage of them. In addition, SSC also has an antenna in Yatharagga, Australia that previously was dedicated for the Chinese manned space program. SSC owns the antenna and control the usage. The antenna has not been used by for a couple of years.