

EARTH OBSERVATION SYMPOSIUM (B1)
Dual Use Earth Observation (6)

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DUAL USE MISSION SUPPORT FROM COMMERCIAL GROUND STATIONS

Abstract

Support to the dual use often requires additional data handling procedures and encoding of the data that is for the military end users. The encoding will certainly be embedded into the satellite itself, whilst the receiving end (e.g. commercial ground station owners) shall handle both the encoded data and the open data from the satellite. The dual use programs will be able to benefit from the commercial society of ground segment providers, as these providers are capable of handling both the downlink from the satellite and the data dissemination to the end users. The availability and proficiency numbers at commercial ground stations are normally in above 99

Data Transfer Data transfer from the ground stations to the end users will in most projects be on either leased private line or through an internet connection. The leased private line will be a dedicated end-to-end link from the provider to the end user. The internet capacity often with a so-called VPN technology will benefit from the global internet availability. In both technologies, the data security will be meet at the required level, because the commercial availability to secured data transfer protocols are good, and a close dialogue between the involved parties will ensure sufficient and cost-effective transfer.

Civil control of Ground Stations Given that the data policy from the owners of dual mission satellites allows the civilians ground stations to support the mission, the dual use missions will therefore be able to call for open tenders amongst the pre-qualified owners of such stations. Such tenders will in most project lead to a better price and the civil stations will probably meet the mission requirements, and also most stations will have even or better proficiency than the mission owner(s) ground station. The availability at any given ground station shall be subject to a screening, so that any redundant solutions are proven and that the commercial ground network has capacity to support the mission under any given scenario. The full paper will describe the details needed on both the main element introduced above.