Executive Summary,

Challenges
One of the largest Mobile Network Operators (MNOs) in Brazil needed to rapidly deploy several Cellular Backhaul sites in under 40 days in order to comply with regulatory requirements for connectivity KPIs.

The Solution
The MNO deployed SpaceBridge’s state-of-the-art WaveSwitch™ technology, which uniquely combines Dynamic-SCPC and MF-TDMA satellite access methods in a highly flexible, bandwidth-saving and throughput-maximizing architecture. SpaceBridge installed an ASAT™ VSAT HUB on the Telesat T12 satellite at a teleport in Belo Horizonte, Brazil and installed ASAT™ VSATs at remote cell sites. The HUB rapidly launched operation within a record 37 days of contract execution. Using SpaceBridge U7400-C4 VSAT terminals and WaveSwitch™ technology, the customer achieved superior Cellular Backhaul performance meet ANATEL’s stringent regulatory connectivity KPIs.

Benefits of Spacebridge
Thanks to the SpaceBridge satellite solution with efficient SCPC/MF-TDMA, the Mobile Network Operator (MNO) has been able to successfully meet extremely rigorous network KPIs set by regulators, while limiting satellite costs in the backhaul network. Success has enabled expansion to new sites, so the MNO extended its VSAT service contract. Local communities in very remote locations far beyond the reach of fiber or terrestrial microwave radio now enjoy amazing 3G/4G connectivity. SpaceBridge U7400-C4 terminals deliver over 30% bandwidth savings with acceleration and optimization of 3G/4G traffic, while ruggedly withstanding harsh environmental conditions. Remote regions in Brazil were accustomed to spotty cell service and technical support during rainy seasons, due to travel and field service and maintenance challenges.

The Challenge
Remote regions in Brazil that got used to mediocre service, remote sites technical support, transportation conditions during heavy summer, when precipitation levels are very high and access to sites is difficult. Activated site in a non-served regions created an unordinary request of usage and created new revenue drivers for the MNO.

Results
The Spacebridge VSAT solution connects a previously un-served population to the rest of the World, helping to bridge “Digital Divide.” The advance VSAT network employs two Geo Redundant Hubs in diverse central Brazilian cities, providing unparalleled redundancy and continuity to meet and exceed regulatory and business KPIs. Successful expansion of VSAT-backhauled cellular services to previously unserved and poorly served regions has unleashed new demand and revenue streams for the Mobile operator.