

|                                      |            |          |
|--------------------------------------|------------|----------|
| <b>General</b>                       | Unit       |          |
| User terminal type                   | -          | SWIFT-64 |
| Modulation ID / Designator           | -          | 45K0G7D  |
| Data rate (kbps)                     | (kbps)     | 64       |
| Coding rate                          | -          | 0.5      |
| Modulation                           | -          | 16 QAM   |
| Carrier bandwidth                    | (kHz)      | 40       |
| Allocated bandwidth                  | (kHz)      | 45       |
| <b>Uplink</b>                        |            |          |
| Frequency                            | (GHz)      | 1.6      |
| User terminal EIRP towards satellite | (dBW)      | 24.7     |
| User terminal tx gain                | (dBi)      | 11.5     |
| Uplink power                         | (dBW)      | 13.2     |
| Uplink p.s.d averaged in 4 kHz       | (dBW/4kHz) | 3.2      |
| Path loss                            | (dB)       | 188.8    |
| Mean Atmospheric loss                | (dB)       | 0.1      |
| Satellite G/T                        | (dB/K)     | 2.2      |
| Adjacent Channel Interference        | (dB)       | 0.2      |
| Up-path C/No                         | (dBHz)     | 66.4     |
| <b>Downlink</b>                      |            |          |
| Frequency                            | (GHz)      | 3.6      |
| Satellite EIRP                       | (dBW)      | 1.3      |
| Path loss                            | (dB)       | 195.7    |
| Mean Atmospheric loss                | (dB)       | 0.4      |
| Earth station G/T                    | (dB/K)     | 35.6     |
| Random Loss                          | (dB)       | 1.0      |
| Down-path C/No                       | (dBHz)     | 68.4     |
| <b>Total</b>                         |            |          |
| Mean satellite C/IMo                 | (dBHz)     | 69.8     |
| Co-Channel Interference              | (dBHz)     | 75.4     |
| Other system interference allocation | (dB)       | 1.0      |
| Mean Overall C/No                    | (dBHz)     | 62.0     |
| Mean Overall C/N                     | (dB)       | 15.9     |
| <b>Margin</b>                        |            |          |
| C/N objective                        | (dB)       | 7.7      |
| C/N margin                           | (dB)       | 8.2      |