

# SPECTRA

Group

SLINGSHOT®

## System Overview



Reliable, Resilient,  
Deployable Communications

# SlingShot® - Radio communications over Inmarsat's L-TAC™ service

## Customer Challenge

To find a solution that allows government and military users to maintain command and control over widely dispersed and isolated teams operating in remote and hostile environments. Deployment must suit high tempo operations and not be delayed waiting for terrestrial communications to be established.

## Requirement

Dedicated government and military TACSAT channel availability is limited to a small number of high priority users and is expensive. An alternative is needed that increases the number of TACSAT channels using commercial satellite networks as a complementary service. It must provide users, voice and data capability over tactical, theatre and strategic distances and utilise existing radios.

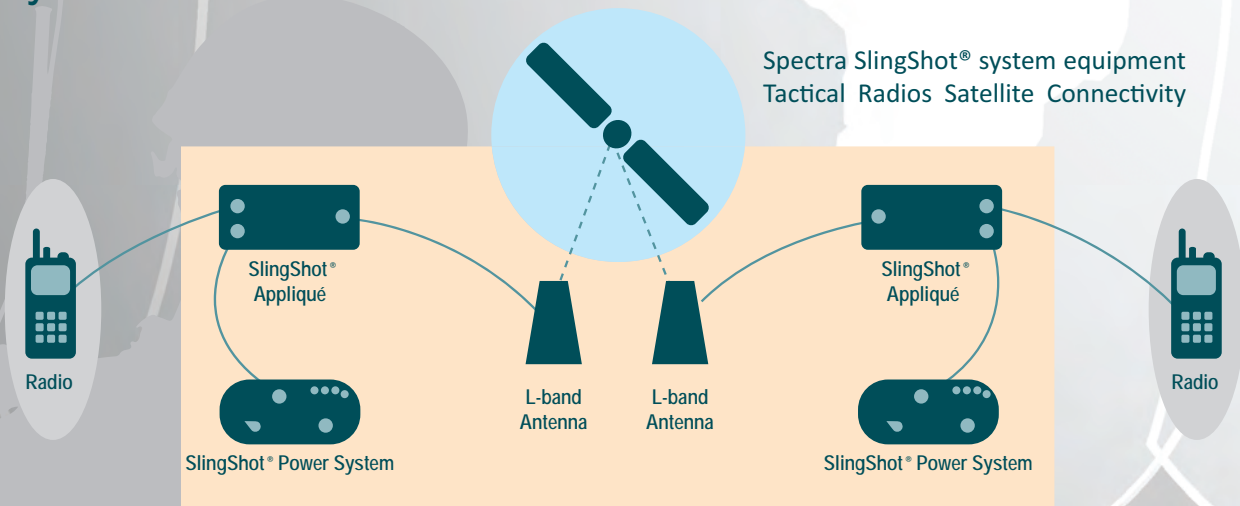
## Solution

SlingShot® - Spectra's small, lightweight and cost effective appliqué allows in-service government and military radios to operate over commercial L-band satellites. It provides low-latency voice and data connectivity to tactical radio networks.

AND

L-TAC™ - Inmarsat's I-4 communications network provides L-band to L-band Beyond Line of Sight communications from a global constellation of geostationary satellites.

## System Overview





# SLINGSHOT

SlingShot® - Enabling beyond line of sight communications on the move

## Technical Specifications



## Key Appliqué Specifications

Band	Frequency (MHz)	Power Input (W)
UHF-M	240 – 311	2 – 4 Watts
VHF-M	58 – 88	3 - 10 Watts
VHF-C	144 – 174	3 - 10 Watts



## Features and Benefits

Features	Benefits
<ul style="list-style-type: none"> <li>• Designed to support in-service radios</li> </ul>	<ul style="list-style-type: none"> <li>• Keep existing technology and security</li> </ul>
<ul style="list-style-type: none"> <li>• Supports UHF &amp; VHF military and commercial frequencies</li> </ul>	<ul style="list-style-type: none"> <li>• Network interoperability</li> </ul>
<ul style="list-style-type: none"> <li>• Approved for Inmarsat I-4 constellation</li> </ul>	<ul style="list-style-type: none"> <li>• Resilient beyond line of sight worldwide connectivity</li> </ul>
<ul style="list-style-type: none"> <li>• Omni-directional antennas</li> </ul>	<ul style="list-style-type: none"> <li>• Reliable communications on the move</li> </ul>
<ul style="list-style-type: none"> <li>• Complements existing military capacity</li> </ul>	<ul style="list-style-type: none"> <li>• End users can prioritise traffic access between military and commercial satellite networks</li> </ul>
<ul style="list-style-type: none"> <li>• Utilises Narrow Beams, Regional Beams, Customised Beams and Relocatable Beams</li> </ul>	<ul style="list-style-type: none"> <li>• Maximum flexibility in high tempo and concurrent operations</li> </ul>
<ul style="list-style-type: none"> <li>• Lease airtime for a minimum of 1 month</li> </ul>	<ul style="list-style-type: none"> <li>• Excellent cost optimisation</li> </ul>
<ul style="list-style-type: none"> <li>• Standard lease provides 25kHz Channel</li> </ul>	<ul style="list-style-type: none"> <li>• 1 x Wideband or 5 x ANDVT channels</li> </ul>
<ul style="list-style-type: none"> <li>• Data enabled</li> </ul>	<ul style="list-style-type: none"> <li>• HPW and ViaSat proven up to 56kbps</li> </ul>

# L-TAC™ - Network Specifications

## Inmarsat-4 L-band Network

- Availability  
Globally in the I-4 footprint;  
Narrow Beam, Regional Beam or Customised Beam  
\*see note 1

- Satellite Figure of Merit  
Narrow Beam >10dB/K  
Regional Beam >0dB/K

- Waveform – Modulation Modes \*see note 2  
FM - Voice and/or LSD  
ANDVT - Voice and/or LSD  
High Performance Waveform (HPW)  
- Data up to 56kbps

A list of proprietary waveforms available on request

- Encryption  
Utilises type approved encryption from end user radios

- Channel width  
A standard channel lease is a 25kHz allocation, which may be used as a single channel or up to five 5kHz sub-channels

- Modes of Operation  
Wideband Mode  
25kHz at the centre of the channel  
Narrowband Mode  
Channels are engineered to offer a 25kHz channel for both voice and/or Low Speed Data (LSD), equal to that provided by UHF. The 25kHz channel can be divided up to five times with each 5kHz providing Narrowband voice and/or LSD using Advanced Narrowband Digital Voice Terminal (ANDVT) mode

\* Note 1. Subject to availability satellite beam footprint expansion is possible by using customised multiple beams. This is a chargeable service. Please contact your account manager for further information.

\* Note 2. Subject to details. The details are for illustrative purposes.



# SLINGSHOT®

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