SPECTRA
GROUP

SHADE

SHADE

SHADE is a Communication system that has been designed to enable Nodes (SHADE DCN & SHADE Lite) to rapidly deploy and deliver voice and data services across a Satellite, Leased Line, GPRS or ADSL bearer to SHADE Central, a UK Hub providing connectivity to the World Wide Web, ISDN, PSTN or dedicated private networks.

The Network has undergone Governmental level Accreditation which guarantees high levels of Confidentiality, Integrity and Availability of services.

Located with the primary SHADE Central is the Network Operations Centre (NOC) which is manned 24/7 to ensure the Quality of Service (QoS) levels are maintained. The staff at the NOC are able to remote into all equipment at the deployed locations to provide configuration changes and fault finding.

To ensure 100% redundancy of the network, SHADE Central is duplicated at a geographically separated location and services can be patched across within minutes in the event of a loss of services. The deployed Nodes benefit from all key system components being provided with 100% pre-configured on site spares.

SHADE is provided as a fully managed service (including airtime, manpower and equipment) and is completely scalable and flexible to meet your specific requirements. All equipment is packaged in ruggedised, portable and air-checkable containers.

SHADE
delivering
Secure, Reliable, Rapidly Deployable Communications Systems in hostile & remote areas

SHADE Deployable Communications Node

SHADE DCN has been designed to provide voice and data services to medium and large teams operating in remote or hostile areas. The SHADE DCN is provided in ruggedised air checkable 19" rack containers.

SHADE DCN can make use of any available communications bearer but is predominately designed to utilise a Very Small Aperture Terminal (VSAT) satellite terminal. It can be deployed globally in a fixed or short term environment. The bandwidth is configurable to cater for each deployment and meet the specific Information Exchange Requirement.

SHADE DCN is flexible in that by utilising the same core equipment, the number of users supported can be increased or decreased very easily. SHADE DCN can be configured to utilise any required IP Service or anything that can be converted to IP, such as ISDN.

TRAINING & OPERATION

SHADE DCN is required to be installed by a highly skilled Spectra engineer or a trained communications engineer from the customer. The Spectra engineer will be experienced and qualified to operate in hostile or remote areas and is able to remain with the equipment to provide on-site support. The deployed equipment can be installed by a trained engineer within a couple of hours.

The SHADE DCN is fully supportable and configurable from the 24 / 7 NOC where the engineers monitor all deployed equipment for any faults.

"…following the recent earthquake in Haiti, Spectra very quickly installed their SHADE system for Oxfam…
This provided Oxfam with a full telecommunication system in an area where communications were almost nonexistent"

Oxfam Logistics, 2010

DCN TECHNICAL SPECIFICATIONS

Physical Characteristics

Weight: Dependant on configuration

Dimensions: Dependant on configuration

Interfaces: Ethernet (100+)
ISDN (up to 8)
GSM/GPRS/3G
Personal Mobile Radio

Bearer: VSAT (C, Ka, Ku, X Bands)
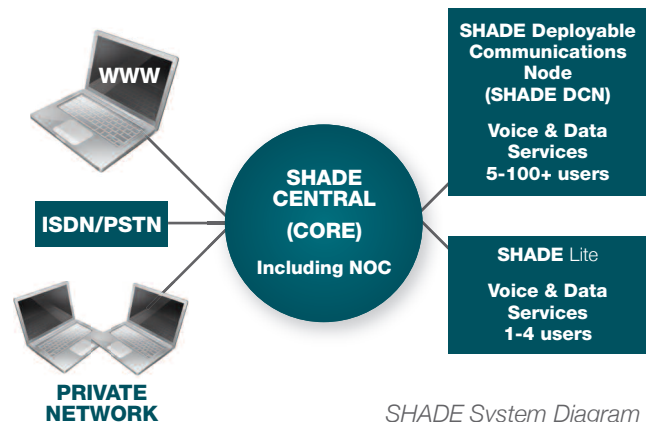
Power: 110V AC
240V AC

Spectra NOC

Services

IP: Internet
e-mail
VoIP
VPN pass through
Tracking Services
CCTV
Other IP connections

ISDN: 8 x 64kbps (up to 384 bonded)

WWW

ISDN/PSTN

SHADE CENTRAL (CORE) Including NOC

SHADE Deployable Communications Node (SHADE DCN) Voice & Data Services 5-100+ users

SHADE Lite Voice & Data Services 1-4 users

PRIVATE NETWORK

SHADE System Diagram

SHADE Lite

SHADE Lite has been designed to provide voice and data services for small teams operating in remote or hostile areas. The SHADE Lite system is provided in a small form factor and can be carried by one person.

SHADE Lite is based around utilising the Inmarsat Broadband Global Area Network (BGAN) family of terminals. It can be deployed globally in a fixed, short-term or mobile environment.

Although being a small form factor SHADE Lite benefits from all the security, resilience and technical support of the SHADE system. The NOC staff are able to provide technical support and configuration to the deployed equipment.

TRAINING & OPERATION

SHADE Lite can be installed and operated by a single user with minimal training. It is a plug and play operation that can be set-up in less than 5 minutes by an unskilled user.

The equipment is capable of being powered by 12V DC (Vehicle), 110V AC or 240V AC to allow maximum deployment flexibility.

Lite **TECHNICAL SPECIFICATIONS**

Physical Characteristics

Weight: 18.5kg

Dimensions:

      Length: 624mm

      Width: 490 mm

      Depth: 303 mm

Interfaces: 4 x Ethernet
              2 x ISDN

Bearer: BGAN

Power: 12V DC (Vehicle)
              110V AC
              240V AC

Services

IP: Internet
              e-mail
              Voice over IP
              Tracking Services
              VPN pass through
              Other IP connections

ISDN: 2 x 64kbps (128kbps bonded)

Spectra Group (UK) Ltd

The Spectra Group (UK) is a leading provider of voice and data services in areas where either none exist or where high intensity conflicts, natural disasters, pandemics or terrorist attacks may have destroyed existing networks.

We are experts in the design, delivery, implementation and ongoing support for a comprehensive range of radio and satellite communication services. These are supplied to clients operating around the world in many different market sectors including defence, government, aid, overseas security and commercial.

Spectra also provides the resources required to deliver effective communications strategies including highly skilled technical and operational specialists, many of whom are security cleared and are Hostile Environments Awareness Trained. These specialists are able to deploy anywhere in the world at a moment's notice. We also design and deliver bespoke telecommunications-based training programmes and have become one of the UK's leading suppliers of training courses and Training Needs Analysis to the MoD.

For more details on this product, please contact:

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