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Secure Remote Asset Management & Situational Awareness

Paradigm Dynamic Integrated Telematics (DIT) Service

Powered By

IBM Remote Operations and Management (ROaM)

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The Origins of the Dynamic Integrated Telematics Service - Why DIT?

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What is the DIT Service?

Dynamic Integrated Telematics (DIT) Service

- **Remotely monitor and interact with control & management systems.**
- Strategic management and support of remote vehicles, fixed and maritime assets.
- Enables C^4ISTAR capabilities to be captured.

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What is the DIT Service?
- Service Provision: Smart Logistics

User Level		User Level Benefits
-Suppliers- -Manufacturers-		• Remote Asset information • Planning Information • Supply Information • Production Information
Strategic Headquarters Tactical Headquarters Logistics & Operations		• Consolidated Asset Management ▪ Remote Asset Status & Information ▪ Remote Platform Status & Information • Formation Status & Information • IT & Network Management • Application Firmware Management • Situational Awareness • Reporting & Analysis Information
Forward Operating Base		• Minimal & effective bandwidth usage • Efficient allocation of resources • Supply / Replenishment status • Satellite Tracking • Platform/Asset Status • Application Firmware Information

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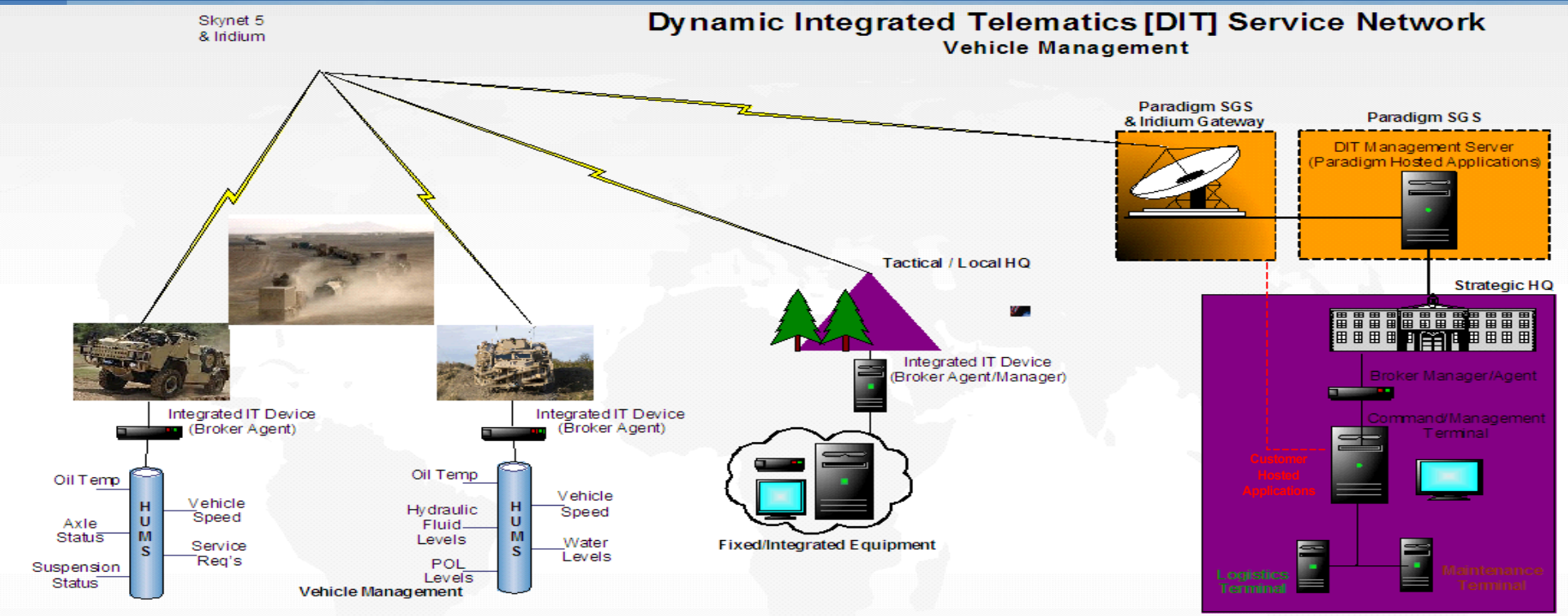
How will the DIT Service be delivered? - Network Diagram (Satcom)



HUMS
Health & Usage Management System

ROAM
Remote Operations and Management

SIE
System Information Exploitation

IBM Tivoli Applications

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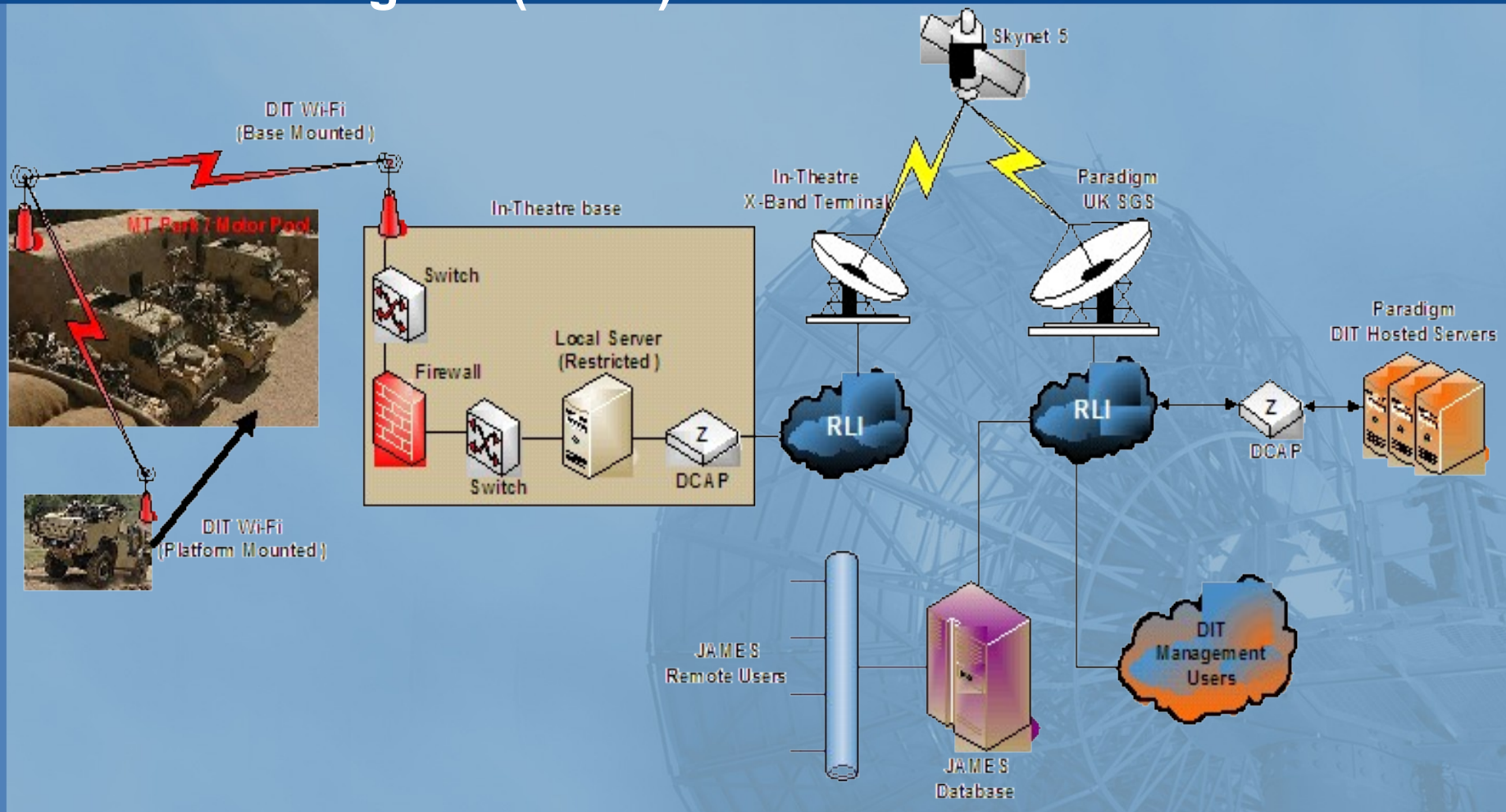
How will the DIT Service be delivered? - Network Diagram (Wi-Fi)



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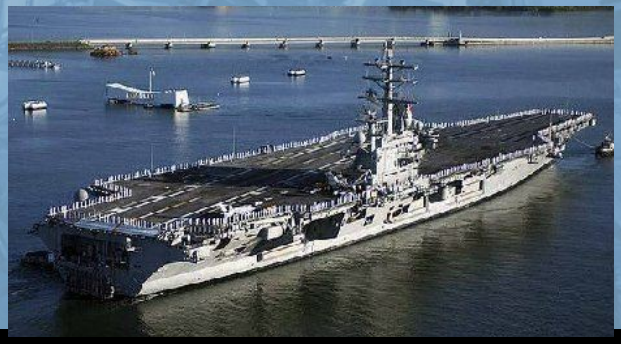
How will the DIT Service be delivered? - Data Set Delivery Levels

- **Data Set Option 1**
  - Remote Vehicle Management
    - Axle Shock levels
    - Temperature levels
    - Fluid levels

- **Data Set Option 2**
  - Fixed Asset Management
    - Running Time
    - Voltage levels
    - Load capacity

- **Data Set Option 3**
  - Integrated Sensor & Intelligence system Management
    - Sensor data
    - Status changes

- **Data Set Option 4**
  - Marine Asset Management
    - Turbine power O/P
    - Pump capacity
    - Load balancing



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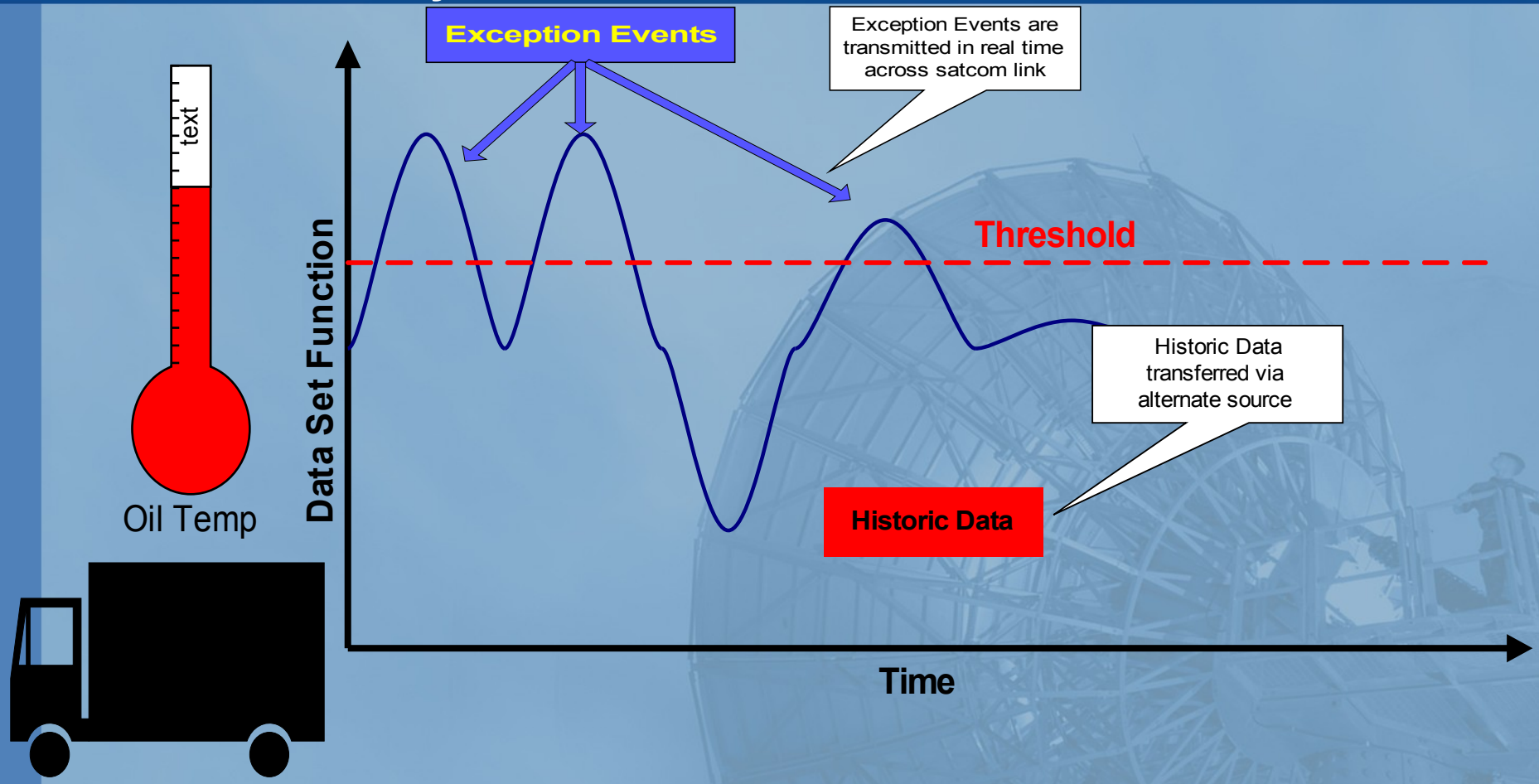
How will the DIT Service be delivered?
- Data Set Delivery



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Secure Military & Government DIT Delivery

- **Dual delivery via Iridium & Skynet 5**
  - UK MOD
  - UK Government
  - NATO
  - Other National Governments
    - Iridium Delivery
      - L-Band
      - Short Burst Data
      - Baseline security (AES 128 / AES 256)
      - COTS equipment
        - Skynet 5 Delivery
          - X-band
          - Streamed data
          - Enhanced security
          - Developing state of the art X-band technology

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Non-Military DIT Delivery

- **Dual delivery via Iridium enables DIT to be delivered to non-military customers:**
  - Emergency & Law Enforcement
  - Merchant & Auxiliary Navy
  - Commercial Haulage
  - Rail service providers

- **All Commercial Customers to be delivered through DIT Iridium**

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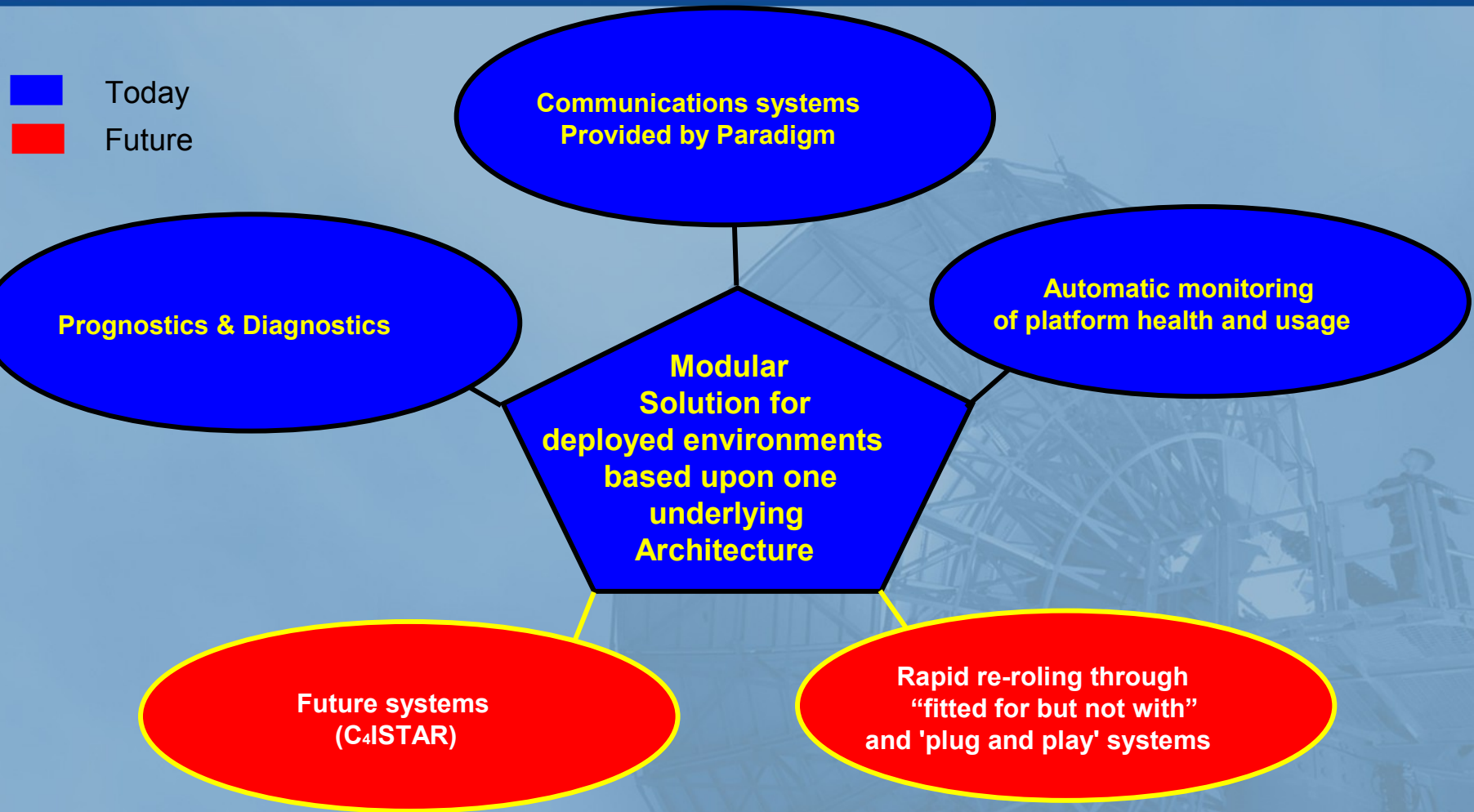
How will the DIT Service be delivered? - A Modular Services Solution



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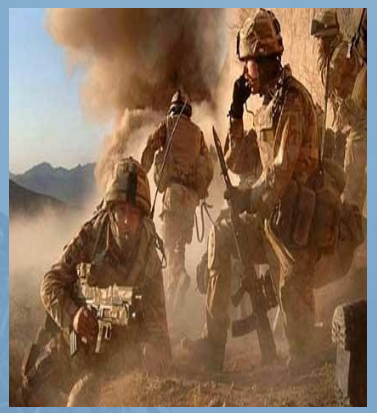
Summary
- Advantages & Benefits

- **Advantages of the DIT Service to existing operational capabilities:**
  - Superior Asset Management
  - Intelligent Logistics
  - Complementary to existing communications
  - Enhanced C⁴ISTAR data capture
    - virtual “real-time” Situational Awareness & Intelligence Gathering



- Benefits of the DIT Service:
  - Improved operational effectiveness
  - Better logistical budget management
  - Accurate & appropriate asset spares holdings
  - Enhanced asset performance & maintenance
  - Bespoke solutions to meet individual customer requirements
  - **Reduces exposure to potential life threatening scenarios**