



A complete, sustainable
support solution for your
telecoms network.



120K

PARTS
IN STOCK

15K

SQ.FT WAREHOUSE
SPACE

30K

NODES UNDER L3
SUPPORT

CUSTOMERS IN

100+

COUNTRIES

Contents

- About Us 3
- Our Customers 4
- Our Services 5
- Parts Supply 6
 - Legacy Equipment 7
 - Transceivers Repair & Refurbishment 8
 - Repair Process 9
 - Repair Statistics 10
- Network Support Services 11
 - 24/7 L2 & L3 Remote Technical Support 12
- Deinstallation 13
- Asset Management 14
- Recycling 15
- Case Studies 16
- Contact Information 17

About Us

Creating sustainability through ongoing telecoms support.

Carritech is a highly experienced telecommunications network support provider, specialising in the supply and ongoing support of legacy equipment. We balance the need for sustainability with a business model that generates maximum revenue for our clients.

Our management team have many years of experience within the carrier telecoms industry that has helped to develop and refine each of our core services: spare part supply, asset management, remote technical support, hardware support and WEEE recycling.

Carritech was founded in 2010 by Miguel Asin and Bruce Sutherland who had the vision to offer services that extend the life of existing telecommunication networks but generate maximum revenue, reduce expenses and help organisations meet their environmental goals. Our management team has since expanded...

Based in the UK and Spain, we supply and support a wide range of customers all around the world.

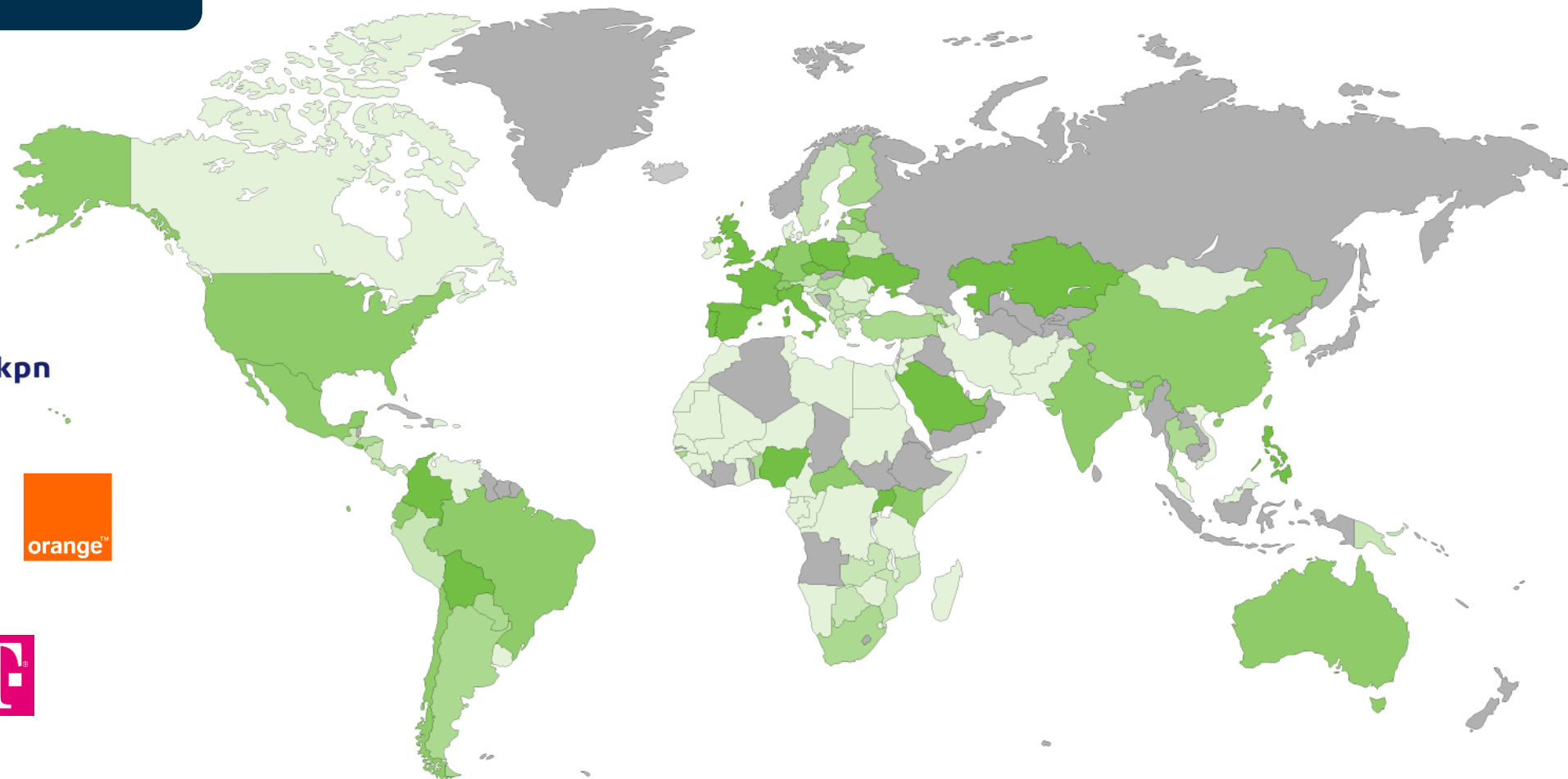


Visit our website to learn more about our team, our values and our company history...

Learn more



Our Customers



Legend: Number of customers per country



Our Services

We specialise in the support of legacy* telecoms equipment.



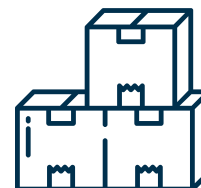
Parts
Supply



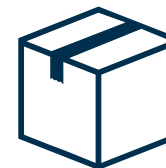
Network
Support Services



Repair &
Refurbishment



Asset
Management



Deinstallation



Recycling

*Denoting or relating to software or hardware that has been superseded but is difficult to replace because of its wide use



Visit our website for more information on all of our Support Services...

Learn more



We can support your network with replacement parts.

- **Transmission/Transport** – ATM, PDH, SDH, WDM
 - **Fixed Access** – ADSL, SDSL, VDSL, PON
 - **Mobile Access** – GSM, EDGE, UMTS, HSPA, LMDS, WiMAX
 - **Core Network** – TDM, NGN, IP, MPLS, DCME, Echo Cancellation
 - **Data Networking** – Data Routers, Switches, Modems, VIP
-
- All of our equipment is backed up with a comprehensive warranty from Carritech
 - Return rate is less than 1%
 - All the equipment we supply is screened and re-packed in new, unbranded ESD packaging
 - Advance Replacement available when equipment in stock.

These are a selection of OEM' we work with:



Visit our website for more information on our Parts Supply Services...

Learn more



Parts Supply > Transceivers

At Carritech, we supply a wide range of optical transceivers for network, server and storage systems:



We pride ourselves on providing the highest quality of products to our customers at all times.

Compatibility

All the manufacturer branded transceivers that we stock at Carritech are compatible with the major industry manufacturers such as Cisco, Juniper, Huawei or Nokia.



Visit our website for more information on our Parts Supply Services...

Learn more



Repair & Refurbishment

Avoid unnecessary waste and expense by repairing your existing equipment.

We offer repairs across the spectrum of network technologies, including:



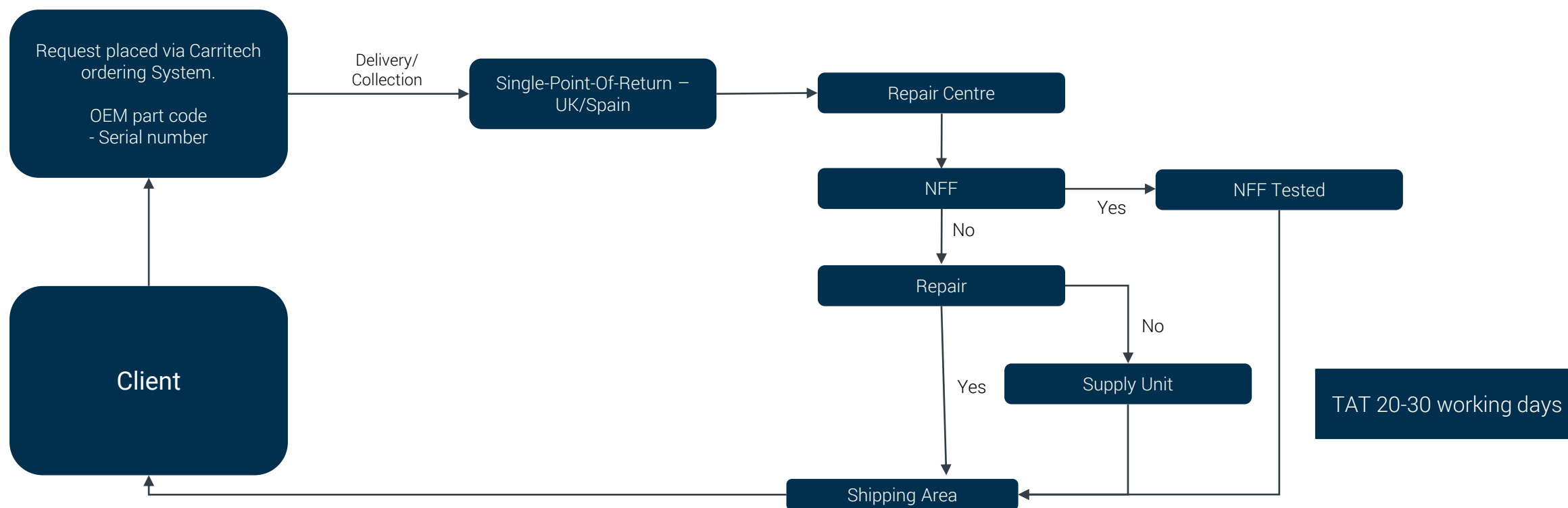
Visit our website for more information on our Repair & Refurbishment Services...

Learn more



Repair Process

We work directly with your business to create a simple, clear and painless process that streamlines the efforts required for repairs, without taking away from the comprehensive and thorough work that is carried out by our team.



Visit our website for more information on our Repair & Refurbishment Services...

Learn more



Repair Statistics

Our repair centre has over 30 years experience in the telecommunications repair and refurbishment industry.

The team, which includes 14 laboratory specialists, ensure that all repairs and refurbishment works are carried out to the highest possible standards and within the agreed timeframe.

	2020 - 2022
Number of cards repaired (total)	27650
ACCESS & DSLAM	10100
SDH	11220
WDM	4490
POWER	1840

No fault found (NFF)	7%
Unable to source components	0.4%
Repaired including special components	95%
Repaired under warranty	1%
Non-repairable (burned PCB)	5%



Visit our website for more information on our Repair & Refurbishment Services...

Learn more



Network Support Services

Maximise your network's operations with the support of **highly experienced engineers** based all around the world.

Carritech can provide Tier 2 and Tier 3 multi-vendor support across multiple technologies within your network, including Network Management Systems.

Allow us to maximise your network operations with:

- Highly experienced engineers based around the world
- 24 hour expert assistance every day of the year
- Support for current and legacy systems
- Tailored packages to suit your needs and budget



24/7 L2 & L3
Remote Technical
Support



Onsite Support



Preventative
Network
Maintenance



Network
Deployment



Network
Configuration



Network Services
Configuration



Network Upgrades/
Expansion Projects



Integration
Services

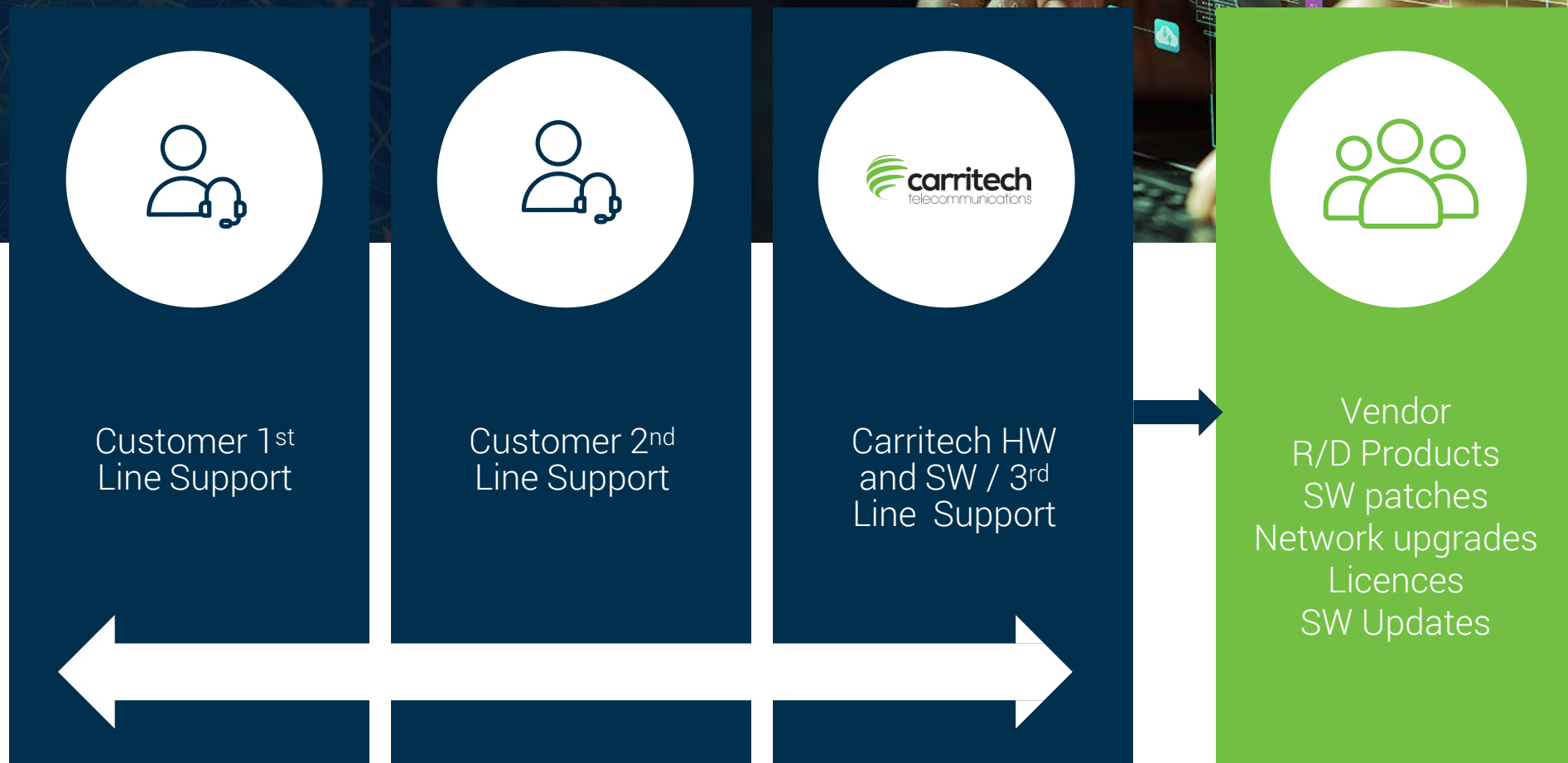


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Network Support Services > 24/7 L2 & L3 Remote Technical Support



Visit our website for more information on our Network Support Services...

Learn more

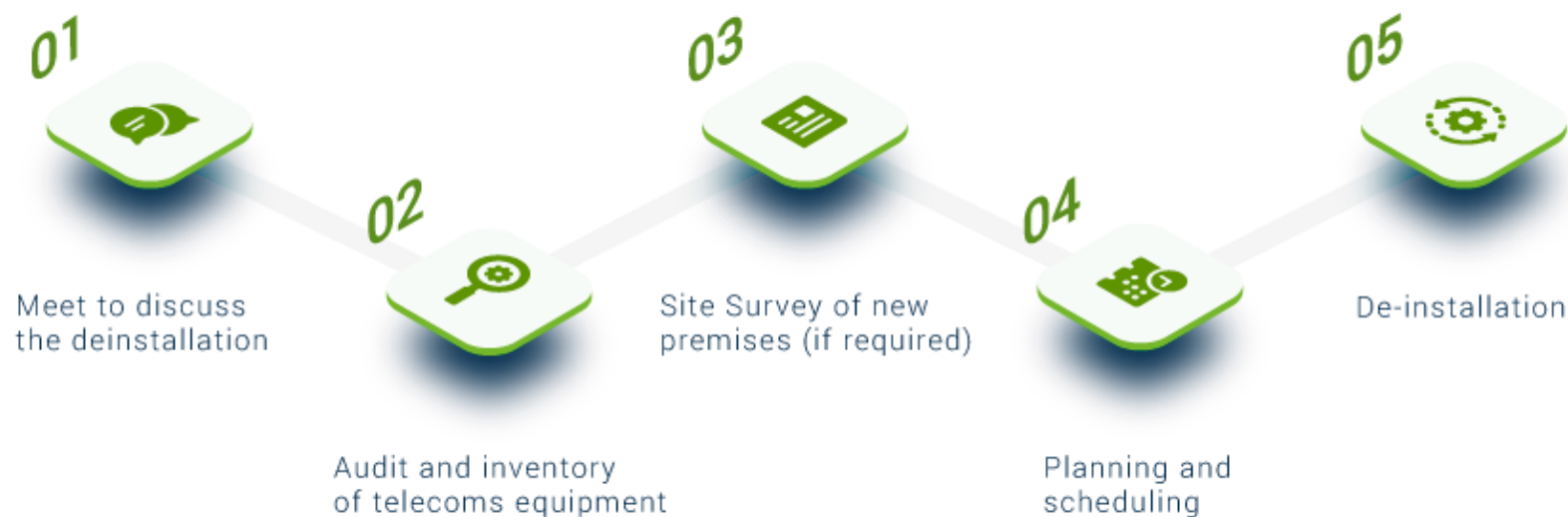


Deinstallation

Our team of experts can **deinstall** and create an inventory of your equipment.

Carritech can deinstall your network equipment and help you to get it ready for resale or recycling.

Our deinstallation services offers a methodical approach to the decommissioning of your network equipment:



Visit our website for more information on our Deinstallation Services...

Learn more



Asset Management

We can **market and resell** your equipment on your behalf.

Carritech can manage your surplus assets and provide you with the maximum available return on your investment.

Utilising our asset management services offers you:

- Hassle-free fully managed service
- The highest ROI and minimises costs and liabilities
- Equipment remains on your balance sheet until sold
- Equipment can be called back at any time to service unforeseen network requirements
- Monthly reporting and online portal
- Elimination of storage costs and improved stock visibility
- Employees focus on the core competencies of your business
- Overall reduction of environmental impact



Visit our website for more information on our Asset Management Services...

Learn more



Recycling

Recycle your unwanted equipment and help towards a sustainable future.

Our aim, always, is to sell your equipment, this is beneficial for you, for us and for the environment. However, this is not always possible, the equipment may be damaged, beyond repair, or just that the technology is too old for redeployment.

Working together, we will periodically review your stock and suggest equipment that we feel is no longer viable for resale and should be considered for recycling.



Visit our website for more information on our Recycling Services...

Learn more



Case Studies

We've worked with clients, **large and small** from all around the world.



Deinstallation of
redundant Ericsson AXE
– Operator in Germany



Ongoing supply of legacy
equipment – Operator in
South America



Remote Technical
Support L3 on Nokia
transmission network –
International Carrier



Ongoing supply of
compatible optics –
International Carrier



Visit our website for more information on our Asset Management Services...

Learn more



Case Studies

Deinstallation of redundant Ericsson AXE – Operator in Germany

Operator Challenges

An international operator was struggling to find a cost effective and available partner to remove a redundant AXE 10 that was due to be decommissioned in Frankfurt. Due to internal challenges, the equipment remained in service beyond original scope and had to be rapidly deinstalled once traffic was removed. Unfortunately, the operator did not have exact dates and needed a team on standby to respond immediately. To add to the issue, the property lease was coming to an end, and they would be faced with penalties if the floor was not cleared in time.

Carritech Solution

Our relationship manager was in daily contact with the operator on the status of the decommission and we were finally given the green light to proceed on a Monday afternoon. On Tuesday evening our team arrived in Frankfurt from the UK and were on site at 07:30 on Wednesday morning. The equipment had to be removed from the fifth floor by close of business on that Friday, allowing for three days to complete the project.

Our team worked tirelessly to remove 56 cabinets of AXE 10 BYB 202, including standby battery banks, DC power systems, UPS systems, cabling, associated peripheral cabinets, DDF's and other miscellaneous equipment.

We left the entire floor (300 sq.mt) empty and clean, with all material off site by 15:00 on the Friday.

Final Result

- Customer managed to have the entire floor clear of equipment by 15:00 on Friday, within four days' notice to Carritech
- Zero cost to the customer with Carritech making a payment for the equipment removed
- Highly reliable and dynamic service from Carritech
- Customer was delighted with our ability to respond and complete the work within such tight timescales
- Customers words at the debrief: "I cannot believe you managed to do it, I just didn't think that you would be able to get it out in time".



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Case Studies

Ongoing supply of legacy equipment – Operator in South America

Operator Challenges

We have an ongoing support contract, providing OEM (original equipment manufacturer) parts to our client that operates TDM technology throughout their network of over 5 million subscribers across three countries.

The OEMs were not able to supply 100% card coverage due to a legacy installed base within the network. This meant that the operator was pushed to apply a 40% OPEX (Operational Expense) reduction on OEM contracts.

Alongside this, due to the life-cycle of legacy equipment, the operator's hardware purchases made via the OEM contracts increased year-on-year. This, paired with ongoing delays with hardware delivery, were causing a negative impact on the customers SLA (service level agreement).

Carritech Solution

Due to a huge stock of legacy TDM and SDH technologies, we were able to offer the client a cost-effective solution, and provide the parts they needed with a saving of up to 75% compared with the OEM. We were also able to provide very short lead times to meet the client's needs.

Our experience and expertise with this equipment also allowed us to supply the parts with the specific regional firmware versions that the client needed for each of the three countries in the network.

Final Result

- Customer was able to extend the life of their telecommunications equipment for over 10 years. They were also able to add other legacy technologies to the support service provided.
- Total savings over 5 million US dollars.
- Highly reliable service. Less than 1% of faults found in the parts supplied by Carritech.



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Case Studies

Remote Technical Support L3 on Nokia transmission network – International Carrier

Operator Challenges

One of the biggest APAC international carriers, had planned to keep using their ATM/SDH (Ex-Alcatel) legacy network for three more years but the OEM could not offer a cost-effective solution for such legacy technology. This network includes the Network Management System with 16 servers replicated, a total of 32 servers, composed by five network management applications. The Network is composed by more than 27000 nodes covering SDH, DWDM, Ethernet over SDH, MPLS and ATM technologies.

As the customer already had a solution for L1 and L2 support and also had their hardware needs covered, by ramping down the network they decided to approach for a reliable partner to provide L3 technical support, on HW and software.

Carritech Solution

Despite the time zone difference, in less than 30 days Carritech along with a local partner from APAC started to provide an ongoing 24x7 support with the same demanding SLA as the OEM, that is defined as Gold Service. This includes several engineers permanently on call and an average resolution of 10+ tickets per month.

Final Result

- Substantial OPEX reduction.
- 4th year of support, in a year-by-year contract basis
- Customer is still using the legacy network while ramping its size down gradually.
- SLAs and KPI achievement



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Case Studies

Ongoing supply of compatible optics – International Carrier

Operator Challenges

After paying for overpriced optical transceivers from the original manufacturers for years, our client was looking to reduce their spend and source products from an alternative source. However, they were concerned about the quality and reliability of the products they were looking to purchase.

The client decided they needed to work closely with two alternative providers, who could provide a cost-effective supply of many different types of transceivers. These products were compatible with a range of manufacturers, including Cisco, Huawei, Juniper, Raisecom and RAD.

The client requirements included supplying the products to several countries around the world. Carritech's job was to ensure that the products were checked and packed correctly and that the required corresponding documentation matched each of the corresponding country requirements.

Carritech Solution

After the initial quotation stage, our optical transceivers were tested by the client, to ensure that they were fully compatible, reliable and effective within their network. They had to withstand particularly hot and humid conditions, so this testing was extremely important.

Our products passed all tests and we were chosen as one of the two suppliers required by our client.

Because our range of optical transceivers are technically identical to vendor equivalent products, they provide the same level of service at a fraction of the cost. They are also interoperable across several systems from different vendors and so provide a level of flexibility not achievable with OEM products.

Not only that, but we also offer certain models which can reach longer distances than the vendor equivalents while retaining the same quality of service.

Final Result

- Decrease of stock holdings whilst ensuring a huge product cost reduction, save money on support costs and limit running cost as well.
- The client was able to reach longer distances, which also reduces the need for unnecessary POPs (points of presence), repeaters and amplifiers to reach their customer's facilities.
- Simplification and improvement of their procurement processes.



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For more information on any of the points made within this presentation, please contact us directly via any of the following means:

Telephone: +44 203 006 1170

Email: contact@carritech.com



Visit our website at www.carritech.com

