



Who Do We Work With?

◆ Metro

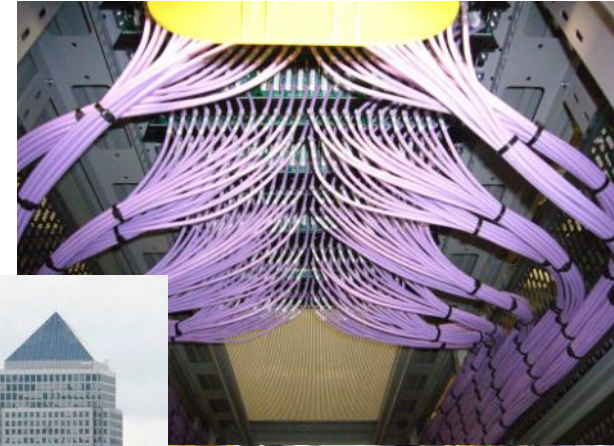
- Installing fibre and copper ties, plus data hall fit-outs, containment builds and upgrades

◆ Secondary Engineering

- Providing end-customer connectivity to the Verizon network

◆ Backbone

- Providing a turnkey solution for optical backbone installations



Cabling

- ◆ Installation, termination and testing
 - Fibre : 4 cores to 144
 - Cat.5 / Cat.6 / Cat.6A : 25-year manufacturer's warranty on all installations
 - (Austin Taylor, Brand-Rex or Hellermann Tyton, other manufacturers in the pipeline)
 - Coax
 - Multi-pair; Krone or wire-wrap termination
 - DC power and earth, Plus AC
 - (Now including electrical safety certificates)
 - Including Live Working

More Than Just Cabling

- ◆ Site Surveys, plus CAD Building / Room Plans
- ◆ Custom hardware
- ◆ Material supply
- ◆ Management of Subcontractors
- ◆ Handover Documentation
- ◆ Recovery of Redundant equipment and cabinets
- ◆ Rack Installations
- ◆ Containment Build and upgrades
 - Including ADC Fibreguide, tray and basket work

Hardware Supply



Custom made
vented doors for
Eurocraft racks



Fibre patch panels



Brush strip
grommet now
supplied and fitted
with all rack installs

Fit Outs

◆ Transport Room

- 5 x ADC NGFs, 2 x ADC FOX bays, 5 x Nortel PTE racks, 6 x 800x800 Cube Filter Cabinets, 4 x 800x600 Equipment Cabinets, 1 x ADC Ethernet Distribution Frame
- 4 x Telect DC Distribution Boards, 25mm² Dual DC Power Feeds + 70mm² earth
- Fibreguide + cable tray
- 16 x 144-fibre IFCs, 4 x 72-fibres, 12 48-fibres and Cat.5e ties

Fit Outs

◆ Transport Room

- 7 x ADC NGFs, 17 x Nortel PTE racks, 5 x 600x800 Equipment Racks, 6 x 800x800 Equipment Racks, 1 x ADC EDF
- 5 x DC Distribution Boards, 25mm² DC Power Feeds
- Fibreguide
- 10 x 144-fibre IFCs, 4 x 72-fibres
- Sleeved the slab penetration cut by others, provided first-aid and anti-static stations

Clock Installs

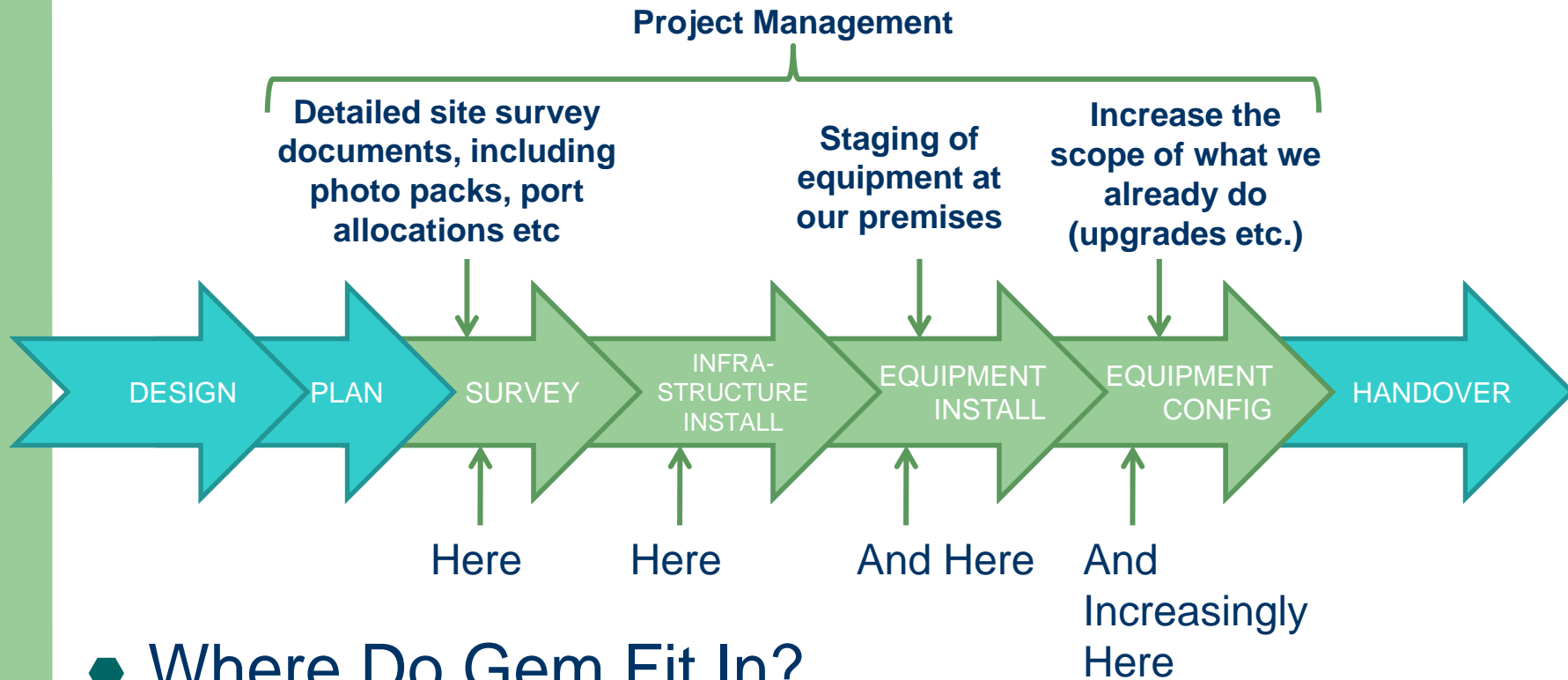
- ◆ Installation of Symmetricom Clock
- ◆ Antenna installation
- ◆ Custom 19" brackets plus under-floor termination boxes made up



Turnkey Installation

- ◆ From an empty footprint to a new network node with live circuits commissioned
- ◆ One-Stop-Shop for the installation and commissioning of
 - Ciena OME6500, OM5200
 - Fujitsu Flashwave 7120, 9500
 - Ericsson-Marconi OMS 800 (AXX9200, AXX9100)
 - Juniper and Cisco Routers

Project Lifecycle



- ◆ Where Do Gem Fit In?
- ◆ Where Can We Add Value?

To Sum It All Up

- ◆ Copper & Fibre cabling of course
 - 20-year performance warranty for Cat.5e and Cat.6 installations on top of our own 12-month materials and workmanship warranty
 - Coax, multi-pair, clock cabling (including antenna and equipment installations)
- ◆ DC power
 - Approved to install DC power, including Live Working
- ◆ AC power
 - Approved to install AC power, including Live Working
 - 17th Edition Certified engineers

To Sum It All Up

◆ Metro

- Installing fibre & copper ties, cabinets and containment, data hall fit-outs, upgrades to existing infrastructure such as cable/basket tray

◆ Backbone

- Turnkey installation for OME6500 nodes, including surveys, installation of rack, equipment, cabling & power, commissioning and testing

◆ Secondary Engineering

- Providing cabling connectivity on end-user sites, copper and fibre, plus equipment installation.

To Sum It All Up

◆ Installation and Commissioning

- Ciena OME6500 – all across UK and Mainland Europe
- Fujitsu Flashwave 7120, 9500
- Ericsson-Marconi OMS 800
- Juniper and Cisco Routers

◆ Upgrades

- Remote upgrades to over 500 OME6500 nodes across EMEA
- Remote upgrades to over 560 OME5200 nodes across EMEA

To Sum It All Up

◆ Site Surveys

- Including updating floor plans/CAD drawings/Photo Packs

◆ Custom Hardware

- Vented cabinet doors, custom patch panels, under-floor coax boxes, vented floor tiles – anything and everything else.

◆ Supply of Sundry Components

- OM3 fibre, patch cords, breakers, patch panels, brush strip grommets etc.

To Sum It All Up

- ◆ Management of Subcontractors
 - If required; meaning Customer staff need not be present on site
- ◆ Handover Documentation
 - From simple test results to complete 'As-Built' packs for a Backbone install
- ◆ Equipment recovery
 - De-commission equipment, recover fibres & other cabling, removal and recovery of racks, storage and re-distribution

To Sum It All Up

◆ Fibreguide Upgrades

- 6” to 12” upgrades carried out between 00:00 and 06:00

◆ Data Hall Fit-Outs

- Installation of cabinets, racks, containment.
Supply of ancillary items such as anti-static test points, first-aid points, blackout blinds, etc.

To Sum It All Up

- ◆ Years of Experience Working With Our Key Customers
 - We work to the standards required without needing to be instructed
 - Familiar with all Customer sites, under normal circumstances we do not require an escort, freeing up personnel.