## Competitive Landscape, Technology & Vendors

<table>
<thead>
<tr>
<th>Companies</th>
<th>Optical Networking Segmentation and Major Equipment Vendors</th>
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<tbody>
<tr>
<td></td>
<td>Long Haul DWDM</td>
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<td>ADVA</td>
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<tr>
<td>Alcatel-Lucent</td>
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<td>BTI</td>
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<td>Ciena</td>
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<td>Cisco</td>
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<td>Coriant (NSN)</td>
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<td>Cyan</td>
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<td>ECI Telecom</td>
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<td>Ericsson</td>
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<td>Fujitsu</td>
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<td>Tejas</td>
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<td>Transmode</td>
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<td>ZTE</td>
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Optical Market Revenue Contribution/Segment

Optical Market Revenue Segmentation

- MSPP
- Metro WDM
- Long Haul DWDM
- POTS
MSPP & POTS Segment

**MSPP $3.1 B**
- ZTE 30%
- Huawei 20%
- Adtran 1%
- Alcatel-Lucent 13%
- Ciena 3%
- Coriant 4%
- ECI Telecom 5%
- Fujitsu 5%
- Ericsson 11%
- Tellabs 2%
- Tejas 0%
- NEC 4%

**POTS $1.65 B**
- Alcatel-Lucent 5%
- Huawei 10%
- Fujitsu 16%
- Cyan 8%
- ECI Telecom 4%
- Tellabs 9%
- BTI 8%
- Ciena 13%
- Cisco 22%
- Ericsson 1%
- Tejas 1%
- MRV 2%
Long-Haul DWDM & Metro WDM

Long-Haul DWDM $4.35 B

- Huawei: 37%
- Infinera: 10%
- NEC: 1%
- ZTE: 13%
- Alcatel-Lucent: 11%
- Ciena: 15%
- Coriant: 9%
- Ericsson: 4%

Metro WDM $3.9B

- Huawei: 26%
- Fujitsu: 12%
- NEC: 6%
- MRV: 2%
- ECI Telecom: 2%
- Ericsson: 2%
- Tejas: 1%
- Transmode: 4%
- Adtran: 1%
- ZTE: 6%
- Alcatel-Lucent: 9%
- ADVA: 7%
- Ciena: 7%
- Cisco: 12%
- Coriant: 2%
Optical Network Regional Segmentation

Regional Segmentation w/Top 5 Vendors & Technologies

Ciena
Cisco
Fujitsu
Infinera
Tellabs

- 1. Metro
- 2. POTS
- 3. LH
- 4. MSPP

Huawei
ZTE
ALU
Ciena
Tellabs
Ericsson

- 1. LH
- 2. MSPP
- 3. Metro
- 4. POTS

APAC 37%
NA 29%
EMEA 26%
CALA 8%

Huawei
ZTE
ALU
Ericsson
Ciena

1. LH
2. Metro
3. MSPP
4. POTS

ACG RESEARCH
Trends & Conclusion

• Market Drivers 2014 Trend
  • Wireline Services (VPNs, VLANs) (growing)
  • Wireless Services (Back Haul) (flattening)
  • Data Center Interconnect and Virtualization (strong)
  • New Services M2M, Security (starting)
  • Submarine (strong)

• Companies to watch
  • Top Three most influential (% total WW market share)
    • Alcatel-Lucent (11%), Ciena (11%), Huawei (25%)
  • Marlin Equity Partners now owns: Coriant (NSN), Sycamore, Tellabs
  • Ericsson and Ciena’s Strategic Global Agreement
  • VZ allocation of Cap-Ex between Alcatel-Lucent & Ciena
  • Infinera (3%) has climbed to a top 5 player in Long Haul DWDM segment
  • #1 Cisco (7%) and #2 Fujitsu (6%) battle for leadership in POTS segment

• ACG Research Forecasts a 6.6% CAGR for the Period 2014-2018
# ACG Research Contact Information

<table>
<thead>
<tr>
<th>Company</th>
<th>Sales</th>
<th>Contact</th>
</tr>
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<tbody>
<tr>
<td>Fax: 775-996-7097</td>
<td>Corporate Offices</td>
<td>Facebook: <a href="http://www.facebook.com/#/group.php?gid=265192812106&amp;ref=ts">http://www.facebook.com/#/group.php?gid=265192812106&amp;ref=ts</a></td>
</tr>
<tr>
<td><a href="mailto:info@acgresearch.net">info@acgresearch.net</a></td>
<td>Telephone: 408.200.0967</td>
<td>LinkedIn: <a href="http://www.linkedin.com/companies/744154">http://www.linkedin.com/companies/744154</a></td>
</tr>
<tr>
<td><a href="mailto:sales@acgresearch.net">sales@acgresearch.net</a></td>
<td><a href="mailto:kgrenier@acgresearch.net">kgrenier@acgresearch.net</a></td>
<td>Twitter: <a href="http://twitter.com/ResearchACG">http://twitter.com/ResearchACG</a></td>
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