



Global Crossing
Genesis
Solutions

Global Crossing Genesis Solutions



Global Crossing®
Think Ahead

Global Coverage with a Worldwide Fiber Network



Global Crossing

- First carrier to deploy global MPLS network in 2001.
 - Transporting 18 Pbps IP traffic on average per day.
- With the acquisition, the Genesis reach expands from 70 cities in 23 countries to more than 700 cities in more than 70 countries

HD encoder inventory:

- **GCGS operates more than 50 HD/3D encoders in support of our OU and Events activities:**
 - EPL football
 - Formula One
 - Grand Slam tennis
 - MLS soccer
 - Other Sports and News requirements
- **A variety of manufacturers:**
 - Ateame, Cisco, Ericson, Harris, Tandberg
 - Managing software versions\revisions a real pain!

Customer encode preferences:

- **A mix of formats based upon the specific customer requirements:**
 - MPEG-2 4:2:0 and 4:2:2 8-bit sampling
 - MPEG-4 4:2:2 with 10-bit sampling
- **Data rates also very customer and venue dependent:**
 - SD contribution typically in the 20-40 Mbps range
 - HD contribution in the 20-80 Mbps range
 - Driven by cost of bandwidth from the venue

3D in the first year involved some technical compromises as chosen by the customer:

- **Most feeds were either horizontally or vertically “split” signals (halving the horizontal or vertical resolution, respectively) driven by left eye/right eye signal timing issues.**
- **We are now seeing more full bandwidth discrete left eye / right eye signal paths being requested.**

We have yet to deploy JPEG-2000:

- **Driven by customer demands; we'd be happy to buy just about anything**
- **Generally accepted that signals need to be North of 80 Mbps in JPEG to get the full benefits**
- **Where local loop and long haul costs are moderate and where customer budgets are bigger, JPEG will start to make more sense**

Near Term Plans:

- **We are busy building out into about ten major LatAm cities to support news and sports traffic**
- **Planning our activities for the PanAmerican Games, World Cup (Brazil), Olympics (London and Brazil)**
- **Over the next 12 months, post Level 3 – Global Crossing integration, we plan to integrate our automated IRIS provisioning system and roll out our capabilities into more venues and customer premise locations worldwide**

Global Coverage with a Worldwide Fiber Network

