SATELLITE 2008
SHOW DAILY
DAY 3 » WEDNESDAY » 02.27.08

FSS CEOs Discuss New Market Opportunities

BY MARK HOLMES AND JESSICA PEARCE

While fixed satellite services operators remain intent on expanding their core video markets, opportunities for new services dominated the conversation at SATELLITE 2008's opening general session, "Expanding Market Growth and Driving Applications."

One of the discussions focused on the potential for providing broadband services and particularly the role of dedicated Ka-band satellites. All FSS operators are looking to play a more prominent role in this market, but there were disagreements in terms of the best way to monetize the opportunity.

Photo by Lisa Czaplicki.

The CEOs of the major FSS operators discuss opportunities to develop business segments such as satellite broadband and mobile video.

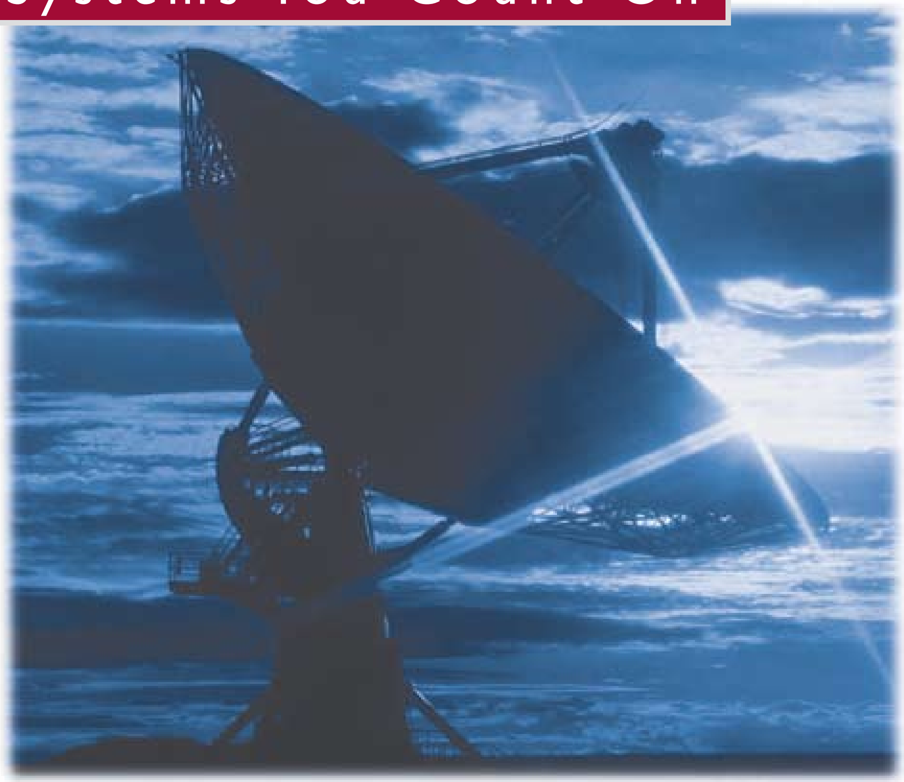
Eutelsat ordered a dedicated Ka-band satellite in January, making a clear statement of intent in terms of satellite broadband. "We have the courage to start a Ka-band project, the biggest we have ever tackled," said CEO Giuliano Berretta said.

Eutelsat's approach is in marked contrast to SES, which does not see the need to operate a dedicated Ka-band satellite in order to take advantage of this market, said CEO Romain Bausch, who emphasized the service over the technology used to deliver the service. "We are speaking about a niche market," he said. "We see a good response on the market. We will decide later whether to invest in a dedicated Ka-band satellite. There is nothing magic about Ka-band."

David McGlade, CEO of Intelsat, said satellite broadband will only work in markets where certain dynamics are favorable. "I think in some countries satellite over broadband will not take off," he said. "When you look at large geographies, large underserved communities, there will be a demand for those services. The strength of satellite communications is point-to-multipoint. There are all kinds of things we can do that terrestrial providers that do."

page 8 ▶

Systems You Count On



Performance

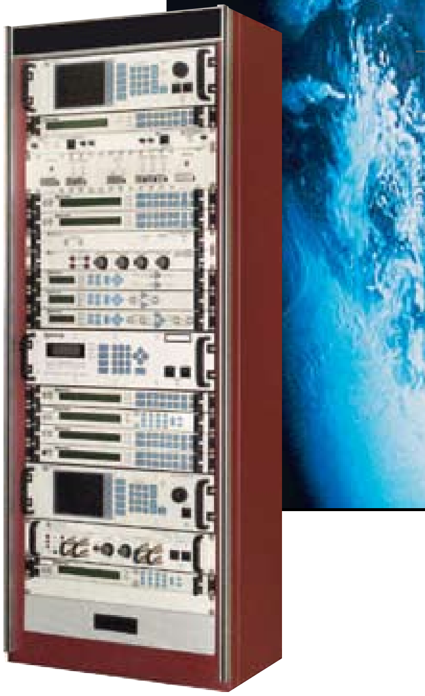
Quality

Reliability

Dependability

Integrity

Ingenuity



Begin With Equipment You Depend On!

Backed By A Company You Can Rely On!

- Synthesized Upconverters/Downconverters
- 1:1 and 1:N Redundant Switchover Units
- Variable Group Delay/Amplitude Equalizers
- Amplifier Systems
- INMARSAT Equipment
- Translators
- Custom Products
- RF Fiber Optic Links

To receive your copy of MITEQ's Communication Products Catalog, also available on CD-Rom, please contact MITEQ's SATCOM Sales Department at (631) 439-9108 or satcomsales@miteq.com

In order for MITEQ to better serve you, please include a brief description of your applications or requirements.

ISO 9001 Registered

3 YEAR WARRANTY

MITEQ®

100 Davids Drive
Hauppauge, NY 11788
TEL.: (631) 436-7400 • FAX: (631) 436-7431
www.miteq.com

Mobile Services Take The Stage

SATELLITE 2008 turns its focus to the mobile satellite services (MSS) market, opening with a second General Session that will feature the top executives from the leading mobile providers. The CEOs will discuss the increased competition in the market as well as the new technologies being counted on to help the sector avoid the mistakes of the past.

After the opening session, the new MSS Forum will offer attendees five more sessions devoted to various aspects of the market, including discussions on "Ancillary Terrestrial Component: The Magic Bullet," "Delivering Broadband Anywhere: The Next Generation of Mobile Satellite Communications," and "Mobile TV: The Role of Satellites in an Increasingly Hybrid, Multimedia World."

One session, "Comms on the Move: Defining the Military Requirement," will appeal to those interested in both the MSS and the Military Forums. Panelists from industry and the Pentagon will examine the growing demand for mobile solutions from the U.S. military and how companies can meet the needs for more bandwidth, better security and lighter, more rugged equipment.

The second day of the Military Forum also features sessions on "European MilSatCom: Trends for the Sixth Decade" and what is sure to be a lively discussion during "ITAR Impact: What Does the Future Hold?". The panelist, including Rep. Ellen Tauscher (D-Calif.), will looks at U.S. Department of State's export regulations and their ongoing impact on the commercial satellite industry.

Wednesday also is the day Via Satellite fetes the 2007 Satellite Executive of the Year winners — the team of executives that led the successful fight to retain unfettered use of C-band for the industry. Join us to as we honor them at both the award presentation luncheon sponsored by Boeing and the Executive of the Year reception sponsored by Arianespace.

With so many choices — as well as needing to devote time to the exhibit floor — it is impossible for a single person to catch everything, so be sure to pick up your copy of the *Show Daily* as well as check out SatelliteTODAY.com for our show blog. ■

Jason Bates

Editorial 301/354-2000
JASON BATES, Editor, ext. 1807
MARK HOLMES, Associate Editor
JULIE BLONDEAU SAMUEL, Managing Editor, Online Producer, ext. 1770
JESSICA PEARCE, News Editor, ext. 1805
JENNIFER O. NEWMAN, Copy Editor
Contributing Writers
SAM SILVERSTEIN
GREG BERLOCHER
LINDA THORNBURG

Design/Production
LISA CZAPLICKI, Senior Graphic Designer
SOPHIE CHAN-WOOD, Production Manager 301/354-1671

Conference Services
SUSAN CUEVAS, CEM - Director, Trade Show Operations and Logistics
JENN HEINOLD, Director, Tradeshow Marketing
RACHEL WEINTRAUB, Events Coordinator
MICHAEL CASSINELLI, Exhibit Sales Manager

Audience Development
STUART BONNER, Audience Development Director
GEORGE SEVERINE, Fulfillment Director

Client Services
REPRINTS:
Client Services, clientservices@accessintel.com
Tel: 800/777-5006 or 301/354-2101
Fax: 301/309-3847
LIST SALES: 800/331-8102
CUSTOMER SERVICE: 847/559-7314
JANIS DAVIS, Advertising Support 301/354-1768

Marketing
JILL BRAUN, Senior Marketing Manager, *Via Satellite*

Access Intelligence, LLC
DON PAZOUR, Chief Executive Officer
ED PINEDO, Exec. Vice President & Chief Financial Officer
PAUL F. MCPHERSON, JR., Divisional President, Access Intelligence Business Media
MACY L. FECTO, Exec. Vice President, Human Resources & Administration
JOE ROSONE, Vice President & Satellite Group Publisher
SYLVIA SIERRA, Senior Vice President, Corporate Audience Development
MICHAEL KRAUS, Vice President, Production and Manufacturing
ROBERT PACIOREK, Senior Vice President & Chief Technology Officer
STEVE BARBER, Director, Financial Planning & Internal Audit.

Subscribe to Via Satellite digitally at www.omeda.com/vs

Visit us on the Web at www.SatelliteToday.com

Access Intelligence
4 Choke Cherry Road, Second Floor
Rockville, MD 20850
Phone: 301/354-2000, Fax: 301/340-3169
Email: jdavis@accessintel.com
Web: www.viasatellite.com

Printed in U.S.A.

Schedule of Events At-A-Glance

Wednesday, February 27, 2008

Start Time	End Time	Room No.	Session
7:00 AM	6:00 PM		Registration Hours
7:30 AM	8:30 AM		Rise-n-Shine Coffee Service

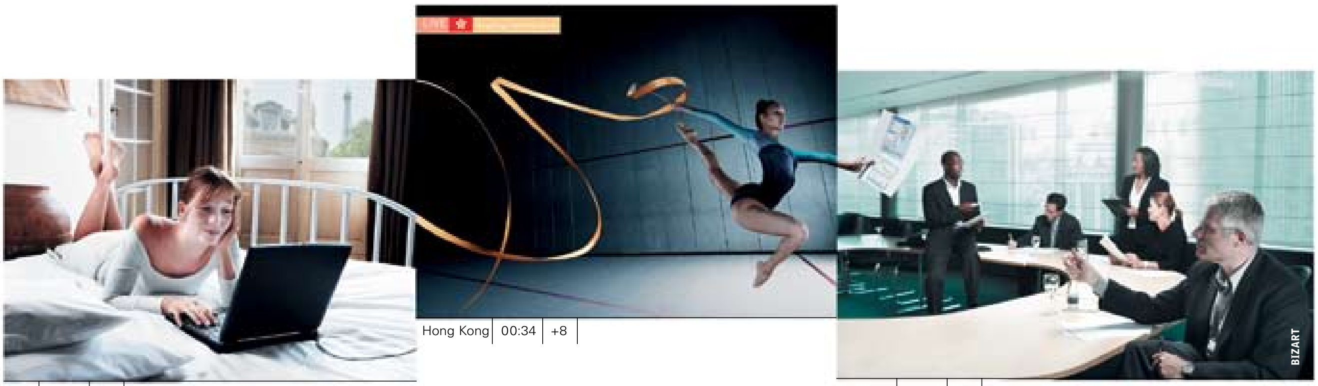
GENERAL SESSION

Start Time	End Time	Room No.	Session
7:45 AM	8:45 AM	143	**Exhibitor Education:** GSA Scheduling Contracting 2008
8:30 AM	10:00 PM	202AB	**General Session: Mobile Satellite Services:** MSS Industry Leaders Stake Their Claims
9:00 AM	6:00 PM		**Exhibit Hall Open**

CONCURRENT SESSIONS

Start Time	End Time	Room No.	Session
10:15 AM	11:30 AM	204C	**The Middle East:** Oil, Commerce & Other Enterprise Applications
		209AB	**Comms on the Move (COTM):** Defining the Military Requirement
		204AB	**Non-Stop Telco Networks:** The Satellite-Enabled Proposition
		207B	**World Radio Conference Results:** Impact and Prophecy
		207A	**Ancillary Terrestrial Component (ATC):** The Magic Bullet?
11:30 AM	1:45 PM	Ballroom A	**Satellite Executive of the Year Award Presentation Luncheon**
1:45 PM	3:00 PM	204C	**Asia:** Can the World's Largest Region Live Up to Expectations?
		209AB	**ITAR Impact:** What Does the Future Hold?
		204AB	**Corporate Satellite Networks:** Building Value on the Bottom Line
		207B	**IPTV:** Ready for Primetime?
		207A	**Delivering Broadband Anywhere:** The Next Generation of Mobile Satellite Communications

One moment. One satellite network. Infinite connections.



Paris | 17:34 | +1

Hong Kong | 00:34 | +8

New York | 12:34 | -5

We make connections in the most unexpected places.
Satellite services create the links that help people to do the most ordinary - and sometimes the most extraordinary - things.
We really are part of the fabric of life.

www.ses.com

Your Satellite Connection to the World

SES

SES (Euronext Paris and Luxembourg Stock Exchanges: SESG) is the world's pre-eminent satellite group, providing unrivalled satellite distribution infrastructure and application services to media, enterprise and government customers worldwide. The fleets of the SES operating companies SES AMERICOM, SES ASTRA and SES NEW SKIES offer comprehensive and secure coverage, reaching out to 99% of the world's population. Together, the SES companies are the providers of choice for satellite capacity and transmission solutions for audio-visual broadcasting, data transmission and communication networks. At SES, we offer local expertise as well as global reach.

Schedule of Events At-A-Glance

Tuesday, February 26, 2008

CONCURRENT SESSIONS CON'T

3:00 PM	3:15 PM		**Refreshment Break** (In Exhibit Hall)
3:15 PM	4:30 PM	204C	**Latin America:** The Rise of a Regional Satcom Power
		209AB	**European MilSatCom:** Trends for the Sixth Decade
		204AB	**Satellite Market Statistics:** The Numbers Speak Volumes
		207B	**Mobile TV:** The Role for Satellites in an Increasingly Hybrid, Multimedia World
4:30 PM	5:45 PM	204C	**Africa:** Getting Past the Satellite Capacity Crisis
		207B	**Satellite Manufacturer CEOs:** The Spacecraft Connection
		207A	**Satellites Serving the Public Interest:** Safety, Security and Service
		204AB	**Digital Signage:** Bringing the Message Out of the Home and Onto the Store Floor
6:00 PM	8:00 PM		**Via Satellite's Satellite Executive of the Year Reception** (City Museum of Washington)

FSS CEOs

from page 1

While there is a risk in investing in Ka-band satellites, Telesat CEO Dan Goldberg sees the investment paying off in the end. "Even if you are not competing with terrestrial, you need to go to this technology," he said. However, Goldberg warned that if satellite operators were not successful in attracting broadband subscribers this could present problems. "These are highly specialized satellites," he said. "You have much greater limitations with the satellites if satellite broadband does not work."

The operators also see high-definition services ready to become a strong growth driver for revenues. "HD is driving growth in all of the segments," said Bausch. "[Europe] may be a little behind [North America], but is still a strong opportunity for us."

While industry consolidation has left the four operators on the panel as the unquestioned largest in the industry, the CEOs seemed to agree that consolidation is not over. While there was no agreement on which steps may be next, it is unlikely that FSS operators will look to acquire mobile satellite services (MSS) operators to boost their mobile strategies. "You couldn't get synergies you need with MSS operators," McGlade said. Bausch agreed, but said, "There could be commercial cooperation with FSS and MSS players."

While all the CEOs believe the industry is in good shape, companies must avoid making the same mistakes that led to the wild market swings of the late 1990s. "I fear that our industry could get into a boom-and-bust cycle," said Goldberg. "We do need to be careful that we don't repeat the excesses of the late 1990s. There are a lot of smaller operators whose business plans who are not as well conceived as ours," he said. ■

Xicom put over 40 Watts of power into a shoebox?

Xicom Technology announces the expansion of its "shoebox-sized" block up-converters (BUCs) for mobile SATCOM applications. The family has been expanded to include new 40 Watt power versions which operate in the X-, Ku-, and extended Ku-band, and 50 Watts in C-band SATCOM frequencies.

Xicom has revolutionized the mobile SATCOM market with the smallest and lightest feature-rich BUC available today. These new antenna-mount BUCs are designed to meet the most demanding requirements for size, weight and high reliability. These units have been specifically designed for the demands of rugged, outdoor, mobile environments.

This is another example of Xicom's ability to continue to provide cutting-edge performance and functionality that meet and exceed the requirements of the mobile SATCOM market.

- **C-Band: 50 Watts**
- **X-Band: 40 Watts**
- **Ku-Band: 40 Watts**
  (Extended Ku-Band Available)
- **Ku-Band: 25 Watts**
  (Extended Ku-Band Available)
- **Compact Size:** 11.63 x 5.5 x 6.5 inches
- **Lightweight:** 15 Lbs.
  (Ideal for Antenna-Mount)
- **Internal Filtering**
- **Full Monitor & Control via Ethernet**
- **L-Band Input**
- **24/7 Technical Support**

You can't beat the combination of features and performance of Xicom amplifiers. These new BUCs are available in as little as 30-60 days ARO. Contact Xicom today and find out more.

xicom TECHNOLOGY
A RADYNE COMPANY

Amplifier Quality & Reliability Since 1991

3550 Bassett Street
Santa Clara, CA 95054 USA
Phone: 408-213-3000 • Fax: 408-213-3001

e-mail: sales@xicomtech.com • www.xicomtech.com

HD, Mobile Video Services Hold Promise For Satellite Firms

BY SAM SILVERSTEIN

Fast-growing consumer demand for high-definition TV (HDTV) at home and handheld entertainment devices that can operate anywhere have emerged as a key growth driver for the satellite industry, panelists at SATELLITE 2008 said Tuesday.

With prices for big-screen TVs falling and sophisticated wireless networks taking root around the world, rising numbers of people are embracing bandwidth-intensive technologies that are well-suited to satellite operators and ground system providers, Edward Berger, vice president of business development at Intelsat, said during the "Five for Five: Top Satellite Markets of the Next Half-Decade," session. "These developments are occurring even faster than some in the industry may have predicted."

Berger noted that he recently traveled to Singapore and was surprised to see people on the subway watching movies on handheld devices. "I was skeptical, but this is happening and it's happening now," he said. "Obviously this is very attractive to a leading operator such as ourselves."

Just as important as the rise of handheld video devices that drive consumers to watch ever-increasing amounts of programming is the sharp drop in the cost of HD screens that in turn is spurring broadcasters to produce more HD fare, said Nick Thompson, managing director of Arqiva Satellite Media Solutions. Arqiva, a U.K.-based satellite company, provides infrastructure for broadcasters and other communications companies.

With more HD sets in the hands of consumers, Arqiva expects the number of HD channels in the United Kingdom and throughout Europe to rise, helping boost demand for satellite capacity and ground systems to handle the large amounts of data needed to carry the high-quality pictures and sound, Thompson said. "HDTV is here and now. We see this as a very exciting development."

Even as satellite companies rejoice as the pipelines they operate carry ever-increasing amounts of programming to consumers, engineers are looking for ways to lower the cost of theses transmissions.

Mike Cook, senior vice president of sales and marketing for Hughes' North American division, figures even more HD programming will come to market if broadcasters can distribute it for less. Hughes is working on techniques to squeeze HD transmissions into less space, which likely would drive down the price of satellite and terrestrial links to carry programming to viewers.

"Technology is advancing in such a way that we're able to deliver HD [programming] much more cost effectively," said Cook.

Lower prices could significantly increase demand for HD transmissions, said Koby Zontag, CEO of RRsat Global Communications. "We're starting to see some growth but not as much as we had expected, Zontag said. "Some channels cannot afford the bandwidth … if we lower the amount of bandwidth needed, I believe it will help growth."

Beyond television channels for the public, Hughes is observing interest among customers that want to use HD technology for in-house networks that reach employees and customers. "We're seeing a striking desire to use high-definition programming even for internal applications," Cook said. "The technology is coming together to stimulate this demand."

The proliferation of screens has transformed homes, workplaces and pockets is also changing the look of public spaces, as companies and governments search for new ways to communicate with the public, the panelists said. Digital signage is popping up in subways systems, elevators and even public restrooms, creating a new market for companies that can feed these ever-changing displays with up-to-date information and video, they said.

"Everybody wants to be in touch wherever they are," Cook said. ■

Broadband, HDTV
Fueling Growth In European Market

BY GREG BERLOCHER

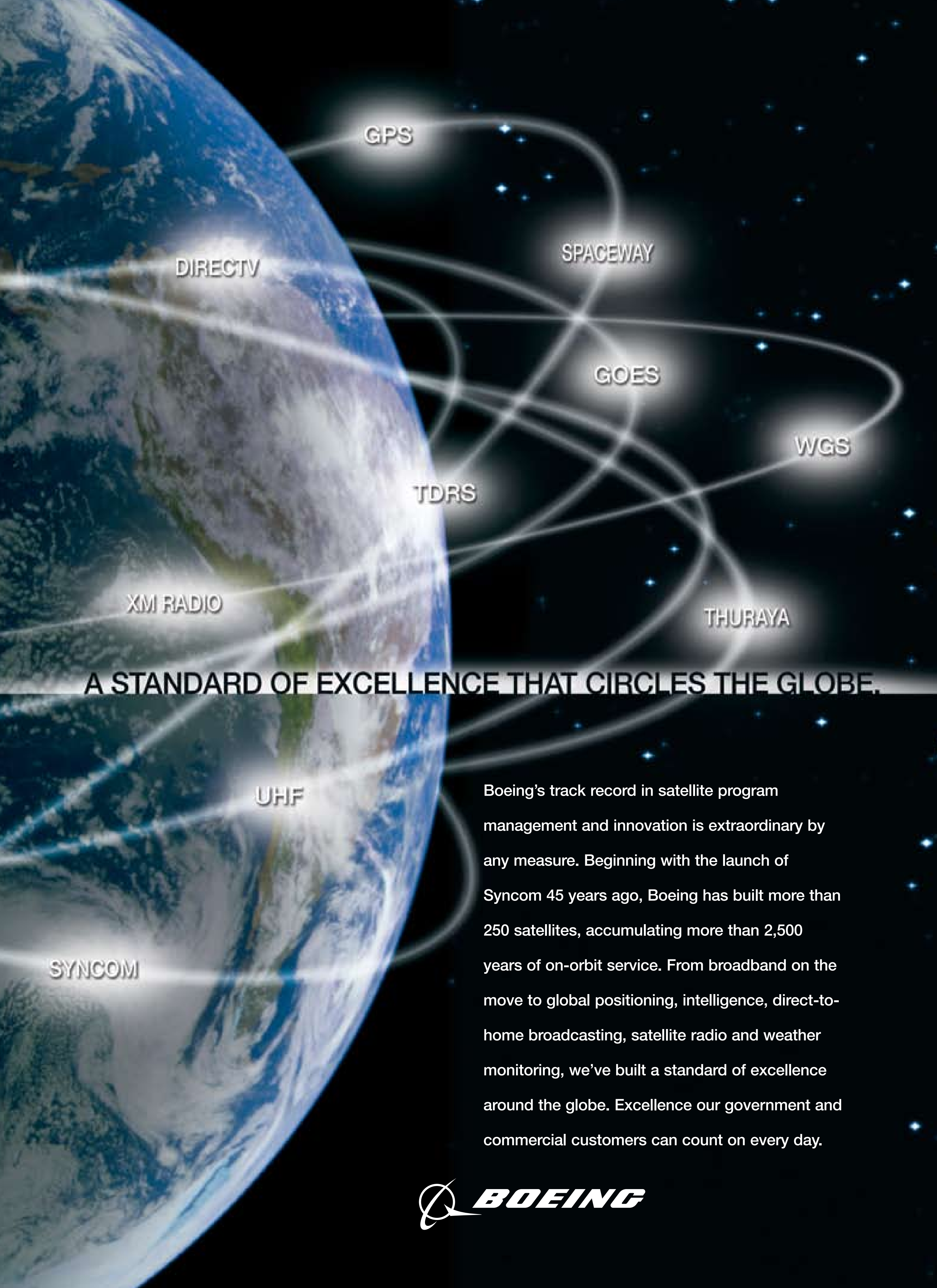
The outlook for continued growth in the European satellite market appears favorable, with demand for high-definition channels and broadband services fueling the growth. In addition, new services delivered via Ka- and S-band will begin to make an impact, according to a panel comprised of satellite operators, a hardware manufacturer, and an industry consultant.

Alexander Oudendijk, senior vice president and Chief Commercial Officer of SES Astra, cited three main areas of growth in the European market: media solutions, enterprise solutions and solutions for government and institutions. SES Astra is placing a heavy focus on the Netherlands as well Central and Eastern Europe.

"[Direct-to-home service] is the mainstay of our business but we are expanding into a number of new markets," Oudendijk said during the "Europe: Setting a Pace for Continued Expansion" panel Tuesday. "We look to acquire additional orbital resources, and conceive and develop new, profitable satellite products and services."

Christodoulos Protopapas, managing director of Hellas Sat, expects the adoption of HD programming to drive demand for transponders. "There has been an explosion of pay-TV platforms in Europe," said Protopapas, "Fifty-four new platforms have been launched in just the last three years alone."

Jeremy Rose, a senior consultant with Comsys,


GPS
SPACEWAY
DIRECTV
GOES
WGS
TDRS
XM RADIO
THURAYA
A STANDARD OF EXCELLENCE THAT CIRCLES THE GLOBE.
UHF
SYNCOM
Boeing's track record in satellite program management and innovation is extraordinary by any measure. Beginning with the launch of Syncom 45 years ago, Boeing has built more than 250 satellites, accumulating more than 2,500 years of on-orbit service. From broadband on the move to global positioning, intelligence, direct-to-home broadcasting, satellite radio and weather monitoring, we've built a standard of excellence around the globe. Excellence our government and commercial customers can count on every day.
BOEING

disagreed, noting that enterprise solutions are becoming less and less attractive for Western European companies and pointed out that Tesco (a large U.K. supermarket chain) is considering using a terrestrial network in lieu of their VSAT network to deliver digital signage. Rose also mentioned that Camelot, a European lottery system, no longer uses VSAT technology.

> We made the prediction 15 years ago that the only way Ka-band services would become viable is if customers were dragged along kicking and screaming. [...] Our prediction has turned out to be true.
>
> – Rose, Comsys

Specific geographic areas such as Eastern Europe, where wireless coverage is less than ideal, will remain good markets for broadband services, said Rose. While Ka-band and S-band offerings will bolster revenues, Rose said technical challenges, such as rain fade, will prevent the utilization of Ka-band services in mission critical applications.

"We made the prediction 15 years ago that the only way Ka-band services would become viable is if customers were dragged along kicking and screaming," said Rose. "Our prediction has turned out to be true. If it weren't for the scarcity of C- and Ku-band space segment, Ka-band offerings wouldn't have gotten off the ground."

Non-traditional satellite companies, such as Cisco, also are recognizing the growth market, said John Egan, the company's space initiatives director–Europe. Cisco has realized that the satellite industry has different needs and now tailors solutions for satellite players, establishing a satellite vertical market within Cisco's Service Provider Group, which represents 45 percent of the company's revenue. ■

WiMax Role Still In Question

Friends or Foes?

BY MARK HOLMES

While WiMax technology may be moving from hype to commercial deployments, the impact it may have in various markets around the world — as well as whether it is friend or foe to satellite — is open to question.

Drew Caplan, chief network officer for Mobile Satellite Ventures (MSV) said one of the questions is whether WiMax could move beyond being a niche technology. "I think we will see deployments on WiMax this year. They will center on fixed and nomadic applications," he said during the "WiMax and Broadband Wireless Networks: Opportunity or Threat for Satellite Communications" panel Tuesday at SATELLITE 2008. "The question is will it (WiMax) explode, and move towards true mobility and compete against 4G networks."

With Sprint potentially driving WiMax deployment in the United States, it could be a key couple of years for the technology. However, in other parts of the world, the potential for WiMax is uncertain.

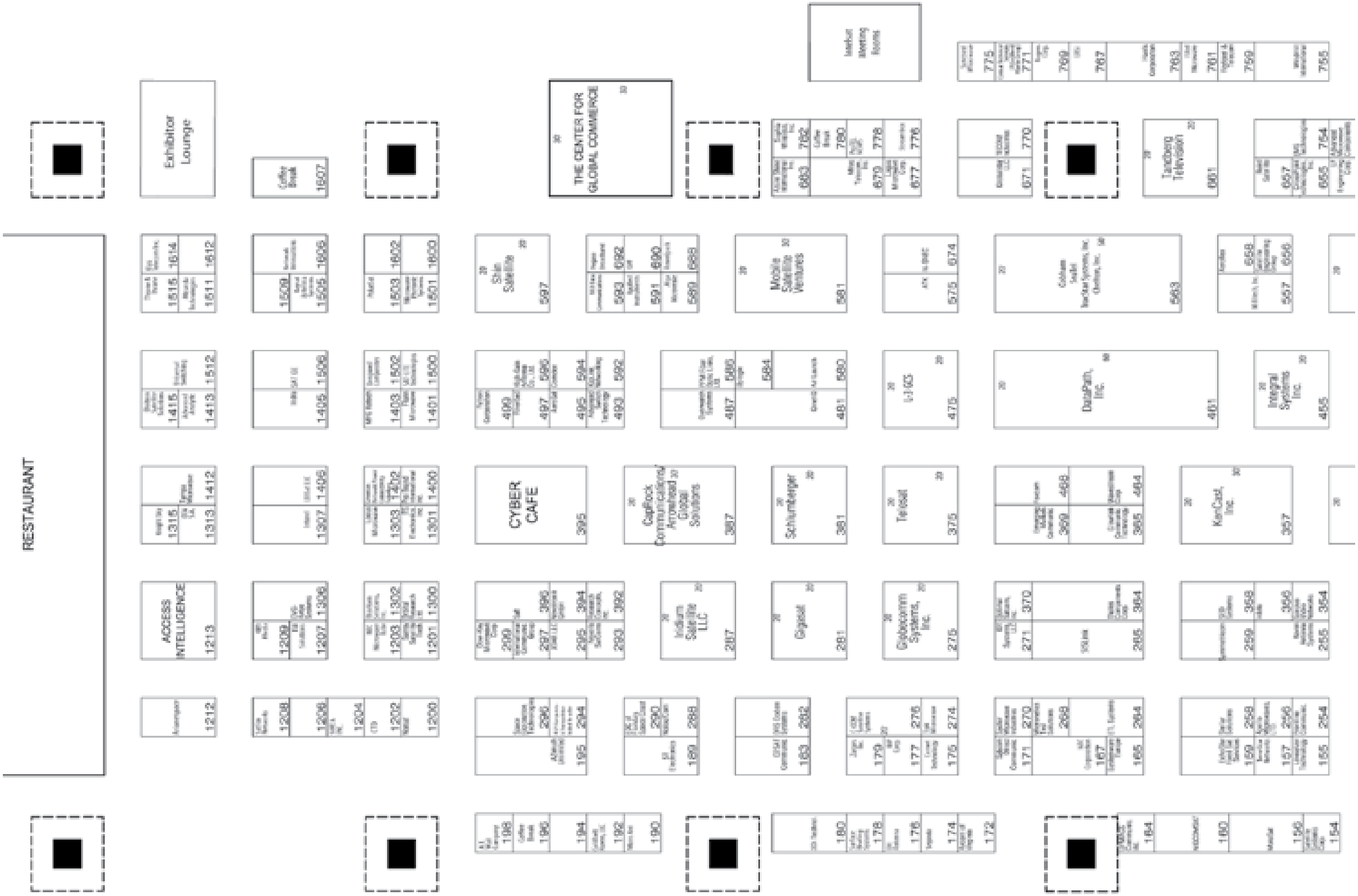
Patompob Suwansiri, head of marketing for Shin Satellite, said of the WiMax possibilities in Asia, "It is beyond the hype stage. It is too early to see deployments happening in Asia. Within the next year, we don't see any large WiMax deployments in Asia," he said.

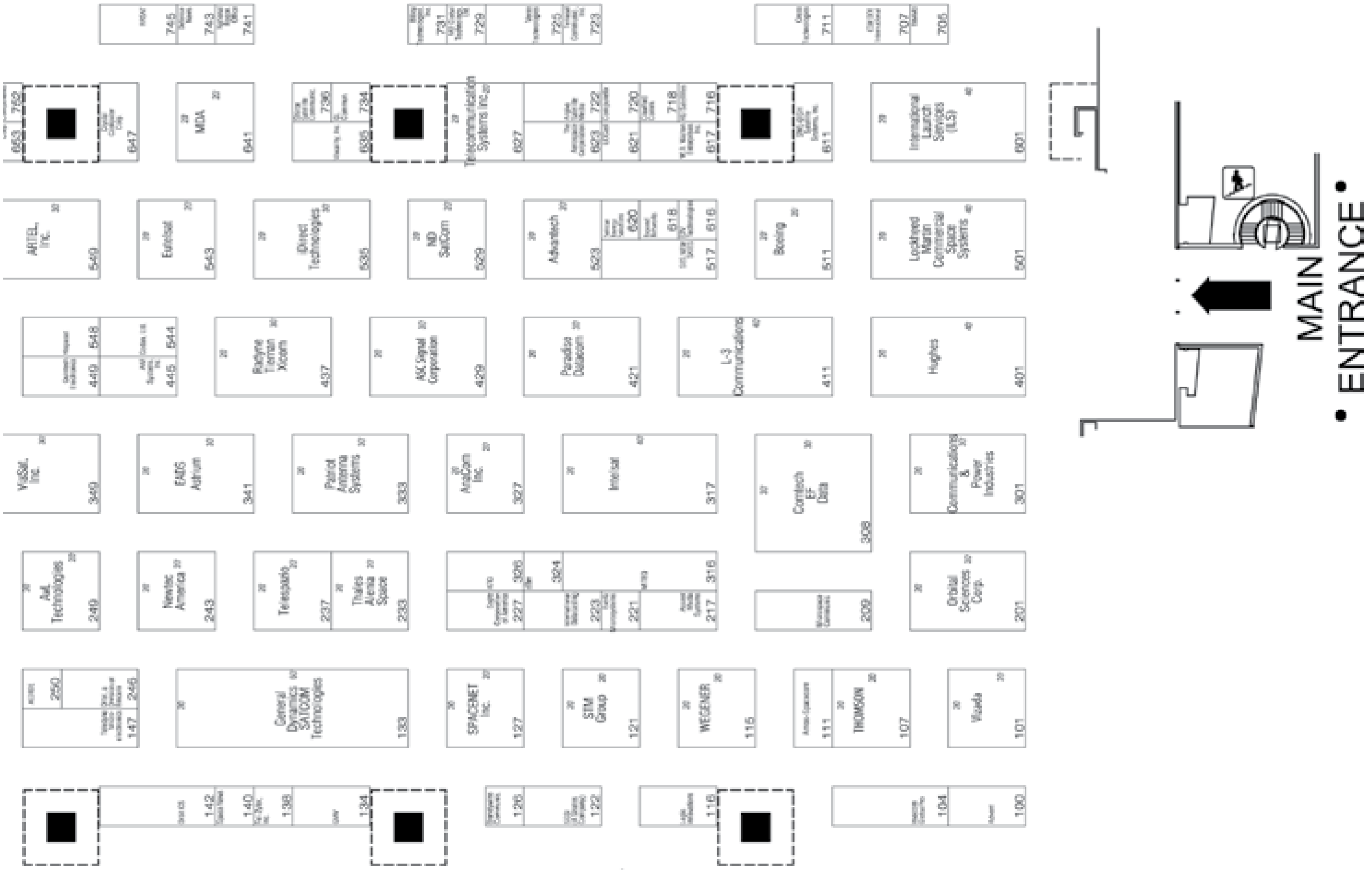
In terms of Europe, Laurent Thomasson, head of marketing and research and development coordination at EADS Astrium, said, "We feel confident there is a market for WiMax, but it is not concrete or high value yet," he said.

Doron Elinav, director of strategic marketing for Gilat Satellite Networks, sees different opportunities for WiMax in the developed world compared to the developing world but thinks WiMax and satellite can work together. "In the developed world I see less competition between satellite and WiMax," he said. "For the developing regions of the world satellite is not just used in rural areas. For these regions I see WiMax competing with satellite and

page 20 ▶

Exhibit Hall Map




MAIN ENTRANCE
International Launch Services (ILS)
601
Telecommunication Systems Inc.
627
MDA
641
647
ARTEL, Inc.
549
Eutelsat
543
iDirect Technologies
535
ND SatCom
529
Advantech
523
Boeing
511
Lockheed Martin Commercial Space Systems
501
Radyne Tiernan Xicom
437
AK Signal Corporation
429
Paradise Datacom
421
L-3 Communications
411
Hughes
401
ViaSat, Inc.
349
EADS Astrium
341
Patriot Antenna Systems
333
ArabCom Inc.
327
Intelsat
317
Comtech EF Data
308
Communications & Power Industries
301
Avl Technologies
249
Newtec America
243
Telespazio
237
Thales Alenia Space
233
Orbital Sciences Corp.
201
General Dynamics SATCOM Technologies
133
SPACENET Inc.
127
STM Group
121
WEGENER
115
THOMSON
107
Vizada
101

Optiva® L-BAND

New for 2008, the Optiva Series for L-Band satellite communication integrates the world leading Ortel RF fiber optic technology into the innovative Optiva Platform by Opticomm.

FEATURING: SmartGain™ Control

WiBa SERIES

Perfect for long distance satellite or cellular applications, the Ortel powered WiBa Series provides a cost-effective alternative to coaxial cable.

FOR MORE INFORMATION, VISIT US AT BOOTH 246

emcore
empower with light™

626 293 3400 | satcom-sales@emcore.com | www.emcore.com | NASDAQ: EMKR

WiMax

from page 14

causing it to disperse in less developed areas of those countries. I see this as the evolution of the technology. What was perceived as a threat has become an opportunity in terms of providing backhaul services."

There is already evidence of the two technologies working together, says Suwansiri, citing a recent demonstration in Vietnam. "In the WiMax world we are strategically partnering with industry drivers such as Intel to do proof of concepts. We are working with them so we get some insight on their roadmap. Last year we did a proof of concept in Vietnam. We connected a town in the north of the country with the integration of WiMax and satellite. It was successfully proven, and then Intel got the word out that satellite and WiMax can work together."

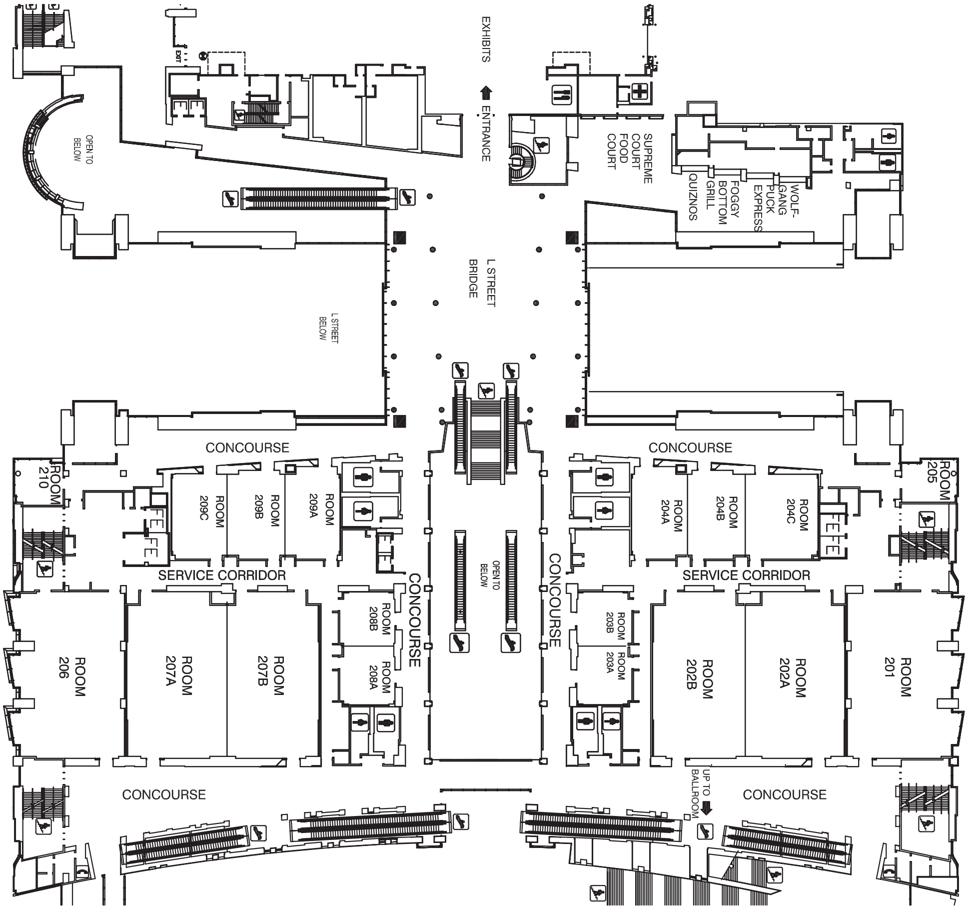
MSV wants to integrate the best of satellite and wireless technologies in order to bring the costs down in deploying services to customers.

"What MSV is pioneering is integrated services," said Caplan. "We are designing our terrestrial solution to be agnostic. WiMax and other terrestrial waveforms can play with satellite when done right. We think MSS (mobile satellite services) should not compete with what terrestrial does well, and that MSS services do a lot of things well that terrestrial does not. The biggest challenge is scale. What we are trying to do is bring the benefits of scale to MSS so MSS devices can be produced at cellular-type costs. We want to get WiMax to help drive the cost of MSS devices down to cellular levels." ■

Correction

In the Feb. 26 story, "Timing, Technology and Finance Key To Success, Says Industry Leader," the speaker should have been identified as Steven Dorfman, chairman of ProtoStar Ltd.

Meeting Room Floor Plan



SATELLITE 2008

EXHIBITOR LIST

COMPANY	BOOTH
3Di Technologies, LLC	180
AAE Systems, Inc.	445
Access Intelligence	1213
ACORDE	250
Advanced Analytic, Inc.	1413
Advanced Microwave Components	752
Advanced Switch Technology	493
Advantech	523
Advent	100
Aeroflex	658
AeroSat	495
Aerospace Corporation (The)	623
Air Launch Aerospace Corporation	580
Alga Microwave	589
Ameripack Inc.	688
Amos-Spacecom	111
AnaCom, Inc.	327
Andrew Corporation	429
Apollo Microwaves, Ltd.	256
Applied Instruments, Inc.	591
Arianespace, Inc.	1212
Arqiva Satellite Media Solutions	722
ARTEL, Inc.	549
Ascent Media Systems & Technology Services	217
ATCi	326
ATK	575
A.T. Wall Company	198
Avcom of Virginia	172
AvL Technologies, Inc.	249
Azimuth Unlimited, LLC	195
Azure Shine International, Inc.	683
Baird Satellite	657
BIP Corporation	177
Bliley Technologies, Inc.	731
Boeing	511
Brandywine Communications	126
C2SAT communications AB	183
CapRock Communications	387
C-Com Satellite Systems Inc.	276
Cobham, Sea Tel, Tracstar, Chelton	563
Codan, Ltd.	544
COM DEV International	707
Comdex, Inc.	594
Communications & Power Industries (CPI)	301
Compunetix, Inc.	720
Comsat Technical Services (A Lockheed Martin Group)	771
Comtech EF Data	308

COMPANY	BOOTH
Cornet Technology	175
Crawford Communications, Inc.	718
Cross Technologies, Inc.	711
CrossPoint Technologies, Inc.	655
Crystal Computer Corporation	647
CTD	1202
CVG - Avtec Systems	1306
DataPath, Inc.	461
dBm	324
Defense News Media Group	743
DH Antenna	176
Disitron Satellite Solutions	1415
Dow-Key Microwave Corporation	299
DRS Codem Systems	282
DTA S.A.	1313
e2v	616
EADS Astrium	341
EASi	767
EchoStar Fixed Satellite Services Corporation	159
EDC of Florida's Space Coast	290
EM Solutions	1207
Emerging Markets Communications	369
Emerson Network Power Connectivity Solutions	1402
EMS Technologies Defense & Space Systems	754
Envivio Inc.	705
ETL Systems	264
Eutelsat America Corp.	543
Evertz Microsystems	221
Expand Networks	618
FEI-Zyfer, Inc.	138
Filtel Microwave, Inc.	761
Flann Microwave	1401
Foxcom	468
Frontline Communications	254
Futron Corporation	499
General Dynamics SATCOM Technologies	133
Gigasat	281
GL Communications, Inc.	734
Globalstar	671
Globecomm Systems	275
Glowlink Communications Technology	365
GMV	134
Goldbelt Raven, LLC	192
GVF	690
Harris Corporation	763
High Gain Antenna Co., Ltd.	596
Hispasat	548

COMPANY	BOOTH
Hughes	401
I.F. Engineering Corp.	653
iDirect Technologies	535
INDRA	1405
IN-SNEC	674
Integral Systems, Inc.	455
Intelsat	317
International Communciations Group	297
International Datacasting Corporation	223
International Launch Services (ILS)	601
Intorel	1307
Invacom Ltd.	104
IOT Systems, LLC	271
Irdeto	356
Iridium Satellite LLC	287
ITS Electronics Inc.	1301
KenCast, Inc.	357
Klas Telecom Inc.	194
KMI Media Group	1209
Knight Sky, LLC	1315
KU Satellites	716
L-3 Communications	411
L-3 GCS	475
LBi Sat	1406
Linearizer Technology, Inc.	155
Lockheed Martin	501
Locus Microwave, Inc.	1303
Logic Innovations	116
Logus Microwave Corp.	677
M2 Global Technology, Ltd.	729
MDA	641
MFG Galileo Composites	1403
Micro-Ant, Inc.	190
Micronetics Inc.	268
Microspace Communications Corporation	209
Microwave Photonic Systems, Inc.	1501
Millitech, Inc.	557
Miranda Technologies Inc.	1511
Mitec Telecom	679
MITEQ/MCL	316
Mobile Satellite Ventures	581
MorganFranklin Corporation	1600
MotoSat	156
National Reconnaissance Office	741
ND SatCom	529
NEC Corporation	167
NEC Microwave Tube, Ltd.	1203
Network Innovations	1606
Newtec America, Inc.	243
NIGCOMSAT	160

COMPANY	BOOTH
Noise Com	288
Norsat International Inc.	1200
Novella SatComs	293
Novotronik GmbH	394
OmniGlobe Networks Inc.	1612
Optimal Satcom, Inc.	370
Orbit Communication Systems, Inc.	142
Orbital Research Ltd.	1300
Orbital Sciences Corporation	201
Ortel, a division of EMCORE	246
Overwatch Textron Systems	487
Paradise Datacom	421
Patriot Antenna Systems	333
Pegaso Broadband	692
PolarSat	1503
PPM Fiber Optic Links, Ltd.	586
Pro Brand International	1400
ProTEL NEWS	778
QinetiQ Ltd.	481
Quintech Electronics	449
RAD Data Communications	593
Radyne Tiernan Xicom	437
Raven Antenna Systems Inc.	255
Raysat Antenna Systems	1505
Research Concepts, Inc.	392
Riverbed	497
Rodcast & Telecom, Inc.	759
Rogers Corporation	769
RRSat Global Communications Network Ltd.	745
Saft	396
Satcom Direct Communications, Inc.	171
Satellite Engineering Group	656
Satellite Systems Corp.	154
SatFax Networks Inc.	1208
SAT-GE	1506
SAT-LITE Technologies	1500
Schlumberger	381
Scopus Video Networks	354
Sector Microwave Industries, Inc.	270
SED Systems	358
Segovia	174
SES NEW SKIES	517
SGSI (A STRATOS COMPANY)	122
Shin Satellite Public Company Limited	597
Shiron Satellite Communications	736
SISLink	265
Sojitz/NJRC	227
Solstar Energy Devices	620
Sophia Wireless, Inc.	782
SOTCA, INC.	1204

COMPANY	BOOTH
Space Exploration Technologies	296
Space News	140
SPACENET Inc.	127
ST Electronics (Satcom & Sensor Systems) Pte Ltd	189
Stellar Solutions	258
STM Group, Inc.	121
Streambox, Inc.	776
Suncoast Microwave, Inc.	775
Surface Heating Systems, Ltd.	178
Surrey Satellite Technology Ltd.	1201
SWE-DISH Satellite Systems Inc.	611
Symmetricom	259
Systemware Europe Ltd.	165
Tampa Microwave	1412
TANDBERG Television, Part of the Ericsson Group	661
TECOM Industries, Inc.	770
TeleCommunication Systems, Inc.	627
Teledyne Microelectronics	147
Telesat/Skynet	375
Telespazio	237
Terrasat Communications, Inc.	723
Terrestar Networks	157
Thales Alenia Space	233
Thales Components Corporation	364
ThinKom Solutions, Inc.	1302
THOMSON	107
Thrane & Thrane	1515
TRAK Microwave	274
UDCast	621
Universal Switching Corporation	1512
Uplogix	584
UPMACS Communications	164
US21 Computers - A Thuraya Value Added Re-Seller	294
Vanguard Composites Group	1502
Verso Technologies	725
ViaSat Inc.	349
Vizada	101
Vocality International	635
W.B. Walton Enterprises, Inc.	617
Wavestream	464
WEGENER	115
Windmill International, Inc.	755
XFTP by Trilithic	1509
XipLink	592
XTAR, LLC	295
Zarges Inc.	179

Both Sides Need To Adapt
To Meet Evolving Military Requirements For Commercial Services

BY LINDA THORNBURG

The environment in which commercial communications services are provided to the U.S. Department of Defense will change in the coming year due to a greater need for capacity, a tight budget and new military technologies coming online, according to panelists at the "Commercial Military Satcom 2008: Buy, Sell or Hold?" session Tuesday.

"If the WGS (Wideband Global System) and other military technologies planned launch successfully, and if money is not taken away, [the Pentagon] will still be short in wideband capability," said U.S. Navy Capt. Douglas Schroeder, chief of the National Security Space Office's Satcom Architecture. "The shortfall will grow to 2018 and beyond. There is a market for commercial [satellite communications] that just grows."

An analysis of the world's satellite capacity through 2016 shows that where the demand for commercial and consumer services is the greatest, it is also the area where the military will need greatest capacity, said Andrea Maleter, technical director of Futron Corp. "One of the most ironic aspects of the satellite business is that its flexibility and ubiquity have been turned against it. When the military contracts for terrestrial systems, long-term contracts are signed because once the infrastructure is in place it cannot easily be removed. But because satellites can provide flexibility, [the Pentagon] has been reluctant to give notice about its future requirements," she said.

"The most difficult requirements for the future are capacity and higher data rates," said James Shaw, director of naval programs for Inmarsat Government Services. "On the mobile side, communications are now being pushed to the last tactical foot, that is, to the foxhole. More is needed at the tactical level. [Pentagon] requirements are evolving more quickly than the government procurement systems can satisfy."

The Pentagon "needs to let vendors have more face time to better understand its specific needs," said Kay Sears, senior vice president, marketing and business development, Intelsat. "It needs to commit more firmly to spending patterns so that industry can build more specifically."

Michael Winchester, deputy CIO/G6, U.S. Army Space and Missile Defense Command/Army Strategic Command, advised the commercial sector to build to the end user and to build complexity into the system rather than making the end user perform difficult or complex operations. ■

Ribbon Cutting Ceremony

Photo by Lisa Czaplicki

SATELLITE 2008 kicked-off the conference and exhibition Feb. 26. This year, a show floor of 55,000 square feet will host 280 companies. More than 8,500 attendees are expected to visit.

Executives Focusing On Growth

BY LINDA THORNBURG

While their businesses vary, CEOs from different satellite industry segments will face the same challenges throughout the next few years, namely how to balance meeting the demands of their customers with the need to turn a profit.

SES Americom knows its niche, and it is not creating content or owning the end user relationship but serving those who do, CEO Ed Horowitz said Monday during the "View From The Top: CEO Market Perspective" panel at SATELLITE 2008. SES "needs to recognize [its] customer base is a portfolio of different types of companies seeking the same thing. In the media space, that is to reach young consumer."

To help meet these needs, SES Americom has 10 satellites in various stages of construction at all times. "The risk of missing a launch is diminished with that kind of constant innovation," he said. "We have agreements about when the first through the third [satellites] will be going up and when the decision on the fourth will be made. I'm trying to establish that kind of rhythm."

Peter Jackson, CEO of satellite operator AsiaSat, said Asia saw relatively flat demand until last year, but demand has started to grow and prices have begun to rise a little. The company's priorities are growth, either organic or through buying businesses, says Jackson.

Mary Cotton, CEO of iDirect, which provides products and services in satellite-based IP communications technology, said her company's priorities are growing the geographic footprint and fulfilling the needs of customers who want to do more with the bandwidth they have in a tight economic environment. About a third of the company's business is with the U.S. government, including providing communications services for warfighters in Iraq.

"We look at the value proposition, understand our end customers' needs and align ourselves with how best to serve that," Cotton said. "We are about creating products and services that create a horizontal need. We look for partnerships that create good markets and more robust customers."

Matt Desch, CEO of Iridium Satellite, which provides satellite voice and data systems, said that besides significant business from the U.S. government, Iridium also has contracts with the Australian government as well as several European governments. The company also is looking to capture its share of the $400 million maritime data business.

"Our system is valuable real estate connected to every part of the planet," Desch said. "The secret to our success during the last seven years is that we have 160 partners making money around what we do."

Iridium's challenge at the moment is the effort to develop and launch its new satellite constellation. Three suppliers are bidding for the contract to build the spacecraft, which are expected to be in orbit beginning in the 2013-2014 timeframe. Iridium expects to award the contract in 2009.

Matt O'Connell, CEO, GeoEye, said the future for commercial imagery satellites is bright, but the U.S. government needs to recognize that the commercial sector can provide products and services more efficiently than the government itself.

GeoEye gets 50 percent of its revenue from the U.S. government and 50 percent from international customers. O'Connell said this plays well on Wall Street and Capitol Hill. The financial market looks more favorably right now on companies that are not targeting individual consumers, and the government likes the fact that 50 percent of its pixels are paid for by foreign investment, he said. ■

Asia Broadcast Satellite CEO Reveals Growth Strategy After ABS-1

BY MARK HOLMES

Asia Broadcast Satellite (ABS) is one of a slew of new operators looking to make an impact in Asia and already has inked a number of capacity deals on its ABS-1 satellite and is making plans for a second satellite. *Show Daily* spoke with CEO Tom Choi about the operator's plans.

SHOW DAILY: *Could you tell us your plans in terms of building the business and investing in new satellites?*

CHOI: In the first 18 months of our operations, ABS has experienced tremendous growth where the utilization rate of the ABS-1 satellite increased from below 35 percent to now above 85 percent with most of the growth coming in the past four quarters. As we are projecting to be above 95 percent utilization rate by [the second quarter of] 2008, we went to our board and received approval to formally release [a request for proposal] for our second satellite, ABS-2. This was released in early February and we are expecting the proposals by late March. We are planning to spend a significant amount of resources in the next two quarters in discussions and negotiations with a limited number of satellite manufacturers and launch providers, and we are working towards signing a set of procurement contracts by June of 2008. …

Our strongest existing customers have become anchor tenants for the second satellite, and we have engaged with them to get their feedback on our design and coverage areas.

SHOW DAILY: *What are your revenue goals in 2008?*

CHOI: In order to maintain the momentum of our revenue growth for 2008 and 2009 while ABS-2 is being constructed, we will be providing value-added services not only on ABS-1 but also via third-party satellites through partnerships with other operators. We will also be looking at possibilities of acquisitions to the extent that the opportunities present themselves.

SHOW DAILY: *What advantages do you have over other operators?*

CHOI: As the satellite capacity segment for telecoms services have become almost commoditized, customers will strive for maximizing value from their capacity provider. We have endeavored to provide a combination of competitive pricing along with on the ground infrastructure, operations and marketing support to our customers. We also deeply respect the relationship that we have with our customers and are keenly concerned about their success. Unlike other operators, we will stay away from providing services which directly compete with our customers — even if we feel that we can extract more revenue from the capacity. As my own background comes from service operations, I am keenly aware of the frustration that can build as a result of large satellite operators who put in place services which directly compete with their customers.

SHOW DAILY: *Is it likely that ABS may become involved in industry consolidation?*

CHOI: This industry is very small and it would not be surprising that there are multiple conversations ongoing amongst many of the operators. Our current thinking is to concentrate on our capacity fill rate and complete the necessary steps for ABS-2 before we consider any other options.

One of the significant challenges of consolidation of national operators in Asia is that most of the satellite operators are either directly or indirectly government owned. A foreign takeover of satellite companies will be controversial and potentially invoking adverse reactions from the government or the public. Thus, I don't believe there will be meaningful consolidation of satellite operators in Asia in the near future. I do believe there will be more collaboration and cooperation amongst the smaller national and regional operators.

SHOW DAILY: *How do you assess the prospects for satellite broadband in Asia?*

CHOI: I have a bit of experience in satellite broadband technologies as the early part of my career was spent at Hughes Communi-

AD INDEX

cations International working on Spaceway, one of the original Ka-band based broadband satellite systems and the only one from the 90s which received funding and launched. Because there is so much capacity available in Ka-band, it is possible that a very large satellite with multiple spot beams to extract 50 to 100 gigabits per second or more of capacity [will be successful]. If the served population is uniformly distributed over the coverage area, and if that area is underserved by cable or ADSL infrastructure, then the multibeam Ka-band satellite could serve a very important role in solving the last-mile problem. However, if most of the beams are radiating territories that are sparsely populated or populated by non-affluent people then there will be problems with capacity fill rates and underlying financial models which fund such projects. Regardless, in highly urbanized cities the cost of cable and DSL platforms are getting more affordable and capable of reaching ever higher speeds and longer ranges. Today the average headend and [customer premises equipment] costs are reaching below $20 levels, so the terrestrial competition is very strong. Undoubtedly in the future more advances will be made in DSL technologies which will enable practically anyone with a telephone to receive some form of broadband connectivity at [capital expenditure] levels far more affordable than any satellite platform.

In Asia you have most of the GDP concentrated in highly urbanized city centers coupled with significantly lower income rural populations. Therefore, I think the chances that consumer-oriented broadband satellite systems serving the North American or European markets with far greater number of wealthy rural populations will be more successful than systems that serve Asia.

ABS has no intentions at this time to fly a Ka-band based consumer-oriented satellite for Asia.

SHOW DAILY***: What is the significance of the recent agreement with Vietnam Telecom International (VTI)?***

CHOI: ABS intends to cooperate and build relationships with other regional and local operators to build value added services. We hope that our partnership with VTI will result in higher fill rates for VinaSat-1 and regional customers having more choices in satellites for their applications. We have in fact signed for capacity with other satellite operators but we have chosen to not to make those agreements public for the time being.

SHOW DAILY***: How do you assess the prospects for direct-to-home (DTH) services in Asia?***

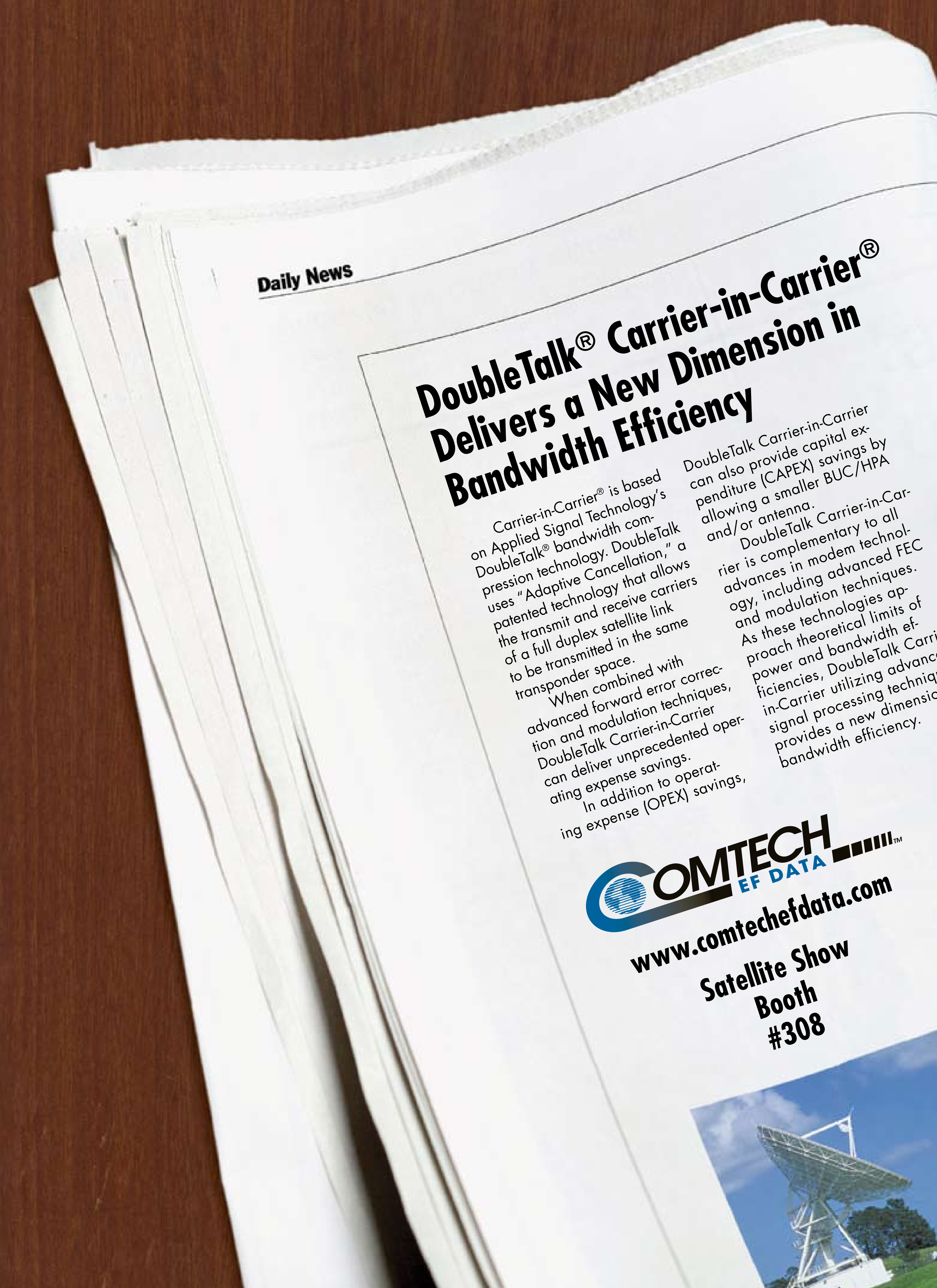
CHOI: Many countries in the Asia-Pacific region in terms of pay-TV penetration rank among the lowest in the world. Affordability is a key issue in the penetration of pay-TV services. Unlike 10 to 15 years ago, end user set-top boxes and dishes are getting very affordable, and new Ku-band satellites are entering the market in Asia to provide much needed capacity in India and SE Asia. Therefore, I do believe that there will be a strong take-up of DTH services over the next 10 years, especially in India where you have a combination of affordable satellite capacity, [customer premises equipment] and an overwhelming amount of local TV channels serving a large and rapidly growing economy.

SHOW DAILY***: Where do you hope to position ABS on the satellite landscape in Asia?***

CHOI: We would like ourselves to be positioned as an innovative and creative partner for our customers. Above and beyond wholesaling bulk capacity, we want to be the company which provides solutions to our customers be they technically or operationally oriented such that they receive the best value in having a rewarding relationship with us. In this endeavor, we hope to continue to grow our business beyond filling out ABS-1 and, of course, consummate all the steps necessary for the launch of ABS-2.

SHOW DAILY***: What do you expect to be the main talking points at SATELLITE 2008?***

CHOI: I believe this is based on the perspective of the observer. On one hand there should be general concern for the industry as we completed massive wave of mergers of large global operators. With less competition, prices will tend to rise with less supply for the customers and less employment opportunities for the very bright people in our industry. However, we have seen a number of new entrants into the marketplace in Africa, the Middle East and of course Asia. Many of these new operators are in the process of procuring new satellites so that should be good news for the manufacturing and launch industry. Overall the industry is becoming more dynamic and sophisticated, so SATELLITE 2008 should be very interesting. ■


Daily News
DoubleTalk® Carrier-in-Carrier®
Delivers a New Dimension in
Bandwidth Efficiency
Carrier-in-Carrier® is based on Applied Signal Technology's DoubleTalk® bandwidth compression technology. DoubleTalk uses "Adaptive Cancellation," a patented technology that allows the transmit and receive carriers of a full duplex satellite link to be transmitted in the same transponder space.
When combined with advanced forward error correction and modulation techniques, DoubleTalk Carrier-in-Carrier can deliver unprecedented operating expense savings.
In addition to operating expense (OPEX) savings,
DoubleTalk Carrier-in-Carrier can also provide capital expenditure (CAPEX) savings by allowing a smaller BUC/HPA and/or antenna.
DoubleTalk Carrier-in-Carrier is complementary to all advances in modem technology, including advanced FEC and modulation techniques.
As these technologies approach theoretical limits of power and bandwidth ef-
ficiencies, DoubleTalk Carri
in-Carrier utilizing advanc
signal processing techniq
provides a new dimensio
bandwidth efficiency.
COMTECH EF DATA™
www.comtechefdata.com
Satellite Show
Booth
#308