



ViaSat, Inc.

FCC International Bureau
Presentation

April 13, 2011

Discussion Topics


ViaSat

- **ViaSat Overview**
- **Next Generation Satellite Systems**
- **Satellite Program Status**
- **User Terminal**
- **Gateway Earth Stations**
- **Other**



ViaSat Overview




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- **ViaSat founded as startup company in 1986 and has been public since 1996 (NASDAQ: VSAT)**
 - **Market capitalization of approximately \$1.4 billion and last fiscal year revenues of nearly \$700 million**
 - **ViaSat invents, designs and builds telecommunications technology**
 - **Leading provider of consumer broadband, enterprise and government satellite networks and communications products on a global basis**
 - **Shipped over 600,000 consumer terminals worldwide over last five years**
 - **WildBlue service (purchased by ViaSat in December 2009) has approximately 425,000 customers using two first generation Ka band satellites**
 - **Leading provider of VSAT networks, tactical data links and network security to US Department of Defense**

Consumer Broadband

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- **WildBlue is a leading US broadband satellite service provider**
 - Over \$900 million cumulative invested capital
 - Entered service in 2005
- **Infrastructure**
 - 2 Ka Satellites
 - ViaSat SurfBeam networking system
- **Over 425,000 subs today**
 - 55% wholesale (powered by), 45% WildBlue brand retail
- **Distribution partners**



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- **Leading innovator in satellite communications industry**
 - Focus on continued improvement in performance and bandwidth efficiency of satellite networks
 - First to design ~140 Gbit/s satellite (VIASAT-1)
 - Assisted in architecture of Eutelsat's KA-SAT satellite (~70 Gbit/s)
 - Next generation satellites currently in design phase with further capacity improvements

Next Generation Satellite Systems



- **Next Generation North American Satellite System**
 - Over \$400 million invested in satellite and ground technologies
 - Partnership for Canadian capacity with Barrett and Loral
 - Will drastically improve broadband speeds and quality of service to levels similar to many terrestrial technologies
 - Lowers cost per bit allowing affordable service offerings
 - Access to NGSO spectrum is critical to this result

- **Partners for Next Generation Satellite Systems**
 - Eutelsat in Europe, North Africa and Middle East
 - Yahsat in Middle East
 - Barrett/Loral in Canada

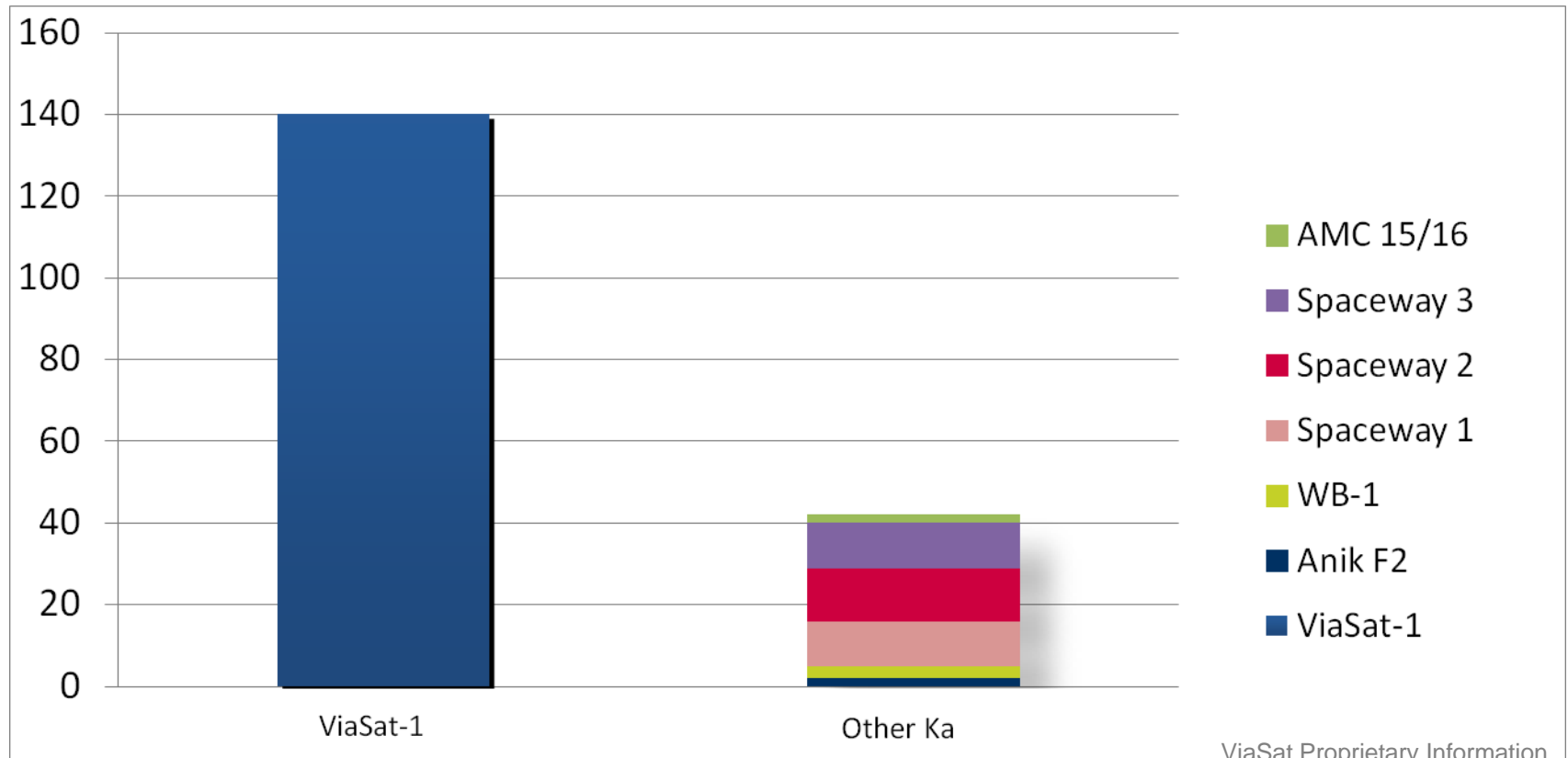
- *ViaSat-1 Satellite*
- *~140+ Gbit/s*
- *Q3 CY2011 Launch*



Extraordinary Capacity



■ Satellite Capacity (Gbit/s)

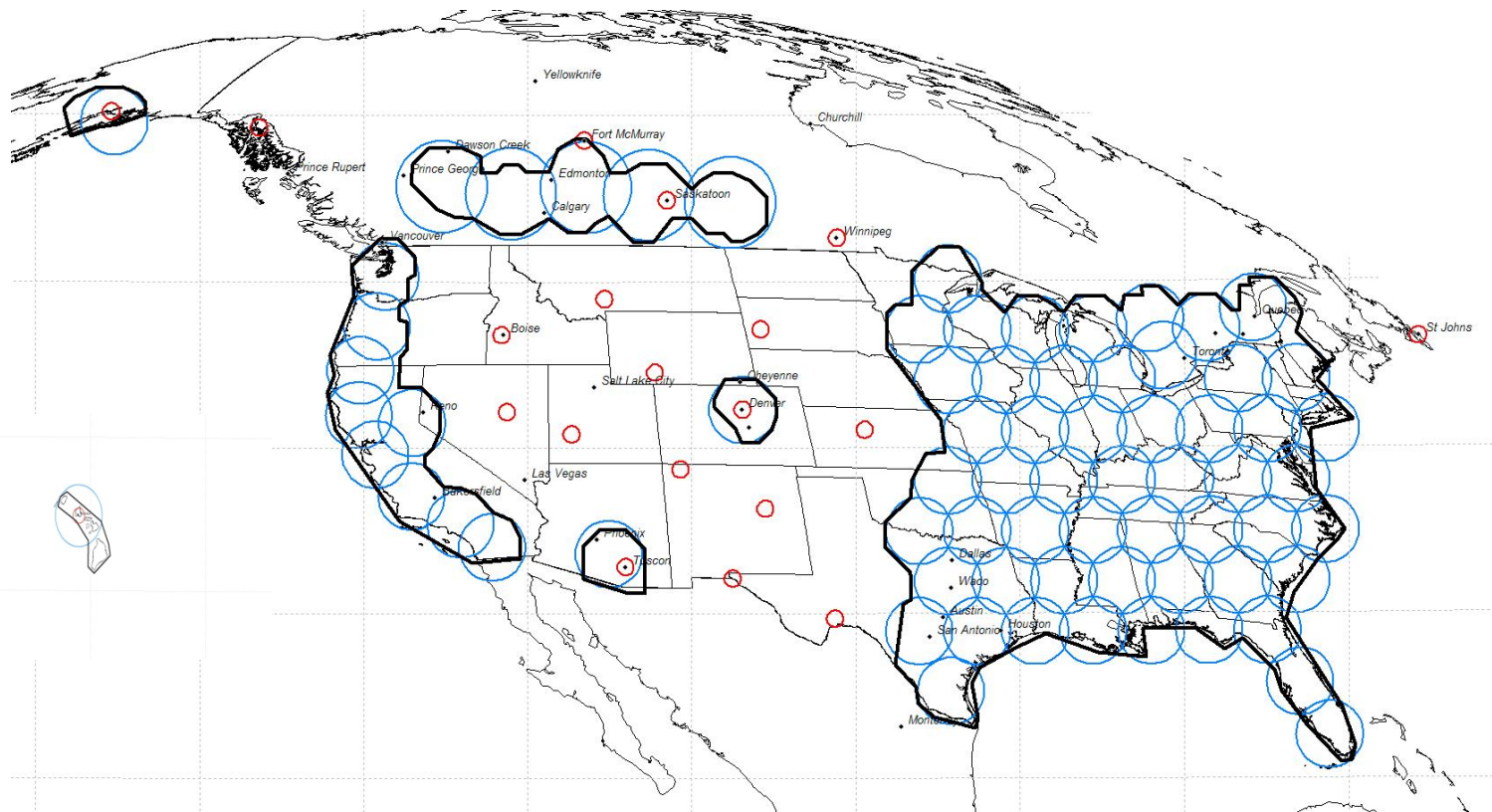


ViaSat Proprietary Information

Satellite Coverage



User Beams in blue, Gateway beam center in Red




- **16 U.S. Gateway locations + 1 Canadian**
 - Gateway beams are 3 or 4 color reuse
- **63 U.S. User beams**
 - User beams are 1 color reuse
- **User beam coverage in heavily populated areas**
- **Gateway beams in less populated areas with arid to moderate rain / weather climates**

- **Satellite is complete and in final testing**
- **Launch window is late July to early August**
- **IOT period is approx 60 days**
- **Service commencement late Oct to early Nov**
- **US334 coordination underway**



- **FCC authorizations granted**
 - **VIASAT-1 market access grant (S2747)**
 - **1500 MHz uplink**
 - Portion shared with NGSO (secondary)
 - Portion shared with LMDS (secondary)
 - **1500 MHz downlink**
 - Portion shared with NGSO on non-conforming basis
 - Portion shared with terrestrial users being sunsetted

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- **FCC applications pending**
 - User terminal (4 M) – GSO and NGSO band
 - Has completed PN period with no comments
 - 14 Gateway earth stations (in U.S.)
 - 2 gateways also provide TT&C support
 - **FCC applications to be filed**
 - 2 Gateway earth station applications
 - Anchorage & Juneau
 - STAs to support on-site GW antenna testing prior to grant of GW application
 - STAs for support of IOT

User Terminal

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- **Fully 25.138 compliant**
- **Transmits in frequency bands**
 - **28.35 – 29.1 GHz, 29.5 – 30.0 GHz**
- **Receives in frequency bands**
 - **18.3 – 19.3 GHz, 19.7 – 20.2 GHz**
- **Same considerations that warrant blanket licensing rules in GSO band warrant blanket licensing waiver in NGSO band**




Gateway Earth Station

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- **Meets FCC 25.138 requirements**
- **Transmits in frequency bands**
 - **28.1 – 29.1 GHz 29.5 – 30.0 GHz**
- **Receives in frequency bands**
 - **18.3 – 19.3 GHz, 19.7 – 20.2 GHz**



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- Gateways and user terminals use same NGSO sharing technique as previously approved for spacecraft
 - Gateways and user terminals compatible with existing terrestrial uses of the bands

- **WildBlue minor modification (on PN)**
- **Minor updates to to pending applications**

