



ViaSat, Inc.

FCC International Bureau
Presentation

April 13, 2011

Discussion Topics

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



ViaSat Overview



- **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**

- **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**



- **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 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

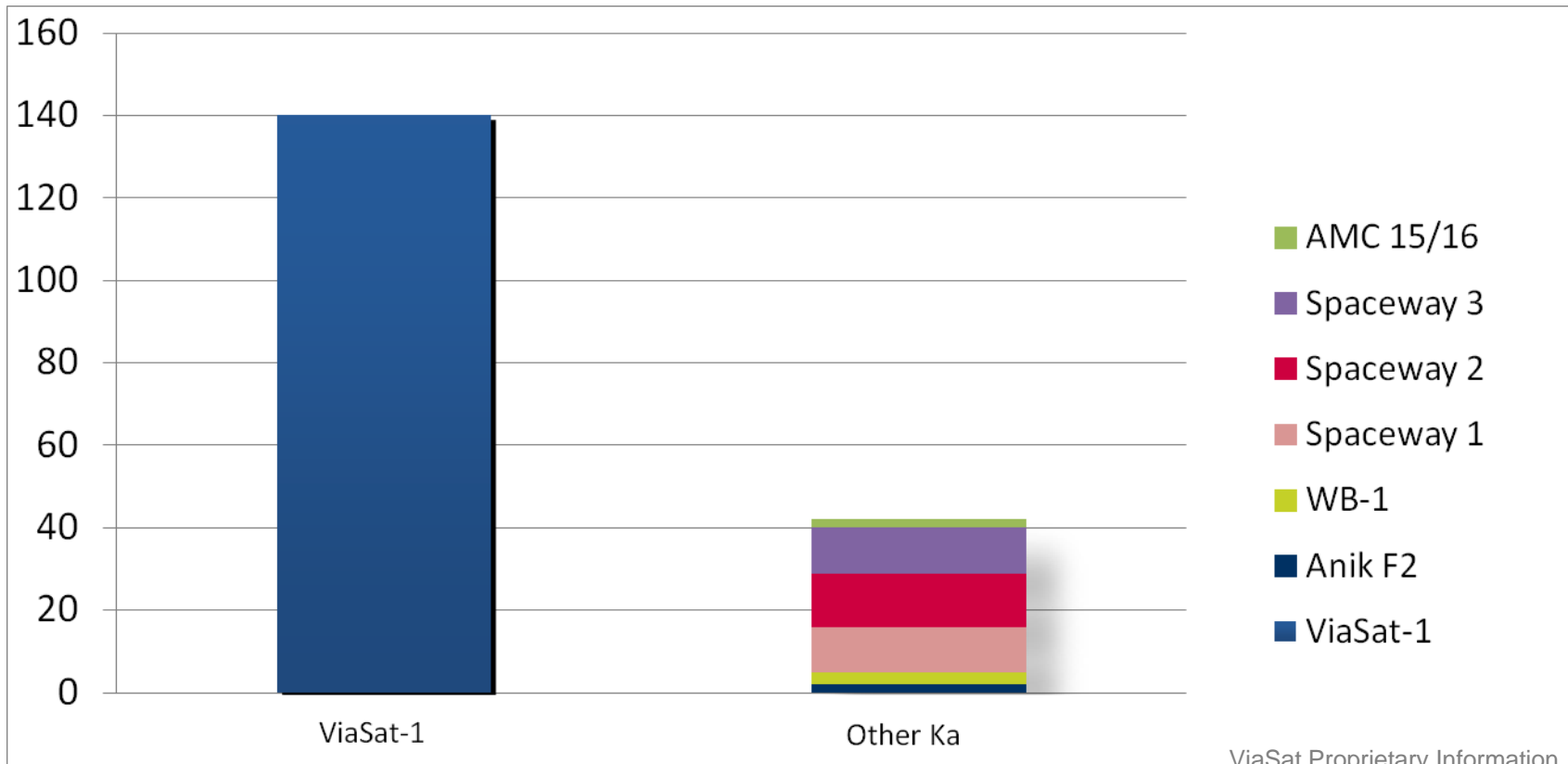
- **Partners for Next Generation Satellite Systems**
 - Eutelsat in Europe, North Africa and Middle East
 - Yahsat in Middle East
 - Barrett/Loral in Canada

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



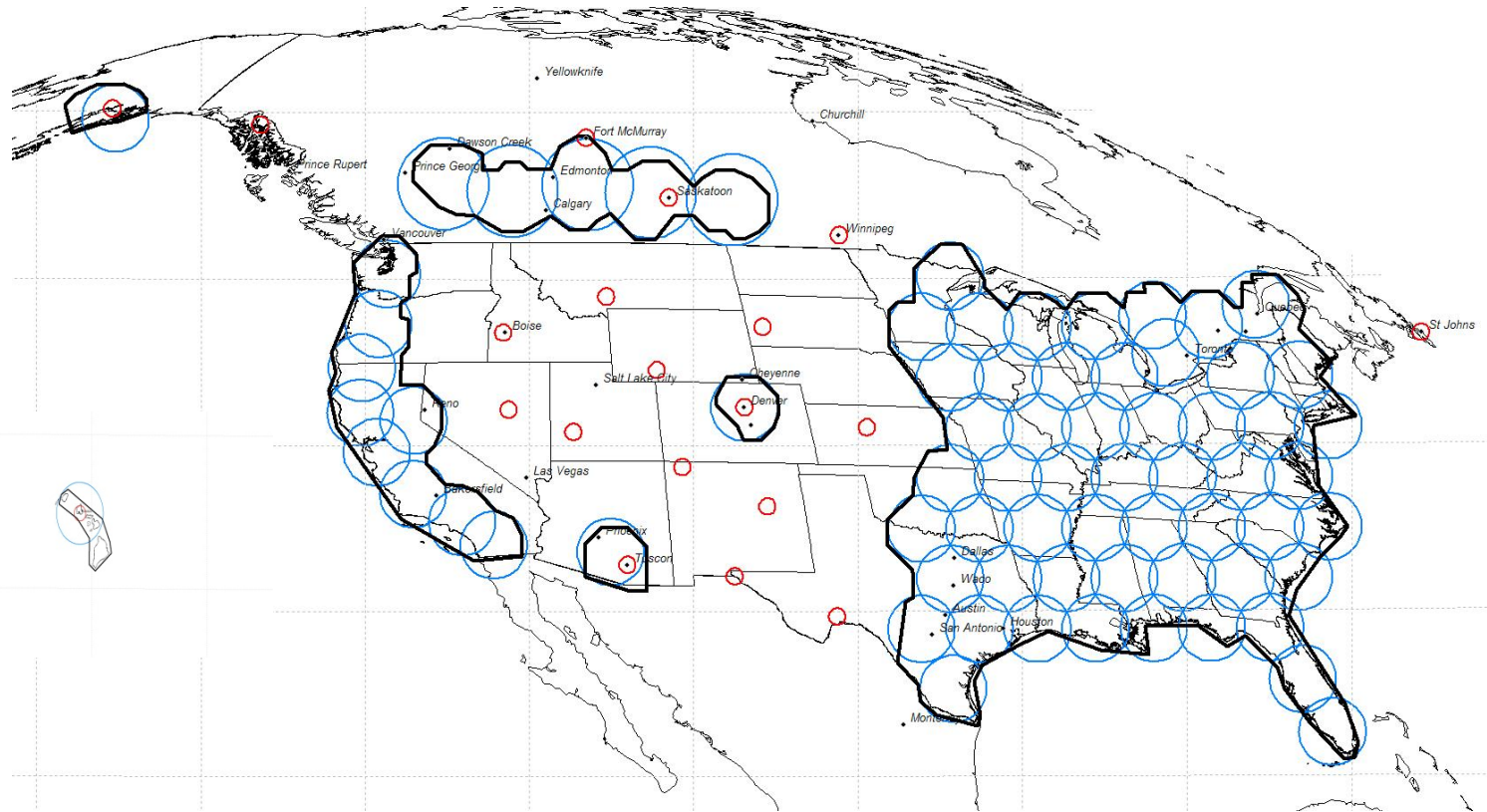
Extraordinary Capacity

■ Satellite Capacity (Gbit/s)



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

- **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



- **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

ViaSat



- **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**



- 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**

