



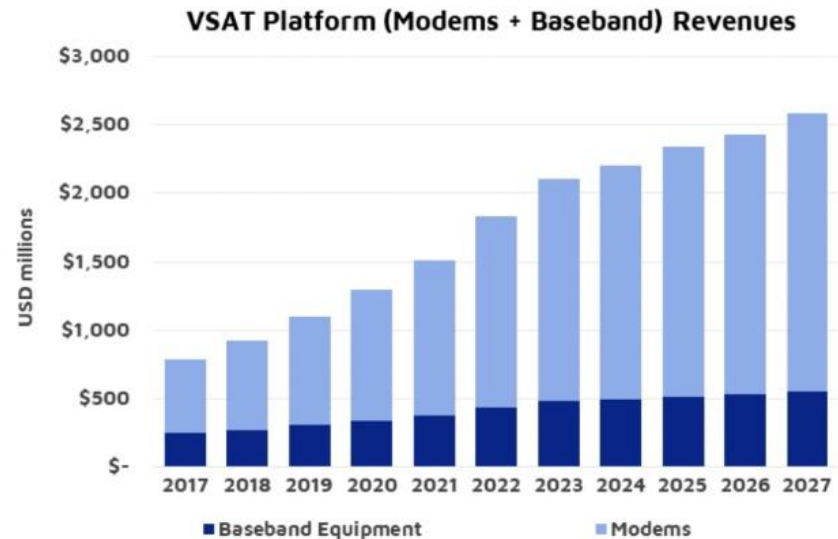
Extended Functionality, Extended Reach, Satellite & the Cloud



February 2019

A rapidly evolving landscape

- Ever increasing speeds and QoE expectations
- Sophisticated Satellite constellations
- Enhanced Mobility
- 3G, 4G, 5G
- Cloud distribution
- Streaming
- Edge compute
- End to End SLA management
- Orchestration
- Growing applicability of satellite solution



Technology and Market Leadership

- **All bands, all satellites, all orbits, all Operators**

C, Ku, Ka

GEO, MEO, LEO

Earth Observation

Hosted Payload solutions

Present in all the worlds leading Satellite operators and Service Providers

- **Highest guaranteed CIR**

Up to 1.4Gbit/s in point to point (SCPC),
700Mb/s point to multipoint (Heights)

Up to 250 x 197Mbit/s in dynamic point to multipoint applications (HPro)

- **Flexibility, efficiency and adaptability**

HDNA, best in class dynamic operation up with markets lowest jitter & latency for superior QoE and monetizable traffic delivery

Most efficient waveforms with bi-directional ACM to maximize link quality, simultaneously maximizing the delivery of monetizable bits for best overall economics

Modular hub, readily upgradable, ensuring longevity and low cost of ownership

Sophisticated Network Management with API's for integration into client OSS & BSS

- **Use Case Optimization**

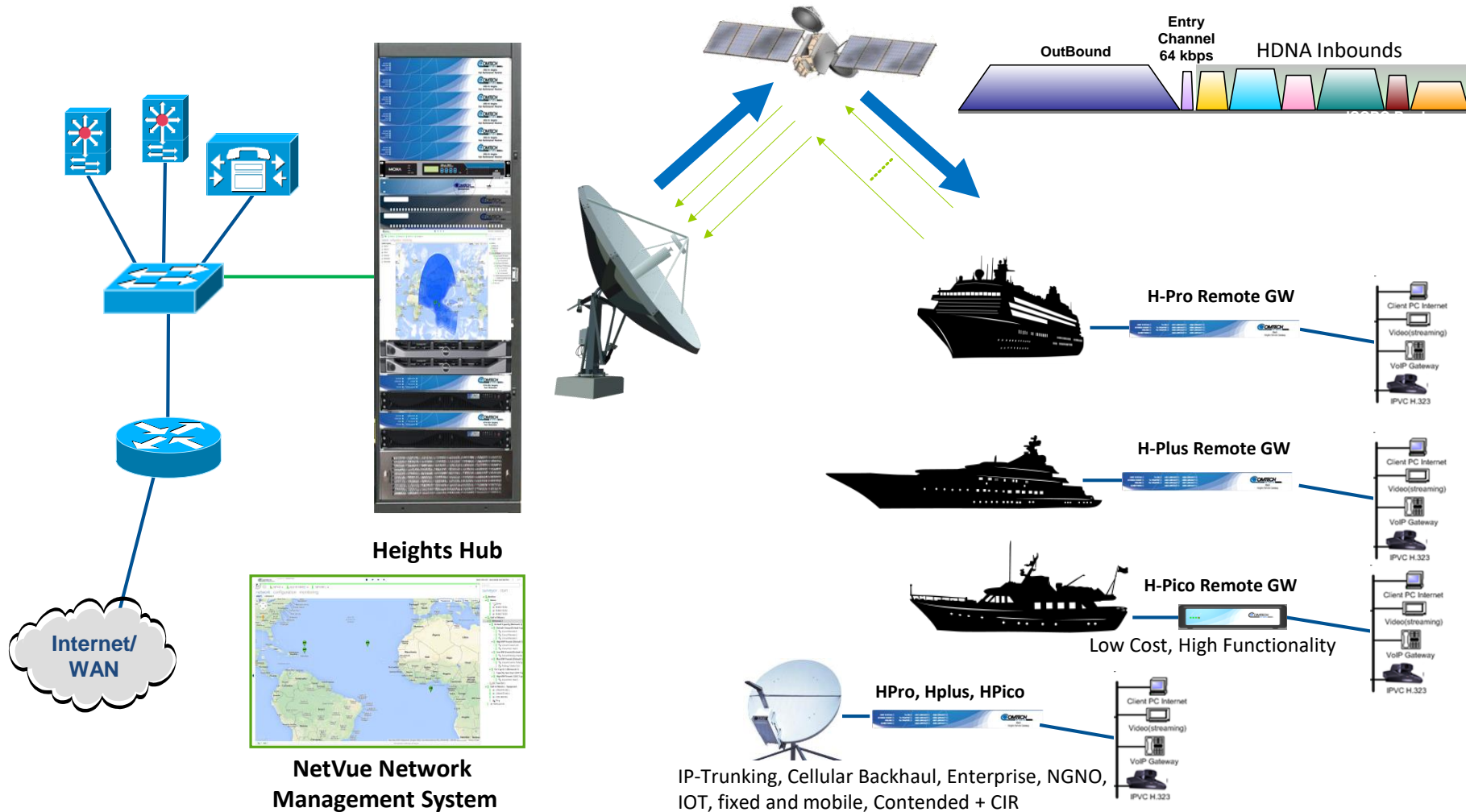
Cellular backhaul bandwidth compression and application QoE optimization

True Layer 2 Operation, seamless integration into user and provider networks

Jumbo frame support

Satellite Beam and Band switching for geographical roaming, with API for external application of provider operational and business rules.

Heights Point to Multi Point for adaptable mission critical applications



Classic market View

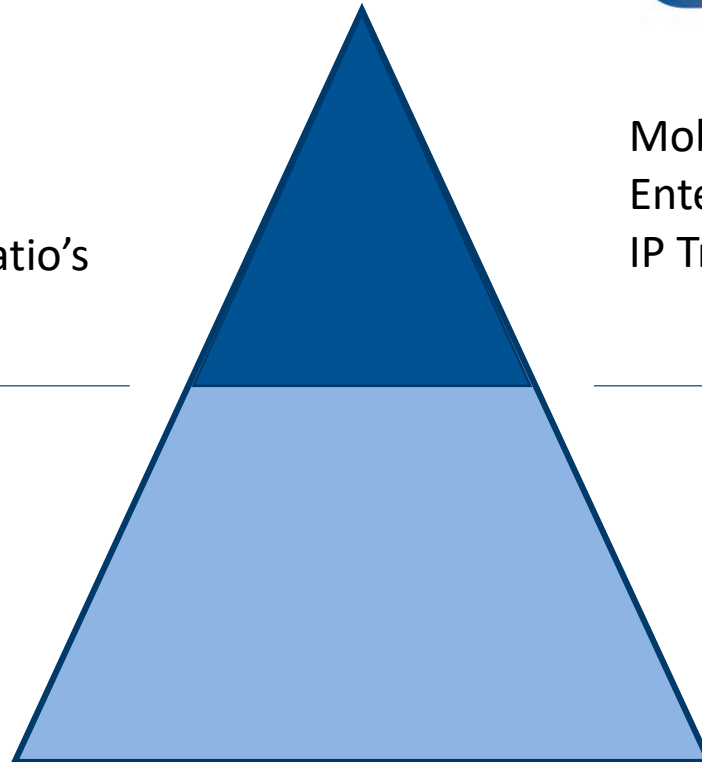


Highest expectation of performance guarantee
Lower Volume
Zero to low contention ratio's

Mobile network operators
Enterprise
IP Trunking

Lowest expectation of performance guarantee
Higher Volume
High Contention ratio's

Broadband
SOHO
Occasional use



Product Set Evolution



Outdoor Enclosures

HPro for highest performance and Hplus with Embedded Compute for hosted applications



Waveform and scalability innovations

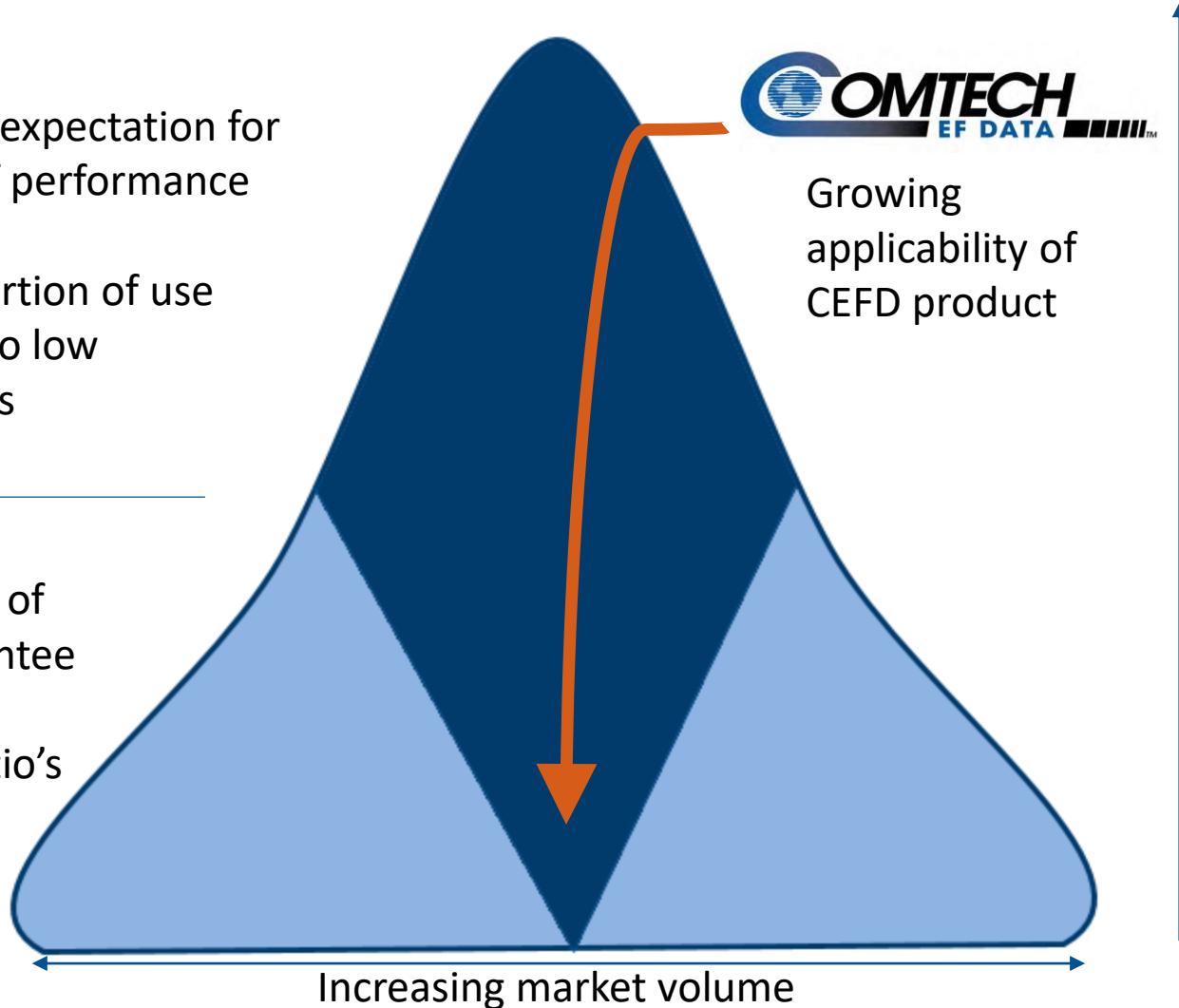
Hpico. Low Cost, High function remote gateway



Evolved Market View

Growing market expectation for the guarantee of performance and throughput
Increasing proportion of use cases with zero to low contention ratio's

Lowest expectation of performance guarantee
Higher Volume
High Contention ratio's



Company Strengths and Values

- Long established, trusted brand
- Financial Stability
- Safety in numbers, broad client, product and market base
- A Culture of commitment and delivering
- Deep Expertise
- Vision, Strong market position and aggressive product roadmap
- Focus on the critical market sectors where Performance counts and best effort is unacceptable
- Delivering the best ownership economics and user experience
- Product Longevity and Upgradability



Comtech. Delivering the Requirements of Today's and the Future's most Demanding Users.

Intelligence to Maximize QoE

QoS, Traffic Shaping, Load Balancing, Network Analytics, Network Management, Resource Allocation

Efficiency to Minimize OPEX

Modulation & Coding, Dynamic Bandwidth / Power Allocation & Compression & Acceleration Techniques

Horsepower and Speed to Support End User Traffic Demand

No Compromise Processing power to support Mbps and Packet Per Second requirements

