



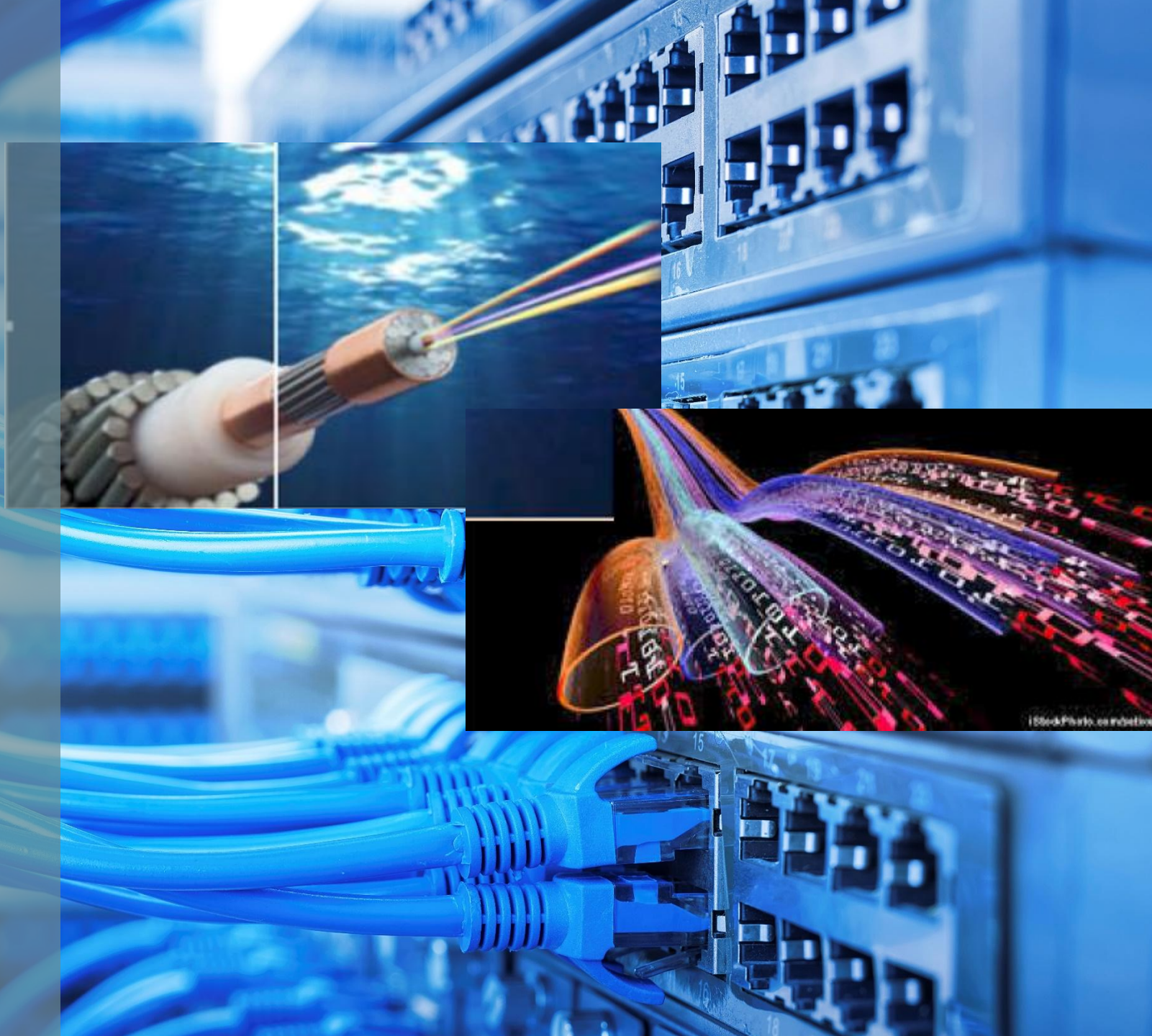
VATOA

Transoceanic Subsea Cable Updates

July 12, 2019

Peter Wallace CIO

Trans-Atlantic Submarine Fiber Optic Cables

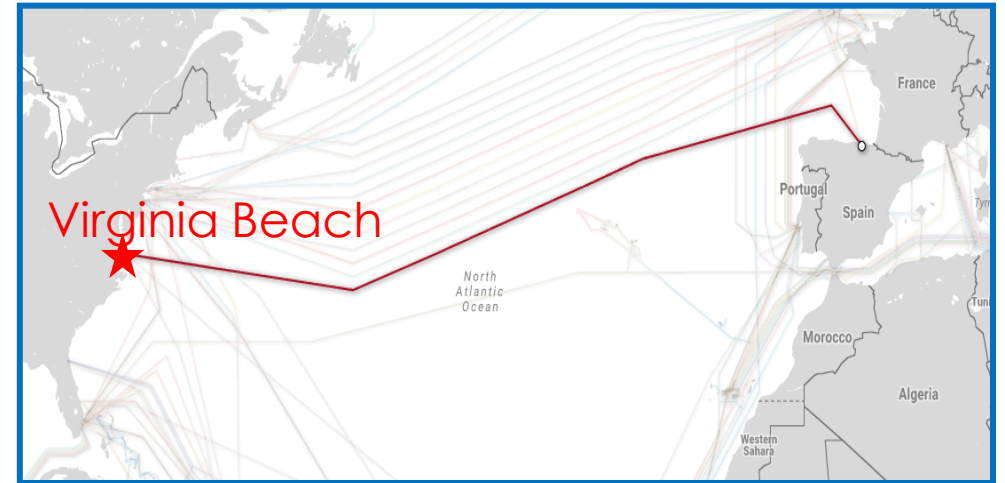


Transatlantic Subsea Fiber Cables

Active Cables

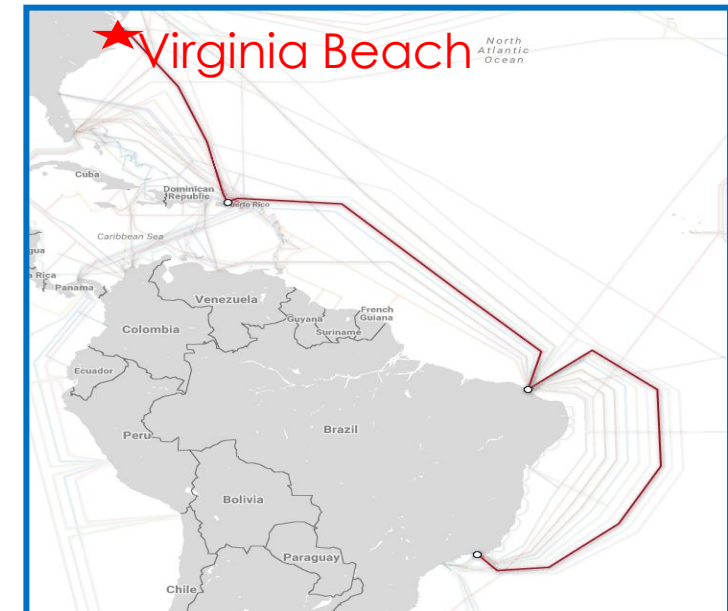
MAREA

- Virginia Beach to BilBoa, Spain
- Operational March 2018
- Led by Facebook and Microsoft



BRUSA

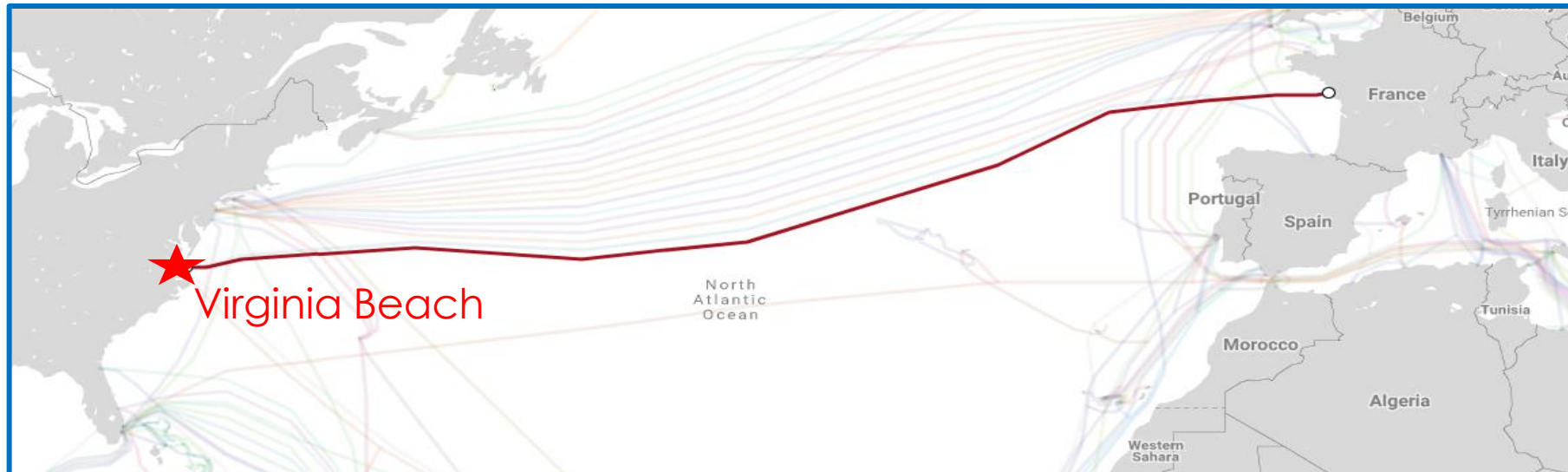
- Virginia Beach to Fortaleza, Brazil
- Operational July 2018
- Owned and operated by Telxius



Transatlantic Subsea Fiber Cables

Dunant

Virginia Beach to Saint-Hilaire-de-Riaz, France
Ready for Service: Q3 2020



- Led by Google
- Dunant will consist of twelve fiber pairs, with a total design capacity of 25 Tb/s per fiber pair
- Dunant will have a single segment between Virginia Beach and Saint-Hilaire-de-Riez, a total length of 6,600 kilometers
- Will provide new and replacement capacity on the U.S.-European routes
- Will use the existing cable landing station in Virginia Beach, Virginia, owned by TELXIUS Cable USA, Inc.

Opportunities to Leverage Transoceanic Fiber

Economic Development

- Create a fiber ready region to attract new enterprises with high-paying jobs
 - Biomed
 - Cyber Security
 - Financial Services
 - Attract and retain a skilled and high tech workforce
- Leverage available assets for regional connectivity, educational and economic opportunities
- Position the region to leverage opportunities for public/private partnerships
- Create fiber infrastructure and connectivity to meet smart region capabilities
- Construct broadband infrastructure to support business incubators, technology innovators, and data centers

Education

- Integrate higher education institutions for collaborative research
- Provide bandwidth to support growing educational needs

Government

- Leverage future grants that promote regionalism as well as educational programs
- Create diverse routes to support public safety infrastructure
- Create a middle mile dark fiber strategy to support regional broadband initiatives