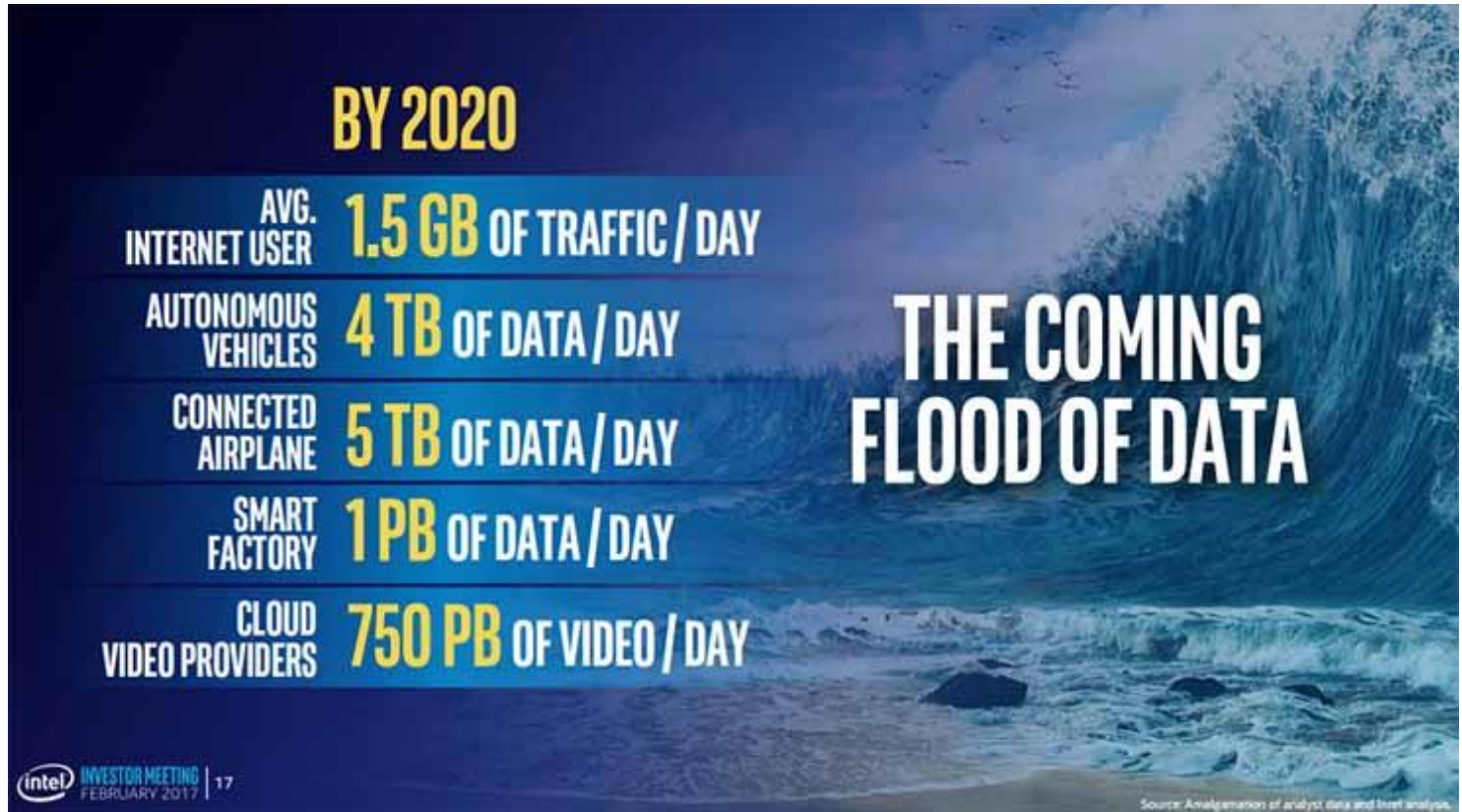# Arctic Connect

Arctic Economic Council

Top of the World Arctic Bradband Summit

# Why do we need connectivity?

Connecting the Arctic

- 99% of the world internet traverses through submarine cables and only 0,5% through satellite
- Submarine cables are the new trading routes of the digital economy and boost the digital development
- The digital economy seeks new routes for, improved connectivity, resiliency and cost reduction

>200%
the expected growth of direct traffic flow between Europe and Asia in the next 5 years

The new northern connection between Europe and Asia would bring 25-40% decrease in latency compared to the traditional southern route

Future development in the Arctic

- Arctic areas can be a game changer for global connectivity and therefore infrastructure investments and growth plans should be planned and developed with both private and public interests

- There are around 900 planned projects in the region requiring 1 trillion USD investments – need for infrastructure in the area is eminent

- Building datacenters in areas with renewable energy also provides growth potential with less environmental impact
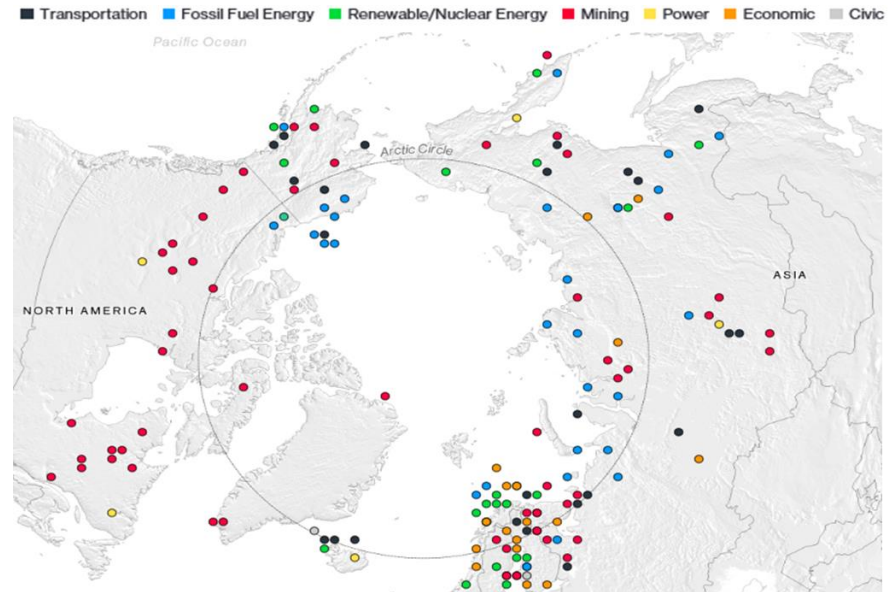
From roads to new mines, these are some of the largest projects on each country's wish list, according to Guggenheim Partners

Key Arctic Drivers for Digitalization

① Investments to the Arctic region

Datacenters

Datacenters need a high level of connectivity to provide capacity for the latest telecommunication services, and the Arctic environment offers optimal settings for it

Direct international investments

Direct investments from companies or start ups may also be attractive to implement in this area

② Cities on the shore of the Arctic Ocean

Arctic regional development strategy 2020

The strategy consists of boosting arctic population and economy by interconnecting them and providing them with new technologies and infrastructures, giving them access to the global economy and modern information services

③ International business requiring high-speed connections

Microsoft · amazon · facebook · Google · SoftBank · NTT · China Mobile · 中国电信 CHINA TELECOM · Alibaba Group · Tencent 腾讯 · Яндекс · ЛУКОЙЛ · НОВАТЭК · СБЕРБАНК · ПОЧТА РОССИИ · ГАЗПРОМ

Arctic Connect - Overview

- Connects 3 continents and 85% of the population of the world
- 18.000 km total system length
- Ultimate capacity from 10 up to 44 Tbit/s per fiber pair
- 6-8 fiber pairs with branching units to connect various landing points along the route

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Arctic Connect - Timeline

1 Pre-launch Preparation

- Analyze Demand, Market and Revenue Potential
- System Design and Budgetary Cost Analysis
- Determine strategy for developing project and prepare initial Business Plan
- Compare & decide potential configuration(s) **Completed**
- Preliminary discussions with potential Partners
- Finalize Partners
- Organize Project Team

2 Development Phase

- Agree Project Plan with Partners
- Finalize Technical & Commercial Requirements
- Establish company organizational and ownership structures
- Secure Fiber Pair IRU / Joint Build Agreements ready for Contract-in-Force
- Arrange equity project financing
- Arrange debt project financing
- Prepare Procurement and Landing Party Agreements Contracts

3 Construction Phase

- Final negotiation of Procurement Contracts
- Program Management: Supplier Oversight; Contract Management
- Pursue Permitting & Regulatory Approvals
- Supply of equipment and management systems
- Fiber optic backbone readiness for terrestrial transit
- Establish operational processes and procedures
- Commissioning & Acceptance Testing → RFPA
- Operational Readiness; Organizational Staffing; Business Processes; OA&M contracts

4 Operational Phase

- OA&M Contracts and Maintenance Plans
- Establish Network Operations Center
- Onward Capacity Procurement
- Sales and Product Management processes & procedures
- Network Readiness Test
- Provisioning
- Customer Support
- Operations, Maintenance & Restoration
- Upgrades

| Developer Investment | Developer Investment | Target completion early-2021/2022 | Ongoing Operations (20+ years) |

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Thank You!

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