



Arctic Data Challenges – avoiding the icebergs

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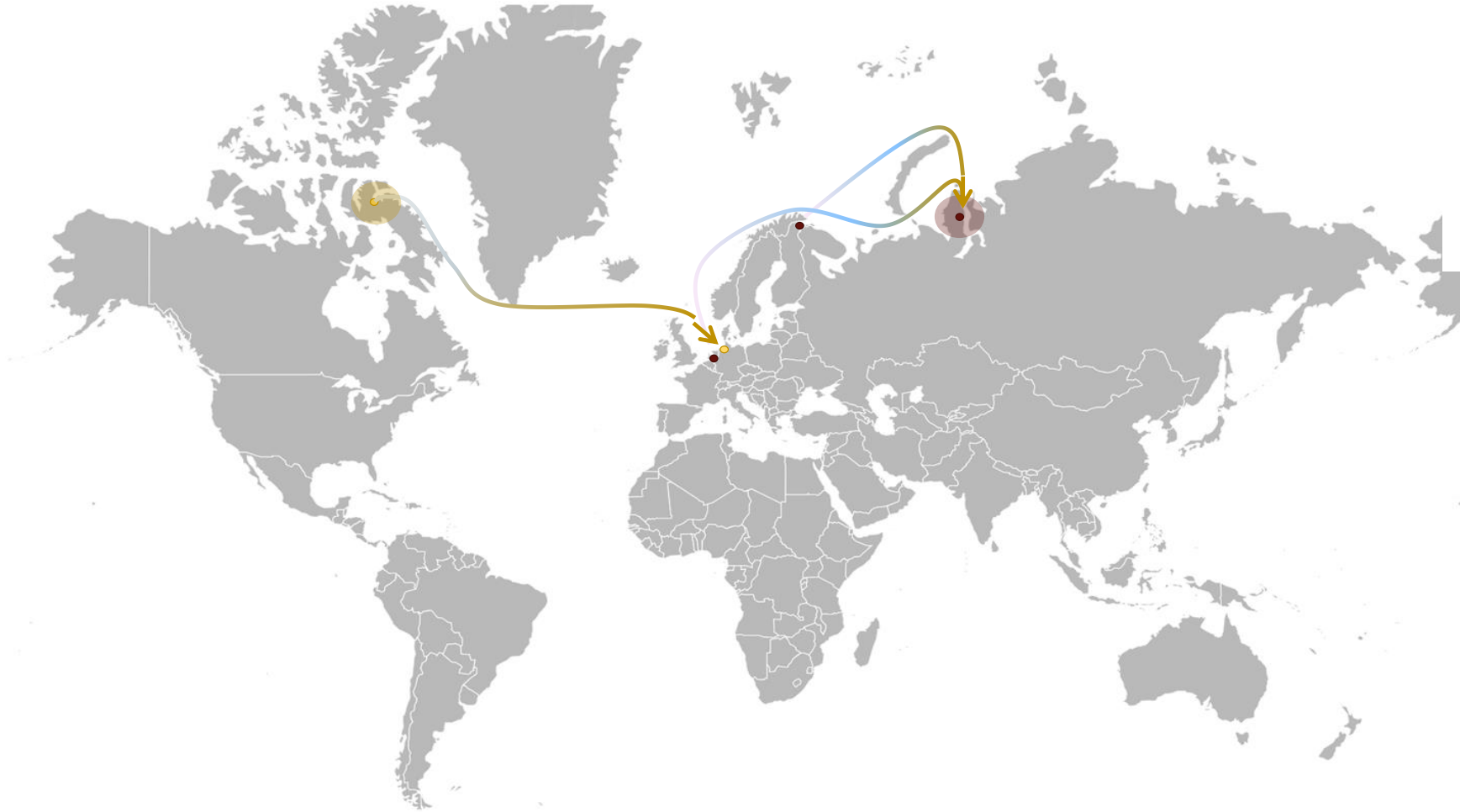
Arctic Data Challenges – avoiding the icebergs



Our value proposition

**Reliable, safe and flexible deliveries regardless
weather and ice conditions as sustainable as
possible**

Most frequent international arctic shipping lanes



Imagine a place with no internet for 30 days

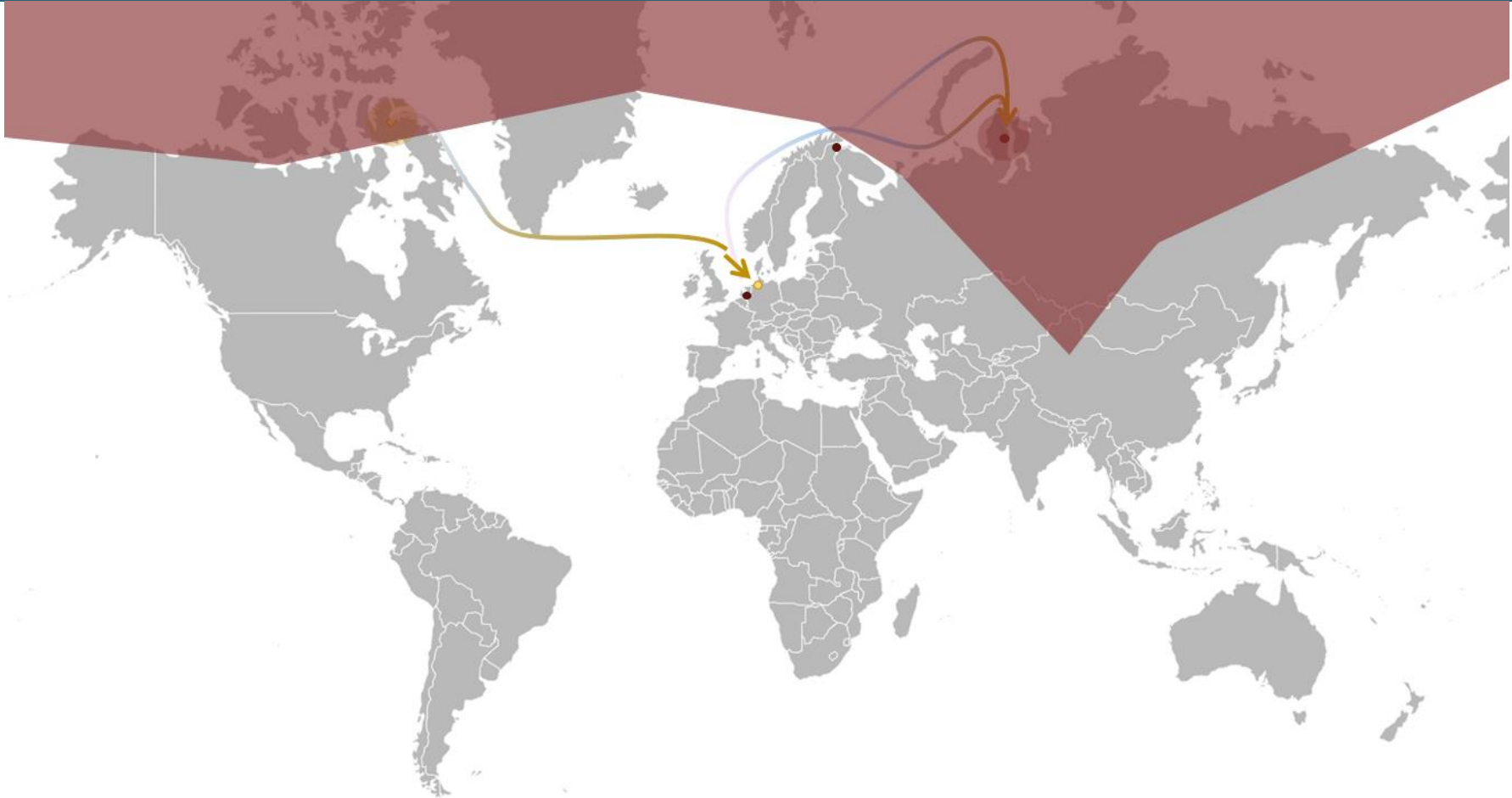
Seriously, would you work regularly in a remote place where you do not have connection to family and friends via social media?

Serious problems to normal daily life matters, no web-banking and kids' school reports available

Difficult to recruit talented young people to seafaring profession

Heaven for some, hell for most of us

No VSAT high-speed coverage in the Arctic



Safety at any data price

Is it acceptable that one MB of data costs 50 USD and takes 30 minutes to receive?

Safety plays a key role in getting better communication systems to the arctic area.

Checking your weather or iceberg forecasts can cost 10,000 USD each time you press the “refresh” button.

Safety cannot be a luxury product.

Current situation

Interoperability between equipment problematic, no user-friendliness

Metering and prioritization of traffic in order to limit cost

Skilled personnel needed, IT-gurus seldom available on cargo vessels

No ready-made solutions available

New technical solutions desperately needed

Low-Earth-Orbit satellites

Advanced ground based stations

**Advanced HF-radio technology
such as Kyynel**

Balloons and bouys

Icebreakers acting as radio communication links





Competent experts with northern know-how

Thank you!



Arctic dry bulk shipping more sustainable than ever before



ESL Shipping



Co-financed by the European Union
Connecting Europe Facility

ASPO