CONTINUOUS INNOVATION – DRIVING OPPORTUNITIES IN THE NORDIC AND BALTIC REGION

Christina Schiøtt Liaos

UKTI Nordic-Baltic Director

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NORDIC-BALTIC INNOVATIVE OPPORTUNITIES

UK TRADE & INVESTMENT

CHRISTINA SCHIØTT LIAOS,

DIRECTOR UKTI NORDIC-BALTIC NETWORK

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NORDIC-BALTIC OPPORTUNITIES

- Energy
- **Infrastructure**
- **Healthcare**
- **ICT**
- Education
- Consumer Goods
- Arctic

- FPBS
- Defence

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CONTINUOUS INNOVATION – DRIVING OPPORTUNITIES IN THE NORDIC AND BALTIC REGION

Daniel Elliott

UKTI Nordic-Baltic Healthcare Lead

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ARE YOU READY TO EXPORT?

Rate yourself:

- Innovative **1 - 3**
- Market ready **1 - 3**

1 / 1 = Not ready. Need to become market ready and ensure high quality.

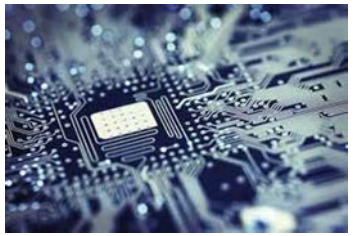
1 / 3 = Ready. But will be highly competitive.

3 / 1 = Not ready. Need to become market ready.

3 / 3 = Ready. You will be competitive but need to build up awareness.

GLOBAL TRENDS

Balancing cost level with the increased number of welfare problems = increased importance of value and outcomes rather than volume and activity.



Emergence of new technologies = empowerment and engagement of the patients

- Disrupting traditional business models / challenging companies to go beyond
- Opportunities for non-traditional Life Science companies to apply strengths / e.g IT, telephony, retail

DEMOGRAPHICS

Population (Total in Millions):	**25.1**
Population growth:	**0.75%**
Health expenditure as % of GDP:	**9.88%**
Health expenditure ($ Billion):	**102.2**
Public as % of total expenditure:	**80.5%**
Number of hospitals:	**4,300**
Number of hospital beds:	**14,000**
Number of primary care doctors:	**22,000**
Physicians per 1,000 population:	**2.4**

HEALTHCARE REFORMS

Denmark: 16 new super hospitals (more centralized)

Sweden: New Karolinska hospital (largest in Europe)

Finland: 21 hospital projects (new builds / renovations)

Iceland: New High Tech Hospital (university hospital)

Norway: New psychiatry hospital / Oslo Uni Hospital

Lithuania: Modernisation of existing hospitals

Latvia: New facility in Riga

Estonia: Development of Tartu Maarjamõisa Hospital

DIGITAL HEALTH

- A strong position in Europe in terms of eHealth deployment in technical and clinical applications
- All Nordic countries have well-developed national eHealth strategies
- Nordic telehealth market is expected to grow 12.8% annually between 2009 and 2015
- Opportunities for digital health companies with focus on improving efficiency of care

MEDTECH

- Highly adoptive, forward thinking culture within the healthcare sector
- Opportunities for medical devices with clear innovation
- Surgical equipment
- Assistive technology / rehabilitation
- Hospital furniture and equipment
- Diagnostics
- Imaging

BIOTECH AND PHARMA

- **Sweden / Denmark:** Medicon Valley
- **Sweden:** GothenburgBIO
- **Finland:**150 companies and15 related universities
- **Norway:** Oslo Cancer Cluster
- **Iceland:** Alvogen Ltd
- **Lithuania:** £700m EU funds

UNITED NATIONS

- Copenhagen hosts 4 major procuremen UN agencies who procure over £400m of medical and lab equipment annually
- Represents over 50% of the UN's spend on healthcare products
- UNICEF Innovation Unit

UKTI ASSISTANCE

- Business opportunities
- Partner intorductions
- Clinical opinion leader engagement
- Events and missions

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Mark Chapman

UKTI Nordic-Baltic Infrastructure Lead

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UK Trade & Investment

Overview of Mass Transportation Projects in the Nordics & Baltic States

Mark Chapman, UKTI Copenhagen, Market Adviser, 6 November 2014

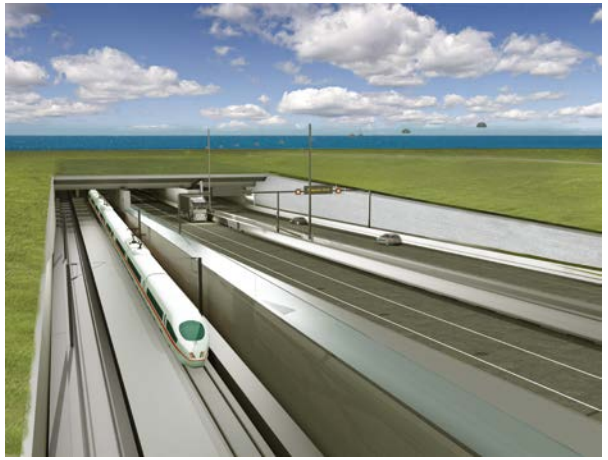
Introduction

Who am I?

- 8 years living & working in Denmark
- 3 1/2 years at the British Embassy in Copenhagen
- Married to a Dane who shares the same name as the Prime Minister in the popular Danish political drama “Borgen”.
- Two daughters age 6 & 4.
- Nordic & Baltic Lead for Infrastructure & Construction (includes Transport Infrastructure)
- UKTI Project Lead for the Femernbelt Fixed Link – one of Europe’s largest Infrastructure projects

Denmark

FEHMARNBELT FIXED LINK TUNNEL – A UKTI High Value Opportunity



One of the most important infrastructure projects in Europe. The construction of an immersed tunnel connecting Denmark to Germany is due to open in 2021 at a cost of £5.5 billion. Road & Rail.

LIGHT RAIL PROJECTS - New Tram systems to three of Denmark's main cities

The principal cities of Aarhus, Odense and Aalborg are due to establish a network of light rail lines that connect the metropolitan areas with a modern and efficient transport system.

“CITYRINGEN” – New Copenhagen City Metro Line

The Cityringen will enhance the performance of Copenhagen’s award-winning Metro by introducing 17 new underground rail stations connecting key areas of the capital. The Cityringen metro will comprise approximately 16km of twin-bore tunnel connecting the city’s main population, education and workplace centres. It will form a loop around the city, interchanging with the existing metro, rail and bus infrastructure at key locations around the loop.

Sweden

THE EAST LINK "OSTLANKEN" - New double track rail link between Jarna and Linkoping

The East Link will be approximately 150km long and is planned to carry trains at speeds of up to 320 km/h.When complete it will be possible to travel on the same train from Stockholm to Copenhagen without changing.

THE WEST LINK ”VASTLANKEN” - Railway tunnel under the centre of Gothenburg

The West Link Project is a railway tunnel under the centre of Sweden’s 2nd largest city – Gothenburg. It will connect commuter rail services to routes that pass though the city and give rise to several new stations.

THE MALAREN LINE PROJECT ”MALARBANAN” – 20km of Track expansion

The Malaren Line Project will expand the railway between Tomteboda and Kallhall northwest of Stockholm from two tracks to four. This will increase the track capacity and trains will be able to run more requently and punctually.

THE GOTHENBURG-BORAS PROJECT – Linking Western Sweden's two largest cities

60 kilometres of new double-track, high-speed railway between western Sweden's two largest cities. The project will be a section of a new main line Stockholm-Gothenburg via Jonkoping.

Norway

FOLLO LINE – High-Speed Rail Line

The Follo Line is a planned 22.5km (14mi) high-speed railway line between Norway's capital city Oslo and the suburban town of Ski. The double-track line will run parallel to the Østfold Line.

INVESTMENT IN NORWEGIAN ROAD INFRASTRUCTURE

The Norwegian Public Roads Administration will invest €1.8 billion on roads in Northern Norway between 2014 and 2017. The investment will allow for maintenance of tunnels and state roads in need of work. Overall, €17.645 billion will be invested on the national road network in Norway between 2014 and 2017.

”FORNEBUBANE” LIGHT RAIL PROJECT

Project under discussion.

Finland

TAMPERE - Tramway Project

The Tampere Tramway project will include the construction of a new 23,5 km tram network in the Tampere city that will serve some 40 000 passengers per day.

Decisions about implementation in 2016 based on detailed plans made in 2015 - 2016. The first section of the tram system should be completed and in traffic in 2018 or 2019. The whole system should be completed by 2022.

PISARA – Underground City Rail Loop

The City Rail Loop is a planned urban railway line for commuter trains under the Helsinki city centre. The loop-shaped railway starts in Pasila and runs in a tunnel via 3 new stations Töölö, Helsinki city centre, Hakaniemi and back to Pasila. This new railway line will smooth traffic flow in the whole country.

Iceland

REYKJAVIK EXPRESS - Airrail from Keflavik International Airport to Reykjavik

A high speed rail system from Keflavik International Airport to the capital city of Iceland, Reykjavik. The estimated cost of the project is £500 million and the distance is just shy of 50km. It is estimated that the travel time one-way will be 15-20 minutes.

The Baltic States

RAIL BALTICA – High Speed Rail Line Connecting the Baltics to Poland

Rail Baltica is one of the priority projects of the European Union *Trans-European Transport Network* (TEN-T). The project will link Finland, the Baltic States and Poland and also improve the connection between Central and Northern Europe and Germany. The route is estimated to be completed by 2024

Thank you!

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Emilie Mortenson

UKTI Trade Adviser ICT Denmark

Information and Communication Technology

Nordic-Baltic Network
UK Trade and Investment

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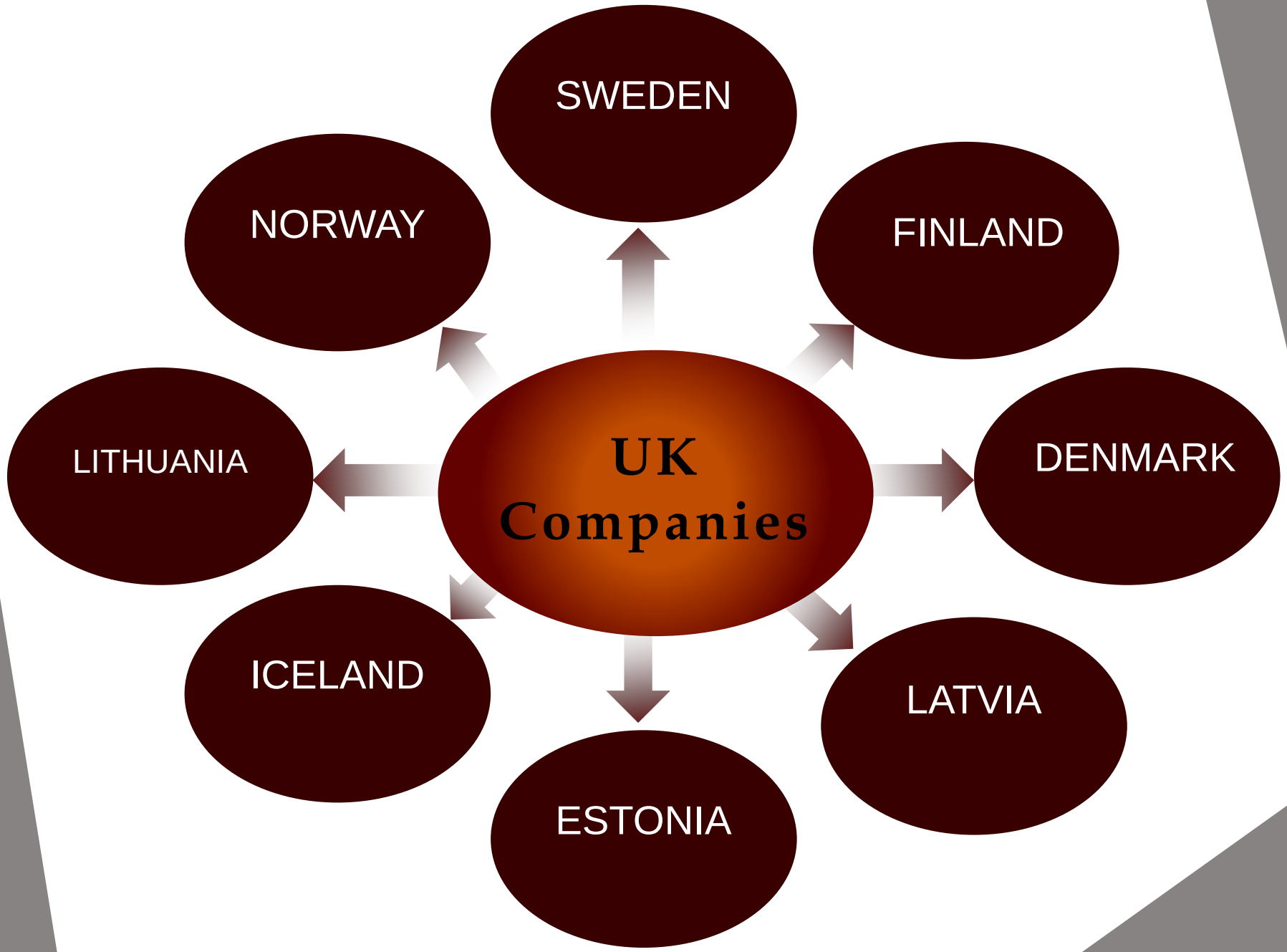
Who?



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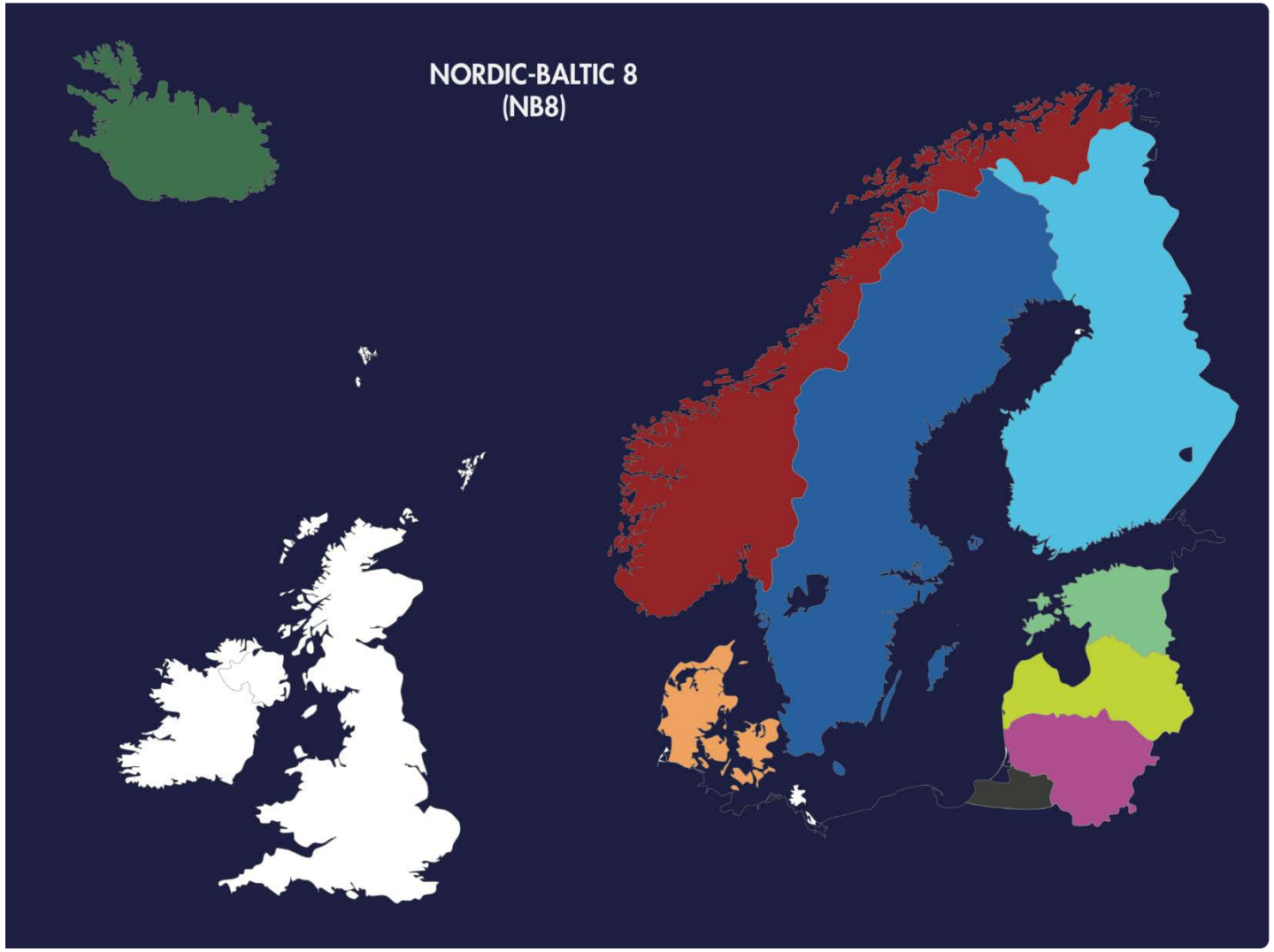
Why export to this region?



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THE NORDIC BALTIC'S INDUSTRIAL STRENGTHS

- Innovation and technology
- Openness and willingness to work globally
- Skilled workforce and high productivity

ERICSSON ***KING DIGITAL ENTERTAINMENT***

NOKIA

ROVIO ***BLUETOOTH***

GSM

F-SECURE ***LTE***

SUPERCELL

SKYPE

TDC ***SPOTIFY***

- The list of innovative, world famous ICT brands and trademarks coming from the Nordic Baltic region is long.
- At the same time global companies originating from outside the region have a strong R&D presence in the market including, Google, Facebook, Microsoft, Intel, Samsung, TeleCity….

THE ICT SECTOR IS WELL DEVELOPED WITH A WIDE RANGE OF E-SERVICES

- e-voting
- e-banking
- e-prescriptions
- e-parking

Also a large focus in the region on Smart Cities solutions

ICT IS MORE THAN A SECTOR – IT IS A PLATFORM FOR ALL OTHER SECTORS

WE SEE OPPORTUNITY FOR UK COMPANIES WITHIN:

- High tech security products
- Cyber Resilience - Cyber Security
- Big Data for Smart City Solutions / Big Data Solutions / Data storage
- Urban Mobility Optimizing solutions
- Renewable Energy, Smart energy infrastructure & Smart electricity grid solutions
- Key market for IT and Telecom, open to new technologies and innovations
- The list goes on, opportunities across the board.

UK security capabilities are both reputable and respected in the Nordic Baltic region

- The need for international cooperation in cyber security is evident, due to the nature of the cyberspace itself.

- International cooperation to counter cyber threats is still lagging behind.

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We are here to help

How can we help you reach your goals in our region?

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UKTI ASSISTANCE

- Market Intelligence
- Partner Introductions
- Access to decision makers
- Great Britain brand
- Business Opportunities

Upcoming Events

UKTI Smart Cities Networking Event in Copenhagen, 11 November 2014

The Danish Smart Cities networking event at the British Ambassador's Residence in Denmark will bring together stakeholders from the leading Danish municipalities concerning the development of smarter cities towards a smarter future.

We invite UK companies to showcase UK expertise within the Smart City space and attract the Danish decision-makers at local government level. This event will also provide UK companies with an insight into the opportunities that are available for them within the Danish landscape.

Event flyer are available for those that are interested after the presentation.

Please contact me if you are interested in attending:
Emilie.Mortensen@mobile.ukti.gov.uk

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Upcoming Events

UKTI @ SLUSH 2014

Northern Europe's Largest Start-up event. Bringing together start-ups, tech talent and international investors and media.

UKTI stand presence at the show and connected activities.

Date 18 & 19th November
www.slush.org

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Upcoming Events

NBN Cyber Security Mission in London, Q1 2015

Cyber Security conference to showcase the UK's cyber security offer to B2B and B2G NBN potential customers. All eight NBN Countries will arrange this event.

We will invite UK companies to showcase the "UK offer" to NBN potential customers.

Event flyer are available for those that are interested after the presentation.

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THANK YOU
FOR YOUR ATTENTION☺

YOUR UKTI ICT NORDIC BALTIC NETWORK TEAM LOOKS FORWARD TO ASSISTING YOU WITH YOUR EXPORT VENTURES TO THE NORDICS BALTICS!

PLEASE GET IN TOUCH IF YOU HAVE ANY QUESTIONS:
EMILIE.MORTENSEN@MOBILE.UKTI.GOV.UK

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Sabine Kauer

Senior Trade Advisor,
UK Trade & Investment British Embassy

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NORDIC-BALTIC ENERGY SECTOR

- Richest sources of energy in the world
- Effective, competitive, safe and sustainable energy systems
- EU-2020 targets

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BALTIC ENERGY SECTOR

- Energy security
- Energy diversification: more investment into renewable energy sources
- Increase of energy efficiency of current plants
- Integration into EU electricity and gas grids (BEMIP)

ESTONIA

- Self-sufficient in energy terms, 70% of primary energy supply from oil shale
- Increase of energy efficiency and sustainability
- Medium-term goal: reduction of oil shale, expansion of renewable energy
- Business opportunites in offshore wind projects
  - Offshore wind, Eesti Energia, 600 MW, applying for permits
  - Nelja Energia, 700 MW, construction start in 2018
  - Baltic Blue Energy, 1999 MW, construction start in 2020-2025
  - Balticconnector between FIN-EST, construction start in 2019

LATVIA

- Energy security – differentiation of supplies of primary energy sources
- Energy efficiency – increase of efficient use of existing resources, heavily supported by EU funds
- 40% renewable energy mix, highest share in the Baltics
- Business opportunities:
  - LNG terminal, implementation in 2016
  - 500 MW offshore wind park, Q1 2015
  - Upgrade/development of underground gas storage, worth €300 Mio, 2015-17

LITHUANIA

- Main power source gas, imported from one supplier
- Missing grid connection to EU neighbour countries – new electricity connections with Sweden and Poland in progress
- Business opportunities
  - Nuclear new build with strategic investor Hitachi. Project to be confirmed
  - Offshore wind: potential for development of 600 MW in 6 zones. Projects will start after required legislation is in place
  - Onshore wind: licences for 500MW, possible additional capacity, ongoing
  - Klaipeda LNG terminal, 2014 – onwards
  - Gas interconnector Lithuania – Poland, in progress

NORDIC ENERGY SECTOR

- Nordic countries – political cooperation since 1952
- NordPool and NordReg: common Nordic electricity wholesale and end-user market
- Ambitious goals exceeding the EU-2020 goals
  - Ensure secure energy supply
  - Raise renewable energy share
  - Climate neutral by 2050

DENMARK

- Important oil producer – high share of crude oil and petroleum
- Wind power most important renewable energy source
- Business opportunites:
  - Offshore wind: Horns Reef 3, 400 MW, preliminary tender specifications 2014
  - Offshore wind: Kriegers Flak, 600MW, prequalifications 2014/15
  - Culzean and Golgen Eagle project, Maersk Oil, fabrication and service, topsides to be procured in 2015

FINLAND

- Diversified energy market, 29% of electricity consumption from renewables
- Wind power: market based feed-in system in place
- Business opportunities:
  - On- and Offshore wind: project financing and niche consulting services
  - LNG: FinnGulf includes Balticconnector, potential joint project with Estonia (EU Funding)
  - Balticconnector between Finland and Estonia (EU PCI): assesment, landing site analysis, route selection, engineering, cable contracting and laying, land transmission

ICELAND

- Most tectonically active places on earth
- 75% electricity derived from hydro power
- 25% electricity derived from geothermal energy
- Business opportunities:
  - Onshore wind: 1800MW expansion
  - Iceland Dragon and Greenland East coast oil fields expansion
  - Interconnector to the UK: feasibility stage
  - Expansion and maintenance of existing geothermal and hydro plants

NORWAY

- Self-sufficient energy supply - 95% hydro power
- 24% of GDP through petroleum sector
- 7th largest world producer of oil and 3rd largest world producer of gas
- Business opportunities:
  - Oil and gas: EOR & IOR technologies, MMO (maintenance, modifications and operations) environmental technologies and arctic developments
  - Interconnectors: Norway-UK (NSN) and Norway-Germay (Nord -Link), 2015
  - Grid update: maintenance and upgrade

SWEDEN

- Already meeting its EU2020 targets
- Three main energy sources: Hydro, nuclear and wind power
- Business opportunities:
  - Blekinge Offshore wind park, SEK50 million investment, 2,500MW, 2015-2018
  - Markbygden Etapp 2: In May 2014 the Swedish land and environment courts gave permission for utterly 440 turbines
  - Onshore wind parks: 12,200 MW currently being reviewed
  - Waste2Energy supply chain
  - Power generation supply chain, January 2015

ANY QUESTIONS?

Contact details:

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