



# UK Cable Protection Committee

‘The benefits of early  
consultation’

7 Oct 2010



# Introduction

- About UKCPC
- Overview of Submarine Cables
- Benefits of Early Consultation
- Request for Help



# About UKCPC

- UKCPC is an international industry forum of administrations and companies which own, operate or service submarine cables in UK waters (Communications & Power).
- UKCPC is regional affiliate of ICPC (International Cable Protection Committee).
- ICPC formed 1958 - [www.iscp.org](http://www.iscp.org)
- UKCPC 1<sup>st</sup> Plenary held June 1999
- UKCPC is a Not for profit trade association
- 1 x part time secretary, all activities manned by volunteers





# Membership / Structure

- 35 Members (inc 20 Telecom cable owners, 6 Power cable owners & 9 Associates)
- Plenary meets 2 x year
- Executive Committee (Elected by Plenary, Chairman, Vice chairman, Secretary/Treasurer + others).
- Three Sub Committees
  - Technical & Regulatory
  - Maritime
  - Renewables
- Sub committees meet as required



# Key Goals

- Promote awareness of cables, marine safety, industry best practice and the safeguarding of cables from hazards.
- UKCPC aims to work closely with other seabed stakeholders & protect cable infrastructure
- Exchange technical, regulatory and legal information without compromising the commercial and market aims of individual members.
- Provide information via Publications, Kingfisher Charts & Disks, Best Practice Guidelines, Trade events, Internet etc



**TARGET®**



# What are Submarine Cables

- Communication & Power cables that exist on or under the surface of the sea floor
- They transmit electrical / optical signals and/or power
- Generally small in diameter (typically  $\varnothing$  15 – 220mm)
- Well established technology, exist 160 years
  - 1<sup>st</sup> International communications cable (UK to France) – 1850
  - 1<sup>st</sup> Trans-Atlantic Telegraph cable – 1858





Typical Communication Submarine Cable Types  
Courtesy of Alcatel-Lucent



Typical Submarine Power Cable  
Courtesy of Moyle Interconnector / Nexans



# Why are communications cables important ?

UK would not function without them

- Essential part of communications networks
- Provide International, National & Local connectivity
- Carry nearly 100% of trans-oceanic internet traffic
- Carry more than 95% of international communications traffic
- They transfer huge volumes of business & social traffic with reliability, safety & security
- They are cost effective & add significant value (GDP) to UKplc
- They are integral to modern life





# Why are power cables important ?

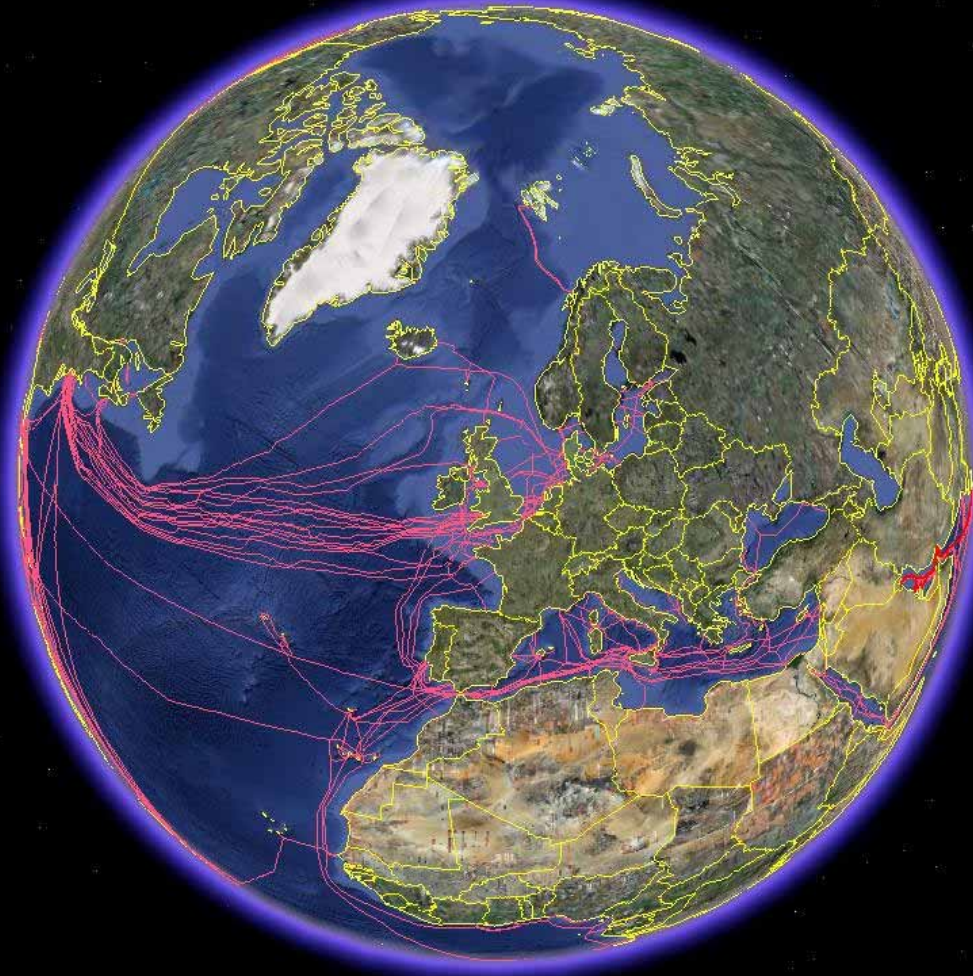
UK would not function without them

- Provide Diversity & Resilience of UK Energy Supply
- International connectivity with France, Netherlands, Ireland, Isle of Man, Channel Islands
- National & local connectivity with many UK island communities
- Enable locally produced green energy to be exported onto the national grid.
- Enable greener energy to be utilised within communities
- They are integral to modern life





# They connect UK with World



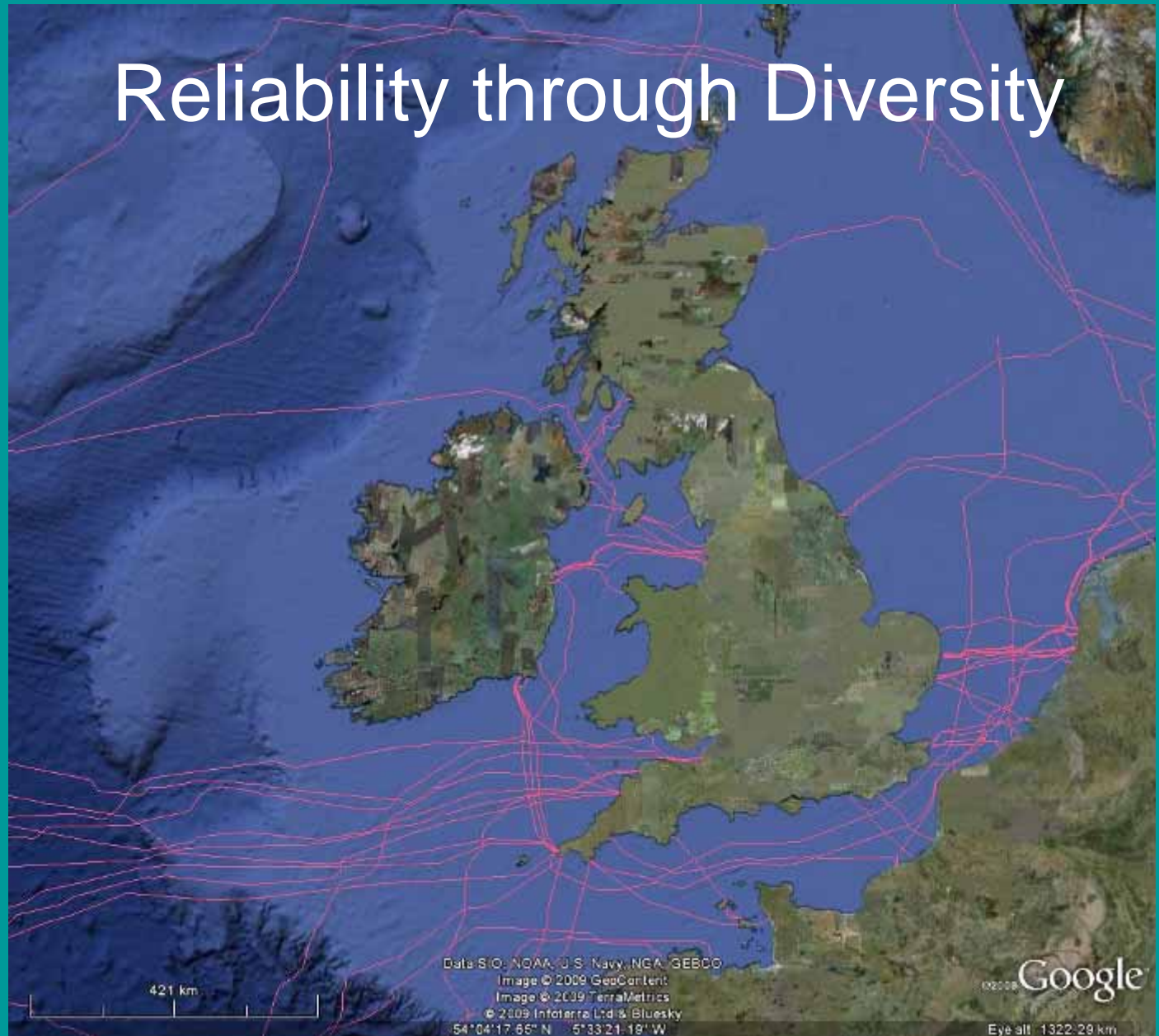
Data SIO, NOAA, U.S. Navy, NGA, GEBCO  
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US Dept of State Geographer  
54°00'00.00" N 2°00'00.00" W

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# Reliability through Diversity





# Benefits of early consultation

- Developers aware of challenges early
- Designs can be modified at Desk Study stage
- Existing stakeholders given time to consult
  - Protocol
    - Developer led
    - Generic Agreements available (eg crossings)
- Real Benefits
  - Cost savings
  - Timescales (cost savings)
  - Improved working relationships (cost savings)
  - Dispute avoidance (cost savings)





# Why are we here today ?

Request for Help ?

We have a problem

- Technical
- Safety
- About
  - Proximity of Turbines to submarine cable (Sea-room)
  - Potential for extended outages to UK communications networks
- Solution requires development





# UKCPC Guideline 6

## Proximity of Wind Farm Developments & Submarine Cables

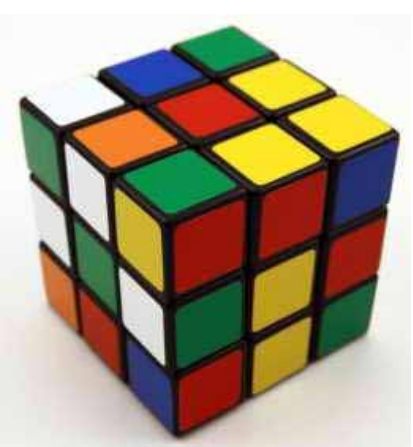
- First issued Sept 2003, latest revision September 2010
- Targeted at small developments (1 – 20 Turbines), served well
- Key point separation between Turbines & Cables +/- 1000m (Unimpeded corridor **2000m** wide for a repair ship)
- Based on existing submarine cable maintenance capability
- Typical developments of 100+ Turbines exposed limits of this guideline
- Does not yet account for
  - Large Development areas
  - Working safely inside a Wind Farm
  - Array, collector & export cables
- How do we determine how much space is needed ?
- ***UKCPC guideline # 6 needs substantial revision***





# Solution

- UKCPC Renewables Sub group (RSG)
  - Terms of Reference
  - Chairman Appointed
- We need help with solution development
  - We think we understand cables
  - We would like to understand Turbines
- We would like to work more closely with the Renewables sector to
  - Understand the issues
  - Develop the solutions
  - Write a new joint Industry Guideline





# Handouts

- UKCPC Brochure
- Submarine cables and the oceans: connecting the world
  - Backed by ICPC, UNEP WCMC
- UKCPC Guideline 6 Issue 3
  - Revised recently for clarification Purposes only
  - Health warning – we know it has limitations
  - We want to develop a new Guideline jointly with the Renewables sector
  - We would like to invite Renewables sector experts to join the UKCPC Renewable sub Group (RSG) team
  - We encourage cable owners, operators & installation & maintenance providers to join UKCPC





# Thank you - Questions

Website - [www.ukcpc.org.uk](http://www.ukcpc.org.uk)

## Contacts

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