



**IRELAND**  
**Our Ocean Wealth 1<sup>st</sup> Annual Conference, Dublin Castle,**  
**18 June 2014**

**Clare Morgan**

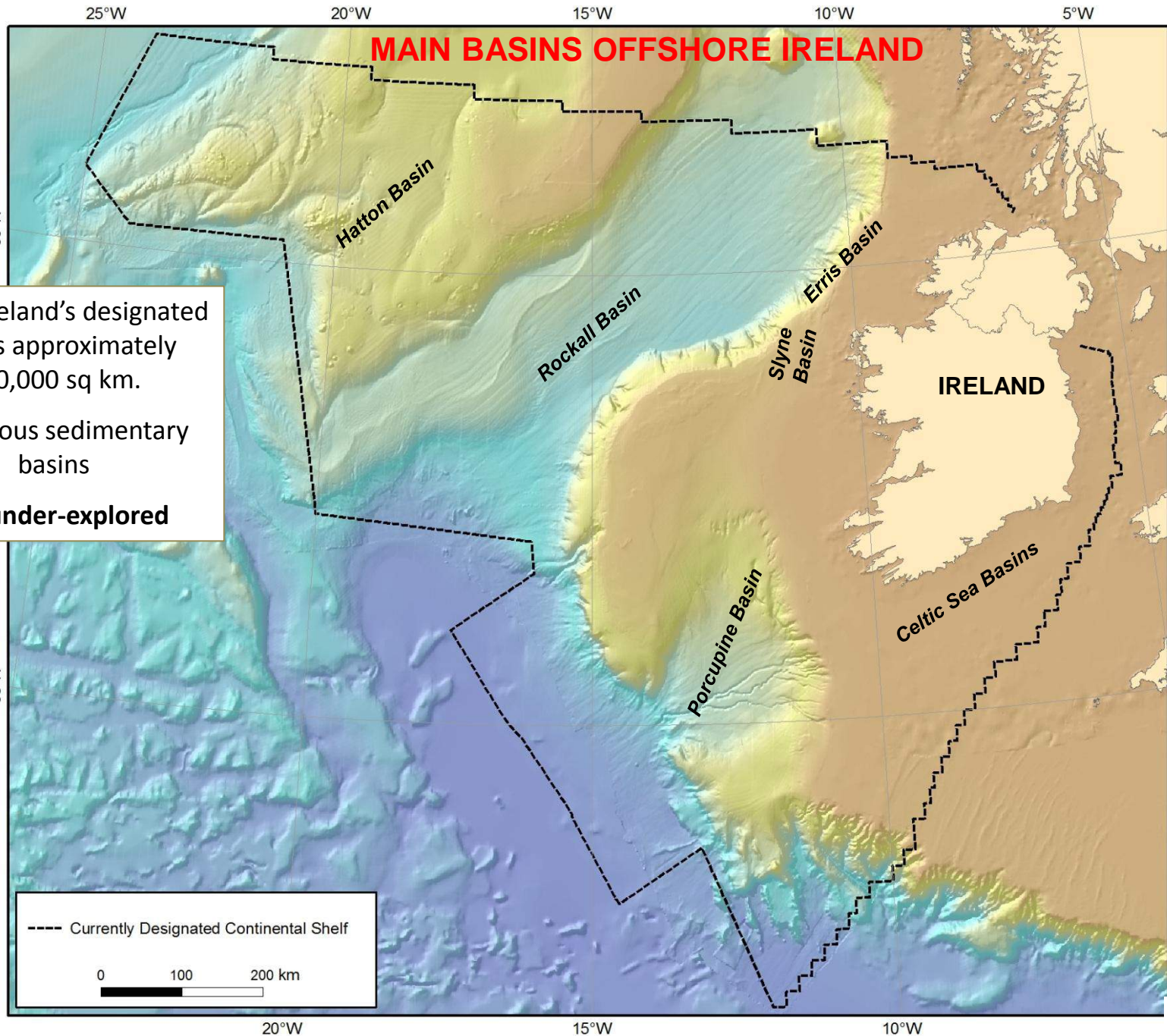
Petroleum Affairs Division

Department of Communications, Energy and Natural Resources



## Presentation outline:

- **Regional seismic survey 2013/2014**
  - Justification
  - Objectives
  - Line layout and parameters
  - Current status
- **Seismic examples (data to be released on 1 Sept 2014)**
- **Data Access**
  - Cost
  - When available
- **Importance of new regional seismic survey**

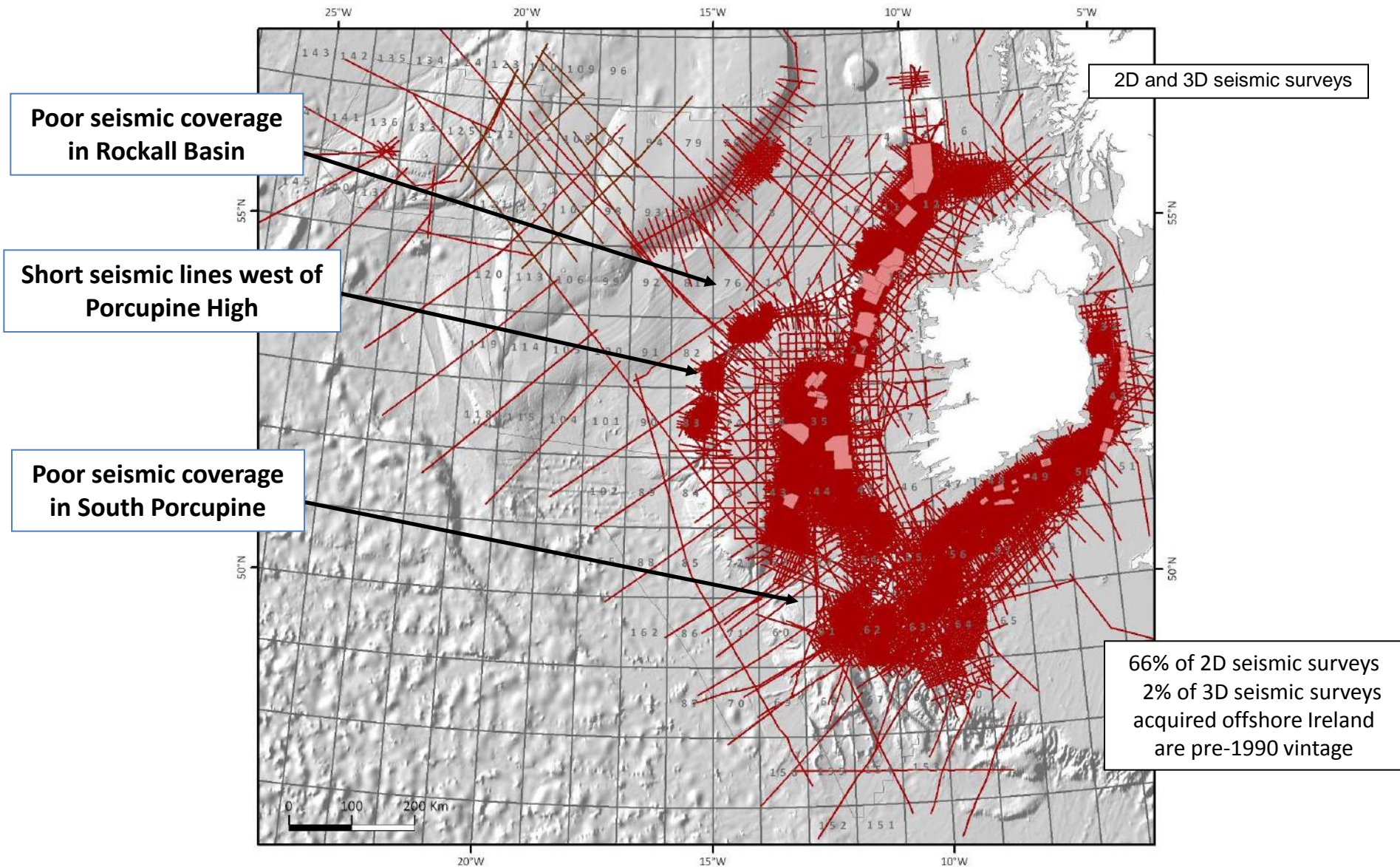


Size of Ireland's designated area is approximately 700,000 sq km.

Numerous sedimentary basins

**It is under-explored**

# Seismic Database offshore Ireland 31 Dec 2012: 2D surveys and 3D surveys



**Data gaps are barriers to Licence Applications**

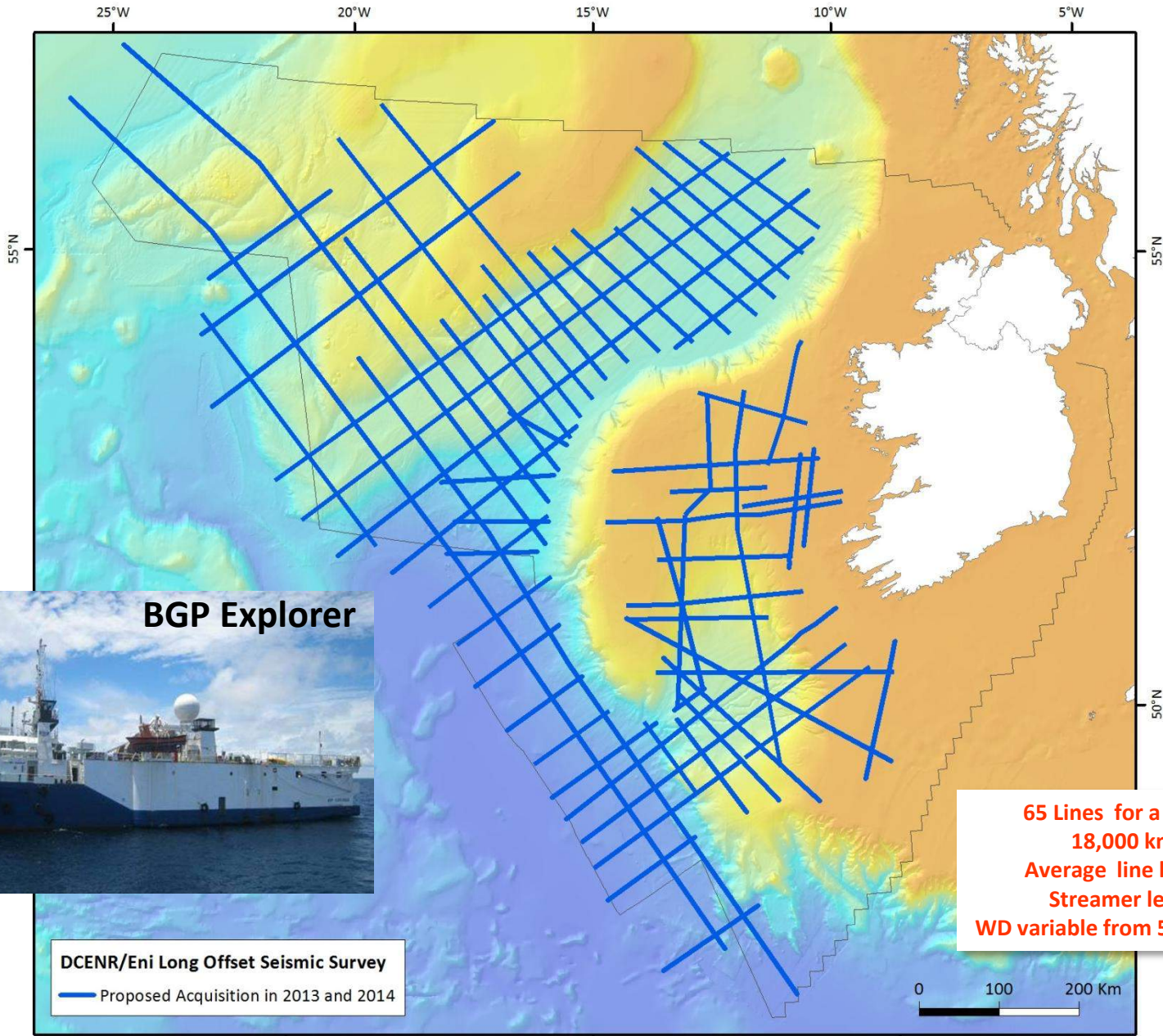
# Regional Seismic Survey Project

## Overall Objective

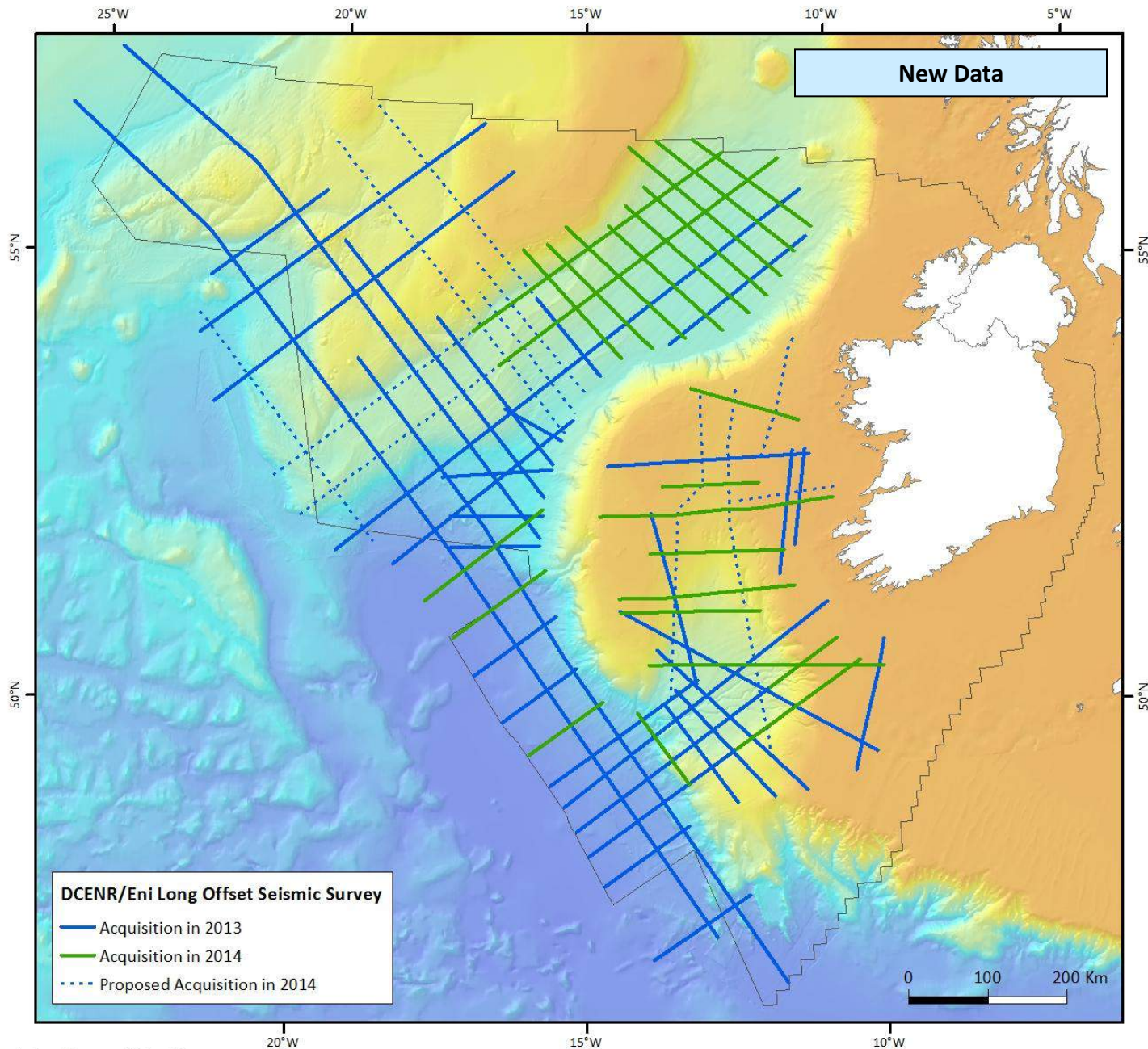
The survey is aimed at providing a regional grid of modern seismic data over the Atlantic Ireland frontier basins, to allow imaging of the subsurface geology and to ultimately result in a greater understanding of the prospectivity offshore Ireland.

- Key piece of missing data offshore Ireland is a complete Regional Seismic Survey of Ireland's Atlantic Margin Basins
- Agreement reached on acquisition of up to 18,000 kilometres of new 2D seismic data. Commenced the survey in June 2013. Acquisition continuing in 2014.
- The new data should provide high quality images of the subsurface, infilling existing data and providing new coverage to fill data gaps
- The new data should aid our understanding in identifying areas of prospectivity for oil and gas offshore Ireland and will be of interest to industry and researchers
- The new regional seismic survey will be available to the industry for the 2015 Atlantic Margin Licensing Round

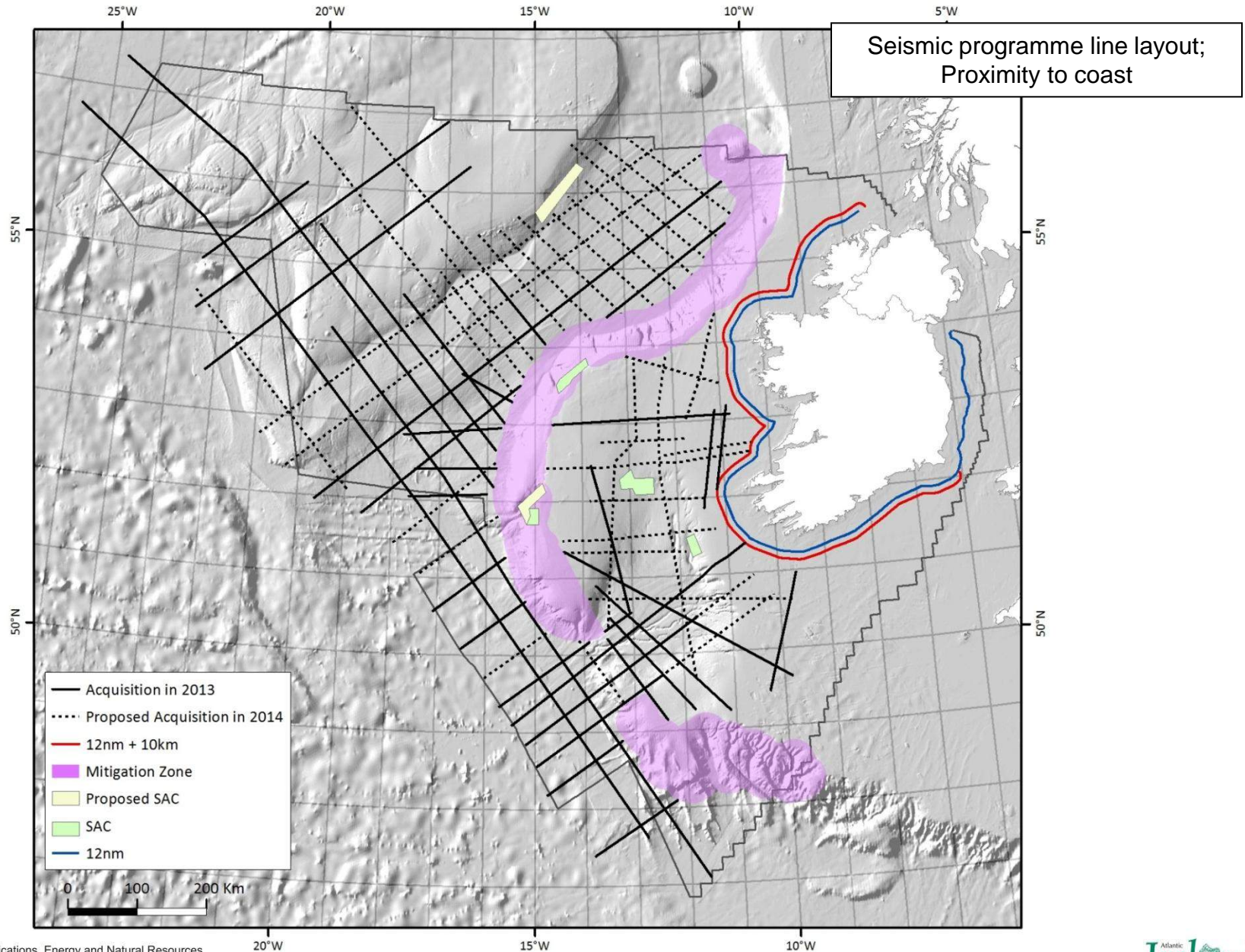
The aim is to make the regional seismic data available to a wide audience



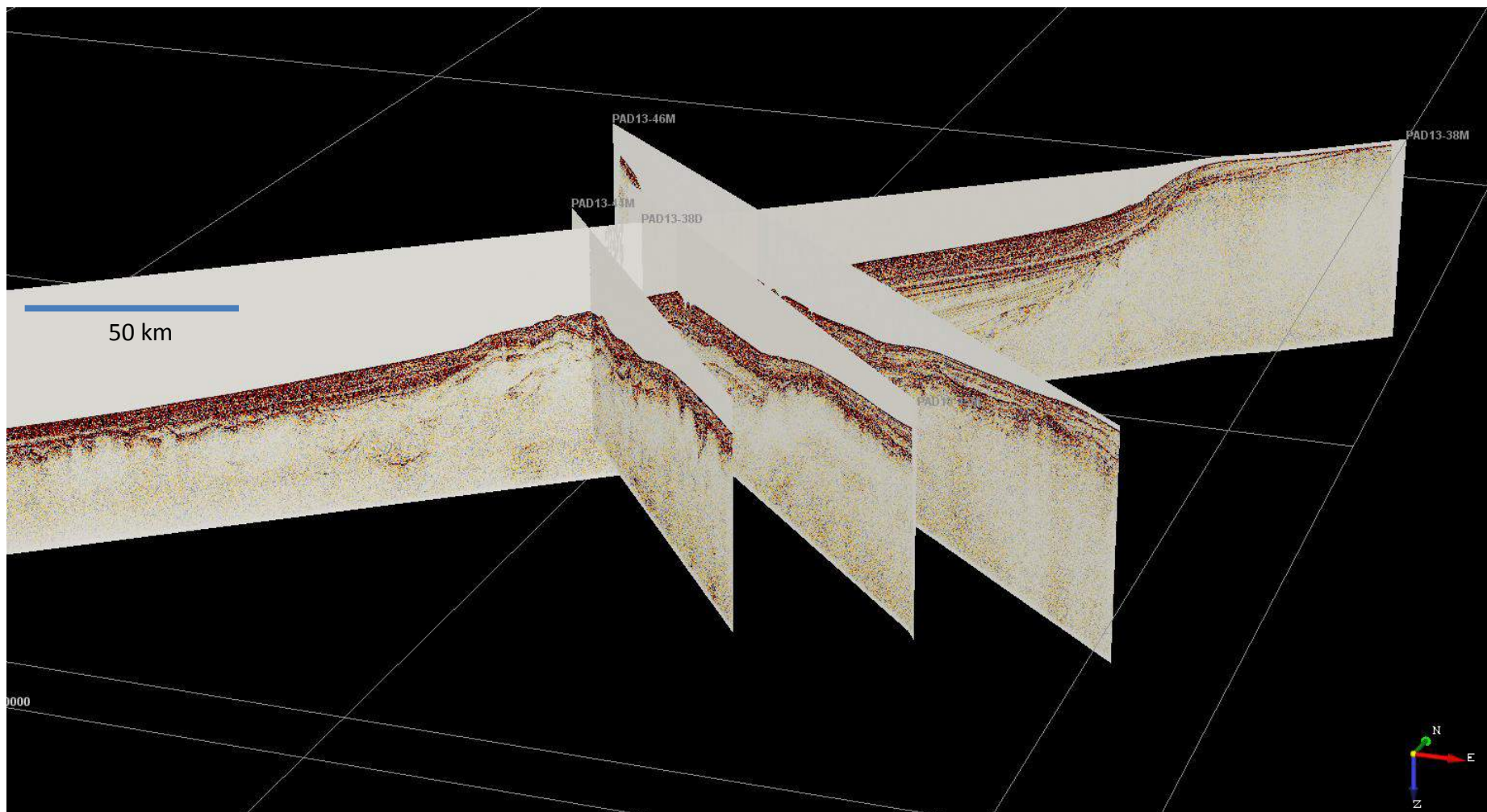
**65 Lines for a total of up to  
 18,000 km Survey  
 Average line length 280 km  
 Streamer length 10km  
 WD variable from 50 to 5,000 metres**



# IRELAND – a substantial new Regional Seismic Survey offshore Atlantic Ireland 2013/2014

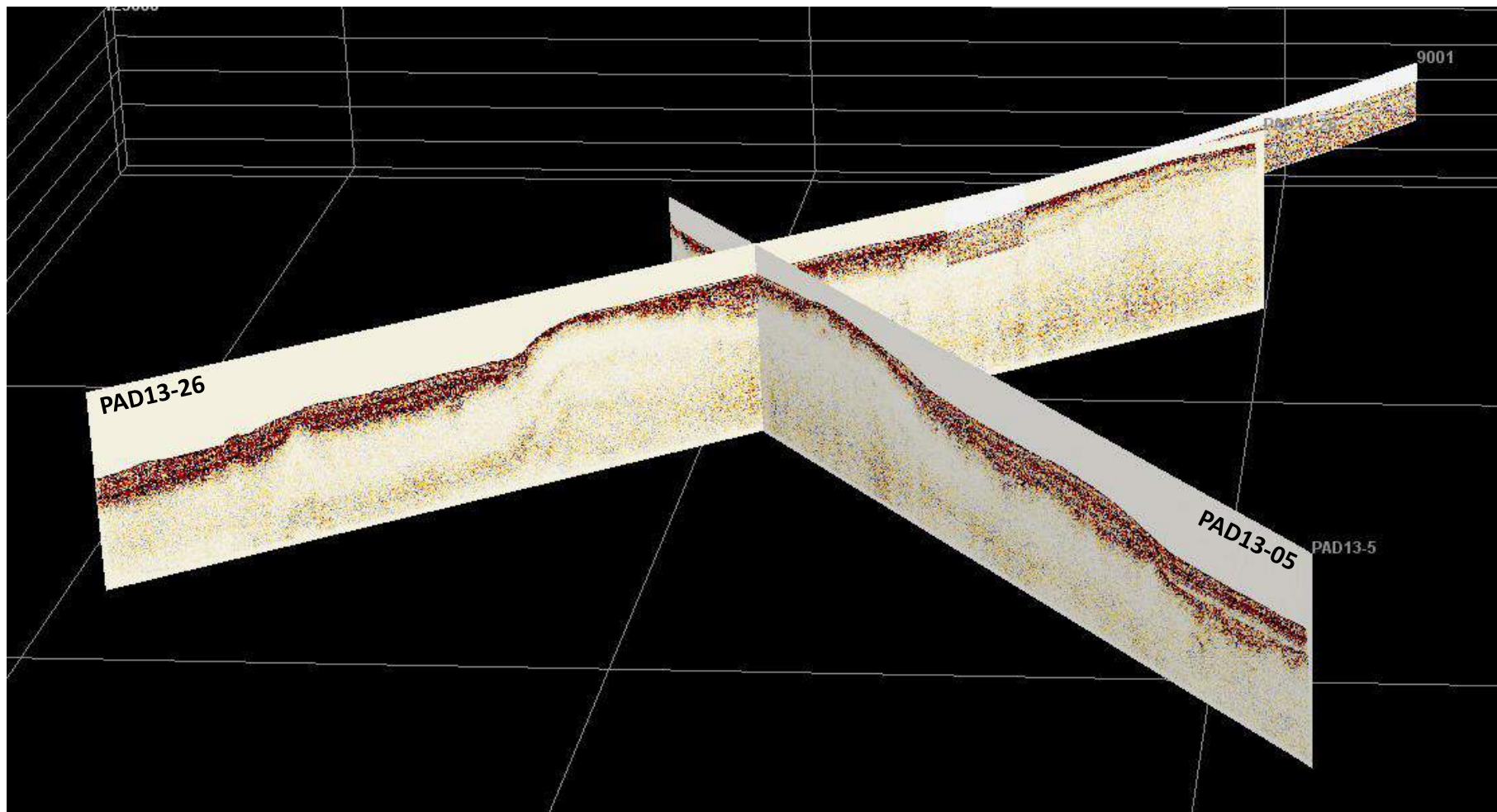


Longest line in the survey is 1338km (illustrated line is 400km)



Illustrates the regional extent of the new dataset and long cable deep imaging

# Hatton Basin

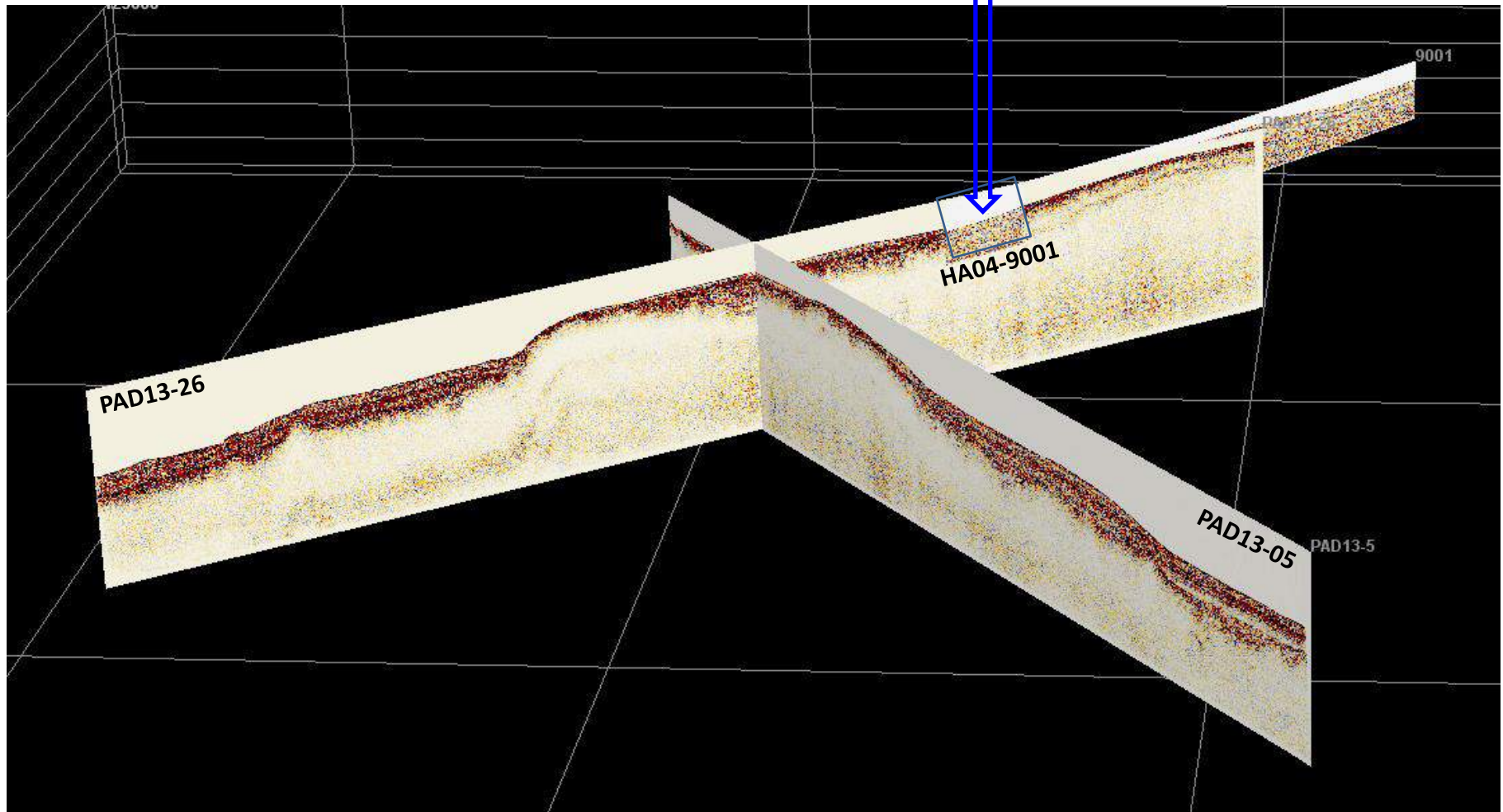


50 km

Length of PAD13 ines on this slide approximately 500km

Comparison of 2D seismic line acquired in 2004 & DCENR seismic line acquired in 2013

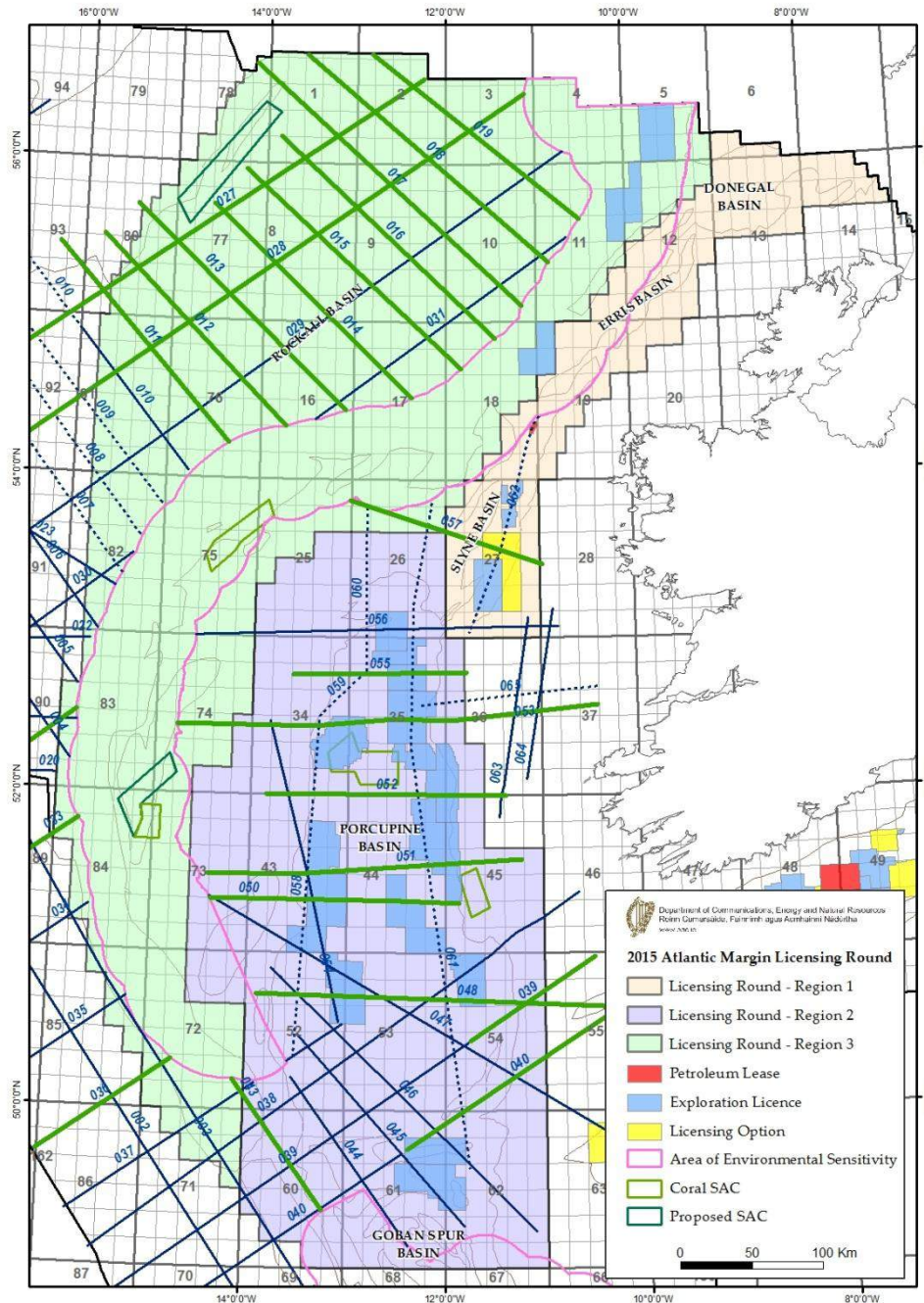
Hatton Basin



Illustrates the regional extent of the new dataset and long cable deep imaging

12 secs record length

# 2015 ATLANTIC MARGIN LICENSING ROUND



New seismic grid in **Rockall Basin** is 35km by 50km

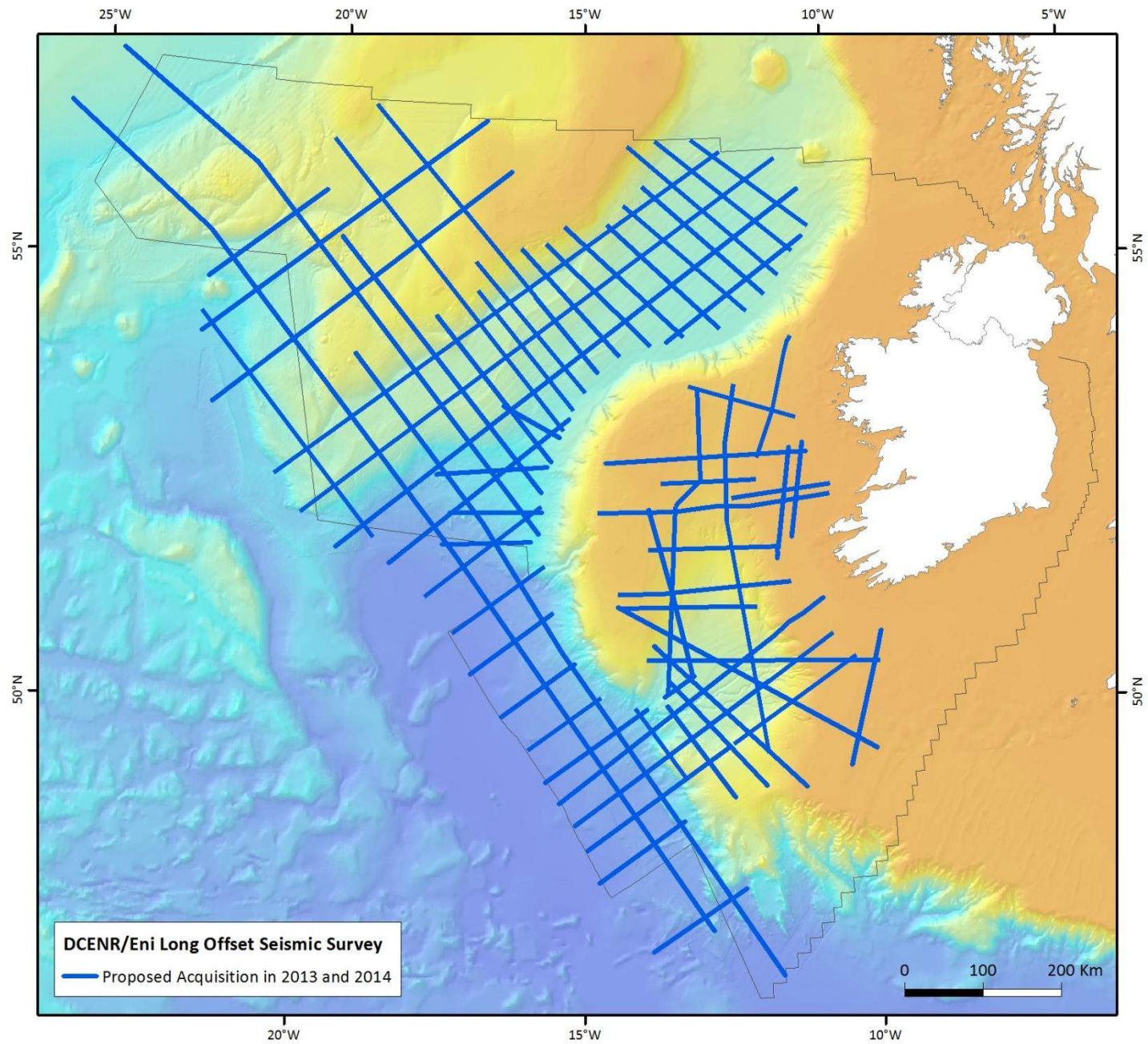
New seismic grid in **South Porcupine Basin** is 30km by 40km

Department of Communications, Energy and Natural Resources  
 Roinn Cumarsáid, Fuinnearaí agus Nádúrtha  
 www.dcnr.ie

**2015 Atlantic Margin Licensing Round**

- Licensing Round - Region 1
- Licensing Round - Region 2
- Licensing Round - Region 3
- Petroleum Lease
- Exploration Licence
- Licensing Option
- Area of Environmental Sensitivity
- Coral SAC
- Proposed SAC

0 50 100 Km



# Cost of DCENR/Eni Regional 2D seismic survey

2013 – 10,000 km acquired (10,165km)  
2014 – estimated 6,000 km to 8,000 km

No cost to Academic Institutions and *bona fide* Researchers

There are 4 options to purchase the data

for companies and contractors

Line km

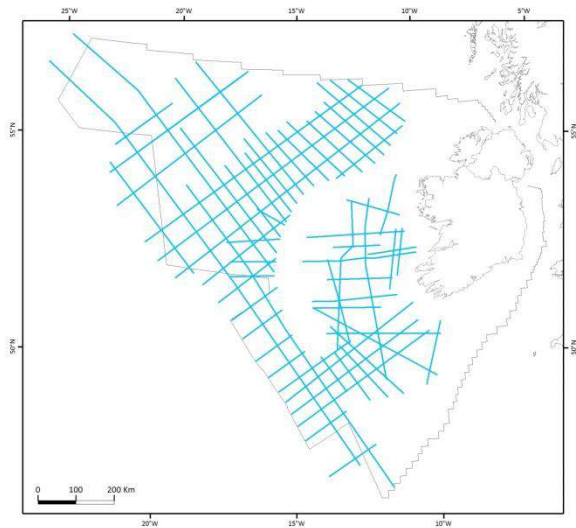
Year

Basin

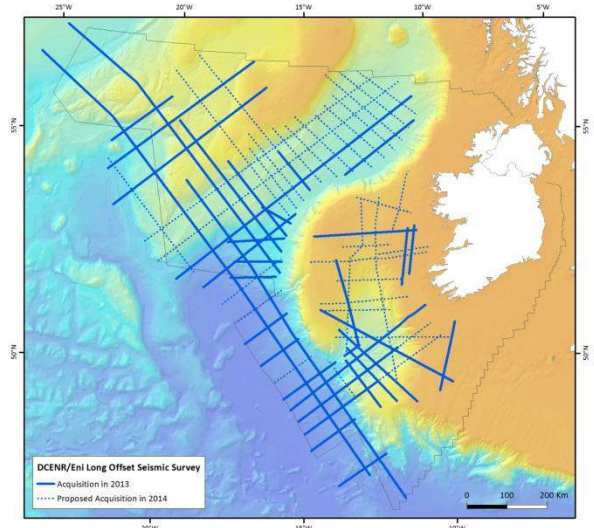
Entire

PreStack Time Migrated digital data

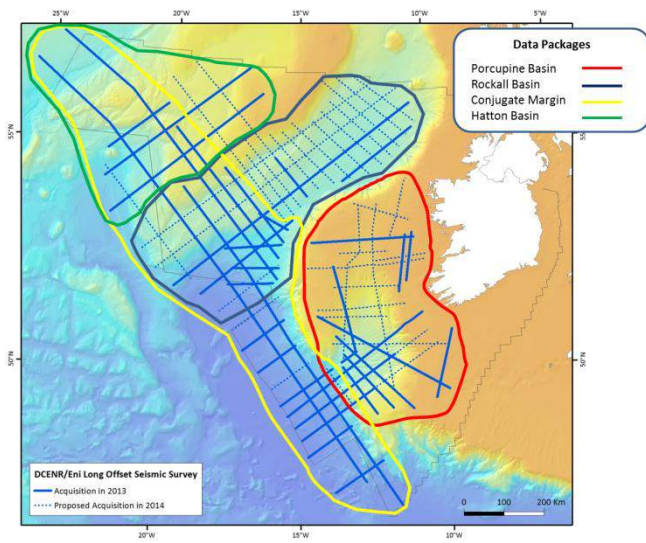




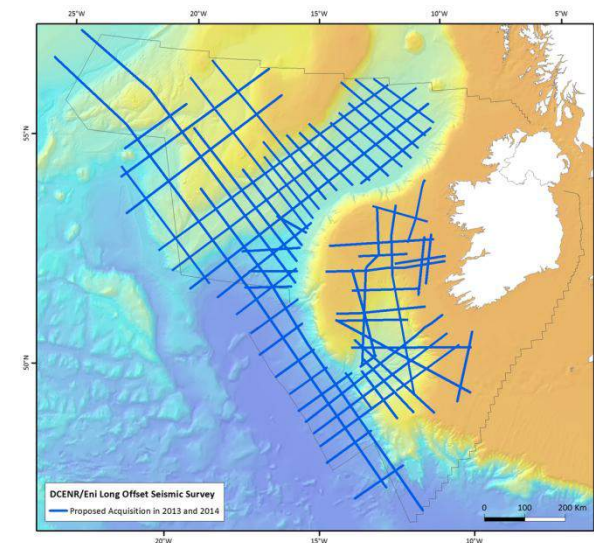
Line km



Year



Basin



Entire

The aim is to make the regional seismic data available to a wide audience

# Cost of DCENR/Eni Regional 2D seismic survey

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2014 – estimated 6,000 km to 8,000 km

There are 4 options to purchase the data

Line km

**€5 per linear km**

Year

€50,000 for 10,165km – 2013 data  
€30,000 for 6,000km min. – 2014 data

Basin

€30,000 Porcupine Basin  
€30,000 Rockall Basin  
€15,000 Conjugate Margin  
€ 5,000 Hatton Basin

Entire

**€60,000** per 15,000km minimum

Contact Petroleum Affairs Division DCENR to purchase data  
[padadmin@dcenr.gov.ie](mailto:padadmin@dcenr.gov.ie)

# A substantial new regional seismic acquisition programme offshore Ireland

TIMELINE

## Regional 2D seismic programme offshore Ireland



Tender Q4  
Contract Award Q1

Survey Design

Data Acquisition 1

Data Acquisition 2

Data Processing 1

Data Processing 2

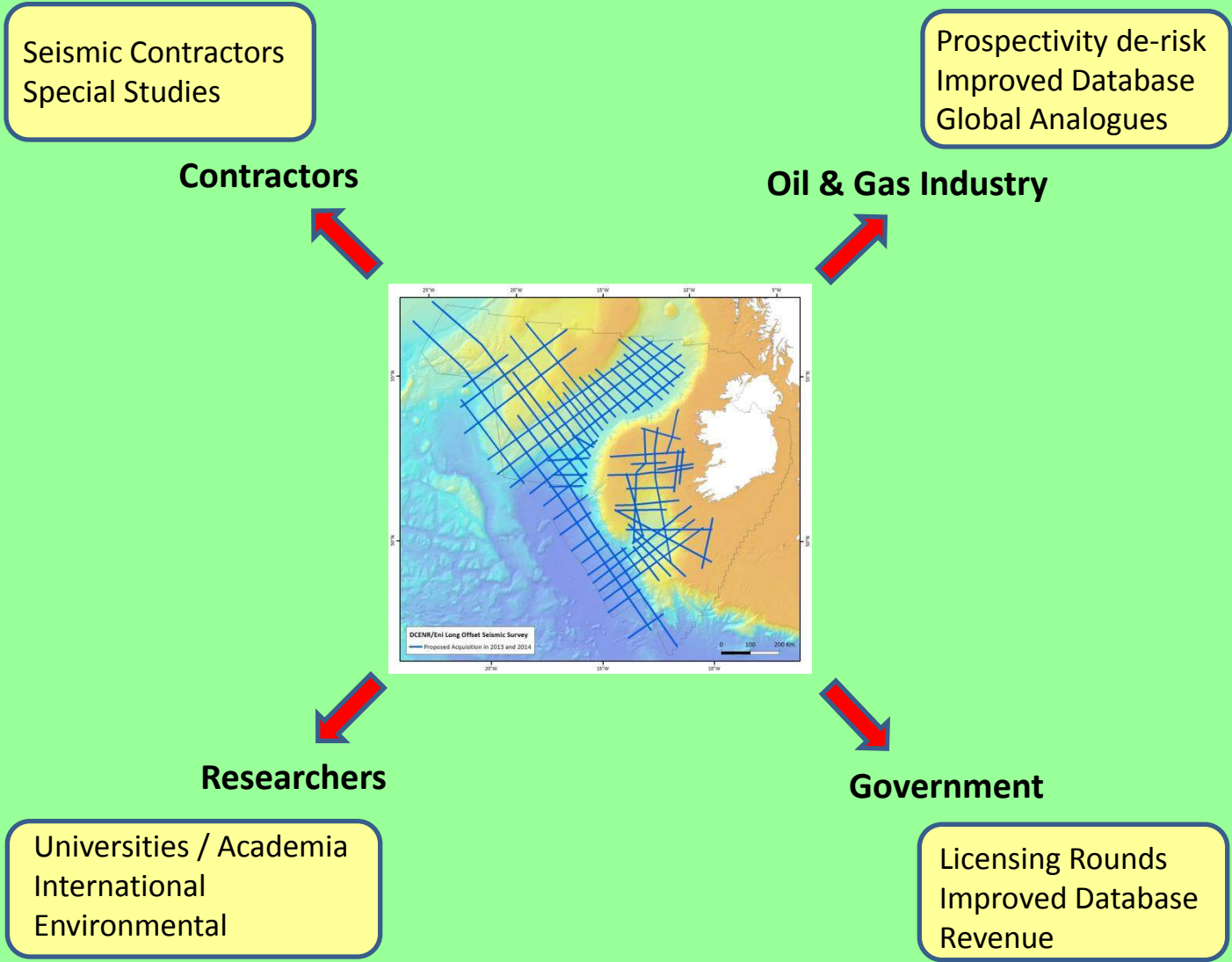
★  
Data Available

★  
Data Available

★  
2015 Round Launch

★  
2015 Round Closes

# The importance of the Regional Seismic Survey 2013/2014 Atlantic Ireland



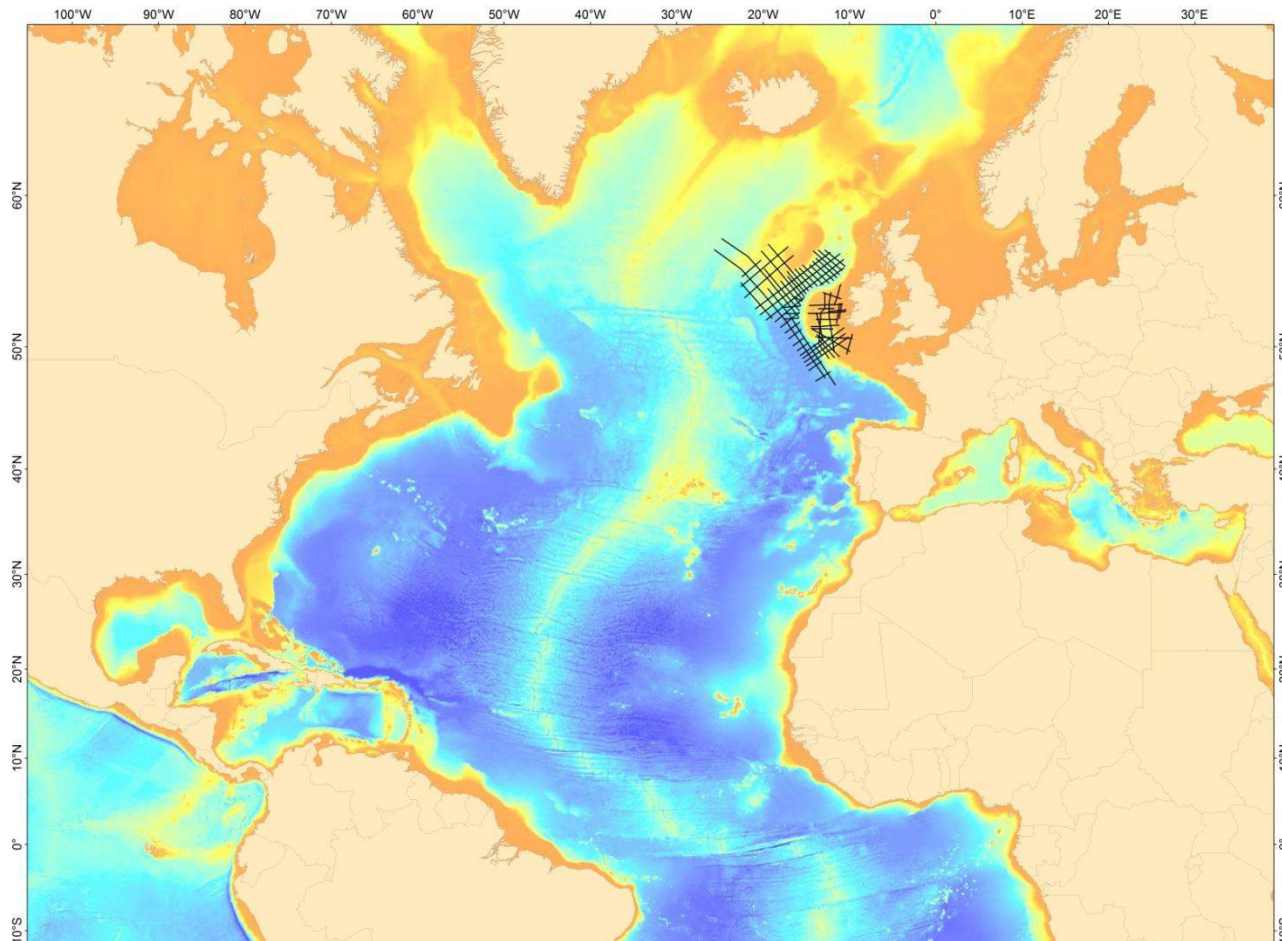
### Summary and Conclusions:

- Approximately 14,500km of new modern 2D regional seismic data has been acquired to date. Data quality is good. The total survey is estimated to provide between 16,000 and 18,000km of new data. The survey will be completed this year.
- New data shows multiple undrilled stratigraphic plays and structures remain to be tested.
- 2015 Atlantic Margin Licensing Round is launched in June 2014 and will close in September 2015. Round includes all of Ireland's major Atlantic basins. The new regional seismic data will be available for evaluating the Round.
- Government continues to aid and promote petroleum research.

**The regional 2D seismic survey 2013/2014 is a significant addition to understanding petroleum systems offshore Ireland.**



# Our ocean wealth is important!



**Ireland has petroleum potential but is under explored.**

**The regional 2D seismic survey 2013/2014 is significant.**

