Min ID: SE11/154

# **Senate Standing Committee on Economics**

# ANSWERS TO QUESTIONS ON NOTICE

Resources, Energy and Tourism Portfolio Supplementary Budget Estimates 19 October 2011

**Question:** SR22

Topic: Cetacean Data and Seismic Surveys in Oil and Gas Lease Assessments

**Proof Hansard Page: Written** 

## **Senator Siewert asked:**

Please provide information on:

# 1(a) The amount in kilometres of seismic surveys tracts in the last 5 years in the North-west marine bioregion?

#### Answer:

Data on seismic surveys in Commonwealth waters is collected by the Designated Authorities of each State and the Northern Territory under the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (OPGGSA).

The following table provides the two dimensional (2D) seismic surveys (line kilometres) and the three dimensional (3D) seismic surveys (square kilometres) over the last 5 years in the North-west Marine bioregion and includes the Bonaparte, Browse, Carnarvon and Perth Basins.

Year	2D (line kilometres)	3D (square kilometres)		
2006	1,157	12,536		
2007	12,368	10,287		
2008	35,701	28,532		
2009	6,889	25,835		
2010	12,787	25,036		
<b>2011</b> (as at 14 November 2011)	1,744	10,903		
TOTAL	70,646 line kilometres	113,129 square kilometres		

# (b) Number / percentage of those conducted at night-time

## **Answer:**

Once a seismic survey program commences they are run continuously over 24 hours unless there are stoppages for refuelling, crew changes, technical issues, poor weather conditions or shut downs in compliance with environmental management conditions such as those related to interaction with cetaceans. The 2D and 3D data provided by industry to regulators does not distinguish between day and night time seismic operations.

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2. Before release of new petroleum leases, geophysical assets are mapped out for prospective areas, is any equivalent analysis conducted to identify biodiversity/environment assets for those areas to be included with information released with these leases? If so, what is the process?

#### **Answer:**

Prior to inclusion in a release, areas are subject to a rigorous assessment process. This takes into account the multi-use nature of the areas and the potential impact of exploration on the marine environment. This includes consultation with state and Australian Government agencies whose stakeholders may have an interest, including the Australian Government Department of Sustainability, Environment, Water, Population and Communities (SEWPaC). Concerns raised during the consultation process are taken into account by the Government in finalising areas for inclusion in the release. Details on issues specific to areas, such as marine animal migratory routes, that potential explorers need to take into account when assessing and determining how to explore an area are included in the release's information package.

In addition Geoscience Australia has produced a series of environmental summaries (Geoscience Australia Records) for prospective basins. These summaries were produced as part of the Australian Government's Energy Security Program (completed June 2011) on a non-routine basis and are available for four remote offshore basins (Sorrell, Browse, Mentelle (including Vlaming Sub-basin) and Ceduna).

The Mentelle and Ceduna environmental summaries can be downloaded from Geoscience Australia's website from the following locations:

- Vlaming Sub-basin and Mentelle Basin: Environmental Summary https://www.ga.gov.au/products/servlet/controller?event=GEOCAT\_DETAILS&catno=66577
- Ceduna Sub-basin Environmental Summary
  https://www.ga.gov.au/products/servlet/controller?event=GEOCAT\_DETAILS&catno=65838

The environmental summary report for the Browse will be publicly available by the end of 2011, and the summary for the Sorrell Basin is due to be publicly released in February 2012.

3. The number of vessel movements in the North-west marine bioregion in last five years, broken down by year and by port of departure?

## **Answer:**

Tracking of vessel movements is not regulated under the OPGGSA. The Department is advised that vessel movements from ports are available from the Bureau of Infrastructure, Transport and Regional Economics (BITRE) annual publication "Australian Sea Freight". The latest report is available at: http://www.btre.gov.au/Info.aspx?ResourceId=813&NodeId=52).

The following data was provided to the Department by BITRE and details the number of ship visits at ports in the North-west Marine Region over five years to 2009/10. Further requests for information in relation to vessels movements should be directed to BITRE.

Port of arrival	2005/06	2006/07	2007/08	2008/09	2009/10
Airlie Island				1	
Barrow Island	19	5	8	6	12
Broome	27	13	12	6	8
Cape Cuvier	8	15	27		4
Challis Terminal	2	1			
Cossack Pioneer Terminal	24	22	24	22	19
Dampier	1,424	1,172	978	1,581	1,244
Derby			1		
Griffin Terminal	5	4	4	6	5
Jabiru Terminal	3	2	2	1	2
Legendre Terminal	1	3	3	1	2
Mutineer-Exeter Field	12	10	7	11	2
Nganhurra Terminal			6	18	24
NW Shelf Australia		3	2		1
Onslow	1		1	1	7
Port Hedland	1,215	1,508	884	1,436	866
Port Walcott	362	339	359	375	373
Puffin Terminal			1	2	
Pyrenees Field					13
Saladin Terminal	1				1
Shark Bay				1	
Stag Terminal	6	2	5	3	6
Stybarrow Venture Terminal				2	20
Thevenard Island			1		
Useless Loop	4	11	3	7	10
Port of arrival (cont)	2005/06	2006/07	2007/08	2008/09	2009/10
Varanus Island	14	3	5	3	7
Vincent Field				4	14
Wanaea Field				1	
Wandoo Terminal	3	2	3	15	12
Woollybutt Terminal					1
Wyndham	6		1	2	5
Yampi Sound		1	12		2
Total	3,137	3,116	2,349	3,505	2,660

Source: Lloyds Maritime Intelligence Unit, unpublished

**Note:** In this analysis the number of ship movements is referred to as 'Number of port visits' at port of arrival, instead of analysis based on port of departure. The BITRE has used due care in preparing this analysis. However as data used for the analysis has been provided by a third party the Commonwealth gives no warranty as to the accuracy, reliability, or fitness for purpose of the data.

# 4(a) The number of ship strikes of marine mammals in the North-west marine bioregion reported to the department in the last 5 years?

### **Answer:**

The Department is advised by the Western Australian Department of Mines and Petroleum (DMP) that there were no ship strikes of marine mammals reported in the last five years associated with petroleum activity regulated under the OPGGSA.

The Department is advised that general data on ship strikes with cetaceans (whales and dolphins) is collected by the Australian Marine Mammal Centre, SEWPaC in Hobart. In addition, the Department is advised that SEWPaC is developing a national strategy on ship strikes with cetaceans. Further requests for information on this strategy should be directed to SEWPaC.

(b) What percentage of actual ship strikes do the department estimate these figures actually represent, given known under-reporting of incidents?

#### **Answer:**

As far as the Department is aware, all petroleum operators are reporting all incidents to the Designated Authorities required under OPGGSA legislative requirements.

5. The number of incidental spills by petroleum operators in the North-west marine bioregion in the last five years?

The National Offshore Petroleum Safety Authority (NOPSA) receives reports from operators of accidents and dangerous occurrences as required under the *Offshore Petroleum and Greenhouse Gas Storage (Safety) Regulations 2009*. The definition of a dangerous occurrence includes 'An uncontrolled release of petroleum liquids exceeding 80 litres' (Regulation 2.41(2), item 5). This definition does not require the operator to identify whether the release of petroleum liquids is contained within the facility or is spilled to the sea. There were a total of 25 uncontrolled releases of petroleum liquids exceeding 80 litres reported by operators of offshore petroleum facilities in the North-west marine bioregion in the period 1 July 2006 to 30 June 2011, out of which 35% were reported to be contained within the facility boundaries and 20% reported that the spill contacted the sea.

- 6. How many surveys of cetaceans (or biodiversity surveys including cetaceans) have been provided to the department by external sources in last five years for the Northwest marine bioregion?
  - (a) Where in the department these surveys are received?
  - (b) Whether these are made available to public?

#### **Answer:**

The Department does not receive and has not been provided with surveys on cetaceans.