

**RECOMMENDATIONS OF THE COMMISSION ON THE LIMITS OF  
THE CONTINENTAL SHELF (CLCS) IN REGARD TO THE SUBMISSION  
MADE BY AUSTRALIA ON 15 NOVEMBER 2004**

**Recommendations prepared by the Subcommittee established for the consideration of the Submission  
made by Australia**

**Adopted by the Commission on 9 April 2008**

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## I. INTRODUCTION

- 1 Australia transmitted a Submission to the Commission on the Limits of the Continental Shelf (hereinafter “the Commission”), through the Secretary-General of the United Nations (hereinafter “the Secretary-General”), on 15 November 2004 by a note verbale. This Submission was made pursuant to the provisions contained in Article 76, paragraph 8, and Article 4 of Annex II to the 1982 United Nations Convention on the Law of the Sea (hereinafter “the Convention”). References to article 76 and paragraphs therein shall be understood to mean article 76 of the Convention.
- 2 The presentation of the Submission of Australia was made to the Commission on 5 April 2005 at the fifteenth session by Christos Moraitis, head of the delegation of Australia, with additional comments made by Bill Campbell, alternate head of delegation. The delegation of Australia also included a number of scientific, technical and legal advisers. Following the presentation, the representatives of Australia responded to questions asked by the members of the Commission.
- 3 On the issue of confidentiality of data submitted, the understanding of Australia was that the members of the Commission would ensure the safe custody of their copies of the Submission during its examination and that access to the Submission should be limited to members of the Commission and designated members of the secretariat. It was understood also that the deliberations of the Commission, the Submission, and any data or information relating to the Submission should be treated as confidential until Australia had deposited documentation on the outer limits of the continental shelf with the Secretary-General under article 76, paragraph 9, of the United Nations Convention on the Law of the Sea. On the basis of these understandings and in order to facilitate its examination by members of the Subcommission, Australia did not classify the Submission formally as confidential under paragraph 2 of Annex II to the rules of procedure of the Commission (CLCS/40) (hereinafter “rules of procedure”).
- 4 The Commission took note of the note verbale No. 89/2004 from Australia dated 15 November 2004 on the issue of Antarctica (Annex II) and decided not to consider the part of the Submission referred to as region 2 in the executive summary of the Australian Submission.
- 5 The Commission also took note of the communications addressed to the Secretary-General of the United Nations received in connection with the issue of Antarctica, which supported the request of Australia, namely: (a) the note dated 3 December 2004 from the Deputy Representative of the United States of America; (b) the note verbale dated 9 December 2004 from the Permanent Mission of the Russian Federation; (c) the note dated 19 January 2005 from the Permanent Representative of Japan to the United Nations; (d) the note verbale dated 31 March 2005 from the Permanent Mission of the Netherlands to the United Nations; and (e) the note verbale dated 5 April 2005 from the Permanent Mission of Germany to the United Nations. In this context, the Commission also took note of the contents of the note subsequently received from the Permanent Mission of India on 5 July 2005
- 6 The Commission took note of the contents of the note from the Permanent Mission of Timor-Leste dated 11 February 2005 and the attached position paper (Annex II) and decided to refer the matter to the Subcommission appointed to examine the Submission of Australia.

- 7 The Commission took note of the note verbale dated 28 March 2005 from the Permanent Mission of France to the United Nations addressed to the Secretary-General (Annex II) and decided to refer the matter to the Subcommittee appointed to examine the Submission of Australia.
- 8 The Commission decided that, as provided for in article 5 of Annex II to the Convention and in rule 42 of the rules of procedure of the Commission, the Submission of Australia would be addressed through the establishment of a subcommission.
- 9 The following members of the Commission were elected as members of the Subcommittee to consider the Submission of Australia: Alexandre Tagore Medeiros de Albuquerque, Harald Brekke, Indurlall Fagoonee, Fernando Manuel Maia Pimentel, Kensaku Tamaki, Naresh Kumar Thakur and Yao Ubuènalè Woeledji. The Subcommittee elected Mr. Brekke as its Chairman, and Mr. Albuquerque and Mr. Tamaki as its Vice-Chairmen.<sup>1</sup>
- 10 The Subcommittee met immediately to conduct its preliminary examination of the Submission and the data accompanying it. It was decided that given the volume and nature of the data contained in the Submission, the Subcommittee would require additional time for the consideration of the Submission as well as intersessional meetings. The Subcommittee also decided, in accordance with section 10, paragraph 2, of Annex III to the rules of procedure, to seek the advice of another member of the Commission, Mr. Carrera, specialist in Geodesy.
- 11 The Subcommittee also prepared a set of procedures for meetings with the Delegation. During its preliminary examination of the Submission, the Subcommittee held a number of meetings with the delegation of Australia, which made a detailed presentation of the data and information for each of the nine subregions included in its Submission. Australia also provided written responses to the questions of the Subcommittee made in writing and clarified various technical aspects of the Submission.
- 12 The Commission makes these Recommendations to Australia in fulfilment of its mandate established in article 76, paragraph 8, and articles 3 and 5 of Annex II to the Convention and in accordance with article 76.
- 13 The Commission prepared these Recommendations following the internal procedures and the methodology outlined in Article 5 of Annex II to the Convention, and in the following official documents of the Commission:
  - (i) Rules of procedure of the Commission on the Limits of the Continental Shelf (CLCS/40);
  - (ii) The Scientific and Technical Guidelines of the Commission on the Limits of the Continental Shelf (CLCS/11 and CLCS/11/Add.1 – hereinafter “the Guidelines”).
- 14 The Commission makes its Recommendations recognizing the fact that the outer limits of the continental shelf as established by a coastal State on the basis of its Recommendations shall be final and binding according to Article 76, paragraph 8.

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<sup>1</sup> At the twentieth session of the Commission, in the light of the partial change in membership of the Commission, which resulted from the elections held at the seventeenth Meeting of States Parties, it became necessary to fill the vacancies Naresh Kumar Thakur and Yao Ubuènalè Woeledji. For this purpose the Commission appointed Sivaramakrishnan Rajan and Michael Anselme Marc Rosette.



**A. The Submission of Australia and its consideration by the Commission and the Subcommission**

15 The Submission was received by the Secretary-General on 15 November 2004. The Secretary-General gave due publicity to the executive summary of the Submission in accordance with rule 50 of the rules of procedure. The consideration of the Submission made by Australia was included in the agenda of the fifteenth session of the Commission, in conformity with rule 51 of the rules of procedure.

**II. CONTENTS OF THE SUBMISSION**

**A. Original Submission**

16 The original Submission received on 15 November 2004 contained: Part I - executive summary; Part II – A main body which is the analytical and descriptive part and Part III- Scientific and technical data. Delineation of the Continental Shelf: relevant annexes and appendices in hard and digital copies. The list of the materials included in the Submission received on 15 November 2004 is contained in Annex I to these Recommendations.

**B. Communications and additional materials**

17 In the course of the examination of the Submission by the Subcommission, the Delegation of Australia has submitted additional material, in response to written preliminary considerations and questions of the Subcommission. Both the communications of the Subcommission and the additional material submitted by Australia are contained in Annex IV to these Recommendations, which is contained in the enclosed CD-Rom. The CD-Rom also contains an electronic copy of the tables contained in Annex III for the convenience of the reader.

18 The additional material submitted by the Delegation of Australia did not contain new particulars leading to a significant departure from the original outer limits of Australia's continental shelf. As a consequence, there was no need for a request to Australia to provide the Secretary-General of the United Nations with an addendum to the executive summary of the Submission for the purpose of due publicity.

**III. EXAMINATION OF THE SUBMISSION BY THE SUBCOMMISSION**

**A. Examination of the format and completeness of the Submission**

19 Pursuant to Annex III, section III, to the rules of procedure, the Subcommission examined and verified the format and completeness of the Submission.

**B. Preliminary analysis of the Submission**

20 Pursuant to paragraph 5 of Annex III to the rules of procedure, the Subcommission undertook a preliminary analysis of the Submission, in accordance with article 76 and the Guidelines and concluded as follows:

- (i) The outer edge of the continental margin as defined by both the 1 per cent sediment thickness and  $FOS + 60 M$  formulae lies beyond 200 M, and therefore the test of appurtenance was satisfied by Australia;

- (ii) The outer limits of Australia's extended continental shelf consists of a combination of a 1 per cent sediment thickness point and FOS + 60 M points;
- (iii) The construction of the outer limits contains straight lines not longer than 60 M;
- (iv) The advice of a specialist in Geodesy from the Commission should be sought;
- (v) Additional time would be required to review all data and to prepare the recommendations to the Commission during the following sessions of the Commission. An estimate of the time required would be reported to the Commission at a later stage.

**C. Main scientific and technical examination of the submission**

- 21 The Subcommission examined the Submission through the following processes:
  - (i) Detailed examination of the data and information supporting every point of the FOS, selected for the delineation of the proposed outer limits;
  - (ii) Raising questions on points for clarification for response by the delegation of Australia, and continuing to examine parts of the Submission and any further clarifications by the Delegation;
  - (iii) Requesting technical support from the GIS staff of DOALOS;
  - (iv) Presentation of Preliminary Conclusions on all regions to the Australian Delegation.
- 22 The processes described above were carried out for the nine regions described in the sections below.

**IV. GENERAL PRINCIPLES ON WHICH THESE RECOMMENDATIONS ARE BASED**

- 23 It is reiterated that the examination of Australia's Submission by the Commission has been made in accordance with the mandate contained in article 76 and Annex II to the Convention. The examination of the Submission and the Recommendations of the Commission are based on the scientific and technical data provided by Australia in the application of article 76. The Recommendations of the Commission only deal with issues related to article 76 and Annex II to the Convention and are without prejudice to matters relating to delimitation between states or application of other parts of the Convention or any other treaties.
- 24 In its Submission, Australia states that at no point was evidence to the contrary invoked to locate the foot of the continental slope. The base of the continental slope has been determined either by morphology alone or by morphology supported by geology. This methodology is consistent with the dispositions of paragraphs 5.1.3, 5.1.4 and 5.2.1 of the Guidelines.
- 25 In its Submission, Australia has adopted a principle that all 2500 m depth points that lie landward of the foot of the continental slope are valid as base points for the construction of constraint lines at 100 M from the 2500 m isobath in accordance with article 76, paragraph 5. The Commission agrees with this principle, which it finds is in accordance with Article 76 and paragraphs 4.4.1 and 4.4.2 of the Guidelines.

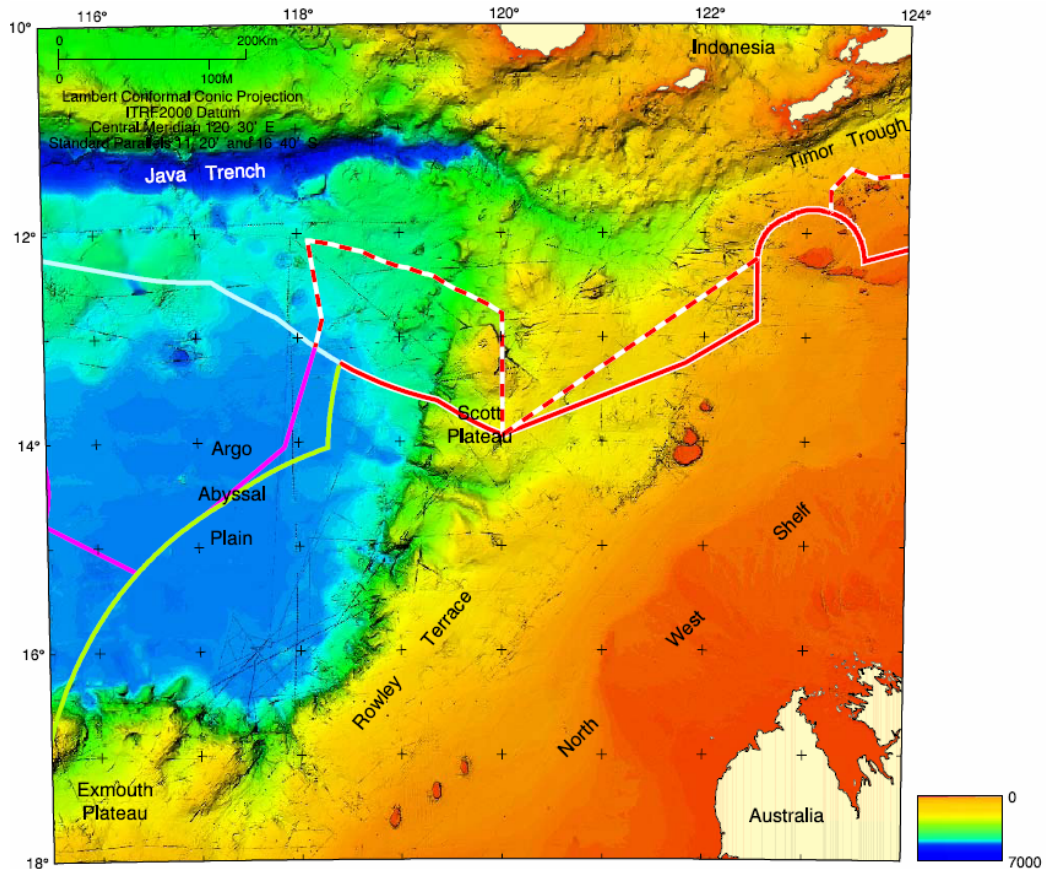
- 26 Australia is of the view that it is possible to use lines not more than 60 M in length to join fixed points on the formula line beyond 200 M to any fixed point on the 200 M line. However the Commission is of the view that the determination of the last segment of the outer limits of the continental shelf shall be established either by the intersection of the formula line, in accordance with article 76, paragraphs 4 and 7, and the 200 M limit from the baselines from which the breadth of the territorial sea is measured, or it shall be determined by the line of shortest distance between the last fixed formula point and 200 M limit. In all cases, the segment cannot exceed 60 M in length in accordance with article 76, paragraph 7.

## **V. RECOMMENDATIONS**

### **A. Argo Region**

#### **1. Geographical region description**

- 27 The Argo Region lies to the north of the Exmouth Plateau and makes up the north-westernmost part of the continental margin of the Australian Continent. The Region does not encompass any major submarine highs. The continental slope has an irregular topography, but is overall clearly defined.
- 28 The continental slope of the Argo Region connects the shallow Rowley Terrace and Scott Plateau in the east with the deep ocean floor of the Argo Abyssal plain in the west (see Figure A.1).



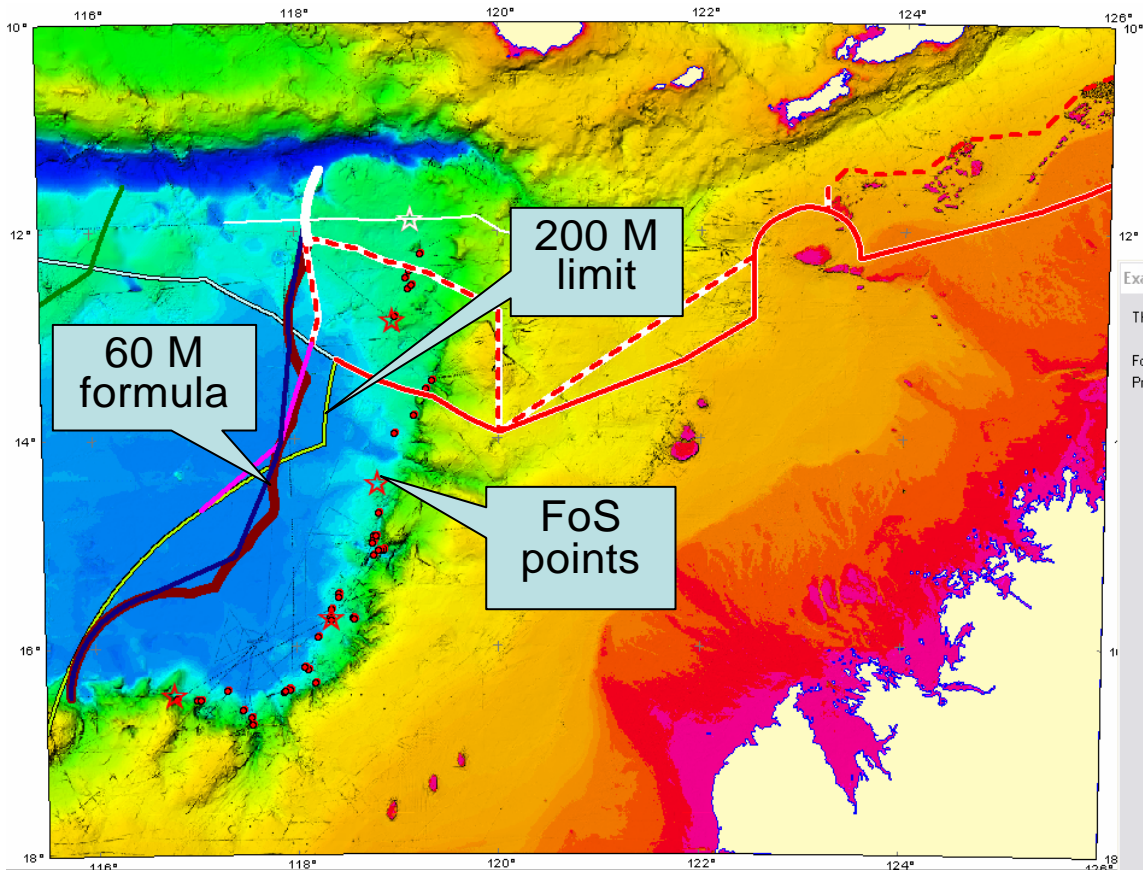
**Figure A.1 Geomorphological elements of the Argo Region.**

**2. Note verbale submitted by other States**

29 The Argo Region is mentioned in a note verbale of 11 February 2005 from the Democratic Republic of Timor-Leste in relation to the Timor Sea, the issues of delimitation between Timor-Leste and Australia, and the Indonesian-Australian Delimitation Treaty of 1997 (Annex II). The Recommendations of the Commission relating to the Argo Region only deal with the outer limits of the continental shelf of Australia in this Region (abutting the Argo Abyssal Plain) and shall not prejudice any bilateral delimitation issues between States, including any treaties.

**3. Submarine prolongation of landmass and entitlement to the continental shelf beyond 200 M**

30 The outer edge of the continental margin, as generated from the foot of the continental slope of the Argo Region by applying the provisions of article 76, paragraph 4, extends beyond the 200 M limits of Australia. On this basis, the Commission recognises the legal entitlement of Australia to establish continental shelf beyond its 200 M limits in this Region (Figure. A.2).



**Figure A.2 Relationships between the 200 M limit, the foot of the continental slope points and the formula lines according the article 76, paragraph 4(a), in the Argo Region.**

#### **4. The determination of foot of the continental slope**

31 The foot of the continental slope should be established in accordance with article 76, paragraph 4(b).

##### **4.1 Considerations**

32 The continental slope in the Argo Region is, in general, well defined, although characterized by local topographic irregularities. Australia has identified two foot of the continental slope points that are deemed critical for the location of the formula line beyond 200 M: ARG-FOS-10 and ARG-FOS-58 (Table A.1, Annex III). By combining the two bathymetric profiles on which the foot of the continental slope points are established by Australia with the rest of the bathymetric information provided, the Commission agrees with the way the two foot of the continental slope points are established by Australia based on their morphological considerations. The point ARG-FOS-10 is located in the area regulated by the 1997 maritime boundary treaty between Australia and Indonesia.

## **4.2 Recommendations**

- 33 Based on its consideration of the technical and scientific documentation contained in the Submission of 15 November 2004 the Commission concludes that, in the area of the Argo Region, the foot of the continental slope points listed in Table A.1, Annex III, fulfil the criteria in accordance with article 76 and Chapter 5 of the Guidelines. The Commission recommends that these foot of the continental slope points should form the basis for the establishment of the outer edge of the continental margin of Australia for the purposes of the Convention in the Argo Region.

## **5. The establishment of the outer edge of the continental margin**

- 34 The outer edge of the continental margin of Australia for the purposes of the Convention in the Argo Region should be established in accordance with article 76, paragraphs 4 and 7.

### **5.1 The application of the 60 M distance criterion**

- 35 In the Argo Region, the formula line delineating the outer edge of the continental margin is based on points on arcs constructed at 60 M distance from the foot of the continental slope points (Table A.1, Annex III) in accordance with the provision contained in article 76, paragraph 4(a)(ii). The arcs are connected by straight lines not exceeding 60M in length. The Commission agrees with the way these points and lines have been established by Australia.

### **5.2 The application of the sediment thickness criterion**

- 36 The provision contained in article 76, paragraph 4(a)(i), has not been applied in the case of the Argo Region.

### **5.3 Recommendations**

- 37 Based on the arcs and points described in section 5.1 above, Australia has submitted a formula line in accordance with article 76, paragraphs 4(a) and 7, that delineates the outer edge of the continental margin beyond 200 M in the Argo Region (see Figure. A.3). The Commission agrees with the way this formula line has been constructed and recommends that it is used as the basis for establishing the outer limit of the continental shelf in this Region.

## **6. The establishment of the outer limits of the continental shelf**

- 38 The outer limits of the continental shelf should be based on the established outer edge of the continental margin and taking into consideration the constraints contained in article 76, paragraphs 2, 5 and 6.

### **6.1 The application of constraint criteria**

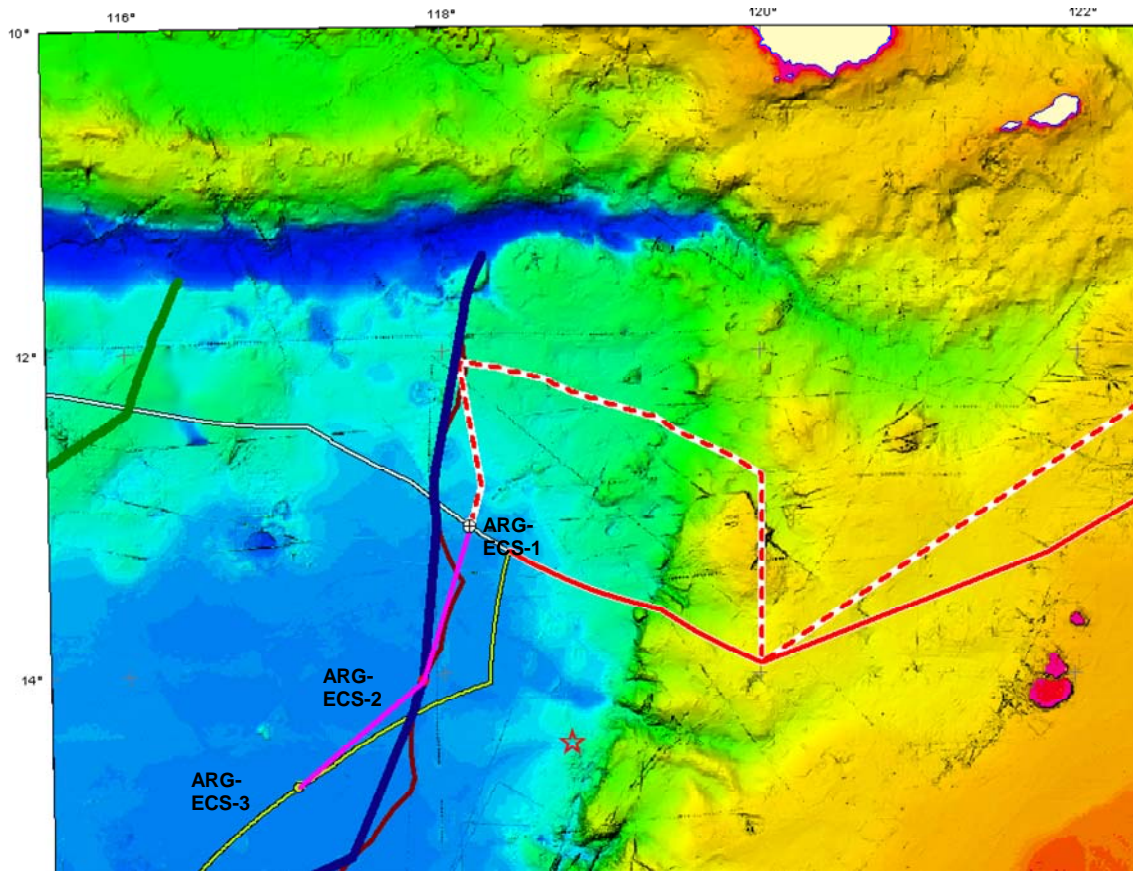
- 39 The outer limits of the continental shelf cannot extend beyond the constraints as per the provisions contained in article 76, paragraphs 5 and 6. Accordingly, the provision that the outer limits of the continental shelf may not exceed 350 M distance from the territorial sea baselines (the distance criterion constraint) may be applied in all cases. Alternatively, the provision that the outer limits of the continental shelf may not exceed 100 M distance from the 2500 m isobath (the depth criterion constraint) may be

applied for those parts of the continental margin that are classified as natural components of that margin.

- 40 In the Argo Region, Australia has demonstrated that the formula line delineating the outer edge of the continental edge does not exceed 350 M from the territorial sea baselines. The distance criterion constraint line submitted by Australia is constructed by arcs at 350 M distance from the territorial sea baselines included in the Submission. The Commission agrees with the methods applied by Australia in the construction of this constraint line.

## **6.2 Recommendations**

- 41 The outer limits of the continental shelf in the Argo Region as submitted by Australia in its Submission of 15 November 2004 consist of fixed points connected by straight lines not exceeding 60 M in length. The fixed points are listed in Table A.2, Annex III. One of the fixed points, ARG-ECS-1, is coincident with the point A82 of the seabed boundary defined by the Indonesian-Australian Delimitation Treaty and lies well inside of the outer edge of the continental margin established as recommended in section 5.3 above. The second fixed point, ARG-ECS-2, is a formula point established by the provisions contained in article 76, paragraph 4(a), that coincides with the fixed points that define the outer edge of the continental margin. The third point, ARG-ECS-3, is located on the 200 M limit line. All the fixed points are located landward of the distance criteria constraint line (Figure. A.3).
- 42 In accordance with paragraph 26 above, the Commission does not agree with the method submitted by Australia for the connection of outer limit continental shelf points beyond 200 M to the 200 M limit line at point ARG-ECS-3 since this method creates area of continental shelf that falls outside of the continental margin as defined in article 76, paragraphs 4 and 7. With the exception of point ARG-ECS-3 the Commission agrees with the principles applied in establishing the outer limits of the continental shelf in the Argo Region, including the determination of the fixed formula points listed in Table A.2, Annex III, and the construction of the straight lines connecting those points. The Commission recommends that point ARG-ECS-3 and its respective connecting line be replaced by a point and a line that conform to the outer edge of the continental margin. The Commission further recommends that Australia proceeds to establish the outer limits of the continental shelf in the Argo Region accordingly.



**Figure A.3 Final outer limit of the continental shelf in the Argo Region as submitted by Australia. The continental shelf outer limit line (violet) is based on the three fixed points, ECS-ARG-1,-2,-3. The formula line is shown in blue, the 350 M constraint line in dark green, the Australian-Indonesian Delimitation Treaty lines in red and stippled red and white, and the 200 M lines of Australia and Indonesia in black bordered light green and white, respectively.**



## B. Great Australian Bight Region

### 1. Geographical region description

- 43 The region defined as the Great Australian Bight in the Submission made by Australia is a broad concave embayment constituting a large part of the southern continental margin of Australia. Morphologically, this part of the continental margin consists of a wide shelf (Eucla Shelf), two lower lying terraces (the narrow Eyre Terrace to the west and the wide Ceduna Terrace to the east), and a lower slope consisting of a steep inner part and a gently sloping outer part which merges into the Southern Australian Abyssal Plain. To the west, the gently sloping part of the continental slope is named the Recherche Lower Slope (see Figure B.1).

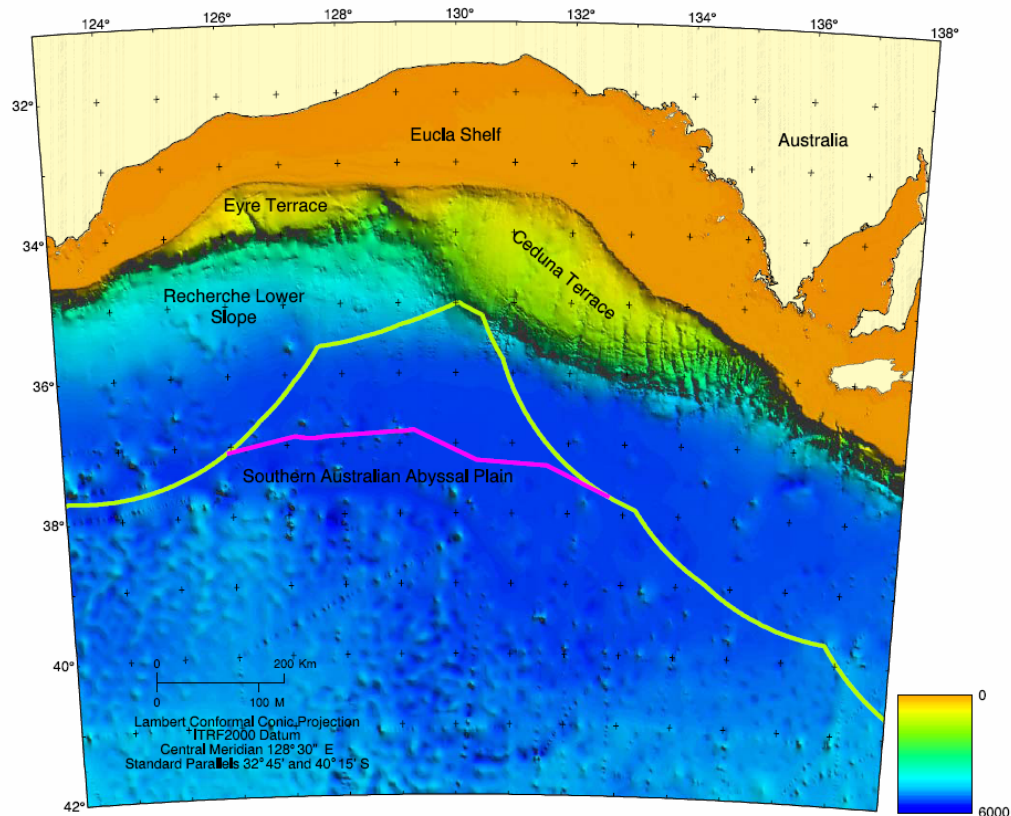


Figure 1. Bathymetric image of the Great Australian Bight region with the major morphological features labelled.  
Figure id = GAB-DOC-MB-2-FIG-1

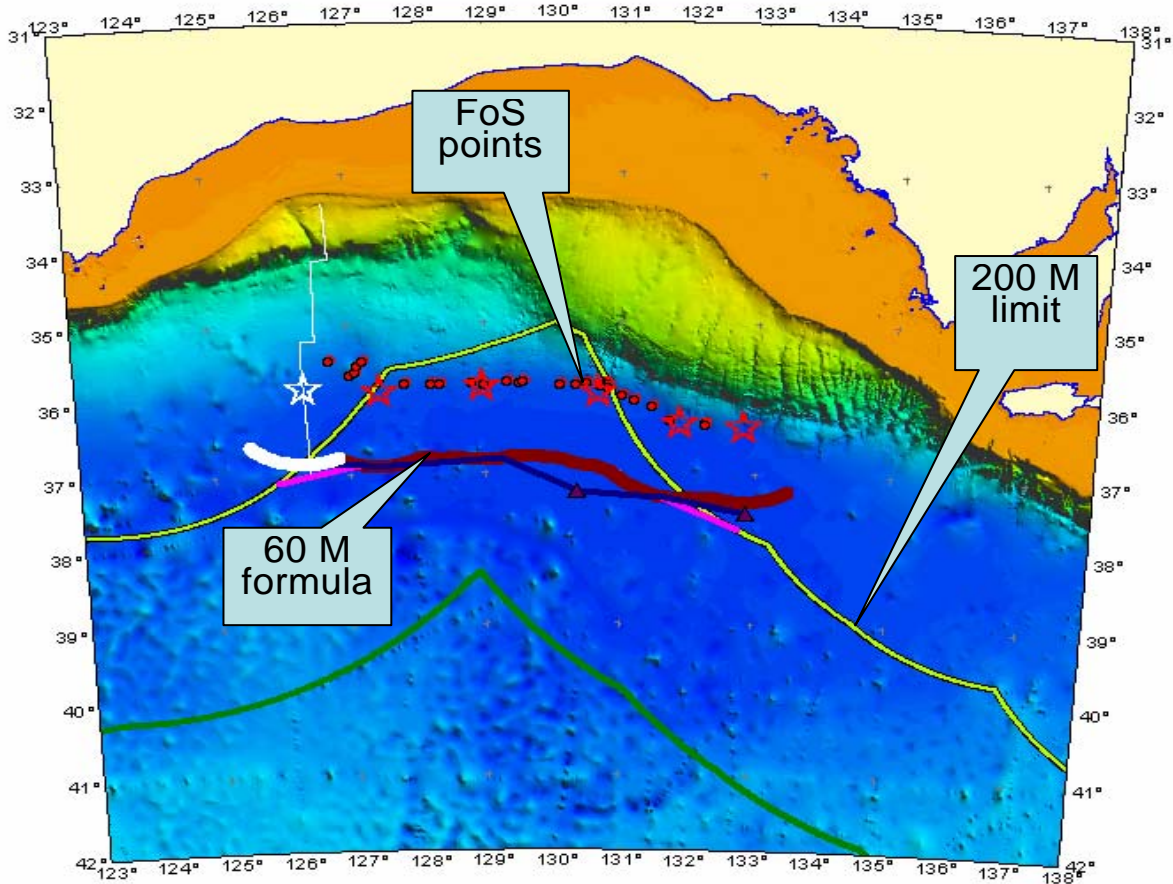
### Figure B.1 Geomorphological elements of the Great Australian Bight Region.

### 2. Note verbale submitted by other States

- 44 No note verbale relating to the Great Australian Bight Region has been submitted by any State.

### 3. Submarine prolongation of landmass and entitlement to the continental shelf beyond 200 M

45 The outer edge of the continental margin as generated from the foot of the continental slope of the Great Australian Bight by applying the provisions of article 76, paragraph 4, extends beyond the 200 M limits of Australia. On this basis, the Commission recognises the legal entitlement of Australia to establish continental shelf beyond its 200 M limits in this Region (Figure B.2).



**Figure B.2 Relationships between the 200 M limit, the foot of the continental slope points and the formula lines according the article 76. 4(a) in the Great Australian Bight Region.**

### 4. The determination of foot of the continental slope

46 The foot of the continental slope should be established in accordance with article 76 paragraph 4(b).

#### **4.1 Considerations**

- 47 The seismic lines provided, GAB-SEISMIC-GA199/01-I, -03-I, -06-I, -09-I, and GA199/11+GA199/08-I, show that the whole continental slope, including the two terraces, are underlain by several sedimentary rift basins in which the rift related basin fill is constituted by a Jurassic to Cretaceous succession unconformably overlying older sediments and extended continental crust. The outermost seaward of these basins, the Recherche Sub Basin, runs all along strike of the Great Australian Bight underneath the gently sloping part of the continental slope, including the whole width of the Recherche Lower Slope and the lower parts of the continental slope of the Ceduna Terrace.
- 48 Based on the seaward extent of the Recherche Sub Basin, Australia has defined three geologically supported critical foot of the continental slope points in the Recherche Lower Slope, GAB-FOS-30, -34, and -217. This is based on the argument that the gently sloping lower part of the continental slope (the Recherche Lower Slope) does not constitute a classical rise as defined in paragraphs 6.2.1, 8.1.6 and 8.1.7 of the Guidelines, but is the morphological expression of the underlying continental rift basin, the Recherche Sub Basin, which geologically is a part of the Australian continent. Therefore, Australia considers the base of the continental slope to be in the area of the seaward margin of that rift basin, beyond which normal seafloor spreading has taken place. This model is supported by several seismic profiles and potential field data. Within this base of the continental slope, the individual foot of the continental slope points have been determined by the point of maximum change in the gradient of the continental slope. The Commission has examined all the information and supporting data regarding the definition of these three foot of the continental slope points and agrees with this reasoning and with the approach submitted by Australia.
- 49 The three remaining critical foot of the continental slope points, GAB-FOS-42, -48, and -216, are defined by morphology alone, but also coincide with outer edge of the underlying Recherche Sub Basin, making them geologically consistent with the geologically supported foot of the continental slope points described above.
- 50 The Commission thus agrees with the way the foot of the continental slope points in the Great Australian Bight Region have been established.

#### **4.2 Recommendations**

- 51 Based on its consideration of the technical and scientific documentation contained in the Submission of 15 November 2004, the Commission concludes that, in the Great Australian Bight Region, the foot of the continental slope points listed in Table B.1, Annex III, fulfil the criteria for such points in accordance with article 76 and Chapter 5 of the Guidelines. The Commission recommends that these foot of the continental slope points should form the basis for the establishment of the outer edge of the continental margin of Australia for the purposes of the Convention in the Great Australian Bight Region.

#### **5. The establishment of the outer edge of the continental margin**

- 52 The outer edge of the continental margin of Australia for the purposes of the Convention in the Great Australian Bight Region should be established in accordance with article 76, paragraphs 4 and 7.

### **5.1 The application of the 60 M distance criterion**

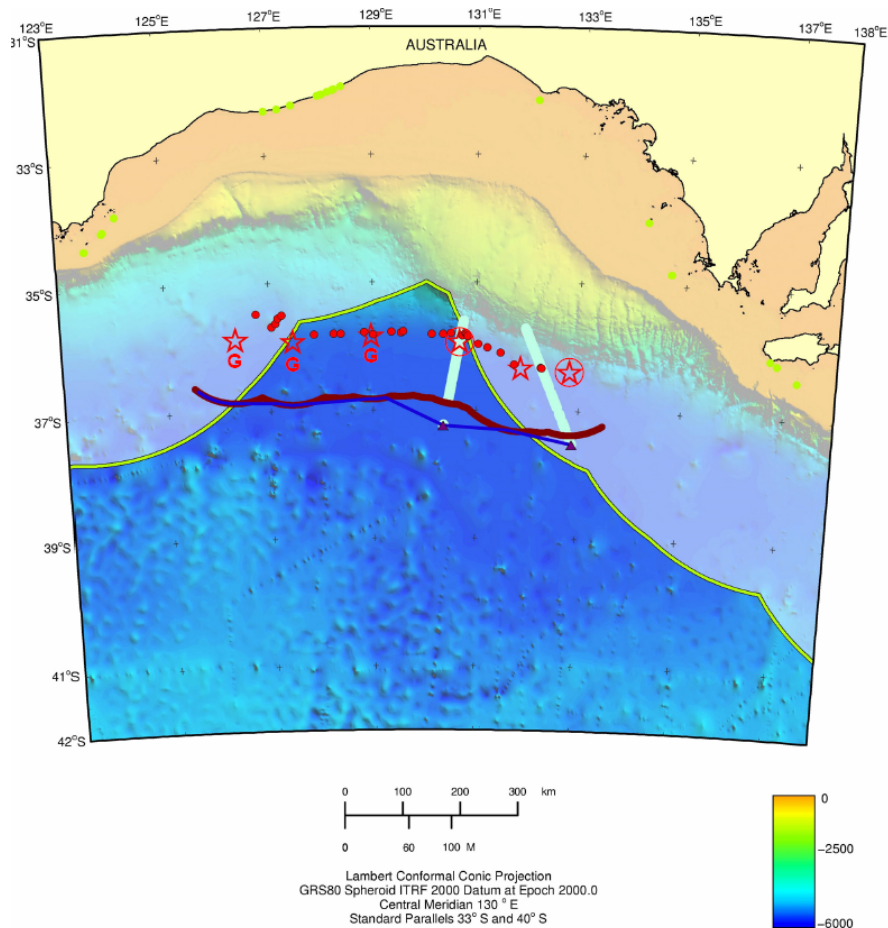
- 53 In the Great Australian Bight Region, the formula line delineating the outer edge of the continental margin is partly based on points on arcs constructed at 60 M distance from the foot of the continental slope points GAB-FOS-216, - 30, -34 and -48 (Table B.1, Annex III), in accordance with the provision contained in article 76, paragraph 4(a)(ii). The arcs are connected by straight lines not exceeding 60M in length. The Commission agrees with the way these points and lines have been established by Australia.

### **5.2 The application of the sediment thickness criterion**

- 54 In the Great Australian Bight Region, Australia has submitted two fixed points, GAB-SED-1 and -4, based on the sediment thickness provision of article 76, paragraph 4(a)(i). Australia has established these sediment thickness points based on the seismic lines GA-199/06 and GA-199/11. The Commission agrees with the methods applied by Australia to establish the sediment thickness points based on the foot of the continental slope points contained in Table B.1, Annex III, including the data provided, the seismic interpretation, the methods of depth conversion, and the distance calculations.

### **5.3 Recommendations**

- 55 Based on the arcs and points described in sections 5.1 and 5.2 above, Australia has submitted a combined formula line in accordance with article 76, paragraphs 4(a) and 7, that delineates the outer edge of the continental margin beyond 200 M in the Great Australian Bight Region (see Figure B.3). The Commission agrees with the way this formula line has been constructed and recommends that it is used as the basis for establishing the outer limit of the continental shelf in this Region.



**Figure B.3 The outer edge of the continental margin in the Great Australian Bight Region as submitted by Australia. The blue line is the combined formula line established in accordance with article 76, paragraphs 4(a) and 7, as based on the foot of the continental slope points (red stars) submitted by Australia on 15.11.2004. From the first fixed points beyond the 200 M limit line (framed light green line) the blue formula line coincides with the submitted continental shelf outer limit line (violet line).**

## 6. The establishment of the outer limits of the continental shelf

56 The outer limits of the continental shelf should be established based on the outer edge of the continental margin, established as referred to above, and taking into consideration the constraints contained in article 76, paragraphs 2, 5 and 6.

### 6.1 The application of constraint criteria

57 The outer limits of the continental shelf cannot extend beyond the constraints set by article 76, paragraphs 5 and 6. Accordingly, for areas on natural components of the continental margin, the outer limits of the continental shelf may not exceed 350 M distance from the territorial sea baselines (the distance criterion constraint) or 100 M

distance from the 2500 m isobath (the depth criterion constraint), while for areas on submarine ridges those limits may not exceed 350 M distance from the territorial sea baselines.

- 58 In the Great Australian Bight Region, Australia has demonstrated that the formula line delineating the outer edge of the continental edge does not exceed 350 M from the territorial sea baselines. The distance criterion constraint line submitted by Australia is constructed by arcs at 350 M distance from the territorial sea baselines included in the Submission. The Commission agrees with the methods applied by Australia in the construction of this constraint line.

## **6.2 Recommendations**

- 59 The outer limits of the continental shelf in the Great Australian Bight Region as submitted by Australia in its Submission of 15 November 2004 consist of fixed points connected by straight lines not exceeding 60 M in length. The fixed points are listed in Table B.2, Annex III. All the fixed points are formula points established by the provisions contained in article 76, paragraph 4(a), that coincide with the fixed points that define the outer edge of the continental margin, except the two points GAB-ECS-1 and GAB-ECS-89 that are located on the 200 M limit line. All the fixed points are located landward of the distance criteria constraint line.
- 60 In accordance with paragraph 26 above, the Commission does not agree with the method submitted by Australia on how the outer limits of the continental shelf beyond the 200 M line is to be connected with that 200 M line at points GAB-ECS-1 and GAB-ECS-89, since this method creates area of continental shelf that falls outside of the continental margin as defined for the purposes of the Convention in accordance with article 76, paragraphs 4 and 7. The Commission recommends that the points GAB-ECS-1 and GAB-ECS-89 and their respective connecting lines are replaced by points and lines that conform to the outer edge of the continental margin.
- 61 With the exception of points GAB-ECS-1 and GAB-ECS-89, the Commission agrees with the principles applied in establishing the outer limits of the continental shelf in the Great Australian Bight Region, including the determination of the fixed formula points listed in Table B.2, Annex III, and the construction of the straight lines connecting those points. The Commission recommends that Australia proceeds to establish the outer limits of the continental shelf in the Great Australian Bight Region accordingly.

## C. Kerguelen Plateau Region

### 1. Geographical region description

62 The region defined as the Kerguelen Plateau Region in the Submission made by Australia is located in the Southern Ocean and encompasses the Kerguelen Plateau. This is a large, NNW-SSE trending composite sea-floor high, about 2300 km long and 600 km in average width and consists of the elements: Northern, Central and Southern Kerguelen Plateau (NKP, CKP and SKP), Skiff Bank (SB), Elan Bank (EB) and Williams Ridge (WR). In the west, north and east, the Kerguelen Plateau is bounded by the Enderby, Crozet, Australian-Antarctic and Labuan Basins. In the south, it is separated from the Antarctic Continent by the Princess Elizabeth Trough (Figure C.1).

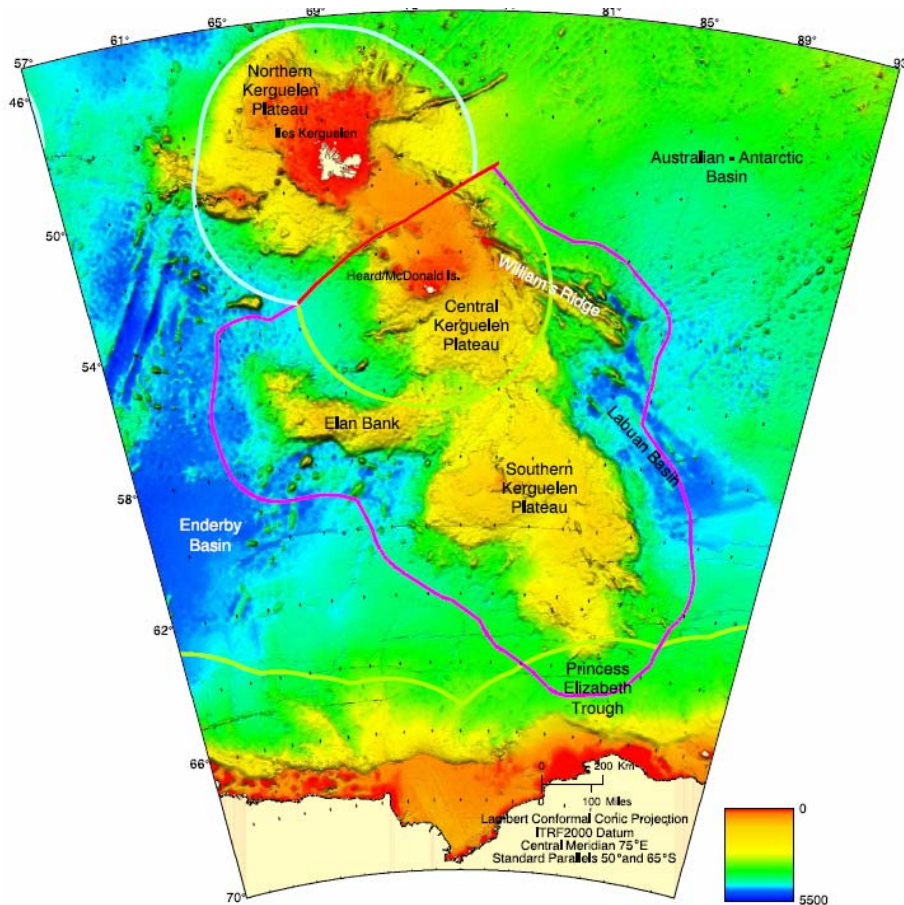


Figure C.1 Geomorphologic elements of the Kerguelen Plateau Region.

### 2. Note verbale submitted by other states

63 In a note verbale of 28 March 2005 from the Permanent Mission of France to the United Nations (Annex II), France takes note of the potential overlap between the areas of extended continental shelf of Australia and of France in the Kerguelen Plateau

Region and that Australia in its Submission emphasizes that its submission for an extended continental shelf is without prejudice to any subsequent delimitation between the two States. The Permanent Mission of France confirms that France has no objection to the Commission considering and making recommendations on those parts of the Submission that concern areas bordering on French territories to the extent that such recommendations are without prejudice to any final delimitation of the continental shelf concluded subsequently in these areas between France and Australia. These considerations seem relevant for the Kerguelen Plateau Region at both ends of the present treaty line of the Australian-French Maritime Delineation Treaty of 1982. The Recommendations of the Commission relating to the Kerguelen Plateau Region only deal with the outer limits of the continental shelf of Australia in this Region and shall not prejudice any bilateral delimitation issues between States.

### **3. Submarine prolongation of landmass and entitlement to the continental shelf beyond 200 M**

- 64 The volcanic Heard and McDonald Islands (Australia) are situated on the CKP and constitute the Australian landmass in the Region. The different components of the Kerguelen Plateau form a continuous, elongated morphological feature that constitutes a submarine prolongation of that landmass. The outer edge of the continental margin as generated from the foot of the continental slope of the Kerguelen Plateau by applying the provisions of article 76, paragraph 4, extends beyond the 200 M limits of Australia. On this basis, the Commission recognises the legal entitlement of Australia to establish continental shelf beyond its 200 M limits in this Region (Figure C. 2).



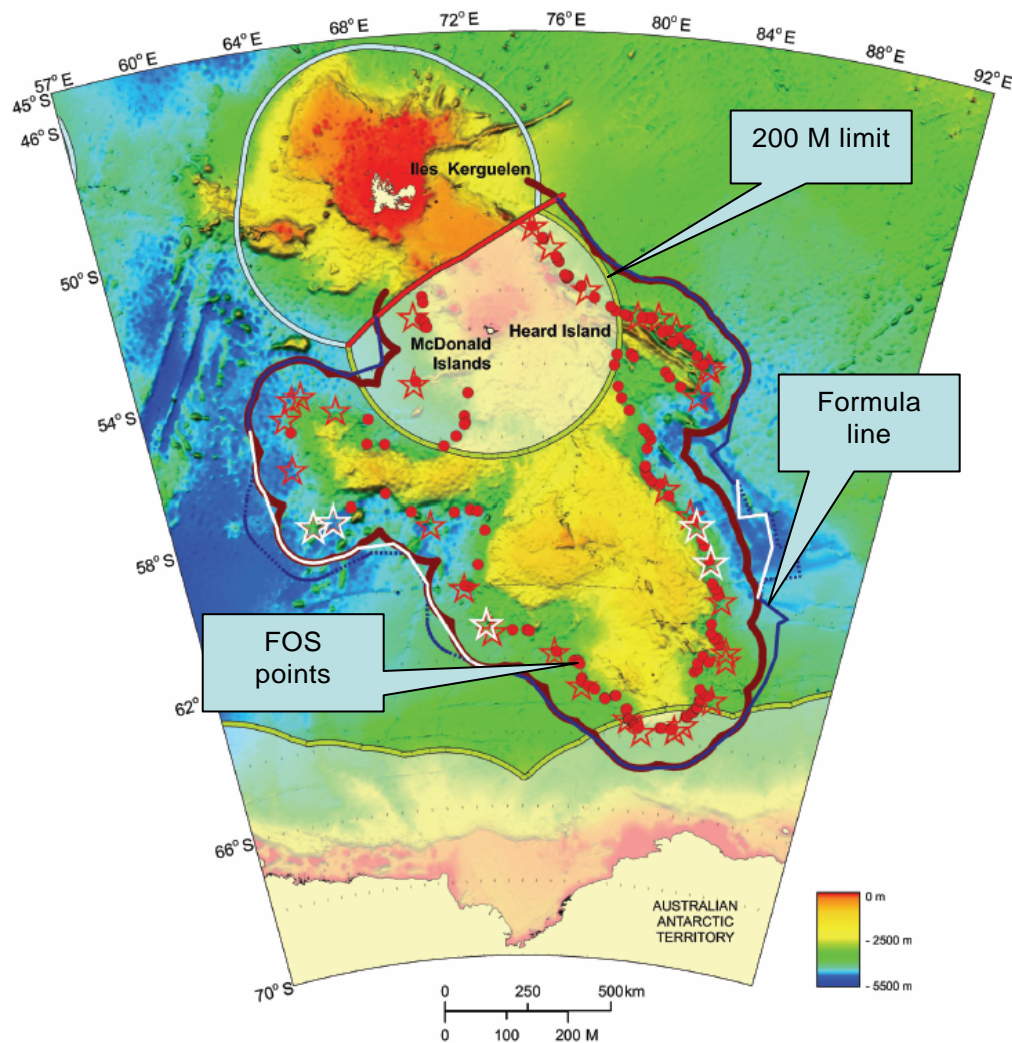


Figure C.2 Relationships between the 200 M limit, the foot of the continental slope points (red dots and stars) and the formula lines (burgundy and blue) established in accordance with article 76, paragraph 4(a), delineating the outer edge of the continental margin (blue and white line) in the Kerguelen Plateau Region. White stars and white lines show the amendments of the foot of the continental slope points and the outer edge of the continental margin line as submitted in AUS-CLCS-DOC-46, -56, -57, and -58.

#### 4. The determination of foot of the continental slope

65 The foot of the continental slope should be established in accordance with article 76, paragraph 4(b).

##### 4.1 Considerations

66 The continental slope around the Kerguelen Plateau drops from its general crestal depths of 1500–500 m to 4500–5000 m of the surrounding deep ocean floor. The

location of the base of the continental slope is, with some important exceptions, generally easily identified on a morphological basis. Accordingly, the Kerguelen Plateau may be readily delineated by its foot of the continental slope envelope. Although the Commission agrees, in general, with the way this foot of the continental slope is established by Australia, it noted some points of disagreement with Australia during the examination of the Submission. The Commission conveyed its opinion to the Australian Delegation. In its responses, AUS-CLCS-DOC-46 of 11 September 2006, and AUS-CLCS-DOC-57 and AUS-CLCS-DOC-58 of 1 March 2007, Australia communicated the following amendments of the list foot of the continental slope points to those submitted 15 November 2004:

- (i) the foot of the continental slope points FOS-KER-185, -186, -190, -324, -500, -511, -567, and -568 have been removed from the list of critical foot of the continental slope points as submitted;
- (ii) the foot of the continental slope points FOS-KER-458, -499 and -283 have been included in the list of critical foot of the continental slope points; and
- (iii) the new foot of the continental slope points FOS-KER-R1-1 and -R1-2 have been picked and included in the list of critical foot of the continental slope points.

#### **4.2 Recommendations**

67 Based on its consideration of the technical and scientific documentation contained in the Submission of 15 November 2004, AUS-CLCS-DOC-46 of 11 September 2006, and AUS-CLCS-DOC-57 and AUS-CLCS-DOC-58 of 1 March 2007, the Commission concludes that, in the area of the Kerguelen Plateau, the foot of the continental slope points listed in Table C.1, Annex III, fulfil the criteria in accordance with article 76 and Chapter 5 of the Guidelines. The Commission recommends that these foot of the continental slope points should form the basis for the establishment of the outer edge of the continental margin of Australia for the purposes of the Convention in the Kerguelen Plateau Region.

### **5. The establishment of the outer edge of the continental margin**

68 The outer edge of the continental margin of Australia for the purposes of the Convention in the Kerguelen Plateau Region should be established in accordance with article 76, paragraphs 4 and 7.

#### **5.1 The application of the 60 M distance criterion**

69 The final application of the 60 M distance criterion by Australia in this Region is based on the material contained in the Submission of 15 November 2004, as amended by AUS-CLCS-DOC-46 of 11 September 2006, and AUS-CLCS-DOC-57 and AUS-CLCS-DOC-58 of 1 March 2007. With the exception of 12 points, all points defining the formula lines delineating the outer edge of the continental margin in the Kerguelen Plateau Region, are based on arcs constructed at 60 M distance from the foot of the continental slope points (Table C.1, Annex III) in accordance with the provision contained in article 76, paragraph 4(a)(ii). The arcs are connected by straight lines not exceeding 60M in length. The Commission agrees with the way these points and lines have been established by Australia.

## **5.2 The application of the sediment thickness criterion**

- 70 In the Kerguelen Plateau Region, Australia has submitted 12 fixed points based on the sediment thickness provision of article 76, paragraph 4(a)(i). Australia has established these sediment thickness points based on the seismic lines GA-180/01/04/05/06/07, MD47/08/10, and GA-47/33, as described in the Submission of 15 November 2004 and as amended by AUS-CLCS-DOC-56. The Commission agrees with the methods applied by Australia to establish the sediment thickness points, including the data provided, the seismic interpretation, the methods of depth conversion, and the distance calculations.

## **5.3 Recommendations**

- 71 Based on arcs and points described in sections 5.1 and 5.2 above, Australia has submitted a combined formula line in accordance with article 76, paragraphs 4(a) and 7, that delineates the outer edge of the continental margin beyond 200 M in the Kerguelen Plateau Region (see Figure C.2 and Table C.1, Annex III). The Commission agrees with the way this formula line has been constructed and recommends that it is used as the basis for establishing the outer limit of the continental shelf in this Region.

## **6. The establishment of the outer limits of the continental shelf**

- 72 The outer limits of the continental shelf should be based on the established outer edge of the continental margin and taking into consideration the constraints contained in article 76, paragraphs 2, 5 and 6.

### **6.1 The application of constraint criteria**

- 73 The outer limits of the continental shelf cannot extend beyond the constraints as per the provisions contained in article 76, paragraphs 5 and 6. Accordingly, the provision that the outer limits of the continental shelf may not exceed 350 M distance from the territorial sea baselines (the distance criterion constraint) may be applied in all cases. Alternatively, the provision that the outer limits of the continental shelf may not exceed 100 M distance from the 2500 m isobath (the depth criterion constraint) may be applied for those parts of the continental margin that are classified as natural components of that margin.
- 74 The application of the constraint criteria involves, firstly, the construction of the constraint line based on the distance criterion and the constraint line based on the depth criterion. Secondly, it involves the combination of these two constraint lines to establish a final combined constraint line to be applied in accordance with the provisions contained in article 76, paragraphs 5 and 6.
- 75 For the outer limits of the continental shelf in the Kerguelen Plateau Region, Australia has invoked a combination of the distance criterion constraint and the depth criterion constraint. In the view of the Commission, the consideration of the application of the depth criterion constraint involves the examination of whether the relevant seafloor highs in the Kerguelen Plateau Region may be considered natural components of the continental margin. For the remaining parts of the outer limits the consideration involves an examination of the construction of the distance criterion constraint line.

### **6.1.1 The construction of the distance criterion line**

- 76 The distance criterion constraint line submitted by Australia is constructed by arcs at 350 M distance from the territorial sea baselines for the Heard and McDonald Islands included in the Submission. The Commission agrees with the methods applied by Australia in the construction of this constraint line.

### **6.1.2 The construction of the depth criterion line**

- 77 The 2500 m isobath on which the depth criterion constraint line is based on the isobaths of the Williams Ridge, the Elan Bank and the Southern Kerguelen Plateau. Australia submits the view that, since all these isobaths are landward of the foot of the continental slope, they conform to the general outline of the continental margin as defined for the purposes of the Convention. Therefore, the application of these isobaths as basis for the depth criterion constraint is in accordance with the Convention and with paragraphs 4.4.1 and 4.4.2 of the Guidelines.
- 78 The Commission agrees with this view and recommends that the depth criterion constraint line is constructed as submitted by Australia.

### **6.1.3 Consideration and classification of submarine highs**

- 79 Based on the literature and the evidence in the Submission, including the additional material provided in AUS-CLCS-DOC-54 and AUS-CLCS-DOC-55, the following considerations and conclusions regarding the application of the constraint provisions may be made.
- 80 The Heard and MacDonal Islands are situated on the large underwater feature known as the Central Kerguelen Plateau (CKP). The two islands are built up by Mioicene to Recent magmatism erupting through and embedded in the older parts of the crust of the CKP.
- 81 The major part of the CKP's crust, which has a thickness of up to 25 km, is made up of Late Cretaceous magmatic rocks, ca 100 Ma old. In the southern parts of the CKP these magmatic rocks show chemical evidence of contamination by the continental crust. Seismic evidence shows that the magmatic crust in the eastern part of CKP continues westwards beneath the Kerguelen-Heard Basin and the Heard Island itself.
- 82 The CKP is connected morphologically to the large underwater feature known as the Southern Kerguelen Plateau (SKP). The major parts of the SKP is also made up of Late Cretaceous magmatic rocks, ca 100 Ma old (90 – 118 Ma), similar to the crust of the CKP. In the SKP the magmatic rocks show a general contamination by continental crust. The continental crust signature in the magmatic rocks of the CKP and SKP shows the involvement of crust similar to that of the Elan Bank in the deeper levels of the CKP and SKP. The Heard and MacDonal Islands are embedded within the late Cretaceous magmatic crust of the CKP. Consequently, the CKP, SKP and EB are natural components of the continental margin of the Heard and MacDonal Islands being subject to the application of the depth criterion constraint as well as the distance criterion constraint.
- 83 The data submitted for the WR seems to give only indirect evidence of its nature and origin and the Commission is of the opinion that the geological origin of the WR still remains unresolved. The Commission therefore questions whether the application of paragraph 7.3.1.b of the Guidelines is justified in the case of WR. Therefore the

Commission does not consider it justified that the WR is regarded as a submarine elevation that is a natural component of the continental margin in the sense of article 76, paragraph 6, qualifying for the application of the depth criterion constraint.

#### **6.1.4 Application of the combination of the distance and the depth constraint criteria**

- 84 In the Kerguelen Plateau Region Australia has applied a combined constraint line based on the application of both the distance and depth criteria as described in sections 6.1.1 and 6.1.2 above and based on the view that all submarine highs involved qualify for the application of the depth constraint criterion as well as the distance constraint criterion. However, on the basis of the classification of the seafloor highs presented in section 6.1.3 above, the Commission is of the opinion that the application of those parts of the combined constraint line which are based on the 2500 m isobaths on the WR is not justified since the nature of that submarine high with regard to article 76, paragraph 6, is not considered proven. The Commission recommends that the combined constraint line to be applied should be adjusted accordingly.

#### **6.2 Recommendations**

- 85 The outer limits of the continental shelf in the Kerguelen Plateau Region as submitted by Australia 15 November 2004 and revised in AUS-CLCS-DOC-58 of 1 March 2007 consist of fixed points connected by straight lines not exceeding 60 M in length. The fixed points are listed in Table C.2, Annex III as submitted in AUS-CLCS-DOC-58 of 1 March 2007. The fixed points are formula points established by the provisions contained in article 76, paragraphs 4(a), or points on the combined constraint line established by the provisions contained in article 76, paragraphs 5 and 6.
- 86 The Commission is not in a position to make recommendations regarding points KER-ECS-732a and KER-ECS-960a referred to in the Executive Summary of Australia. In this connection, the Commission refers to paragraph 23 above, according to which the Commission's recommendations are without prejudice to matters related to other treaties.
- 87 In accordance with paragraph 26 above, the Commission does not agree with the method submitted by Australia for the connection of outer limit continental shelf point KER-ECS-2 beyond 200 M to the 200 M limit line at point KER-ECS-1 since this method creates area of continental shelf that falls outside of the continental margin as defined in article 76, paragraphs 4 and 7.
- 88 In accordance with section 6.1.4 above, the Commission does not agree that the application of fixed points KER-ECS-1260 through KER-ECS-1430 are justified since these points are established on the basis of the depth constraint criterion as based on the 2500 m isobaths on the Williams Ridge. The Commission recommends that the basis for the establishment of these fixed points be further documented or that they be replaced by fixed points in accordance with the distance criterion constraint.
- 89 With the exception of fixed points KER-ECS-1 and KER-ECS-1260 through KER-ECS-1430 the Commission agrees with the principles and procedure applied in establishing the outer limits of the continental shelf in the Kerguelen Plateau Region, including the determination of the remaining fixed points established by the formulae of article 76, paragraph 4 and the constraint criteria of article 76, paragraphs 5 and 6, listed in Table C.2, Annex III, the construction of the straight lines connecting those points. The Commission further recommends that Australia proceeds to establish the

outer limits of the continental shelf in the Kerguelen Plateau Region accordingly and taking into consideration the possible overlap with France.

## D. Lord Howe Rise Region

### 1. Geographical region description

- 90 The Lord Howe Rise Region comprises the area between the Australian Continent and New Zealand and encompasses several structural elements, including the Dampier Ridge, the Middleton Basin, the Lord Howe Basin, the Lord Howe Rise, the New Caledonia Basin and the Norfolk Ridge. The Lord Howe Island and the Norfolk Island are located on the Lord Howe Rise and the Norfolk Ridge, respectively. The Lord Howe Rise Region is flanked to the southwest by the Tasman Basin, to the south by the landmass of New Zealand, and to the north by the landmass of New Caledonia. The Lord Howe Rise Region has an elevation of more than 3500m above the abyssal plain of the Tasman Basin (see Figure D.1).

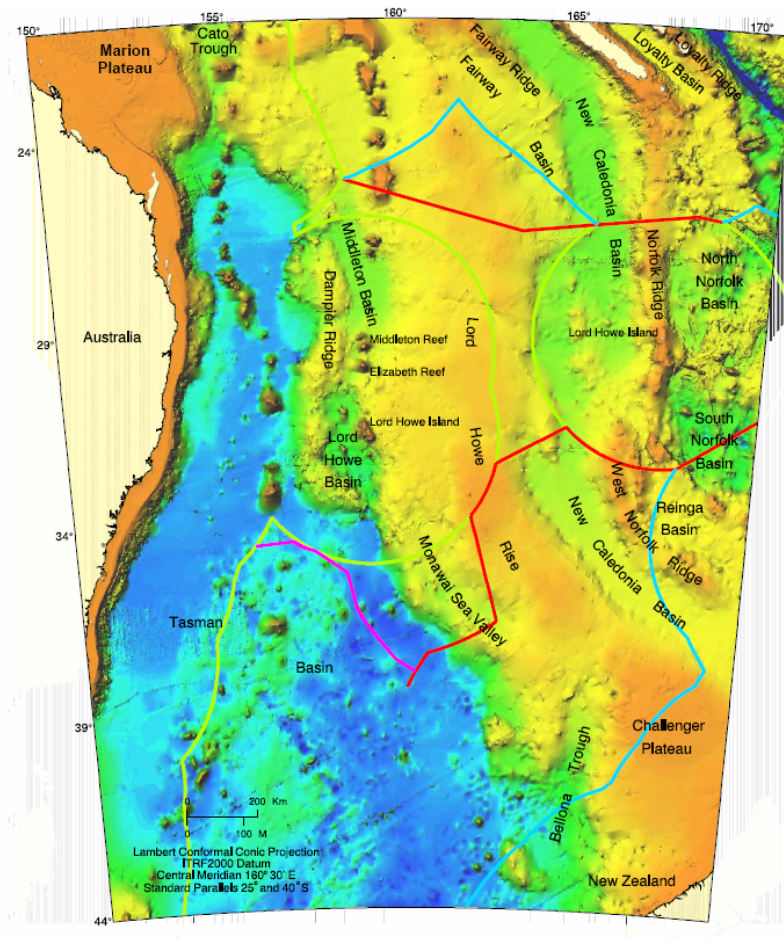


Figure D.1 Geomorphological elements of the Lord Howe Rise Region.

## 2. Note verbale submitted by other States

91 No note verbale relating to the Lord Howe Rise Region has been submitted by any State.

## 3. Submarine prolongation of landmass and entitlement to the continental shelf beyond 200 M

92 The Lord Howe Rise Region is a complex morphological feature forming a submarine prolongation of the Lord Howe Island and the Norfolk Island. The outer edge of the continental margin as generated from the foot of the continental slope of the Lord Howe Rise Region by applying the provisions of article 76, paragraph 4, extends beyond the 200 M limits of Australia. On this basis, the Commission recognises the legal entitlement of Australia to establish continental shelf beyond its 200 M limits (Figures. D.2, D.3 and D.4).

93 Australia is of the view that the Lord Howe Rise Region is also a submarine prolongation of the Australian Continent itself, but the particulars of such a prolongation are not presented in the Submission.

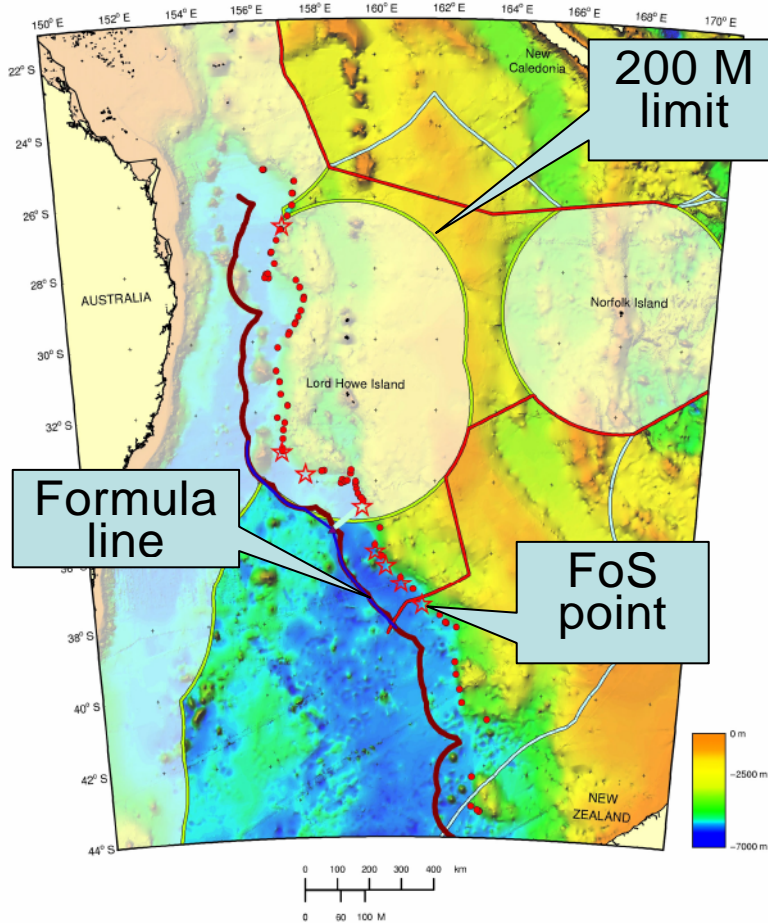


Figure D.2 Relationships between the 200 M limit, the foot of the continental slope



points and the formula lines according the article 76. 4(a) in the Lord Howe Rise Region adjacent to the Tasman Basin.

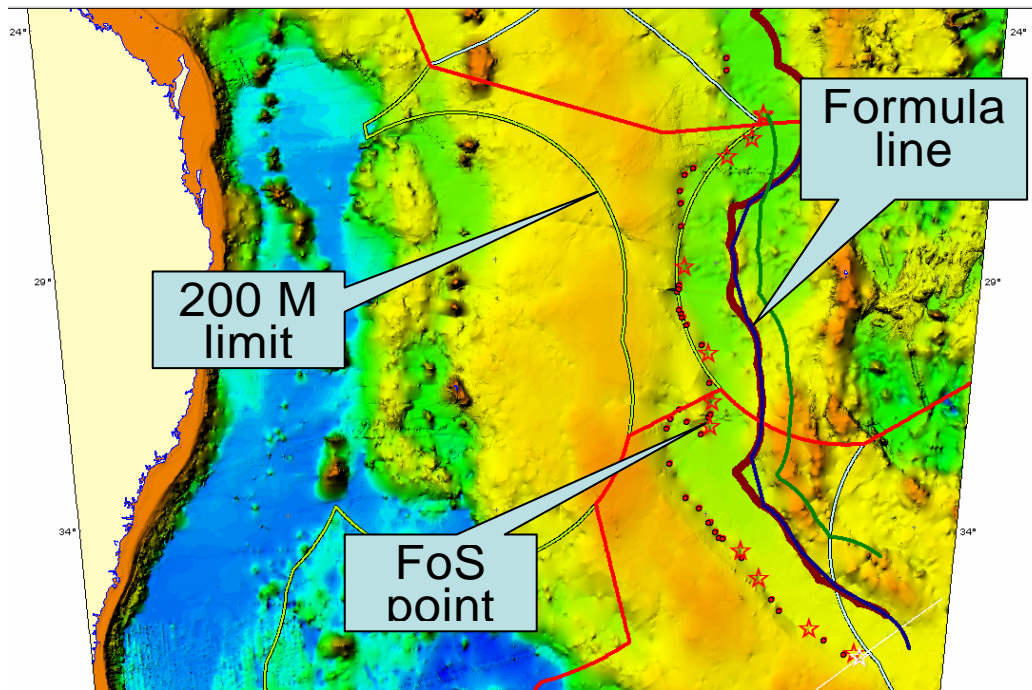
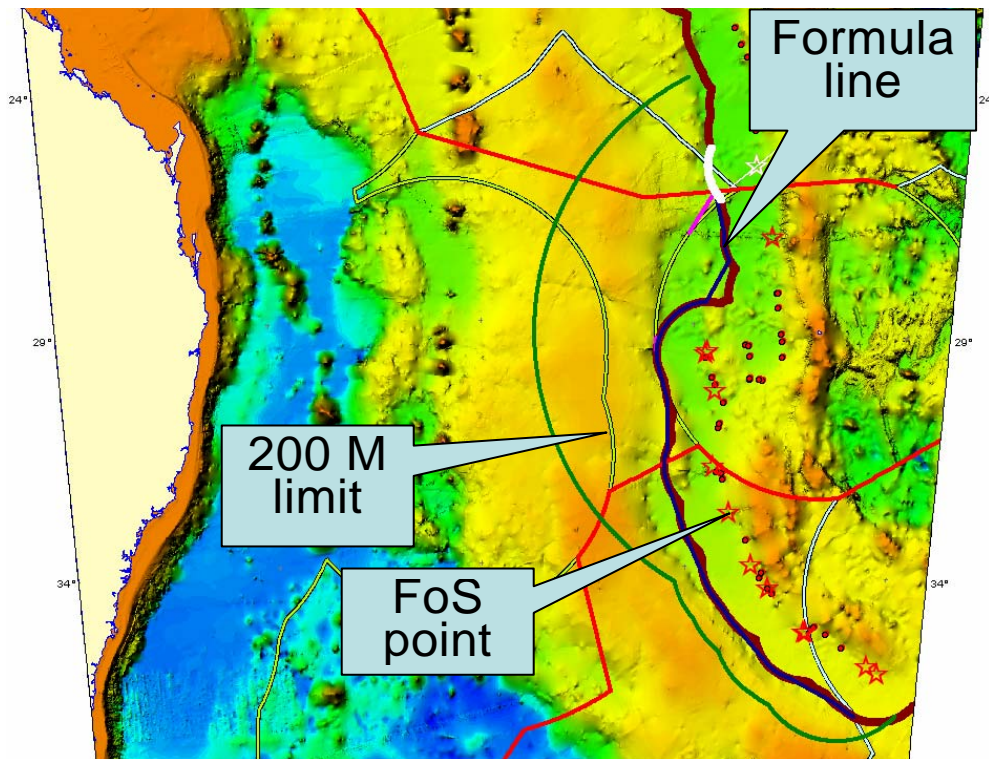


Figure D.3 Relationships in the Lord Howe Rise Region between the 200 M limit, the foot of the continental slope points and the formula lines according the article 76. 4(a) in the New Caledonia Basin adjacent to the Lord Howe Rise.



**Figure D.4 Relationships in the Lord Howe Rise Region between the 200 M limit, the foot of the continental slope points and the formula lines according the article 76. 4(a) in the New Caledonia Basin adjacent to the Norfolk/West Norfolk Ridge system.**

#### **4. The determination of foot of the continental slope**

94 The foot of the continental slope should be established in accordance with article 76, paragraph 4(b).

##### **4.1 Considerations**

95 In the Lord Howe Rise Region, there are continental slopes relative to the New Caledonia Basin, as well as the Tasman Basin (Figures D.2, D.3 and D.4). In general, these continental slope segments are steep where the location of the base of the continental slope is distinct and easily identified on a morphological basis. The Commission agrees, in general, with the way the foot of the continental slope is established by Australia in the Lord Howe Rise Region.

##### **4.2 Recommendations**

96 Based on its consideration of the technical and scientific documentation contained in the Submission of 15 November 2004, the Commission concludes that, in the area of the Lord Howe Rise Region, the foot of the continental slope points listed in Table D.1, Annex III, fulfil the criteria in accordance with article 76 and Chapter 5 of the Guidelines. The Commission recommends that these foot of the continental slope

points should form the basis for the establishment of the outer edge of the continental margin of Australia for the purposes of the Convention in the Lord Howe Rise Region.

## **5. The establishment of the outer edge of the continental margin**

97 The outer edge of the continental margin of Australia for the purposes of the Convention in the Lord Howe Rise Region should be established in accordance with article 76, paragraphs 4 and 7. In the case of the Lord Howe Rise Region this applies to the continental margin along the Tasman Basin in the southwest and to the continental margins along both sides of the New Caledonia Basin in the northeast, for all three of which Australia has established foot of the continental slope points (see Figures D.2, D.3 and D.4).

### **5.1 The application of the 60 M distance criterion**

98 With one exception, all points defining the formula lines delineating the outer edge of the continental margin in the Lord Howe Rise Region, are based on arcs constructed at 60 M distance from the foot of the continental slope points Table D.1, Annex III, in accordance with the provision contained in article 76, paragraph 4(a)(ii). The arcs are connected by straight lines not exceeding 60M in length. The Commission agrees with the way these points and lines have been established by Australia.

### **5.2 The application of the sediment thickness criterion**

99 In the Lord Howe Rise Region, Australia has submitted one fixed point based on the sediment thickness provision of article 76, paragraph 4(a)(i). Australia has established this sediment thickness point based on the seismic line GA-177/LHRNR-E R. The Commission agrees with the methods applied by Australia to establish the sediment thickness point based on the foot of the continental slope points contained in Table D.1, Annex III, including the data provided, the seismic interpretation, the methods of depth conversion, and the distance calculations.

### **5.3 Recommendations**

100 Based on arcs and points described in sections 5.1 and 5.2 above, Australia has submitted a combined formula line in accordance with article 76, paragraphs 4(a) and 7, that delineates the outer edge of the continental margin beyond 200 M in the Lord Howe Rise Region along the South Tasman Basin (see Figure D.2). Furthermore, based on arcs and points described in section 5.1 above, Australia has submitted two formula lines in accordance with article 76, paragraphs 4(a)(ii) and 7, that delineate the outer edge of the continental margins beyond 200 M in the Lord Howe Rise Region along both flanks of the New Caledonia Basin (see Figures D.3 and D.4). Of the latter two, one is the outer edge of the continental margin of the landmass of Lord Howe Island, while the other is the outer edge of the continental margin of the landmass of Norfolk Island. The Commission agrees with the way these three formula lines have been constructed and recommends that they are used as the basis for establishing the outer limit of the continental shelf in this Region.

## **6. The establishment of the outer limits of the continental shelf**

101 The outer limits of the continental shelf should be based on the established outer edge of the continental margin and taking into consideration the constraints contained in article 76, paragraphs 2, 5 and 6.

### **6.1 The application of constraint criteria**

102 The outer limits of the continental shelf cannot extend beyond the constraints as per the provisions contained in article 76, paragraphs 5 and 6. Accordingly, the provision that the outer limits of the continental shelf may not exceed 350 M distance from the territorial sea baselines (the distance criterion constraint) may be applied in all cases. Alternatively, the provision that the outer limits of the continental shelf may not exceed 100 M distance from the 2500 m isobath (the depth criterion constraint) may be applied for those parts of the continental margin that are classified as natural components of that margin.

103 The application of the constraint criteria involves, firstly, the construction of the constraint line based on the distance criterion and the constraint line based on the depth criterion. Secondly, it involves the combination of these two constraint lines to establish a final combined constraint line to be applied in accordance with the provisions contained in article 76, paragraphs 5 and 6.

104 In the Lord Howe Rise Region, Australia has invoked the constraint of 100 M distance from the 2500 m isobath for those parts of the outer limits of the continental shelf that exceed 350 M from the territorial sea baselines. These parts of the outer limits are based on the continental margin arising from foot of the continental slope points LHR-FOS-269 and -704. In the view of the Commission, the consideration of the depth criterion constraint applied in this area therefore involves the examination of whether the Lord Howe Rise may be considered a natural component of the continental margin, and of the relevant 2500 m isobath. For the remaining area, the consideration involves an examination of the construction of the distance criterion constraint line.

#### **6.1.1 The construction of the distance criterion line**

105 The distance criterion constraint line submitted by Australia is constructed by arcs at 350 M distance from the territorial sea baselines included in the Submission. The Commission agrees with the methods applied by Australia in the construction of this constraint line.

#### **6.1.2 The construction of the depth criterion line**

106 The 2500 m isobath on which the depth criterion constraint line is based, where this line exceeds 350 M distance from the territorial sea baselines, encloses the entire Lord Howe Rise and conforms to the general outline of the continental margin as defined for the purposes of the Convention. Therefore, the application of this isobath as basis for the depth criterion constraint is in accordance with the Convention and with paragraphs 4.4.1 and 4.4.2 of the Guidelines. The Commission hence recommends that the depth criterion constraint line is constructed as submitted by Australia.

### **6.1.3 Consideration and classification of submarine highs**

107 Geologically, the Lord Howe Rise Region is of a complex origin comprising continental, island arc and oceanic elements. The Commission agrees that the Lord Howe Rise is of continental origin that is well evidenced by deep sea drilling data, bottom sampling data, seismic reflection/refraction studies, and gravity modelling. The rifting structure and its process through geologic time are well documented by the scientific studies submitted. The overall extension tectonics controlled the Region through early Cretaceous to mid-Tertiary. The Lord Howe Rise and other associated continental blocks were once parts of the Australian continent and separated from it by extension and possible seafloor spreading. Based on this evidence, the Commission considers the Lord Howe Rise to be classified as a submarine elevation that is a natural component of the continental margin of Australia in the sense of article 76, paragraph 6, and in accordance with paragraph 7.3.1.b of the Guidelines.

### **6.1.4 Application of the combination of the distance and the depth constraint criteria**

108 In the Lord Howe Rise Region Australia has applied a constraint line based on the combination of lines constructed by the application of both the distance and depth criteria contained in article 76, paragraph 5. The Commission agrees with the way this combined constraint line has been constructed.

## **6.2 Recommendations**

109 The outer limits of the continental shelf in the Lord Howe Rise Region along the Tasman Basin as submitted by Australia in its Submission of 15 November 2004 consist of fixed points connected by straight lines not exceeding 60 M in length. The fixed points are listed in Table D.2, Annex III. All the fixed points are formula points established by the provisions contained in article 76, paragraph 4(a), that coincide with the fixed points that define the outer edge of the continental margin, except the three points LHR-ECS-1 and LHR-ECS-51 that are located on the 200 M limit line and LHR-ECS-117a located on the treaty line with New Zealand. All the fixed points are located landward of the combined depth and distance criteria constraint line, although in one case a straight line connecting fixed points makes a traverse beyond the constraint line.

110 In accordance with paragraph 26 above, the Commission does not agree with the method submitted by Australia for the connection of outer limit continental shelf points beyond 200 M to the 200 M limit line at points LHR-ECS-1 and LHR-ECS-51, since this method creates area of continental shelf that falls outside of the continental margin as defined in article 76, paragraphs 4 and 7, and since LHR-ECS-1 is situated on the 200 M line of the Australian Mainland which is not proven to be in morphological continuity with Lord Howe Island landmass.

111 With the exception of points LHR-ECS-1 and LHR-ECS-51, the Commission agrees with the principles applied in establishing the outer limits of the continental shelf in the Lord Howe Rise Region, including the determination of the fixed formula points listed in Table D.2, Annex III, and the construction of the straight lines connecting those points. The Commission recommends that points LHR-ECS-1 and LHR-ECS-51 and their respective connecting lines be replaced by the points and lines that conform to the outer edge of the continental margin. The Commission further recommends that Australia proceeds to establish the outer limits of the continental shelf in the Lord Howe Rise Region along the Tasman Basin accordingly.

112 The Commission recognises that the continental margins, as established for the purposes of the Convention, of the landmasses of the Lord Howe Island and the Norfolk Island in the New Caledonia Basin overlap completely with each other and with the treaty lines with France in the north and New Zealand in the south, so that the continental shelf will cover the entire area outside 200 M on the Australian side of the treaty lines in this area. The Commission recommends that Australia proceeds to establish the limits of the continental shelf around the Caledonian Basin accordingly.

## E. Macquarie Ridge Region

### 1. Geographical region description

113 The Macquarie Ridge Region is dominated by the Macquarie Ridge Complex which consists of a system of segments of steep-sided and narrow ridges and trenches that separates the Emerald Basin to the east from the Tasman and Australian-Antarctic Basins to the west. The Macquarie Ridge Complex extends northwards and southwards from the Macquarie Island (see Figure E.1).

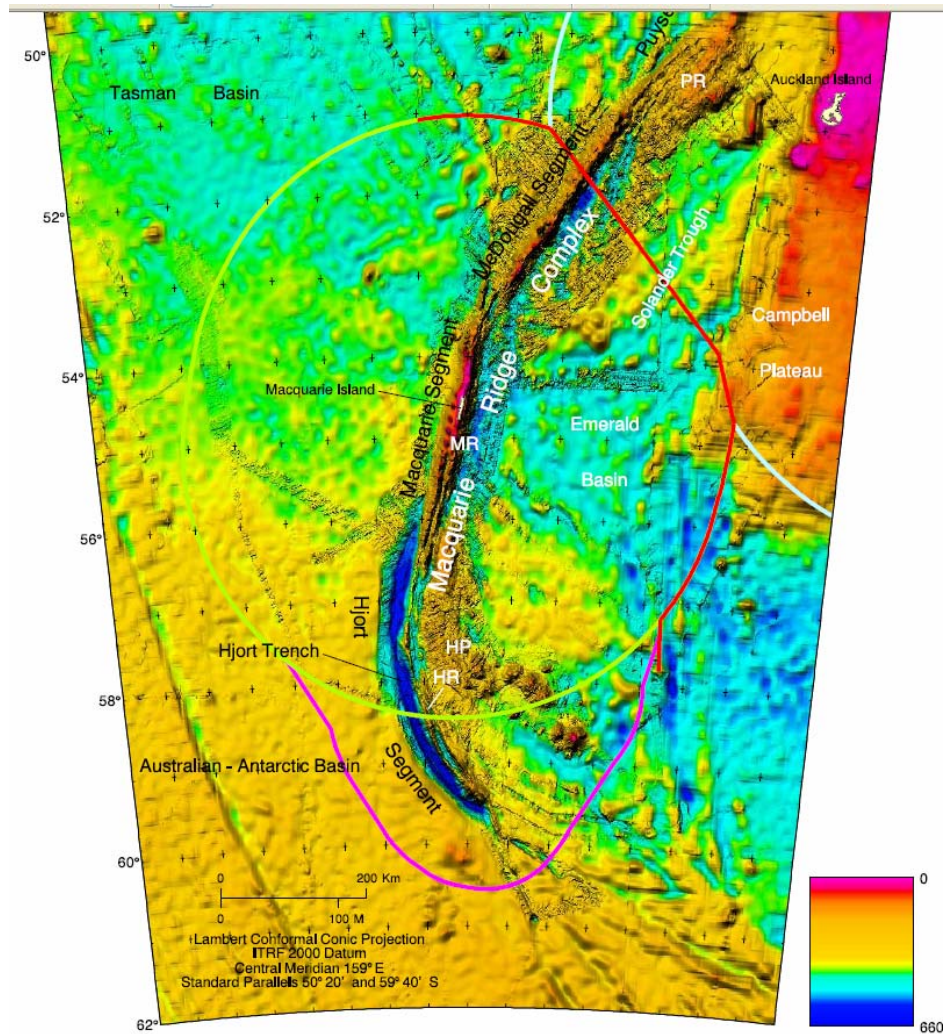


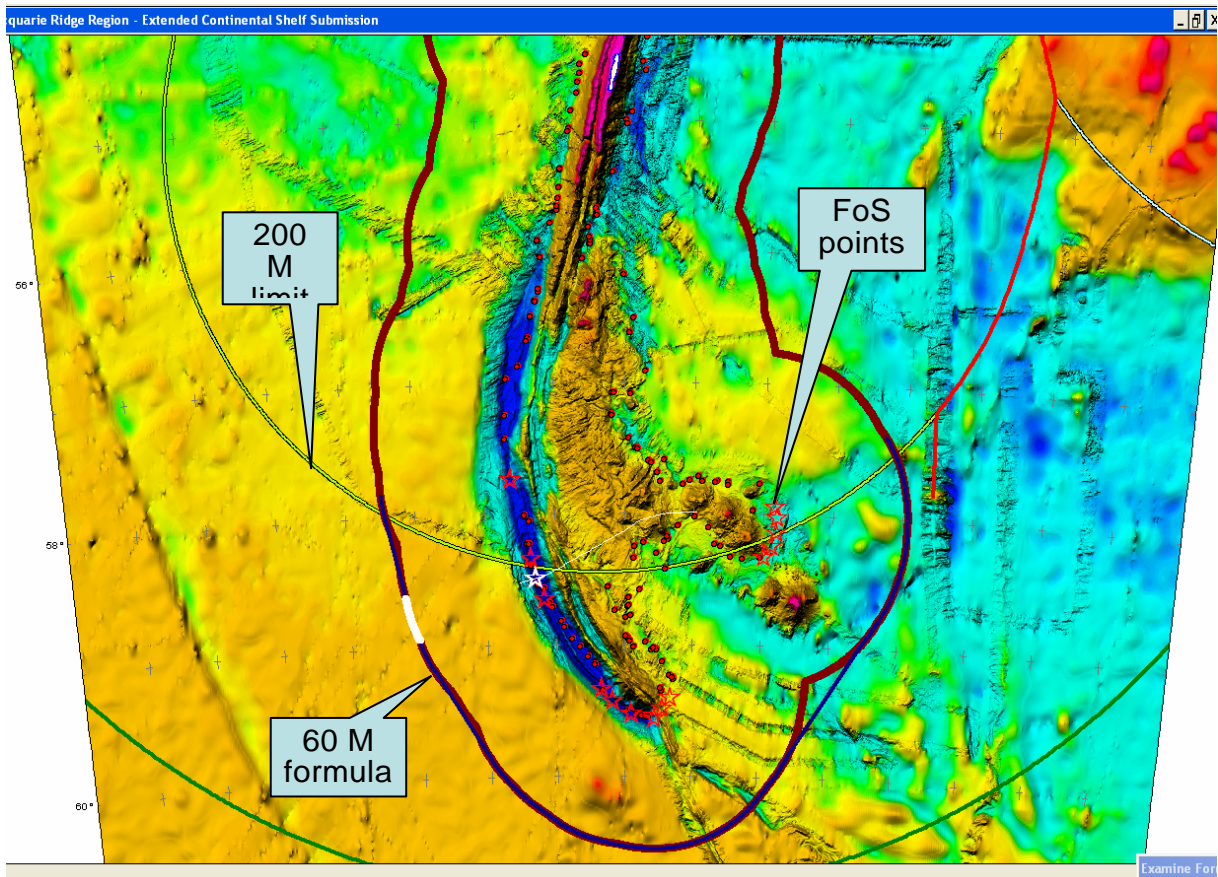
Figure E.1 Geomorphological elements of the Macquarie Ridge Region.

### 2. Note verbale submitted by other States

114 No note verbale relating to the Macquarie Ridge Region has been submitted by any State.

### 3. Submarine prolongation of landmass and entitlement to the continental shelf beyond 200 M

115 The Macquarie Ridge Complex is an elongated morphological feature forming a submarine prolongation of the continent. The ridge segments to the south are interconnected across two saddle areas, which rise 2000 m and 700 m above the adjacent deep ocean floor, respectively. The outer edge of the continental margin as generated from the foot of the continental slope of the Macquarie Ridge Complex by applying the provisions of article 76, paragraph 4, extends beyond the 200 M limits of Australia. On this basis, the Commission recognises the legal entitlement of Australia to establish continental shelf beyond its 200 M limits (Figure E.2).



**Figure E.2 Relationships between the 200 M limit, the foot of the continental slope points and the formula lines according the article 76. 4(a) in the Macquarie Ridge Region. White arrows point out saddle regions critical for the morphological continuity.**



#### **4. The determination of foot of the continental slope**

##### **4.1 Considerations**

116 The continental slope around the Macquarie Ridge Complex is generally steep, ending on the deep ocean floor as the rise is missing. The location of the base of the continental slope is distinct and easily identified on a morphological basis. Accordingly, the Macquarie Ridge Complex may be readily delineated by its foot of the continental slope envelope. The Commission agrees, in general, with the way this foot of the continental slope is established by Australia.

##### **4.2 Recommendations**

117 Based on its consideration of the technical and scientific documentation contained in the Submission of 15 November 2004, the Commission concludes that, in the Macquarie Ridge Region, the foot of the continental slope points listed in Table E.1, Annex III, fulfil the criteria for such points in accordance with article 76 and Chapter 5 of the Guidelines. The Commission recommends that these foot of the continental slope points should form the basis for the establishment of the outer edge of the continental margin of Australia for the purposes of the Convention in the Macquarie Ridge Region.

#### **5. The establishment of the outer edge of the continental margin**

118 The outer edge of the continental margin of Australia for the purposes of the Convention in the Macquarie Ridge Region should be established in accordance with article 76, paragraphs 4 and 7.

##### **5.1 The application of the 60 M distance criterion**

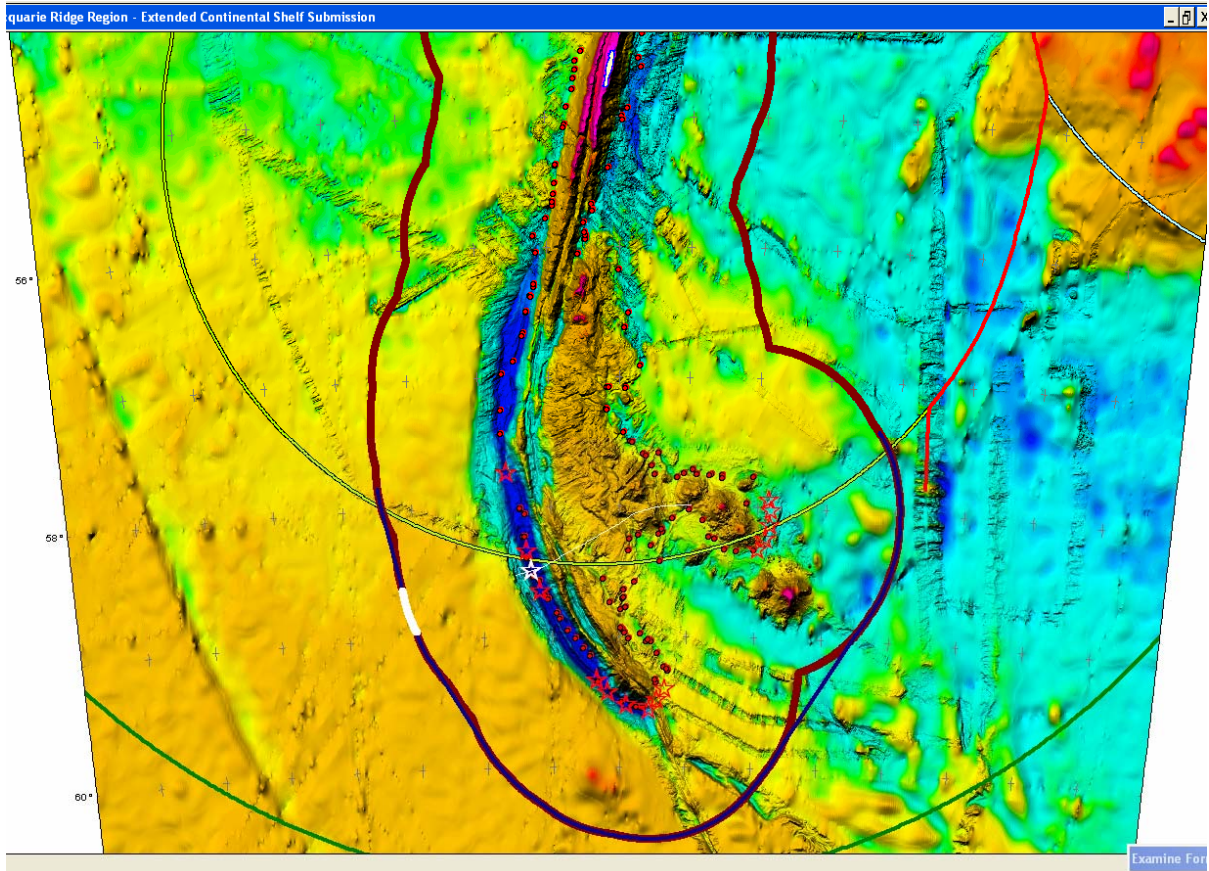
119 In the Macquarie Ridge Region, the formula line delineating the outer edge of the continental margin is entirely based on points on arcs constructed at 60 M distance from the foot of the continental slope points in accordance with the provision contained in article 76, paragraph 4(a)(ii), of the. The arcs are connected by straight lines not exceeding 60M in length. The Commission agrees with the way these points and lines have been established by Australia.

##### **5.2 The application of the sediment thickness criterion**

120 The provision contained in article 76, paragraph 4(a)(i), has not been applied in the case of the Macquarie Ridge Region.

##### **5.3 Recommendations**

121 Based on the arcs and points described in section 5.1 above, Australia has submitted a formula line in accordance with article 76, paragraphs 4(a) and 7, that delineates the outer edge of the continental margin beyond 200 M in the Macquarie Ridge Region (see Figure E.3. and Table E.1, Annex III). The Commission agrees with the way this formula line has been constructed and recommends that it is used as the basis for establishing the outer limit of the continental shelf in this Region.



**Figure E.3** The outer edge of the continental margin in the Macquarie Ridge Region as submitted by Australia. The blue line is the formula line established in accordance with article 76, paragraphs 4(a) and 7, as based on the foot of the continental slope points (red stars) submitted by Australia on 15 November 2004.

## **6. The establishment of the outer limits of the continental shelf**

122 The outer limits of the continental shelf should be established based on the outer edge of the continental margin, established as referred to above, and taking into consideration the constraints contained in article 76, paragraphs 2, 5 and 6.

### **6.1 The application of constraint criteria**

123 The outer limits of the continental shelf cannot extend beyond the constraints set by article 76, paragraphs 5 and 6. Accordingly, for areas on natural components of the continental margin the outer limits of the continental shelf may not exceed 350 M distance from the territorial sea baselines (the distance criterion constraint) or 100 M distance from the 2500 m isobath (the depth criterion constraint), while for areas on submarine ridges those limits may not exceed 350 M distance from the territorial sea baselines.

124 In the Macquarie Ridge Region, Australia has demonstrated that the formula line delineating the outer edge of the continental margin does not exceed 350 M from the territorial sea baselines. The distance criterion constraint line submitted by Australia is constructed by arcs at 350 M distance from the territorial sea baselines included in the Submission. The Commission agrees with the methods applied by Australia in the construction of this constraint line.

## **6.2 Recommendations**

125 The outer limits of the continental shelf in the Macquarie Ridge Region as submitted by Australia in its Submission of 15 November 2004 consist of fixed points connected by straight lines not exceeding 60 M in length. The fixed points are listed in Table E.2, Annex III. All the fixed points are formula points established by the provisions contained in article 76, paragraph 4(a), that coincide with the fixed points that define the outer edge of the continental margin, except the two points MAC-ECS-31 and MAC-ECS-431a that are located on the 200 M limit line and the treaty line with New Zealand, respectively. All the fixed points are located landward of the distance criteria constraint line.

126 In accordance with paragraph 26 above, the Commission does not agree with the method submitted by Australia on how the outer limits of the continental shelf beyond the 200 M line is to be connected with that 200 M line at points MAC-ECS-31 and MAC-ECS-431a, since this method creates area of continental shelf that falls outside of the continental margin as defined for the purposes of the Convention in accordance with article 76, paragraphs 4 and 7. The Commission recommends that the points MAC-ECS-31 and MAC-ECS-431a and their respective connecting lines are replaced by points and lines that conform to the outer edge of the continental margin.

127 With the exception of points MAC-ECS-31 and MAC-ECS-431a, the Commission agrees with the principles applied in establishing the outer edge of the continental margin in the Macquarie Ridge Region, including the determination of the fixed formula points listed in Table E.1, Annex III, and the construction of the straight lines connecting those points. The Commission recommends that Australia proceeds to establish the outer limits of the continental shelf in the Macquarie Ridge Region accordingly.

## F. Naturaliste Plateau Region

### 1. Geographical region description

128 The Naturaliste Plateau is a plateau extending westwards from the south-western coast of the Australian continent. The plateau is connected with the Yallingup Shelf of the Australian continent by a slightly deeper saddle area named the Naturaliste Trough. The Naturaliste Trough is only 200–300 m deeper than the outer parts of the plateau which is at a general depth of 2400 m. Thus, the Naturaliste Plateau rises 2500 m and 3000 m above the abyssal plains to the north and south, respectively.

129 The Naturaliste Plateau is flanked to the north and northwest by the Perth Abyssal Plain, to the west by the Naturaliste Fracture Zone, and to the south by the complicated abyssal seafloor adjacent to the Diamantina Zone (see Figure F.1).

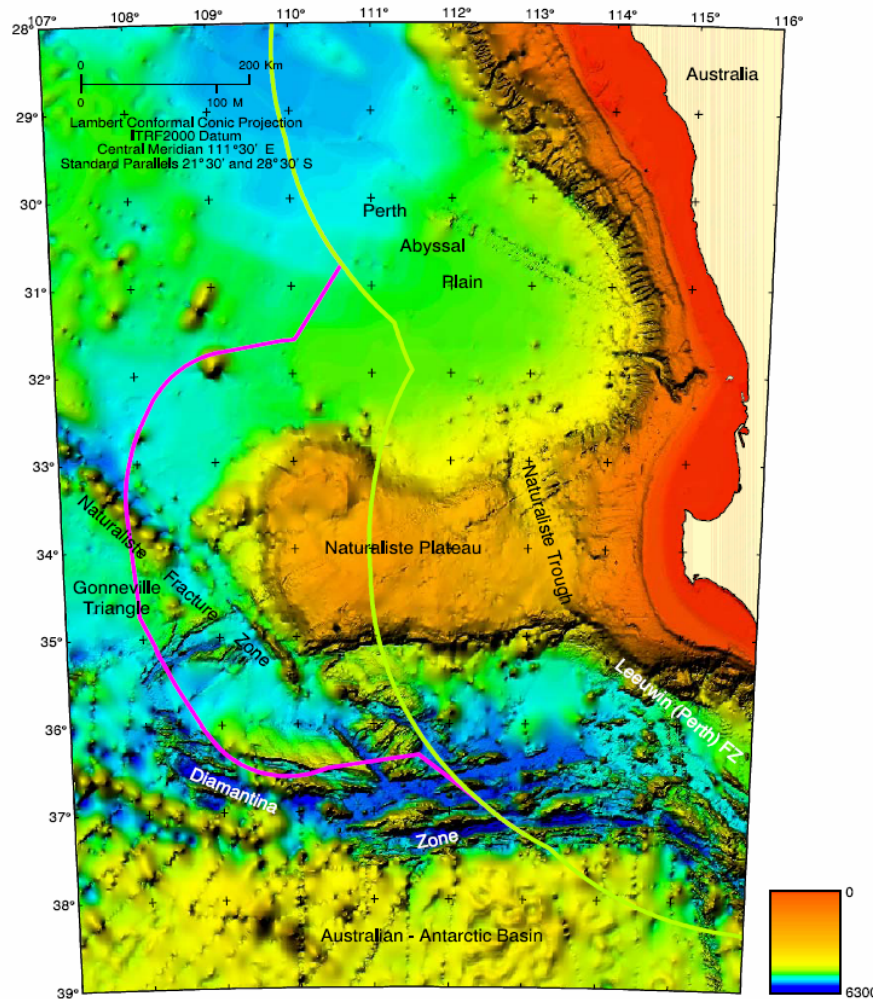


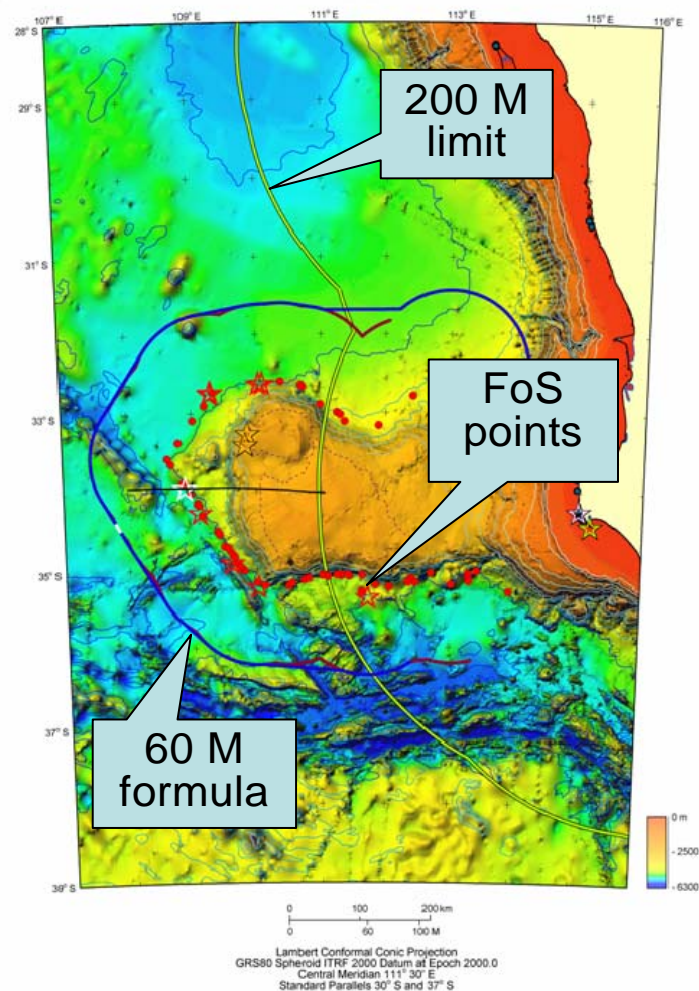
Figure F.1 Geomorphological elements of the Naturaliste Plateau Region.

## 2. Note verbale submitted by other States

130 No note verbale relating to the Naturaliste Plateau Region has been submitted by any State.

## 3. Submarine prolongation of landmass and entitlement to the continental shelf beyond 200 M

131 The Naturaliste Plateau is a morphological feature forming a submarine prolongation of the continent. The outer edge of the continental margin as generated from the foot of the continental slope of the Naturaliste Plateau by applying the provisions of article 76, paragraph 4, extends beyond the 200 M limits of Australia. On this basis, the Commission recognises the legal entitlement of Australia to establish continental shelf beyond its 200 M limits in the Naturaliste Plateau Region (Figure F.2).



**Figure F.2 Relationships between the 200 M limit, the foot of the continental slope points and the formula lines according to article 76. 4(a) in the Naturaliste Plateau Region.**

#### **4. The determination of foot of the continental slope**

132 The foot of the continental slope should be established in accordance with article 76, paragraph 4(b).

##### **4.1 Considerations**

133 The continental slope around the Naturaliste Plateau is generally steep, ending on the deep ocean floor as the rise is missing in most, but not all, parts. The location of the base of the continental slope is distinct and easily identified on a morphological basis. Accordingly, the Naturaliste Plateau may be readily delineated by its foot of the continental slope envelope. The Commission agreed, in general, with the way this foot of the continental slope was established by Australia, except in the cases of foot of the continental slope points NAT-FOS-72, -11, -121, -73, and -84. These five foot of the continental slope points were situated on the seaward side of a ridge structure along the Naturaliste Fracture Zone. To the south and north of this ridge the foot of the continental slope points follow the base of the major slope of the plateau on the east of the ridge. Based on the bathymetric data provided, it seems that the ridge in question is not connected to the major slope of the plateau. Therefore, the foot of the continental slope points as placed by Australia along the western side of this morphologically isolated ridge could not link up with the foot of the continental slope points to the south and north. The Commission conveyed to Australia that in its opinion in this area the foot of the continental slope points should be placed along the base of the major slope of the plateau to the east of the ridge mentioned.

134 In AUS-CLCS-DOC-43 Australia amended the foot of the continental slope points accordingly.

##### **4.2 Recommendations**

135 Based on its consideration of the technical and scientific documentation contained in the Submission of 15 November 2004 and AUS-CLCS-DOC-43 of 1 September 2006, the Commission concludes that, in the area of the Naturaliste Plateau Region, the foot of the continental slope points listed in Table F.1, Annex III, fulfil the criteria in accordance with article 76 and Chapter 5 of the Guidelines. The Commission recommends that these foot of the continental slope points should form the basis for the establishment of the outer edge of the continental margin of Australia for the purposes of the Convention in the Naturaliste Plateau Region.

#### **5. The establishment of the outer edge of the continental margin**

136 The outer edge of the continental margin of Australia for the purposes of the Convention in the Naturaliste Plateau Region should be established in accordance with article 76, paragraphs 4 and 7.

##### **5.1 The application of the 60 M distance criterion**

137 In the Naturaliste Plateau Region, the formula line delineating the outer edge of the continental margin is based on points on arcs constructed at 60 M distance from the foot of the continental slope points listed in Table F.1, Annex III, in accordance with the provision contained in article 76, paragraph 4(a)(ii). The arcs are connected by straight lines not exceeding 60M in length. The Commission agrees with the way these points and lines have been established by Australia.

## 5.2 The application of the sediment thickness criterion

138 The provision contained in article 76, paragraph 4(a)(i), has not been applied in the case of the Naturaliste Plateau Region.

## 5.3 Recommendations

139 Based on the arcs and points described in section 5.1 above, Australia has submitted a formula line in accordance with article 76, paragraphs 4(a) and 7, that delineates the outer edge of the continental margin beyond 200 M in the Naturaliste Plateau Region (see Figure F.3 and Table F.1, Annex III). The Commission agrees with the way this formula line has been constructed and recommends that it is used as the basis for establishing the outer limit of the continental shelf in this Region.

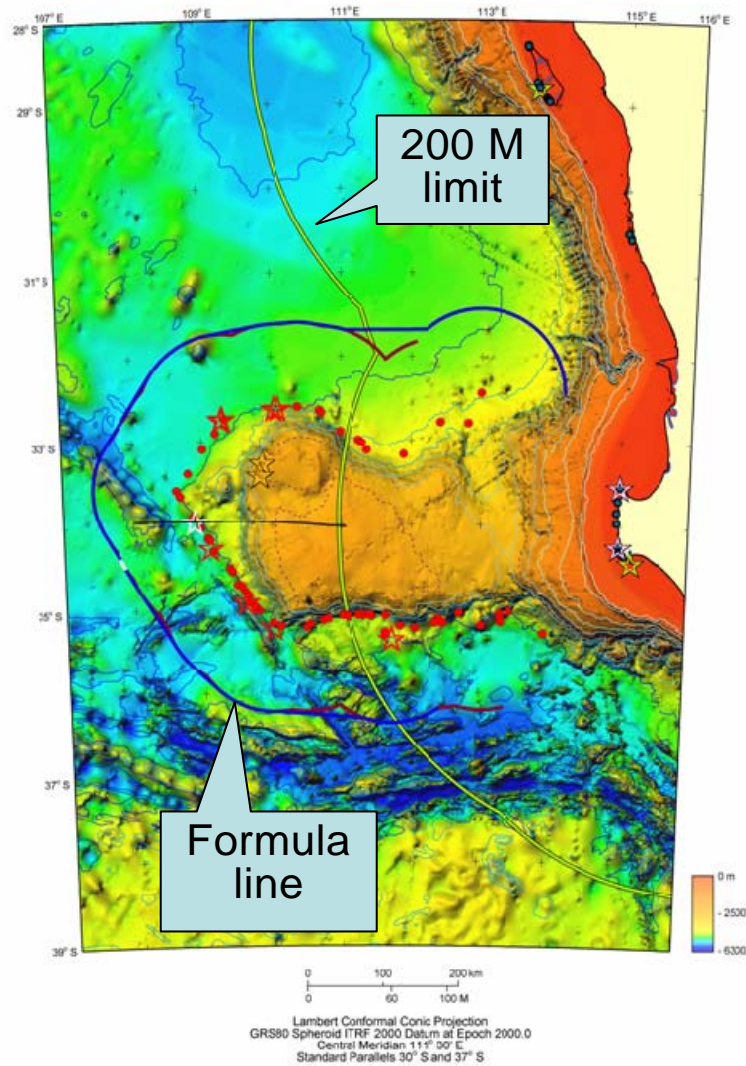


Figure F.3 The outer edge of the continental margin in the Naturaliste Plateau Region

**defined by the formula line established in accordance with article 76, paragraphs 4(a)(ii) and 7, as based on the foot of the continental slope points submitted by Australia on 15 November 2004 and revised as per AUS-CLCS-DOC-44 submitted on 1 September 2006.**

## **6. The establishment of the outer limits of the continental shelf**

140 The outer limits of the continental shelf should be based on the established outer edge of the continental margin and taking into consideration the constraints contained in article 76, paragraphs 2, 5 and 6.

### **6.1 The application of constraint criteria**

141 The outer limits of the continental shelf cannot extend beyond the constraints as per the provisions contained in article 76, paragraphs 5 and 6. Accordingly, the provision that the outer limits of the continental shelf may not exceed 350 M distance from the territorial sea baselines (the distance criterion constraint) may be applied in all cases. Alternatively, the provision that the outer limits of the continental shelf may not exceed 100 M distance from the 2500 m isobath (the depth criterion constraint) may be applied for those parts of the continental margin that are classified as natural components of that margin.

142 The application of the constraint criteria involves, firstly, the construction of the constraint line based on the distance criterion and the constraint line based on the depth criterion. Secondly, it involves the combination of these two constraint lines to establish of a final combined constraint line to be applied in accordance with the provisions contained in article 76, paragraphs 5 and 6.

143 In the Naturaliste Plateau Region, Australia has invoked the constraint of 100 M distance from the 2500 m isobath for those parts of the outer limits of the continental shelf that exceed 350 M from the territorial sea baselines. These parts of the outer limits are based on the continental margin arising from foot of the continental slope points NAT-FOS-10, -19 and -58. In the view of the Commission, the consideration of the depth criterion constraint applied in this area therefore involves the examination of whether the Naturaliste Plateau may be considered a natural component of the continental margin, and of the relevant 2500 m isobath. For the remaining area, the consideration involves an examination of the construction of the distance criterion constraint line.

#### **6.1.1 The construction of the distance criterion line**

144 The distance criterion constraint line submitted by Australia is constructed by arcs at 350 M distance from the territorial sea baselines included in the Submission. The Commission agrees with the methods applied by Australia in the construction of this constraint line.

#### **6.1.2 The construction of the depth criterion line**

145 The 2500 m isobath on which the depth criterion constraint line is based, where this line exceeds 350 M distance from the territorial sea baselines, is a closed isobath confined to the NW corner of the Naturaliste Plateau. Australia submits the view that, since the entire isobath is landward of the foot of the continental slope points, it conforms to the general outline of the continental margin as defined for the purposes of



the Convention. Therefore, the application of this isobath as basis for the depth criterion constraint is in accordance with the Convention and with paragraphs 4.4.1 and 4.4.2 of the Guidelines.

- 146 The Commission agrees with this view and recommends that the depth criterion constraint line is constructed as submitted by Australia.

### **6.1.3 Consideration and classification of submarine highs**

- 147 The seismic data submitted show that the Naturaliste Plateau is underlain by classical rift basins with tilted fault blocks, of which the Mentelle Basin beneath the Naturaliste Trough is the largest. The available geological data show that the rifted crust is of continental origin. Furthermore, the seismic data show that the outer parts of the Naturaliste Plateau is underlain by seaward dipping reflector sequences testifying to a thickened magmatic crust amalgamated with the continental crust to the east. Based on this evidence as well as the rock samples of continental affinity acquired by dredging and deep sea drilling the Commission considers the Naturaliste Plateau to be classified as a submarine elevation in the sense of article 76, paragraph 6, and in accordance with paragraph 7.3.1.b of the Guidelines.

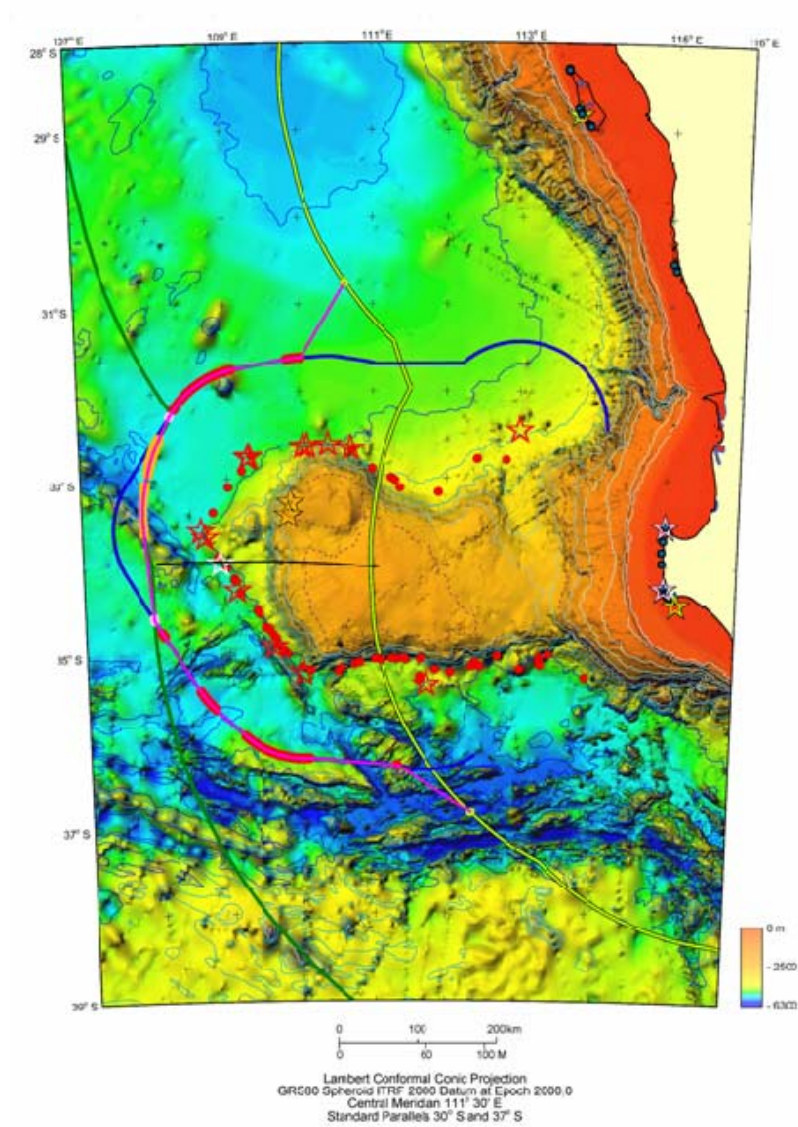
### **6.1.4 Application of the combination of the distance and the depth constraint criteria**

- 148 In the Naturaliste Plateau Region Australia has applied a constraint line based on the combination of lines constructed by the application of both the distance and depth criteria contained in article 76, paragraph 5. The Commission agrees with the way this combined constraint line has been constructed.

## **6.2 Recommendations**

- 149 The outer limits of the continental shelf in the Naturaliste Plateau Region as submitted by Australia in its Submission of 15 November 2004 and revised in AUS-CLCS-DOC-43 of 1 September 2006 consist of fixed points connected by straight lines not exceeding 60 M in length. The fixed points are listed in Table F.2, Annex III, as submitted in AUS-CLCS-DOC-43-ANNEX1. The fixed points are formula points established by the provisions contained in article 76, paragraph 4(a), or points on the constraint line where the outer edge of the continental margin extends beyond the constraints. Two points NAT-ECS-1 and NAT-ECS-R1-138 are located on the 200 M limit line (Figure F.4).
- 150 In accordance with paragraph 26 above, the Commission does not agree with the method submitted by Australia for the connection of outer limit continental shelf points beyond 200 M to the 200 M limit line at points NAT-ECS-1 and NAT-ECS-R1-138, since this method creates area of continental shelf that falls outside of the continental margin as defined in article 76, paragraphs 4 and 7. With the exception of points NAT-ECS-1 and NAT-ECS-R1-138, the Commission agrees with the principles applied in establishing the outer limits of the continental shelf in the Naturaliste Plateau Region, including the determination of the fixed formula points listed in Table F.2, Annex III, and the construction of the straight lines connecting those points. The Commission recommends that points NAT-ECS-1 and NAT-ECS-R1-138 and their respective connecting lines be replaced by the points and lines that conform to the outer edge of the continental margin. The Commission further recommends that Australia proceeds

to establish the outer limits of the continental shelf in the Naturaliste Plateau Region accordingly.

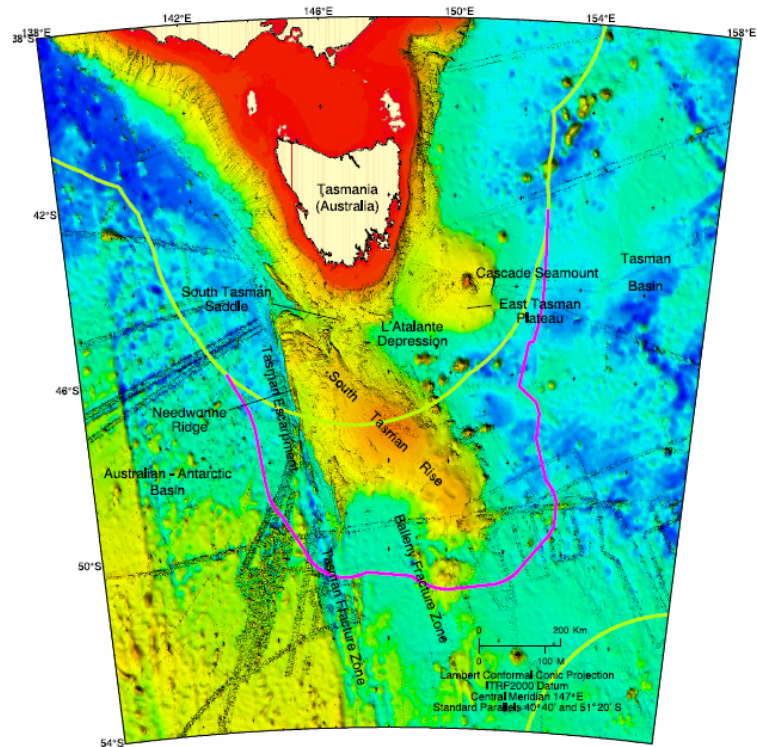


**Figure F.4 Final outer limit of the continental shelf as submitted by Australia. Continental shelf outer limit line (violet) is based on the combination of the formula line (blue) and the constraint line (green).**

## G. South Tasman Rise Region

### 1. Geographical region description

- 151 The region defined as the South Tasman Rise Region in the Submission made by Australia encompasses the two major geomorphological structural elements the South Tasman Rise and the East Tasman Plateau.
- 152 The South Tasman Rise is a large, NNW-SSE trending elongated plateau extending approximately 700 km southwards from the Australian state of Tasmania (Figure G.1). The South Tasman Rise is bounded to the west by the NNW-SSE trending Tasman Fracture Zone, and to the south and east by the abyssal plain of the Tasman Basin. In the northeast the South Tasman Rise is separated from the East Tasman Plateau by the L'Atalante Depression. In the north, the South Tasman Rise is attached to the rest of the Australian continent through the South Tasman Saddle having seafloor depths in the order of 3000 m.
- 153 The East Tasman Plateau is an almost equidimensional plateau about one third the size of the South Tasman Rise. The East Tasman Plateau is bounded to the southwest by the L'Atalante Depression and to the southeast, east and northeast by the abyssal plain of the Tasman Basin. The saddle area connecting the East Tasman Plateau with the rest of the Australian continent is less pronounced than the South Tasman Saddle and rises more than 1000 m above the surrounding abyssal plain. The volcanic edifice of the Cascade Seamount in the central part of the plateau constitutes the shallowest part of the East Tasman Plateau.



**Figure G.1 Geomorphological elements of the South Tasman Rise Region.**

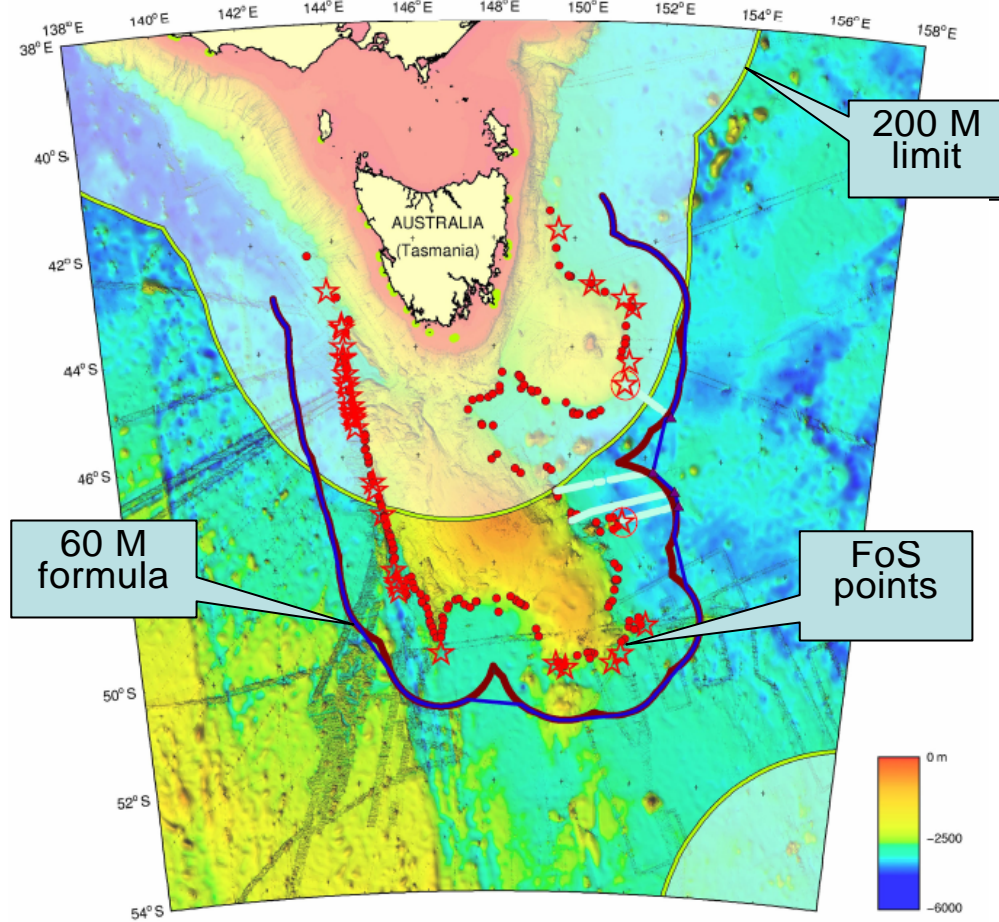
**2. Note verbale submitted by other States**

154 No note verbale relating to the South Tasman Rise Region has been submitted by any State.

**3. Submarine prolongation of landmass and entitlement to the continental shelf beyond 200 M**

**3.1 The South Tasman Rise**

155 The South Tasman Rise is a morphological feature forming a submarine prolongation of the Australian continent. The saddle area, the South Tasman Saddle, rises more than 1000 m above the abyssal plains in the west and east. In the view of the Commission, this implies that the South Tasman Rise is in morphological continuity with the Australian Continent. Australia has demonstrated that the outer edge of the continental margin as generated from the foot of the continental slope of the South Tasman Rise by applying the provisions of article 76, paragraph 4, extends beyond the 200 M limit from the Australian territorial baseline. On this basis, the Commission recognises the legal entitlement of Australia to establish continental shelf beyond its 200 M limit from the baseline in this Region (Figure G.2).



**Figure G.2 Relationships between the 200 M limit, the foot of the continental slope points and the formula lines according the article 76. 4(a) in the South Tasman Rise Region.**

### **3.2 The East Tasman Plateau**

156 The East Tasman Plateau forms a submarine prolongation of the continent. The outer edge of the continental margin as generated from the foot of the continental slope of the East Tasman Plateau by applying the provisions of article 76, paragraph 4, extends beyond the 200 M limits of Australia. On this basis, the Commission recognises the legal entitlement of Australia to establish continental shelf beyond its 200 M limits in this Region (Figure G.2).

#### **4. The determination of foot of the continental slope**

157 The foot of the continental slope should be established in accordance with article 76, paragraph 4(b).

#### **4.1 The South Tasman Rise**

158 The continental slope around the South Tasman Rise is generally steep, ending on the deep ocean floor as the rise is missing. The location of the base of the continental slope, i.e. the transition from the continental slope to the deep ocean floor is distinct and generally easily identified on a morphological basis. Accordingly, the South Tasman Rise may be readily delineated by its foot of the continental slope envelope and the Commission agreed, in general, with the way this foot of the continental slope was established by Australia, except in the cases of foot of continental slope points STR-FOS-37, -254, -255, and -258. These four foot of the continental slope points were situated on the seaward side of a ridge structure along the South Tasman Fracture Zone. To the south of this ridge the foot of the continental slope points follow the base of the major slope of the plateau on the east of the ridge, while to the north the foot of the continental slope points follow the base of the South Tasman Fracture Zone. Based on the bathymetric data provided, the Commission argued that the ridge in question is not connected to the major slope of the plateau. Therefore, the foot of the continental slope points as placed by Australia along the western side of this morphologically isolated ridge could not link up with the foot of the continental slope points to the south. The Commission conveyed to Australia that, in its opinion, in this area the foot of the continental slope points should be placed along the base of the major slope of the plateau to the east of the ridge mentioned. These foot of the continental slope points should join up with the foot of the continental slope points in the South Tasman Fracture Zone where this major slope intersects the fracture zone north of the isolated ridge. In AUS-CLCS-DOC-44 Australia amended the foot of the continental slope points accordingly.

#### **4.2 The East Tasman Plateau**

159 The continental slope around the East Tasman Plateau is generally steep. The location of the base of the continental slope is distinct and generally easily identified on a morphological basis. Accordingly, the South Tasman Rise may be readily delineated by its foot of the continental slope envelope and the Commission agrees, in general, with the way this foot of the continental slope is established by Australia.

#### **4.3 Recommendations**

160 Based on its consideration of the technical and scientific documentation contained in the Submission of 15 November 2004 and AUS-CLCS-DOC-44 of 1 September 2006, the Commission concludes that, in the area of the South Tasman Rise and the East Tasman Plateau, the foot of the continental slope points listed in Table G.1, Annex III, fulfil the criteria in accordance with article 76 and Chapter 5 of the Guidelines. The Commission recommends that these foot of the continental slope points should form the basis for the establishment of the outer edge of the continental margin of Australia for the purposes of the Convention in the South Tasman Rise Region.

### **5. The establishment of the outer edge of the continental margin**

161 The outer edge of the continental margin of Australia for the purposes of the Convention in the South Tasman Rise Region should be established in accordance with article 76, paragraphs 4 and 7.

### **5.1 The application of the 60 M distance criterion**

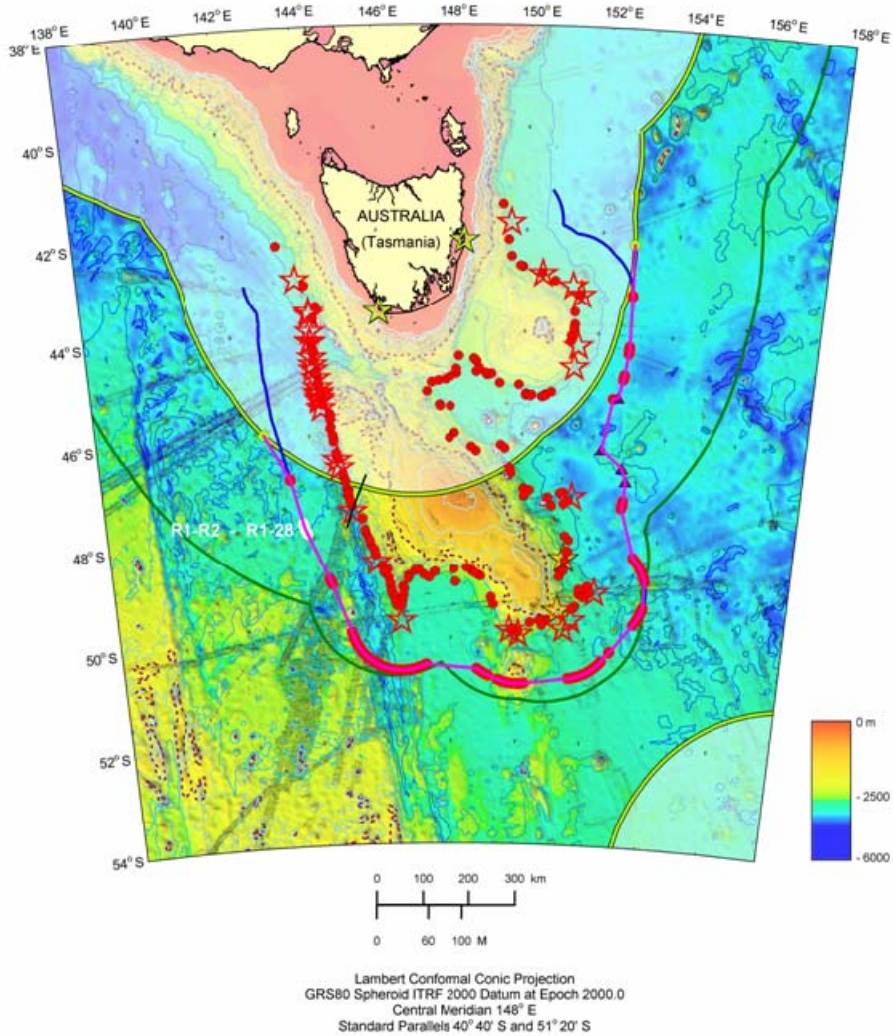
162 In the South Tasman Rise Region, the formula line delineating the outer edge of the continental margin is based on points on arcs constructed at 60 M distance from the foot of the continental slope points listed in Table G.1, Annex III, in accordance with provision contained in article 76, paragraph 4(a)(ii). The Commission agrees with the way these points have been established by Australia.

### **5.2 The application of the sediment thickness criterion**

163 In the South Tasman Rise Region, Australia has submitted four fixed points based on the sediment thickness provision of article 76, paragraph 4(a)(i). Australia has established these sediment thickness points based on the seismic lines GA-202/01, GA-202/02, GA-202/03 and GA-202/04. The Commission agrees with the methods applied by Australia to establish the sediment thickness, including the data provided, the seismic interpretation, the methods of depth conversion, and the distance calculations.

### **5.3 Recommendations**

164 Based on the fixed points referred to above (see Table G.1, Annex III), Australia has submitted a combined formula line in accordance with article 76, paragraphs 4(a) and 7, that delineates the outer edge of the continental margin beyond 200 M in the South Tasman Rise Region (see Figure G.3). The Commission agrees with the way this formula line has been constructed and recommends that it is used as the basis for establishing the outer limit of the continental shelf in this Region.



**Figure G.3 The outer edge of the continental margin in the South Tasman Rise Region as submitted by Australia. The blue line is the combined formula line established in accordance with article 76, paragraphs 4(a) and 7, as based on the foot of the continental slope points submitted by Australia on 15 November 2004 and revised as per AUS-CLCS-DOC-44 submitted on 1 September 2006. From the first fixed points beyond the 200 M limit line (framed light green line) the blue formula line coincides with the submitted continental shelf outer limit line (violet line).**

#### **6. The establishment of the outer limits of the continental shelf**

165 The outer limits of the continental shelf should be based on the established outer edge of the continental margin and taking into consideration the constraints contained in article 76, paragraphs 2, 5 and 6.



## **6.1 The application of constraint criteria**

- 166 The outer limits of the continental shelf cannot extend beyond the constraints as per the provisions contained in article 76, paragraphs 5 and 6. Accordingly, for areas on natural components of the continental margin the outer limits of the continental shelf may not exceed 350 M distance from the territorial sea baselines (the distance criterion constraint) or 100 M distance from the 2500 m isobath (the depth criterion constraint), while for areas on submarine ridges those limits may not exceed 350 M distance from the territorial sea baselines.
- 167 In the South Tasman Rise Region, Australia has invoked the constraint of 100 M distance from the 2500 m isobath for those parts of the outer limits of the continental shelf that exceed 350 M from the territorial sea baselines. These parts of the outer limits are all based on the continental margin arising from foot of the continental slope points along the South Tasman Rise.
- 168 In the view of the Commission, the consideration of the depth criterion constraint applied in this area therefore involves the examination of whether the South Tasman Rise may be considered a natural component of the continental margin, and of the relevant 2500 m isobath. For the remaining area, the consideration involves an examination of the construction of the distance criterion constraint line.

### **6.1.1 The application of the depth constraint criterion**

#### **6.1.1.1 Consideration of the South Tasman Rise**

- 169 The Commission has examined the geological and geophysical data submitted to document the geological nature of the South Tasman Rise. Seismic reflection data show rift related tectonics. Geological sampling have documented that the underlying crust includes pre-Mesozoic metasediments and other metamorphic rocks overlain by up to 4 km rift basin infill of Late Cretaceous to Eocene siliciclastics and younger pelagic sediments. Parts of the South Tasman Rise are dominated by volcanic vents and lava flows related to the break-up process in Late Cretaceous and subsequent volcanism. Based on the data provided, the Commission is of the opinion that the South Tasman Rise is of continental origin and is a natural submerged prolongation of the Australian continental landmass. Consequently, the Commission is of the opinion that the South Tasman Rise should be classified as a submarine elevation that is a natural component of the continental margin in accordance with article 76, paragraph 6, and paragraph 7.3.1.b of the Guidelines.

#### **6.1.1.2 The construction of the depth constraint criterion line**

- 170 The 2500 m isobath on which the depth criterion constraint line is based, where this line exceeds 350 M distance from the territorial sea baselines, is a closed isobath confined to the South Tasman Rise. Australia submits the view that, since the entire isobath is landward of the foot of the continental slope, it conforms to the general outline of the continental margin as defined for the purposes of the Convention. Therefore, the application of this isobath as basis for the depth criterion constraint is in accordance with the Convention and with paragraphs 4.4.1 and 4.4.2 of the Guidelines.
- 171 The Commission agrees with this view and recommends that the depth criterion constraint line is constructed as submitted by Australia.

### **6.1.2 The construction of the distance constraint criterion line**

172 The distance criterion constraint line submitted by Australia is constructed by arcs at 350 M distance from the territorial sea baselines included in the Submission. The Commission agrees with the methods applied by Australia in the construction of this constraint line.

### **6.1.3 The application of the combination of the distance and the depth constraint criteria**

173 In the South Tasman Rise Region Australia has applied a constraint line based on the combination of lines constructed by the application of both the distance and depth criteria contained in article 76, paragraph 5. The Commission agrees with the way this combined constraint line has been applied.

## **6.2 Recommendations**

174 The outer limits of the continental shelf in the South Tasman Rise Region as submitted by Australia in its Submission of 15 November 2004 and revised in AUS-CLCS-DOC-44 of 1 September 2006 consist of fixed points connected by straight lines not exceeding 60 M in length. The fixed points are listed in Table G.2, Annex III as submitted in AUS-CLCS-DOC-44-ANNEX1. All the fixed points are formula points established by the provisions contained in article 76, paragraph 4(a), that coincide with the fixed points that define the outer edge of the continental margin, except the two points STR-ECS-1 and STR-ECS-647 that are located on the 200 M limit line. All the fixed points are located landward of the combined depth and distance criteria constraint line, although in two cases parts of the straight lines connecting fixed points make traverses beyond the constraint line (Figure G.3).

175 In accordance with paragraph 26 above, the Commission does not agree with the method submitted by Australia for the connection of outer limit continental shelf points beyond 200 M to the 200 M limit line at points STR-ECS-1 and STR-ECS-647, since this method creates area of continental shelf that falls outside of the continental margin as defined in article 76, paragraphs 4 and 7. With the exception of points STR-ECS-1 and STR-ECS-647, the Commission agrees with the principles applied in establishing the outer limits of the continental shelf in the South Tasman Rise Region, including the determination of the fixed formula points listed in Table G.2, Annex III, and the construction of the straight lines connecting those points. The Commission recommends that points STR-ECS-1 and STR-ECS-647 and their respective connecting lines be replaced by points and lines that conform to the outer edge of the continental margin. The Commission further recommends that Australia proceeds to establish the outer limits of the continental shelf in the South Tasman Rise Region accordingly.

## H. Three Kings Ridge Region

### 1. Geographical region description

176 The Three Kings Ridge Region lies to the east of the Norfolk Ridge and makes up the easternmost part of the continental margin as submitted by Australia. The continental slope has an irregular topography, but is overall clearly defined. The ridge after which the Region is named lies within the New Zealand maritime space following the treaty between Australia and New Zealand (see Figure H.1).

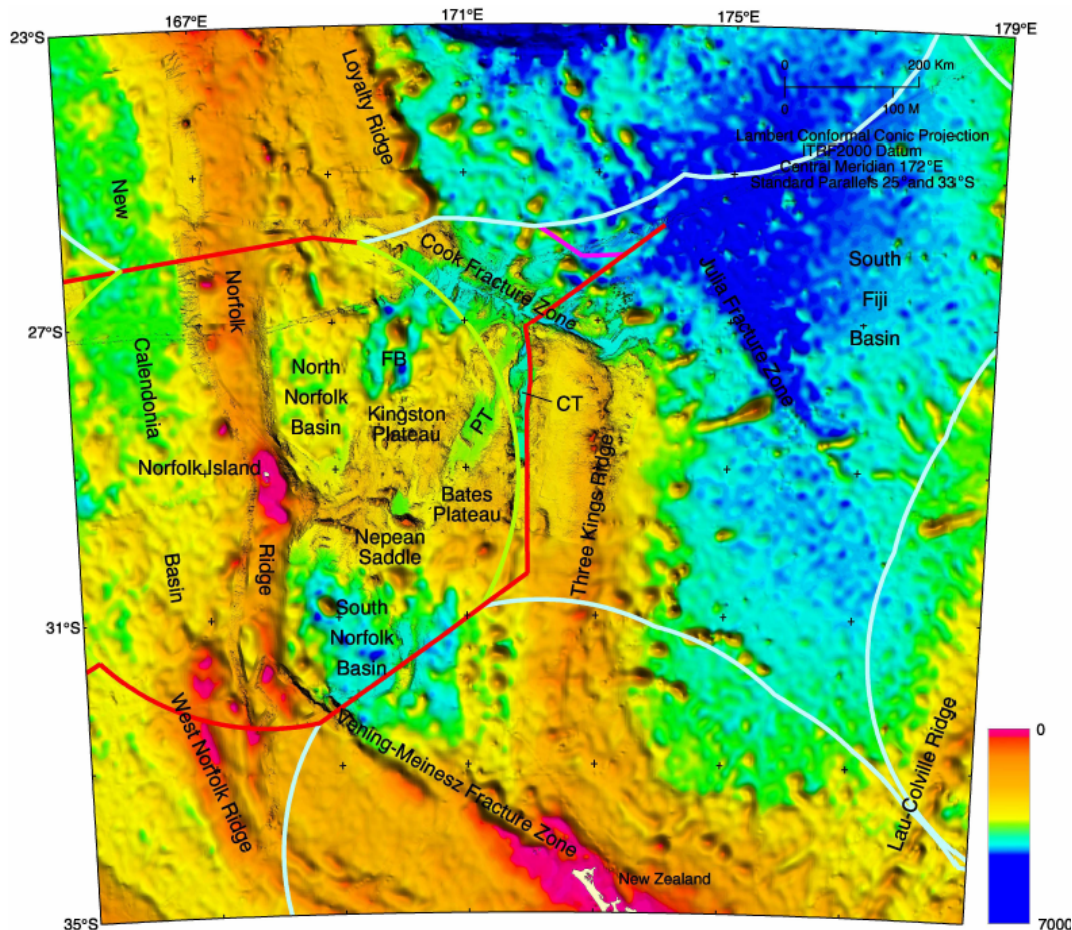


Figure H.1 Geomorphological elements of the Three Kings Ridge Region.

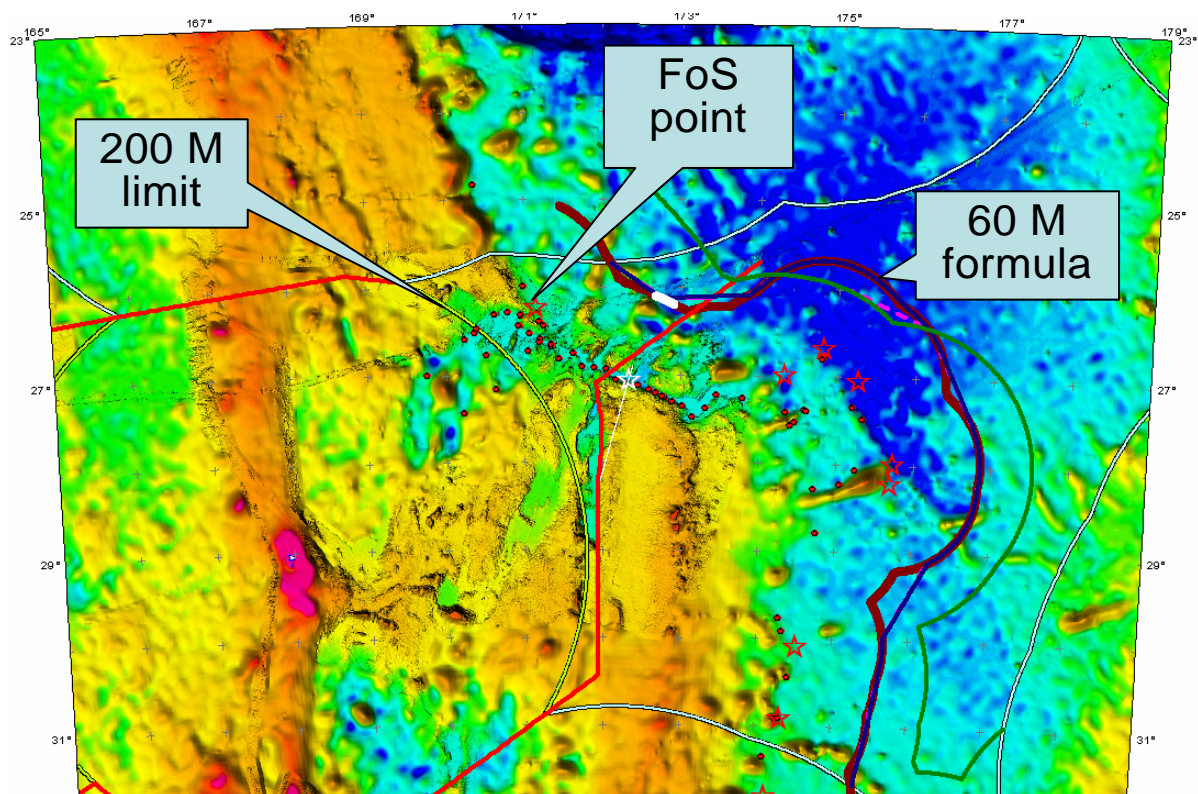
### 2. Note verbale submitted by other States

177 In a note verbale of 28 March 2005 from the Permanent Mission of France to the United Nations (Annex II), France takes note of the potential overlap between the areas of extended continental shelf of the two States in the New Caledonia region and that Australia in its Submission emphasizes that its submission for an extended continental shelf is without prejudice to any subsequent delimitation between the two States. The

Permanent Mission of France confirms that France has no objection to the Commission considering and making recommendations on those parts of the Submission that concern areas bordering on French territories to the extent that such recommendations are without prejudice to any final delimitation of the continental shelf concluded subsequently in these areas between France and Australia. These considerations seem relevant for the Three Kings Region east of the end of the present treaty line of the Australian-French Maritime Delineation Treaty of 1982. The Recommendations of the Commission relating to the Three Kings Ridge Region only deal with the outer limits of the continental shelf of Australia in this Region and shall not prejudice any bilateral delimitation issues between States.

### 3. Submarine prolongation of landmass and entitlement to the continental shelf beyond 200 M

178 The outer edge of the continental margin as generated from the foot of the continental slope of the Three Kings Ridge Region by applying the provisions of article 76, paragraph 4, extends beyond the 200 M limits of Australia. On this basis, the Commission recognises the legal entitlement of Australia to a continental shelf beyond its 200 M limits (Figure H.2).



**Figure H.2 Relationships between the 200 M limit, the foot of the continental slope points and the formula lines according the article 76. 4(a) in the Three Kings Ridge Region. The formula line is shown in blue, the combined constraint line in dark green, the Australian-French Delimitation Treaty lines in red, and the 200 M lines of Australia and neighbouring States in black bordered light green and white, respectively.**

#### **4. The determination of foot of the continental slope**

179 The foot of the continental slope should be established in accordance with article 76 paragraph 4(b).

##### **4.1 Considerations**

180 The continental slope in the Three Kings Ridge Region is, in general, well defined, although characterized by local topographic irregularities. Australia has identified two foot of the continental slope points that are deemed critical, TKR-FOS-64 and TKR-FOS-76. The Commission agrees with the way the two foot of the continental slope points are established by Australia based on their morphological considerations.

181 The Commission recognises the need for Australia to establish foot of the continental slope points also along the eastern side of the Three Kings Ridge in order to demonstrate that the extension of its continental margin entirely overlaps with the 2004 treaty boundary beyond 200 M with New Zealand on the western side of the ridge.

182 The Commission has examined the data provided in support of the other relevant foot of the continental slope points on the eastern flank of the Three Kings Ridge. i.e. TKR-FOS-93, -92, -89, -14, -10, -111. While the Commission does not agree with the way some of these points have been determined, it does recognise that those foot of the continental slope points on which it agrees with Australia suffice to establish the outer edge of the continental margin east of the Three Kings Ridge. Consequently, in the view of the Commission the area between the 200 M line of Norfolk Island and the treaty line with New Zealand on the western side of Three Kings Ridge is part of the continental margin of Australia

##### **4.2 Recommendations**

183 Based on its consideration of the technical and scientific documentation contained in the Submission of 15 November 2004, the Commission concludes that, in the area of the Three Kings Ridge Region, the foot of the continental slope points listed in Table H.1, Annex III, fulfil the criteria in accordance with article 76 and Chapter 5 of the Guidelines. The Commission recommends that these foot of the continental slope points should form the basis for the establishment of the outer edge of the continental margin of Australia for the purposes of the Convention in the Three Kings Ridge Region.

#### **5. The establishment of the outer edge of the continental margin**

184 The outer edge of the continental margin of Australia for the purposes of the Convention in the Three Kings Ridge Region should be established in accordance with article 76, paragraphs 4 and 7.

##### **5.1 The application of the 60 M distance criterion**

185 In the Three Kings Ridge Region, the formula line delineating the outer edge of the continental margin is based on points on arcs constructed at 60 M distance from the foot of the continental slope points Table H.1, Annex III in accordance with the provision contained in article 76, paragraph 4(a)(ii). The arcs are connected by straight lines not exceeding 60M in length. The Commission agrees with the way these points and lines have been established by Australia.

## **5.2 The application of the sediment thickness criterion**

186 The provision contained in article 76, paragraph 4(a)(i), has not been applied in the case of the Three Kings Ridge Region.

## **5.3 Recommendations**

187 Based on the arcs and points described in section 5.1 above, Australia has submitted a formula line in accordance with article 76, paragraphs 4(a) and 7, that delineates the outer edge of the continental margin beyond 200 M in the Three Kings Ridge Region (see Figure H. 2 and Table H.1, Annex III). The Commission agrees with the way this formula line has been constructed and recommends that it is used as the basis for establishing the outer limit of the continental shelf in this Region.

## **6. The establishment of the outer limits of the continental shelf**

188 The outer limits of the continental shelf should be based on the established outer edge of the continental margin and taking into consideration the constraints contained in article 76, paragraphs 2, 5 and 6.

### **6.1 The application of constraint criteria**

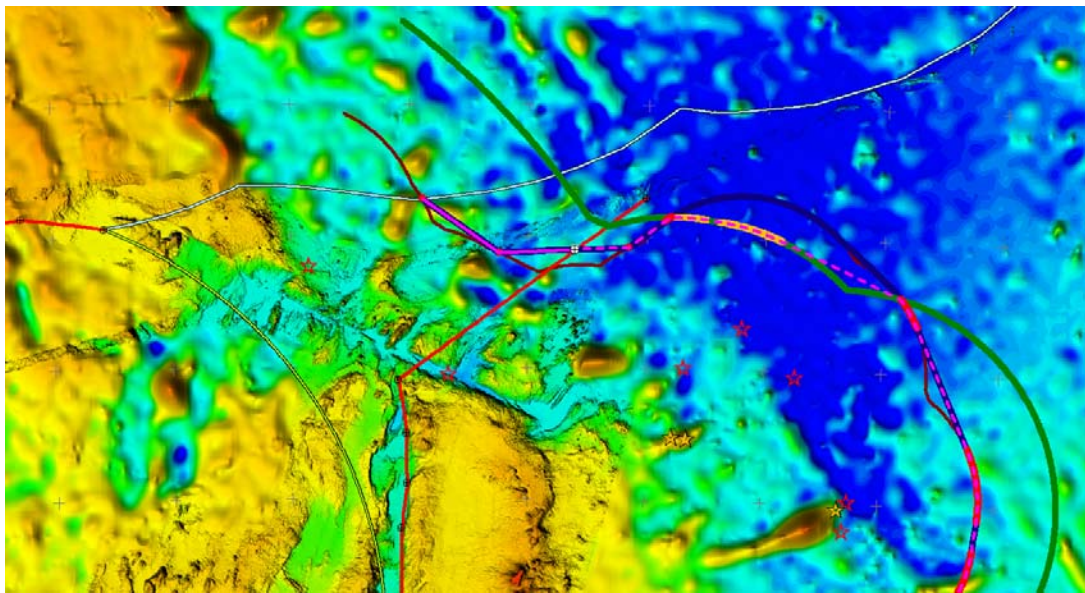
189 The outer limits of the continental shelf cannot extend beyond the constraints as per the provisions contained in article 76, paragraphs 5 and 6. Accordingly, the provision that the outer limits of the continental shelf shall not exceed 350 M distance from the territorial sea baselines (the distance criterion constraint) may be applied in all cases. Alternatively, the provision that the outer limits of the continental shelf shall not exceed 100 M distance from the 2500 m isobath (the depth criterion constraint) may be applied for those parts of the continental margin that are classified as natural components of that margin.

190 In the Three Kings Ridge Region, Australia has submitted, in accordance with AUS-CLCS-DOC-51, that the formula line delineating the outer edge of the continental margin does not exceed 350 M from the territorial sea baselines. The distance criterion constraint line submitted by Australia is constructed by arcs at 350 M distance from the territorial sea baselines included in the Submission. The Commission agrees with the methods applied by Australia in the construction of this constraint line.

### **6.2 Recommendations**

191 The outer limits of the continental shelf in the Three Kings Region as submitted by Australia in its Submission of 15 November 2004 and AUS-CLCS-DOC-51 of 10 November 2006 consist of three fixed points connected by straight lines not exceeding 60 M in length. The fixed points are listed in Table H.2, Annex III. One of the fixed points, TKR-ECS-347, is the point of intersection between the formula line and the 200 M limit line of Matthew and Hunter Islands. The second fixed point, TKR-ECS-346, is a formula point established by the provisions contained in article 76, paragraph 4(a), that coincide with the fixed points that define the outer edge of the continental margin. The third point, TKR-ECS-R1-1, is the point of intersection between the formula line and the boundary defined by the Australian-New Zealand Delimitation Treaty. All these fixed points are located landward of the distance criteria constraint line (Figure H.3).

192 The Commission agrees with the principles applied in establishing the outer edge of the continental margin in the Three Kings Ridge Region, including the determination of the fixed formula points listed in Table H.2, Annex III, and the construction of the straight lines connecting those points. However, the establishment of the final outer limit of the continental shelf of Australia in this Region may depend on delimitation between States. The Commission recommends, taking into consideration paragraph 9 of Annex II to the Convention that Australia proceeds to establish the outer limits of the continental shelf in the Three Kings Ridge Region on the basis of the outer edge of the continental margin recommended in section 5.3 above and the methods applied in establishing the fixed points on this formula line, and in accordance with article 76, paragraphs 8, 9 and 10.



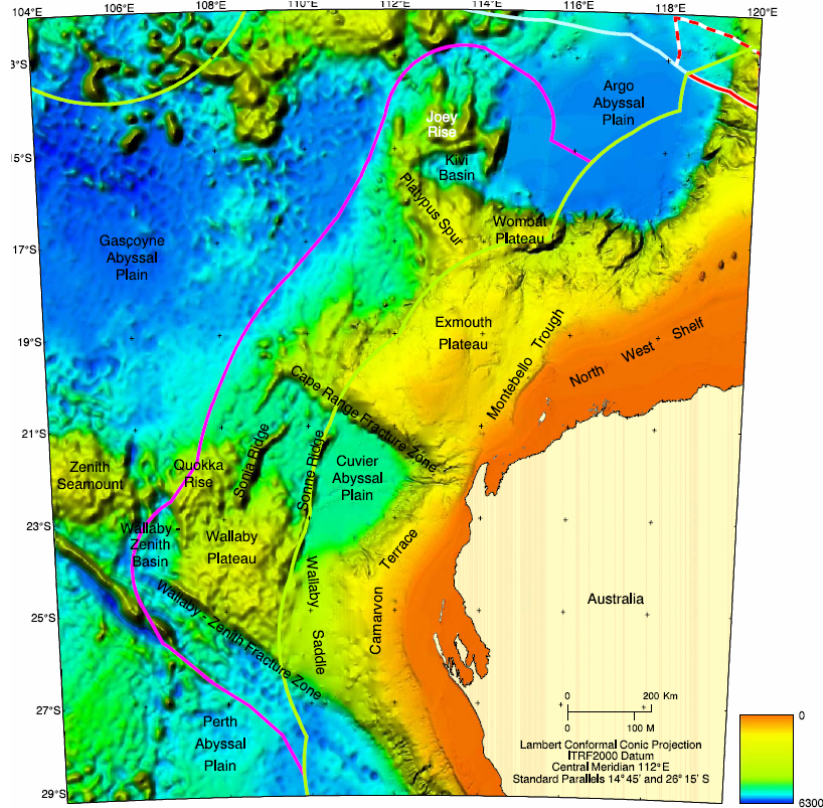
**Figure H.3 Relationships between the 200 M limit, the foot of the continental slope points and the formula lines according the article 76. 4(a) in the Three Kings Ridge Region. The formula line is shown in blue, the combined constraint line in dark green, the Australian-French Delimitation Treaty lines in red, and the 200 M lines of Australia and neighbouring States in black bordered light green and white, respectively.**

## **I. Wallaby and Exmouth Plateaus Region**

### **1. Geographical region description**

- 193 The region defined as the Wallaby and Exmouth Plateaus Region in the Submission made by Australia encompasses the two major geomorphological structural elements of the Wallaby Plateau and the Exmouth Plateau, both being prominent submarine highs extending from the north-western coast of the Australian continent.
- 194 The Wallaby Plateau is part of a composite structural high extending from the landward shallow Carnarvon Terrace to the southeast, and consisting of the deep Wallaby Saddle, the Wallaby Plateau itself and the Quokka Rise to the northwest. This structural high, herein further referred to as the Wallaby Composite High, is bounded to the south by the northwest-southeast trending Wallaby-Zenith Fracture Zone, to the northwest by the Gascoyne Abyssal Plain and the Wallaby-Zenith Basin, and to the northeast by the Cuvier Abyssal Plain.
- 195 The Exmouth Plateau constitutes a composite submarine high to the north of the Cuvier Abyssal Plain. The Wombat Plateau, Platypus Spur and the Joey Rise are situated on the northern margin of Exmouth Plateau. The Exmouth Plateau is bounded to the south by the northwest-southeast trending Cape Range Fracture Zone, to the northwest by the Gascoyne Abyssal Plain, and to the northeast by the Argo Abyssal Plain.





**Figure I.1. Geomorphological elements of the Wallaby and Exmouth Plateaus Region.**

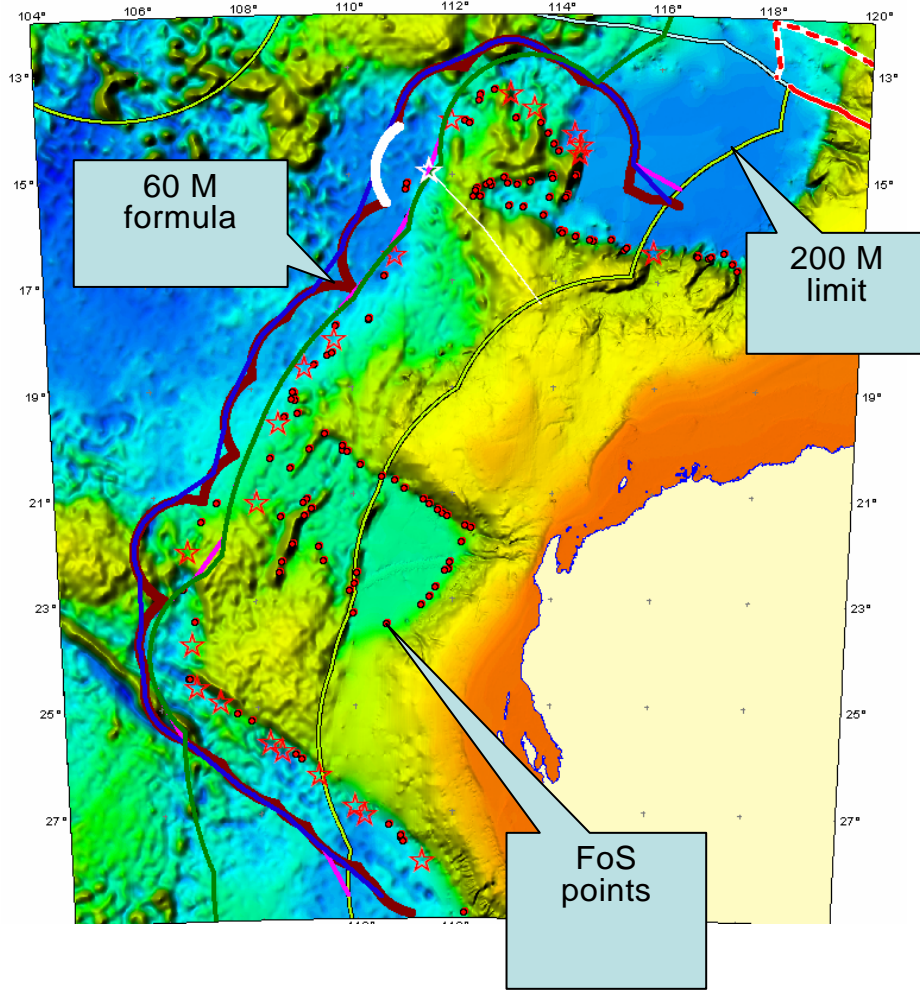
**2. Note verbale submitted by other States**

196 No note verbale relating to the Wallaby and Exmouth Plateaus Region has been submitted by any State.

**3. Submarine prolongation of landmass and entitlement to the continental shelf beyond 200 M**

**3.1 The Wallaby Plateau Area**

197 The Wallaby Composite High is a morphological feature forming a submarine prolongation of the continent. The outer edge of the continental margin as generated from the foot of the continental slope of the Wallaby Composite High by applying the provisions of article 76, paragraph 4, extends beyond the 200 M limits of Australia. On this basis, the Commission recognises the legal entitlement of Australia to establish continental shelf beyond its 200 M limits (Figure I.1).



**Figure I.2 Relationships between the 200 M limit, the foot of the continental slope points and the formula lines according the article 76. 4(a) in the Wallaby and Exmouth Plateaus Region.**

### **3.2 The Exmouth Plateau Area**

198 The Exmouth Plateau is an equidimensional morphological feature forming a submerged prolongation of the continent. The outer edge of the continental margin as generated from the foot of the continental slope of the Exmouth Plateau by applying the provisions of article 76, paragraph 4, extends beyond the 200 M limits of Australia. On this basis, the Commission recognises the legal entitlement of Australia to establish continental shelf beyond its 200 M limits (Figure I.2).

#### **4. The determination of foot of the continental slope**

199 The foot of the continental slope should be established in accordance with article 76, paragraph 4(b).

##### **4.1 The Wallaby Composite High**

200 The continental slope around the Wallaby Composite High is generally steep, ending on the deep ocean floor as the rise is missing. The location of the base of the continental slope, i.e. the transition from the continental slope to the deep ocean floor is distinct and easily identified on a morphological basis. Accordingly, the Wallaby Composite High may be readily delineated by its foot of the continental slope envelope and the Commission agrees with the way this foot of the continental slope is established by Australia.

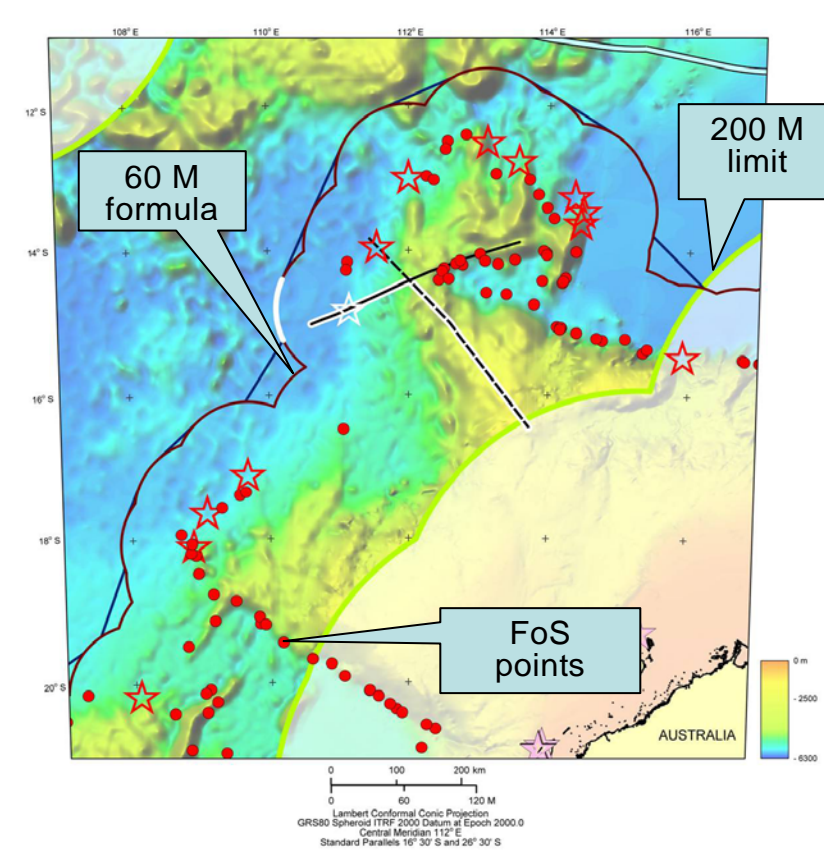
##### **4.2 The Exmouth Plateau**

201 The continental slope around the Exmouth Plateau is generally steep, ending on the deep ocean floor as the rise is missing. The location of the base of the continental slope, i.e. the transition from the continental slope to the deep ocean floor is distinct and easily identified on a morphological basis. Accordingly, the Exmouth Plateau may be readily delineated by its foot of the continental slope envelope and the Commission agreed, in general, with the way this foot of the continental slope was established by Australia in its Submission of 15 November 2004, except in the cases of foot of continental slope points WEP-FOS-288 and WEP-FOS-406.

202 These foot of the continental slope points were situated northwest of the Exmouth Plateau where the Gascoyne Abyssal Plain forms an embayment towards the plateau (hereafter termed the Gascoyne Embayment). This area is characterised by an inner steep slope of the plateau adjacent to the seafloor of the Gascoyne Embayment. The embayment is underlain by generally rugged magmatic basement (including a series of wedges of seaward dipping reflectors), and merges westward with the slightly deeper parts of the abyssal plain smoothed by a thin blanket of sediments.

203 The area is sediment starved and no classical rise is developed and the Commission agrees with Australia that the gently sloping seafloor between the steep slope to the east and the smooth, deepest parts of the abyssal plain to the northwest cannot be classified as a rise. The area contains very little sediment and the morphology is an expression of the underlying crust. Australia therefore argues, based on supportive geological evidence that this area of seafloor constitutes a part of the continental slope in the sense of article 76, paragraphs 3 and 4(b). The Commission, however, is of the opinion that the data provided show that the area of sea floor between the steep slope to the east and the deeper, smooth part of the Gascoyne Abyssal Plain should be regarded as part of the deep ocean floor and, consequently, could not be the location of foot of the continental slope points.

204 The Commission conveyed to Australia its view that, in this area the foot of the continental slope points should be placed along the base of the major slope of the plateau adjacent to the Gascoyne Embayment. In AUS-CLCS-DOC-52 of 21 December 2006 Australia amended the foot of the continental slope points accordingly.



**Figure I.3 Foot of the continental slope points and 60 M formula line in the Exmouth Plateau area as amended by Australia in AUS-CLCS-DOC-52 submitted 21 December 2006.**

#### **4.3 Recommendations**

205 Based on its consideration of the technical and scientific documentation contained in the Submission of 15 November 2004 and AUS-CLCS-DOC-52 of 21 December 2006 the Commission concludes that, in the area of the Wallaby and Exmouth Plateaus, the foot of the continental slope points listed in Table I.1, Annex III, fulfil the criteria in accordance with article 76 and Chapter 5 of the Guidelines. The Commission recommends that these foot of the continental slope points should form the basis for the establishment of the outer edge of the continental margin of Australia for the purposes of the Convention in the Wallaby and Exmouth Plateaus Region.

#### **5. The establishment of the outer edge of the continental margin**

206 The outer edge of the continental margin of Australia for the purposes of the Convention in the Wallaby and Exmouth Plateaus Region should be established in accordance with article 76, paragraphs 4 and 7.

### **5.1 The application of the 60 M distance criterion**

207 In the Wallaby and Exmouth Plateaus Region, the formula line delineating the outer edge of the continental margin is based on points on arcs constructed at 60 M distance from the foot of the continental slope points Table IV.1, in accordance with the provision contained in article 76, paragraph 4(a)(ii). The arcs are connected by straight lines not exceeding 60M in length. The Commission agrees with the way these points and lines have been established by Australia.

### **5.2 The application of the sediment thickness criterion**

208 The provision contained in article 76, paragraph 4(a)(i), has not been applied in the case of the Wallaby and Exmouth Plateaus Region.

### **5.3 Recommendations**

209 Based on the arcs and points described in section 5.1 above, Australia has submitted a formula line in accordance with article 76, paragraphs 4(a) and 7, that delineates the outer edge of the continental margin beyond 200 M in the Wallaby and Exmouth Plateaus Region (see Figure I.2 and I.3 and Table I.1, Annex III). The Commission agrees with the way this formula line has been constructed and recommends that it is used as the basis for establishing the outer limit of the continental shelf in this Region.

## **6. The establishment of the outer limits of the continental shelf**

210 The outer limits of the continental shelf should be based on the established outer edge of the continental margin and taking into consideration the constraints contained in article 76, paragraphs 2, 5 and 6.

### **6.1 The application of constraint criteria**

211 The outer limits of the continental shelf cannot extend beyond the constraints as per the provisions contained in article 76, paragraphs 5 and 6. Accordingly, the provision that the outer limits of the continental shelf shall not exceed 350 M distance from the territorial sea baselines (the distance criterion constraint) may be applied in all cases. Alternatively, the provision that the outer limits of the continental shelf shall not exceed 100 M distance from the 2500 m isobath (the depth criterion constraint) may be applied for those parts of the continental margin that are classified as natural components of that margin.

212 The application of the constraint criteria involves, firstly, the construction of the constraint line based on the distance criterion and the constraint line based on the depth criterion. Secondly, it involves the combination of these two constraint lines to establish of a final combined constraint line to be applied in accordance with the provisions contained in article 76, paragraphs 5 and 6.

213 For the outer limits of the continental shelf in the Wallaby and Exmouth Plateaus Region, Australia has invoked a combination of the distance criterion constraint and the depth criterion constraint. In the view of the Commission, the consideration of the application of depth criterion constraint involves the examination of whether the seafloor highs in the Wallaby and Exmouth Plateaus Region may be considered natural components of the continental margin. For the remaining parts of the outer limits, the

consideration involves an examination of the construction of the distance criterion constraint line.

#### **6.1.1 The construction of the distance criterion line**

214 The distance criterion constraint line submitted by Australia is constructed by arcs at 350 M distance from the territorial sea baselines included in the Submission. The Commission agrees with the methods applied by Australia in the construction of this constraint line.

#### **6.1.2 The construction of the depth criterion line**

215 The 2500 m isobaths, on which the depth criterion constraint line is based, are a landward continuous isobath and outer isobaths on the Wallaby Plateau, Platypus Spur and Joey Rise. Australia submits the view that, since all these isobaths are landward of the foot of the continental slope, they conform to the general outline of the continental margin as defined for the purposes of the Convention. Therefore, the application of these isobaths as basis for the depth criterion constraint is in accordance with the Convention and with paragraphs 4.4.1 and 4.4.2 of the Guidelines.

216 The Commission agrees with this view and recommends that the depth criterion constraint line is constructed as submitted by Australia.

#### **6.1.3 Consideration and classification of submarine highs**

##### **6.1.3.1 Consideration of the Wallaby Composite High**

217 According to Australia, the Wallaby Composite High qualifies as a submarine elevation (in the sense of article 76, paragraph 6) that may be subject to either constraint criteria. Based on morphology only, Australia holds the view that the Wallaby Composite High is not a ridge and, in addition, Australia maintains that the high is formed under the rifting and break-up of the continent in accordance with paragraph 7.3.1.b of the Guidelines.

218 The Commission has examined the geophysical and geological evidence provided in this respect, including the information contained in AUS-CLCS-DOC-53 submitted on 15 February 2007 and presented to the Commission on 06 March 2007. The Commission agrees that the Wallaby Saddle is underlain by seaward dipping reflectors older than the break-up unconformity demonstrating that this part of the feature was formed during the rifting and break-up of the continent. However, on the basis of the data and information presented the geological origin of the whole Wallaby Composite High still remains unresolved. Nevertheless, on the balance of morphological and geological evidence presented, the Commission agrees that the Wallaby Composite High is to be regarded as a submarine elevation that is a natural component of the continental margin in the sense of article 76, paragraph 6, qualifying for the application of the depth criterion constraint.

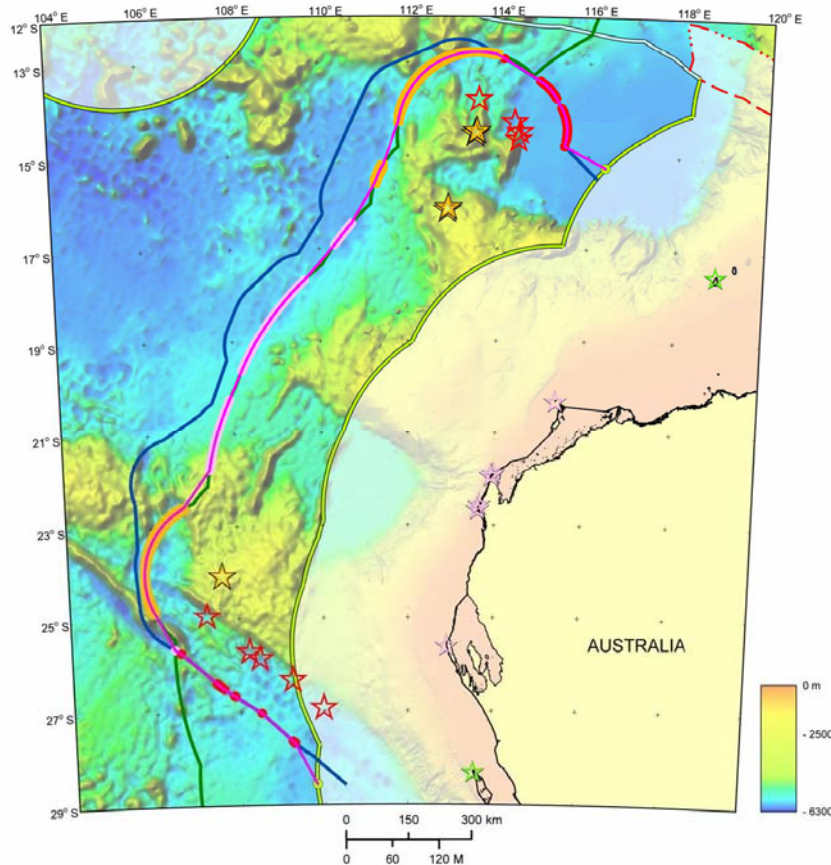
### **6.1.3.2 Consideration of the Exmouth Plateau Area**

- 219 Bridged by the Platypus Spur, the Joey Rise constitutes the north-westernmost extension of the Exmouth Plateau. The morphological expression of this spur-and-rise pair allows the establishment of a foot of the continental slope envelope around them. A seismic line, GA-162/15, is shot across the critical bridging point between the two structures, which demonstrates that the spur and the rise are in morphological continuity, implying that the foot of the continental slope envelope of the Joey Rise is in continuity with the foot of the continental slope envelope of rest of the continental margin. Australia classifies the Joey Rise as a submarine elevation that is a natural component of the continental margin in the sense of article 76, paragraph 6. Based on morphology only, Australia holds the view that the Joey Rise is not a ridge and, in addition, Australia maintains that the rise is formed under the rifting and break-up of the continent in accordance with paragraph 7.3.1.b of the Guidelines.
- 220 The Commission has examined the geophysical and geological evidence provided in this respect, including the information contained in AUS-CLCS-DOC-53 submitted on 15 February 2007 and presented to the Commission on 06 March 2007. The view of the Commission, however, is that the data presented on the origin of the Joey Rise is too sparse to be conclusive. The combination of the two seismic lines GA-162/11 and GA-162/15 shows the crustal structure of the Platypus Spur and the Joey Rise. The crust of the Platypus Spur comprises clear internal reflectors indicative of continental crust. The lack of reflectors and structures in the seismic profile across the Joey Rise, however, indicates a magmatic origin of that crust. Based on the data provided, it is furthermore not clear whether the Joey Rise was formed as part of the seafloor spreading process in the Argo Basin or the subsequent rifting and break-up along the western side of the Exmouth Plateau. Therefore, the Commission does not consider it proven that the Joey Rise should be regarded as a submarine elevation that is a natural component of the continental margin in the sense of article 76, paragraph 6, qualifying for the application of the depth criterion constraint.
- 221 The Commission recognises, however, that by way of the foot of the continental slope envelope and morphology, the Joey Rise is part of the submerged prolongation of the landmass of Australia and, as such, is part of the continental margin of Australia.
- 222 Based on the geological and geophysical data provided, the Commission is of the opinion that the Exmouth Plateau, including the Wombat Plateau and the Platypus Spur, is continental in origin and constitutes a natural prolongation of the Australian continental landmass. The Commission is of the opinion that the Exmouth Plateau is classified as a submarine elevation that is a natural component of the continental margin in the sense of article 76, paragraph 6, and qualifies for the application of the depth criterion constraint.

### **6.1.4 Application of the combination of the distance and the depth constraint criteria**

- 223 In the Wallaby and Exmouth Plateaus Region Australia has applied a combined constraint line based on the application of both the distance and depth criteria as described in sections 6.1.1 and 6.1.2 and based on the view that all submarine highs involved qualifies for the application of the depth constraint criterion as well as the distance constraint criterion. The Commission is of the opinion that the application of those parts of that combined constraint line which are based on the 2500 m isobaths on the Joey Rise is not justified since the nature of that submarine high with regard to article 76, paragraph 6, is not considered proven (see section 6.1.3 above). The

Commission recommends that the combined constraint line to be applied should be adjusted accordingly.



**Figure I.4. Outer limits of the continental shelf (violet line) in the Wallaby and Exmouth Plateaus Region as submitted by Australia in AUS-CLCS-DOC-52. Outer edge of continental margin line (blue), combined constraint line (green), 60 M distance formula points (red), depth constraint criterion points (orange), distance criterion constraint points (pink).**

## 6.2 Recommendations

224 The outer limits of the continental shelf in the Wallaby and Exmouth Plateaus Region as submitted by Australia on 15 November 2004 and revised in AUS-CLCS-DOC-52 of 21 December 2006 consist of fixed points connected by straight lines not exceeding 60 M in length. The fixed points are listed in Table I.2, Annex III, as submitted on 15 November 2004. The fixed points are formula points established by the provisions contained in article 76, paragraphs 4(a), or points on the combined constraint line



established by the provisions contained in article 76, paragraphs 5 and 6. Two points, WEP-ECS-1 and WEP-ECS-966 are located on the 200 M limit line (Figure I.4).

- 225 In accordance with section 6.1.3 above, the Commission does not agree that the application of fixed points WEP-ECS-150 to WEP-ECS-413 is justified since these points are established on the basis of the depth constraint criteria as based on the 2500 m isobaths on the Joey Rise. The Commission recommends that the basis for the establishment of these fixed points be further substantiated or that they be replaced by fixed points in accordance with the distance criterion constraint.
- 226 In accordance with paragraph 26 above, the Commission does not agree with the method submitted by Australia for the connection of outer limit continental shelf points beyond 200 M to the 200 M limit line at points WEP-ECS-1 and WEP-ECS-966, since this method creates area of continental shelf that falls outside of the continental margin as defined in article 76, paragraphs 4 and 7. The Commission recommends that points WEP-ECS-1 and WEP-ECS-966, and their respective connecting lines, be replaced by points and lines that conform to the outer edge of the continental margin.
- 227 With the exception of fixed points WEP-ECS-1 and WEP-ECS-966, WEP-ECS-151 to WEP-ECS-413 the Commission agrees with the principles applied in establishing the outer limits of the continental shelf in the Wallaby and Exmouth Plateaus Region, including the determination of the remaining fixed points listed in Table I.2, Annex III, and the construction of the straight lines connecting those points. The Commission further recommends that Australia proceeds to establish the outer limits of the continental shelf in the Wallaby and Exmouth Plateaus Region accordingly.

**ANNEX I**

**List of materials submitted to the Commission and Subcommittee**

## ANNEX II

**Comments from other States regarding the data reflected in the executive summary of the Submission made by Australia, including all charts and coordinates as made public by the Secretary-General in accordance with rule 50 of the rules of procedure of the Commission**

**ANNEX III**

**Tables of coordinates**

**ANNEX IV (ON CD-ROM ONLY)**

**Communications between the Subcommission and the Delegation of Australia**

