



Capacity-building to assist developing States in the preparation of their submissions to the Commission on the Limits of the Continental Shelf

Purpose and practice of DOALOS programs



7 December 2006



Obligations under the United Nations Convention on the Law of the Sea of 10 December 1982 ("UNCLOS")



- Under article 4 of annex II to UNCLOS, a coastal State intending to establish the outer limits to its continental shelf beyond 200 nautical miles is obligated to submit particulars of such limits to the Commission on the Limits of the Continental Shelf ("CLCS or "the Commission) along with supporting scientific and technical data as soon as possible but in any case within 10 years of the entry into force of the Convention for that State.



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Challenges for developing States in the implementation of article 76 of UNCLOS



- The complexity of the task of preparing submissions to the Commission;
- Need to deploy significant resources, capacity and expertise for collection, collation and analysis of a large amount of bathymetric, seismic and geophysical data;
- Lack of required resources, including human resources, and other capacity;
- Approaching time-limit, which for some States is 13 May 2009.

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Need for effective capacity-building and assistance to developing countries



There is an essential need for capacity-building to ensure that developing countries are able both to implement the Convention and to benefit from the sustainable development of the oceans and seas.

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Actions taken by the Commission on the Limits of the Continental Shelf



- Adoption of Scientific and Technical Guidelines;
- Outline for the five-day training course.
- Note: CLCS - not mandated by UNCLOS to conduct or organize training, though members may be involved in their personal capacities. Nevertheless, the CLCS as a body felt obliged to prepare the outline for a five-day training course in order to facilitate the preparation of submissions in accordance not only with its Guidelines, but also with the letter and spirit of UNCLOS.

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Actions taken by the General Assembly




- Recognition of the need for capacity-building;
- Establishment of Article 76 Trust Fund;
- Endorsement of the initiative by DOALOS to organize regional training courses based on the Training Manual;





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Actions by DOALOS and development of capacity building programmes

- Preparation and production of the Training Manual;
- Preparation and delivery of regional training courses in Fiji, Sri Lanka, Ghana and Argentina;
- Administration of the Trust fund for the purpose of facilitating the preparation of submissions to the CLCS;
- Participation in training courses, seminars, symposiums and other activities organized by various Governments or entities.

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Training manual on the preparation of a submission to the CLCS




- Prepared by DOALOS;
- Assistance by two Members of the CLCS -Mr. Harald Brakke and Mr. Galo Carrera;
- Goals – to provide in-depth understanding of the legal, scientific, technical and procedural issues related to the implementation of article 76 of UNCLOS.



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Training course on the preparation of a submission to the CLCS



- Purpose: To provide training to the appropriate technical staff of wide-continental-margin developing States;
- Mandate: Paragraph 32 of General Assembly resolution 59/24 of 17 November 2004;
- Programme: based on the “Outline for a five-day training course for delineation of the outer limits of the continental shelf beyond 200 nautical miles and for preparation of a submission of a coastal State to the Commission on the Limits of the Continental Shelf” (CLCS/24), and on the training manual, with additional components, including side-events.

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Modules – training manual and training course



- Module I - Legal Framework
- Module II - Geodetic Methodologies
- Module III - Hydrographic Methodologies
- Module IV - Morphological Methodologies
- Module V - Geological Methodologies
- Module VI - Geophysical Methodologies
- Module VII - Seafloor Highs
- Module VIII - Planning and Management of a Submission
- Module IX - Procedure for Preparation and Presentation of a submission

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Regional training courses - Training Manual



<p>TRAINING MANUAL Geodetic Methodologies Module II</p> <p>Figure II.16 Distribution of the outer limits of the extended continental shelf</p> <p>According to the Commission's Scientific and Technical Guidelines paragraph 2.3.9, in the case of the outer limits of the continental shelf determined by lines connecting fixed points defined by the following criteria:</p> <ol style="list-style-type: none"> only points located not more than 60 NM apart along the same continental margin will be connected; these lines should not be used to connect fixed points located on opposite and opposite continental margins; only the portion of the shelf that covers all the portions of width "a" can be enclosed by these straight lines; and no portion of the seabed adjacent to a continental shelf will <p><small>Training Manual: The Allocation of the outer limits of the continental shelf beyond 200 nautical miles and the preparation of submissions to the Commission on the Limits of the Continental Shelf</small></p> <p>II-46</p>	<p>SUAL Hydrographic Methodologies</p> <p>Figure III.8 Depth measurement types</p> <p>There are several types of depth measurement techniques from old lead line data, mechanical scan line, single beam echosounders to satellite systems such as acoustic streamer, multi-beam echosounders and Lida.</p> <p>Figure III.9 Vertical resolution when measuring</p> <p><small>Illustration of the outer limits of the continental shelf beyond 200 nautical miles of submissions to the Commission on the Limits of the Continental Shelf</small></p> <p>III-11</p>	<p>JAL Hydrographic Methodologies</p> <p>In order for a 2D fixed limited signal to be reconstructed fully, it must be sampled twice as fast as the highest frequency component, f_m, and f_s must always result in two orthogonal directions (e.g. north and east).</p> <p>The two orthogonal Nyquist Frequencies are defined as:</p> $f_{Nyquist} = 0.5(2 \Delta x) \text{ and } f_{Nyquist} = 0.5(2 \Delta y)$ <p>No information is lost in each direction if a 2D signal is sampled at an Nyquist Frequency, and an additional dimension is added by sampling faster than these rates.</p> <p>Adding an extra dimension creates values resulting in continuous data for a specific Nyquist frequency.</p> <p>Figure III.10 The sampling theorems and aliasing in 2D</p> <p>Figure III.16 SRES vs MRES</p> <p>The above fine 3" x 3" bathymetric grid is not evenly supported by MRES data throughout the region. These are places where SRES</p> <p><small>Section of the outer limits of the continental shelf beyond 200 nautical miles of submissions to the Commission on the Limits of the Continental Shelf</small></p> <p>III-37</p>
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First regional training course on the preparation of submissions to the CLCS - Suva (Fiji)



- Region and countries: six developing States of the South Pacific (members of SOPAC) and four East-Asian States;
- Dates: from 28 February to 4 March 2005;
- In cooperation with: the South Pacific Applied Geoscience Commission (SOPAC) and the Commonwealth Secretariat;
- Participation: 36 technical and administrative staff.



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Second regional training course – Colombo, Sri Lanka



- Region and countries: 12 developing States of the Indian Ocean region;
- Dates: from 16 to 20 May 2005;
- In cooperation with: Government of Sri Lanka and the Commonwealth Secretariat;
- Participation: 40 technical and administrative staff.



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Third regional training course – Accra (Ghana)



- Region and countries: 16 developing States of the African region bordering the Eastern Atlantic;
- Dates: from 5 to 9 December 2005;
- In collaboration with: the Government of Ghana, the Commonwealth Secretariat, and with the support of the African Union and the Economic Community of West African States (ECOWAS);
- Participation: 54 technical and administrative staff.



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Fourth regional training course – Buenos Aires, Argentina



- Region and countries: 11 Caribbean and Latin American countries;
- Dates: from 8 to 12 May 2006;
- In collaboration with the Government of Argentina and the support of intergovernmental organizations, including the Commonwealth Secretariat;
- Participation: 37 technical and administrative staff.



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Regional training courses



- During the delivery of the four regional training courses on the delineation of the outer limits of the continental shelf beyond 200 nautical miles and the preparation of submissions to the Commission, the Division trained about 160 technical and administrative staff from 49 developing coastal States.

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Article 76 Trust fund



- Established by the Secretary-General pursuant to paragraph 18 of General Assembly resolution 55/7 of 30 October 2000;
- Purposes, terms of reference;
- Mechanism for applications disbursement of funds;
- 80 participants in the regional training courses organized by the Division in 2005-06 received assistance from the Trust Fund.

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"Article 76" Trust fund - Activities






- Training of technical and administrative staff;
- Desktop study or other means to make an initial assessment of the nature of the continental shelf and its limits;
- Working out of plans for the acquisition of necessary additional data and mapping projects;
- Preparation of final submission documents;
- Advisory/consultancy assistance related to the above points.

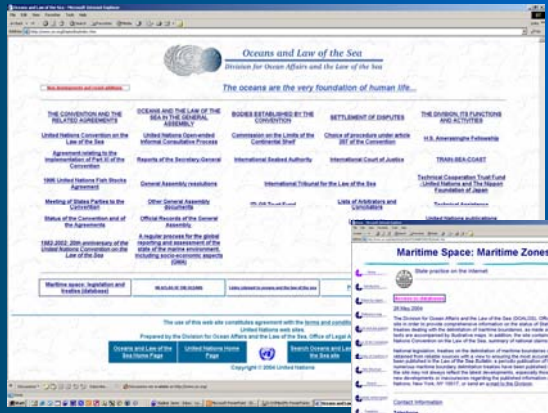
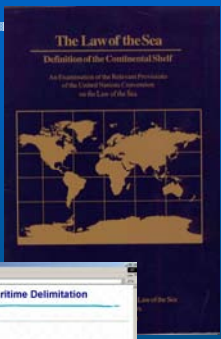

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Other activities of and support by DOALOS





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Conclusions and questions




Thank you for your attention.







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